



# CITY OF ANN ARBOR PROJECT MANAGEMENT

## 2015 ANNUAL RESURFACING PROGRAM

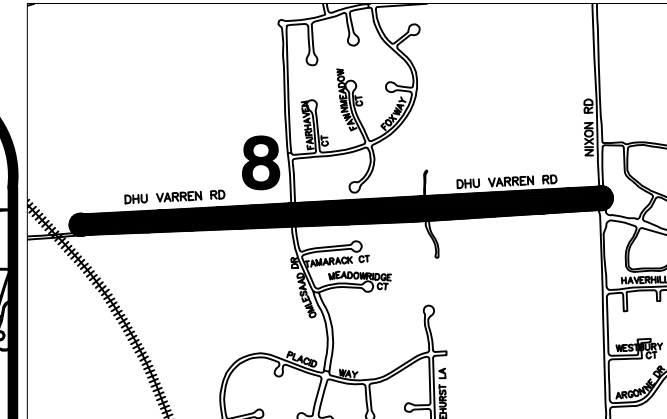
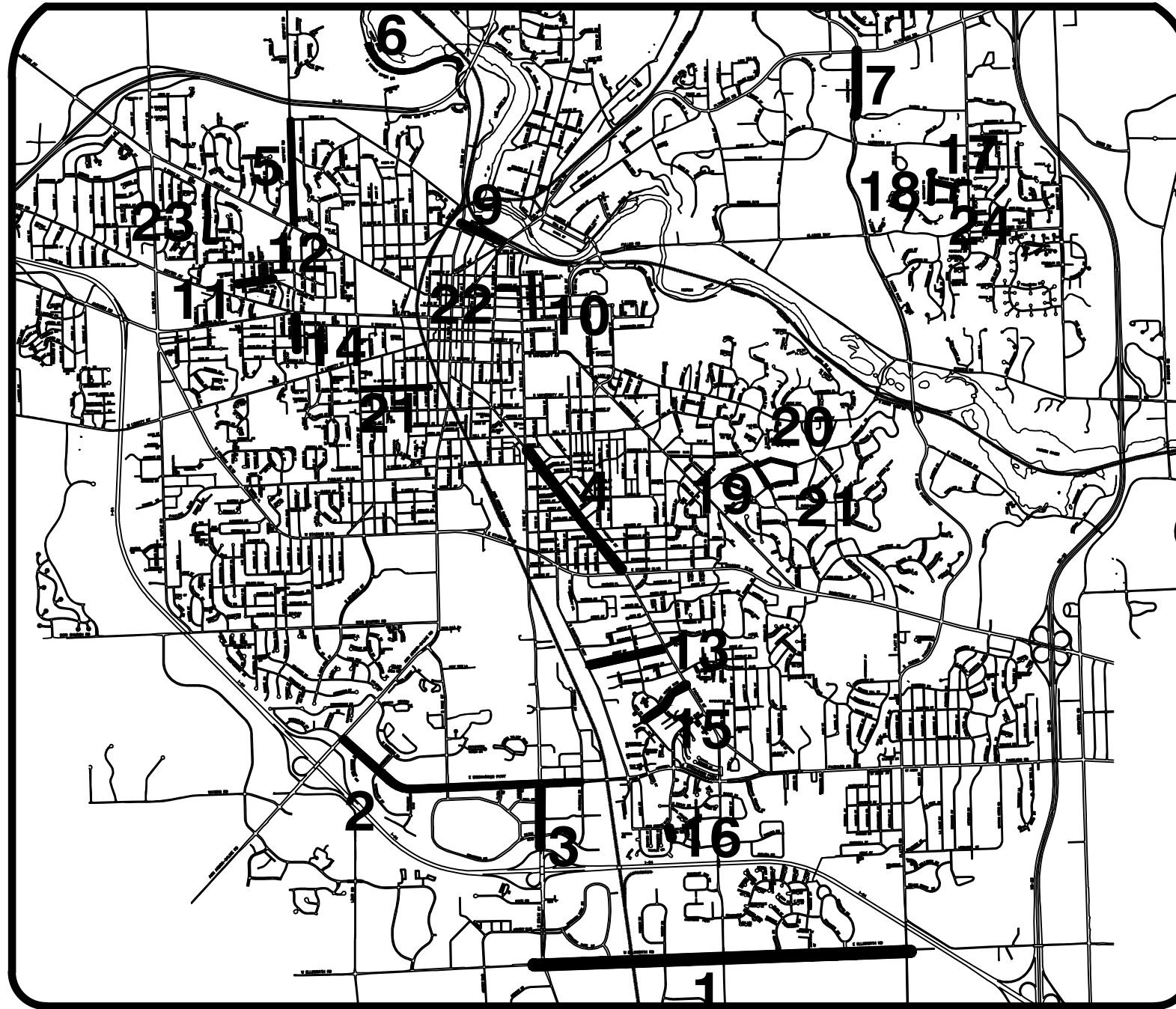
ITB No. 4371 FILE No. 2015-004



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\* See Traffic Calming Details.



### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

NICHOLAS S. HUTCHINSON, P.E. - MI LICENSE No. 46789  
CITY ENGINEER

DATE

PREPARED UNDER THE SUPERVISION OF

ELIZABETH ROLLA, P.E. - MI LICENSE No. 40106  
PROJECT MANAGER

DATE

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

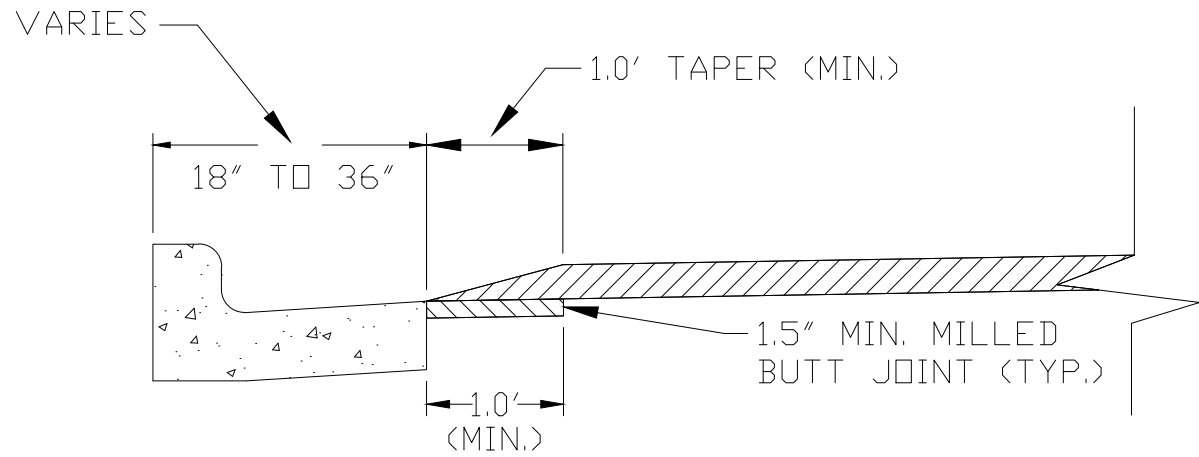
PROJECT DESCRIPTION AND LIMITS

ENGINEER'S SEAL

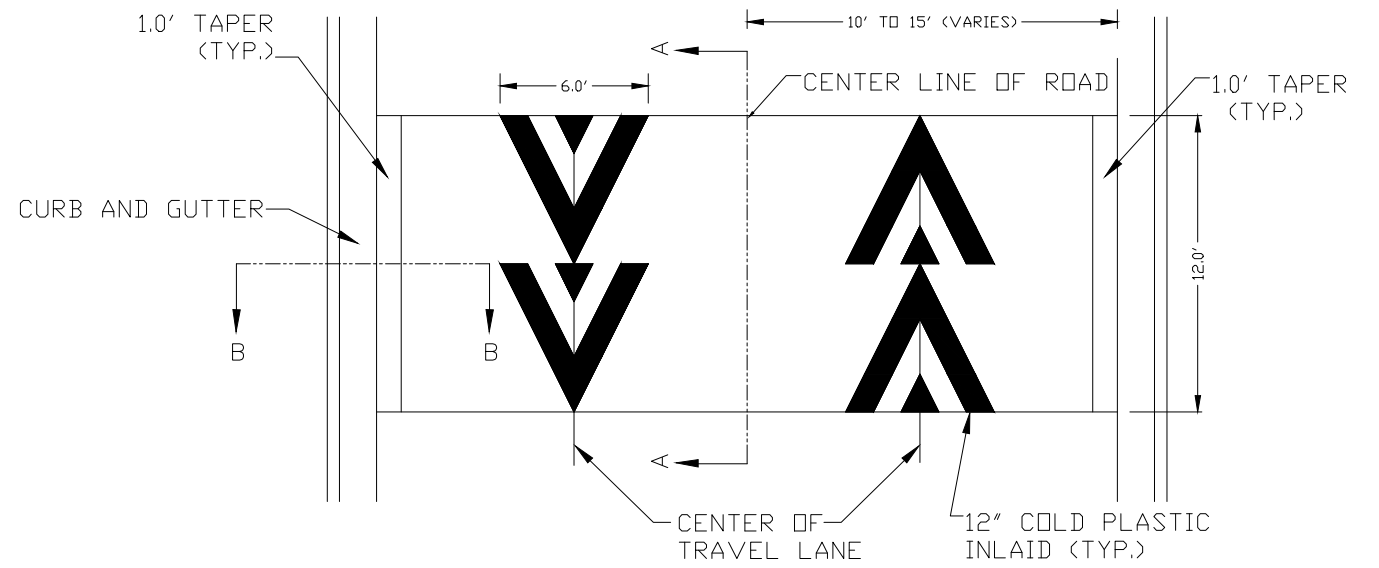
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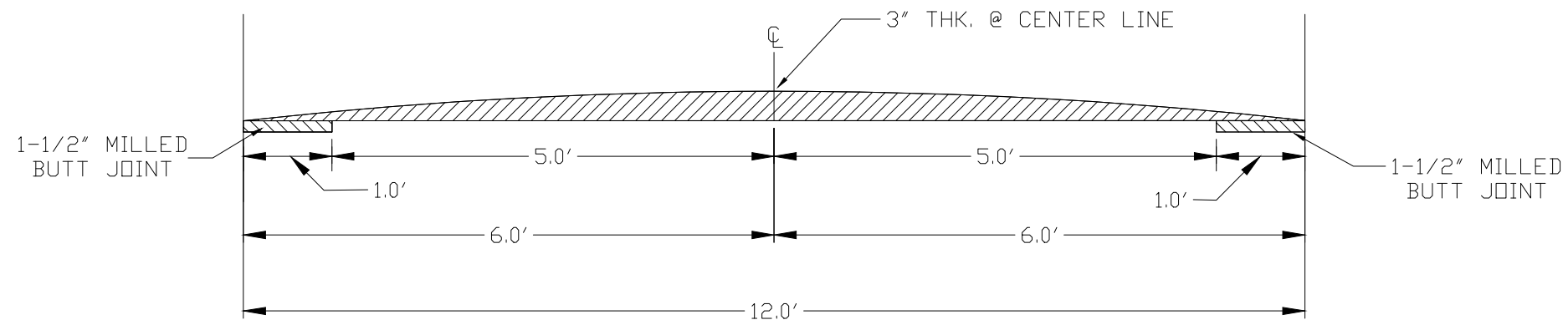
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SPEED HUMP CROSS SECTION  
SECTION B-B



PAVEMENT MARKING DETAIL



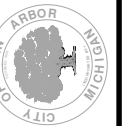
SPEED HUMP CROSS SECTION  
SECTION A-A

**GENERAL NOTES**

1. RAISED INTERSECTIONS SHALL FOLLOW THE SAME TAPER REQUIREMENT AS THE SPEED HUMPS DETAILED HEREIN.
2. PAYMENT FOR PAVEMENT MARKINGS FOR SPEED HUMPS AND RAISED INTERSECTIONS SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.



000	ORIGINAL ISSUE	2.19.2015	G.S.	INITIALS	CHECKED
REV.	DESCRIPTION	DATE	DRAWN		



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
2015 ANNUAL RESURFACING PROGRAM  
TRAFFIC CALMING DETAIL  
SCALE PLAN: NTS  
DRAWING No. 2015004 - ----



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: E. ELLSWORTH ROAD

BID No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	77
207	Cold Milling Pavement	Tons	3570
209	Subgrade Undercutting - Type II	C.Y.	690
220	HMA Patching	Tons	9
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Tons	3570
227	HMA Pavement Wearing - 4E3	Tons	0
230	Rem. Curb & Gutter, Any Type	L.F.	410
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	710
233	Pvmt. Joint & Crack Repair - Detail 7	Ft.	200
234	Pvmt. Joint & Crack Repair - Detail 8	Ft.	100
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	410
240	4" Sidewalk or Ramp	S.F.	140
241	6" Drive, Sidewalk or Ramp	S.F.	570
245	Detectable Warning, Cast in Place	S.F.	150
250	2' Dia. Structure	Each	2
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
260	Inlet Structure Cover (MDOT K)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	20
268	Flowable Fill	C.Y.	12
271	21AA Limestone - C.I.P.	C.Y.	690
276	Remove Raised Pavement marker	Each	380
281	Arrow Panel, Furn. & Operate	Each	2
282	Plastic Drum - Lighted - Furn. & Operate	Each	50
283	Barricade Type III - Furn. & Operate	Each	0
284	Temp Signs Type - B	S.F.	376
285	No Parking Sign	Each	0
286	Portable Message Board, Furn.	Each	2
287	Portable Message Board, Oper.	Each	2
295	Tubular Markers, 36", Furn. & Operate	Each	555
590	Thermo. Pvmt. Marking, Railroad Symbol	Each	2
592	12" Thermo. White or Yellow	L.F.	726
594	4" White Thermo.	L.F.	19647
595	4" Yellow Thermo.	L.F.	26126
596	6" White Thermo.	L.F.	8734
597	24" White Thermo.	L.F.	1097
598	Pvmt. Marking Symbol	Each	35
599	Cold Plastic Bike Symbol W/ Arrow or Sharrow	Each	16

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
15	W20-1	"ROAD WORK AHEAD"
14	W20-7A	"FLAGGER IMAGE"
30	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

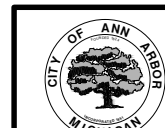
1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
5. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
6. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
7. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
8. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
9. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
10. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

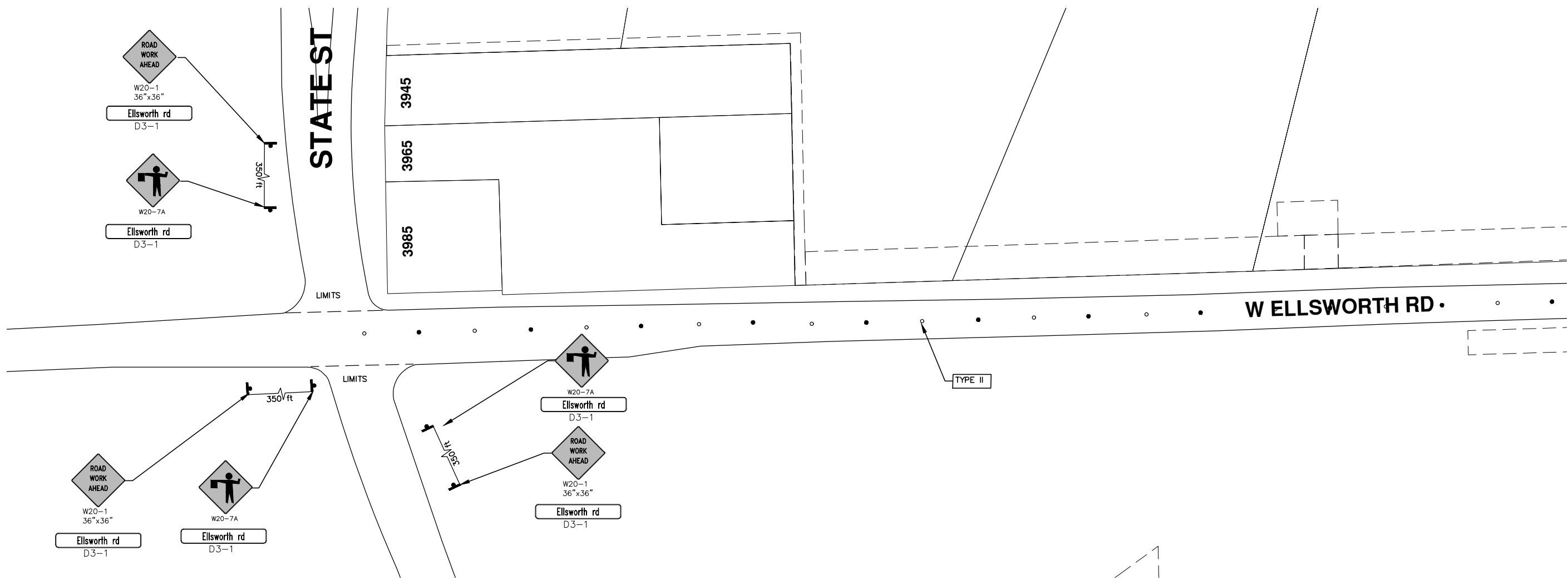
E. ELLSWORTH ROAD

PROJECT DESCRIPTION

DRAWING No.  
2015004 - 3

SHEET No.  
3 OF 117

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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
<b>3</b>	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
<b>3</b>	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
<b>3</b>	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
<b>1</b>	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
<b>1</b>	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



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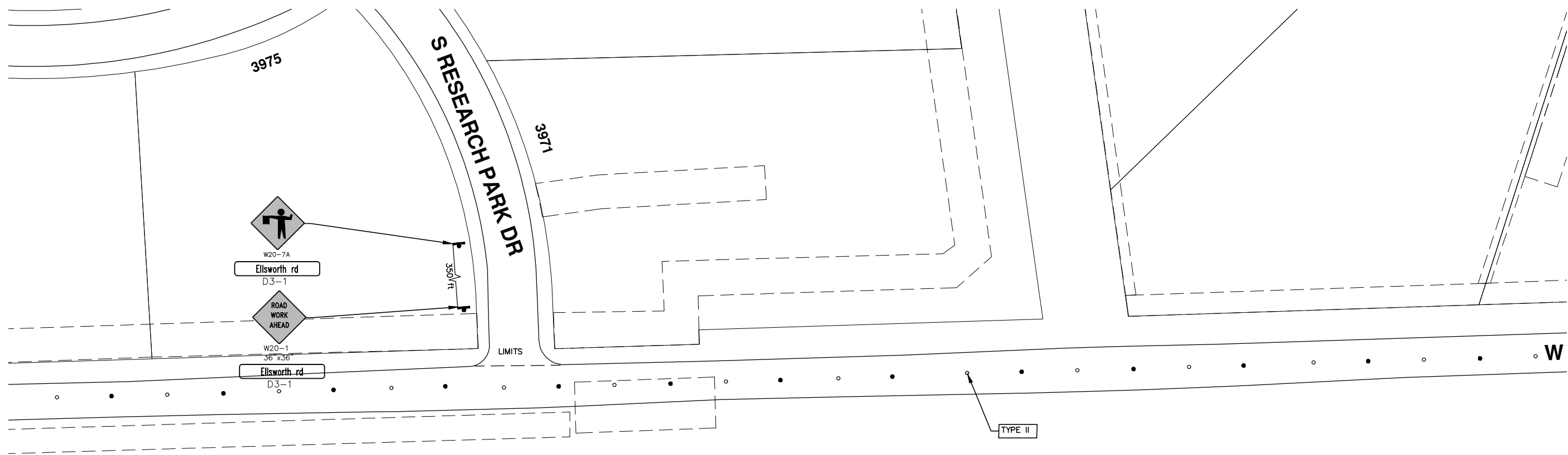
CITY OF ANN ARBOR  
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301 EAST HURON STREET  
ANN ARBOR, MI 48106-0847  
www.a2gov.org



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
2015 ANNUAL RESURFACING  
E. ELLSWORTH ROAD  
MAINTENANCE OF TRAFFIC  
DRAWING No. 2015004-4



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	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
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	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
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	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
2015 ANNUAL RESURFACING  
E. ELLSWORTH ROAD  
MAINTENANCE OF TRAFFIC

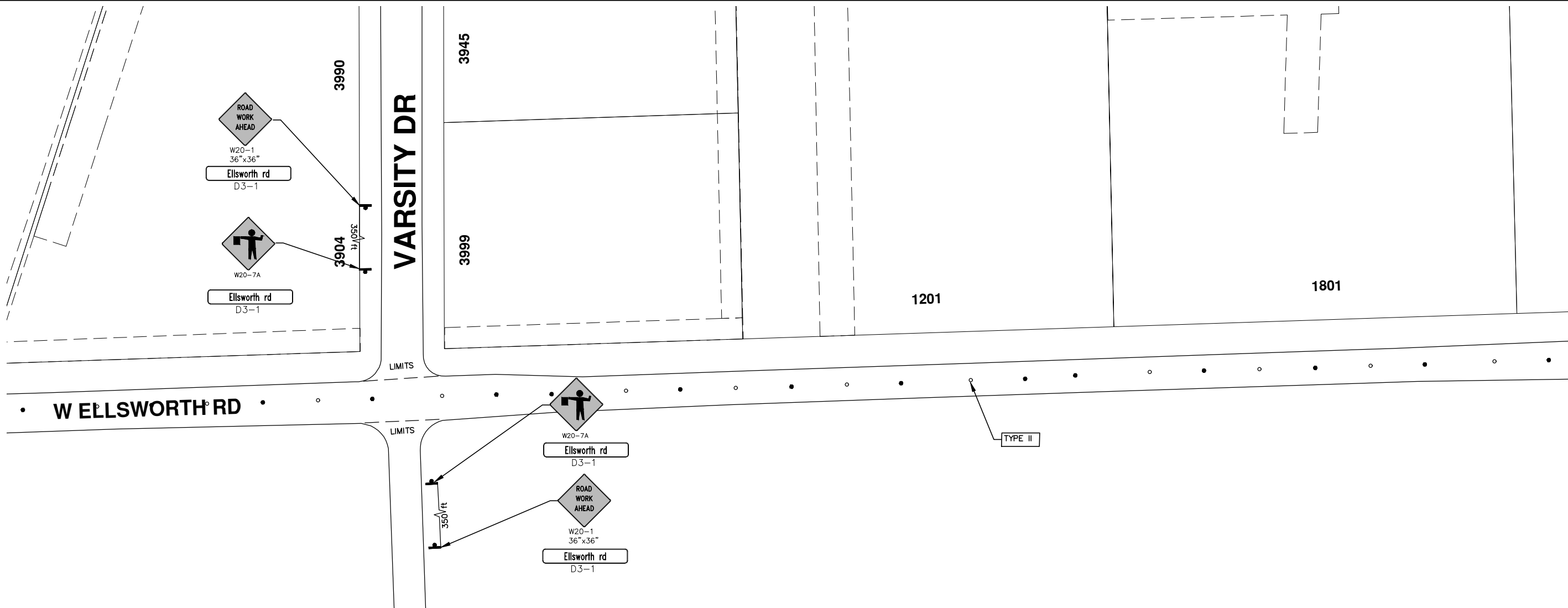
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SHEET No. 5 OF 117



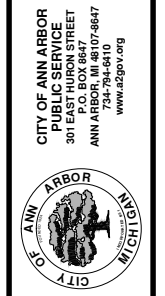
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TRAFFIC CONTROL & SIGN LEGEND		
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	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 E. ELLSWORTH ROAD  
 MAINTENANCE OF TRAFFIC  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-6  
 SHEET No. 6 OF 100

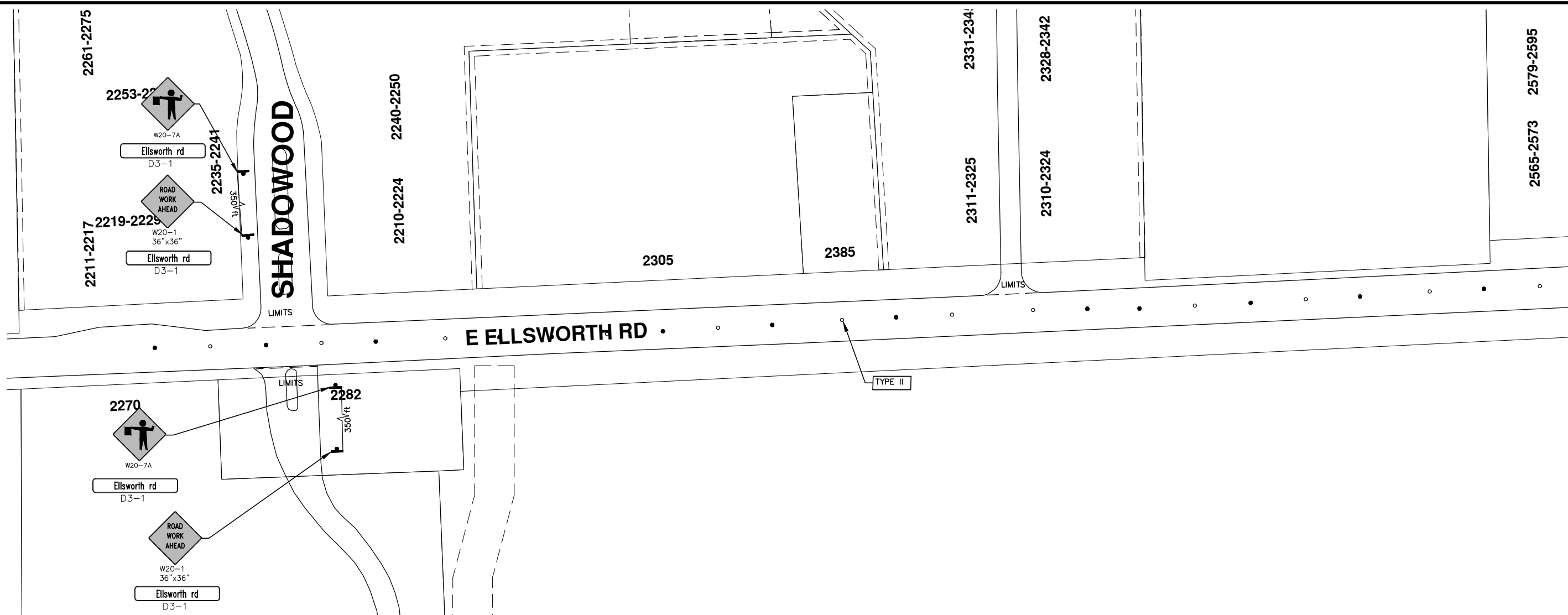


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811  
 Know what's below.  
 Call Before you dig.



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**2015 ANNUAL RESURFACING**  
 E. ELLSWORTH ROAD  
 MAINTENANCE OF TRAFFIC

SHEET No. **OF 100**

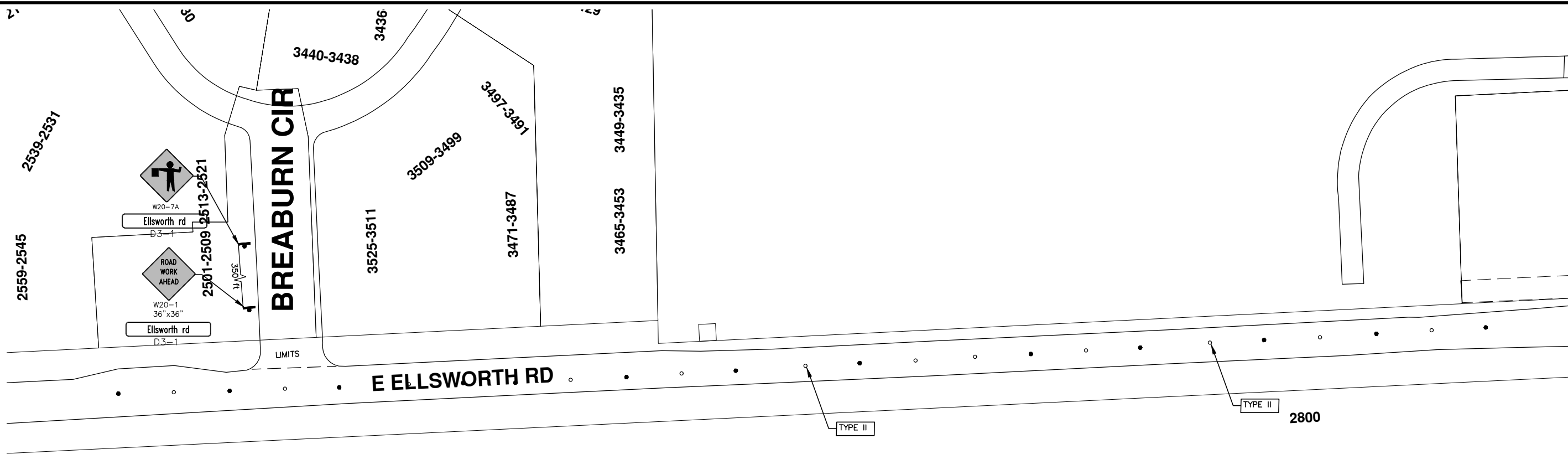
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 301 EAST HURON STREET  
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 ANN ARBOR 734.764.5410  
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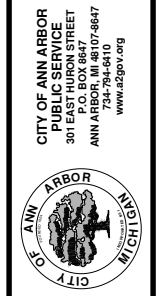


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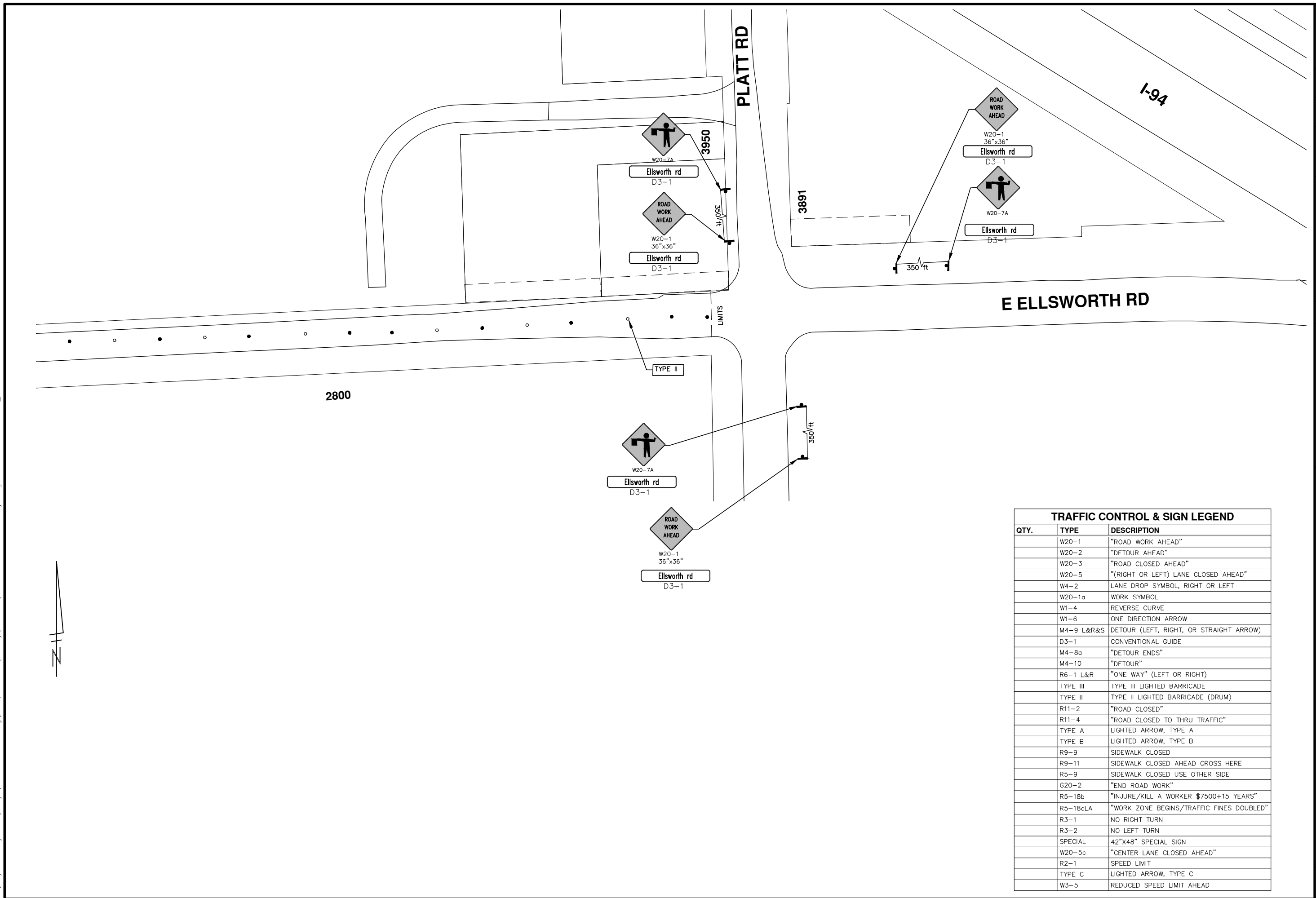
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	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 E. ELLSWORTH ROAD  
 MAINTENANCE OF TRAFFIC  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-7  
 SHEET No. 7 OF 117



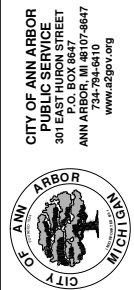
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 2015 ANNUAL RESURFACING  
 E. ELLSWORTH ROAD  
 MAINTENANCE OF TRAFFIC



CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1000  
 ANN ARBOR 734.764.6410  
 www.a2gov.org

REV.	DESCRIPTION	DATE	BY	CHECKED
00	ADD DESCRIPTION AN MAKE LAYER PLOT			

SHEET No. OF 100



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: E. EISENHOWER PKWY AND BIKE PATHS

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	73
207	Cold Milling Pavement	Tons	4640
209	Subgrade Undercutting - Type II	C.Y.	630
220	HMA Patching	Tons	8
222	HMA Pavement Leveling, Regular (Bike Paths)	Tons	1320
223	HMA Pavement Wearing, Regular	Tons	0
224	HMA Pavement Wearing, 36 A (Bike Paths)	Tons	660
226	HMA Pavement Wearing - 5E3	Tons	4640
227	HMA Pavement Base or Leveling - 4E3	Tons	0
230	Rem. Curb & Gutter, Any Type	L.F.	490
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	2560
233	Pvmt. Joint & Crack Repair - Detail 7	FT	400
234	Pvmt. Joint & Crack Repair - Detail 8	FT	100
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	490
240	4" Sidewalk or Ramp	S.F.	300
241	6" Drive, Sidewalk or Ramp	S.F.	2260
245	Detectable Warning, Cast in Place	S.F.	290
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
260	Inlet Structure Cover (MDOT Type K)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	14
271	21AA Limestone - C.I.P.	C.Y.	630
282	Plastic Drum - Lighted - Furnish & Operate	Each	40
283	Barricade Type III - Furnish & Operate	Each	0
284	Temp Signs Type - B	S.F.	689
285	No Parking Sign	Each	0
286	Sign, Portable Changeable Mess., Furnish	Each	2
287	Sign, Portable Changeable Mess., Operate	Each	2
295	Tubular Markers, 36", Furnish & Operate	Each	292
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	3448
595	4" Yellow Thermo.	L.F.	596
596	6" White Thermo.	L.F.	405
597	24" White Thermo.	L.F.	1627
598	Pvmt. Marking Symbol	Each	84

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
15	W20-1	"ROAD WORK AHEAD"
14	W20-7a	"FLAGGER IMAGE"
29	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. PERFORM HMA CRUSHING AND SHAPING OF HMA BIKE PATHS, AS DIRECTED BY THE ENGINEER.
5. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
6. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
7. PAVE 2 INCHES OF BITUMUNUS MIX ON THE BIKE PATHS AS SPECIFIED OR DIRECTED, AS THE BASE/LEVELING COURSE, IN ONE LIFT.
8. PAVE 1 INCH OF BITUMUNOUS MIX ON THE BIKE PATHS AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE IN ONE LIFT.
9. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
10. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
11. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
12. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

E. EISENHOWER PKWY AND BIKE PATHS

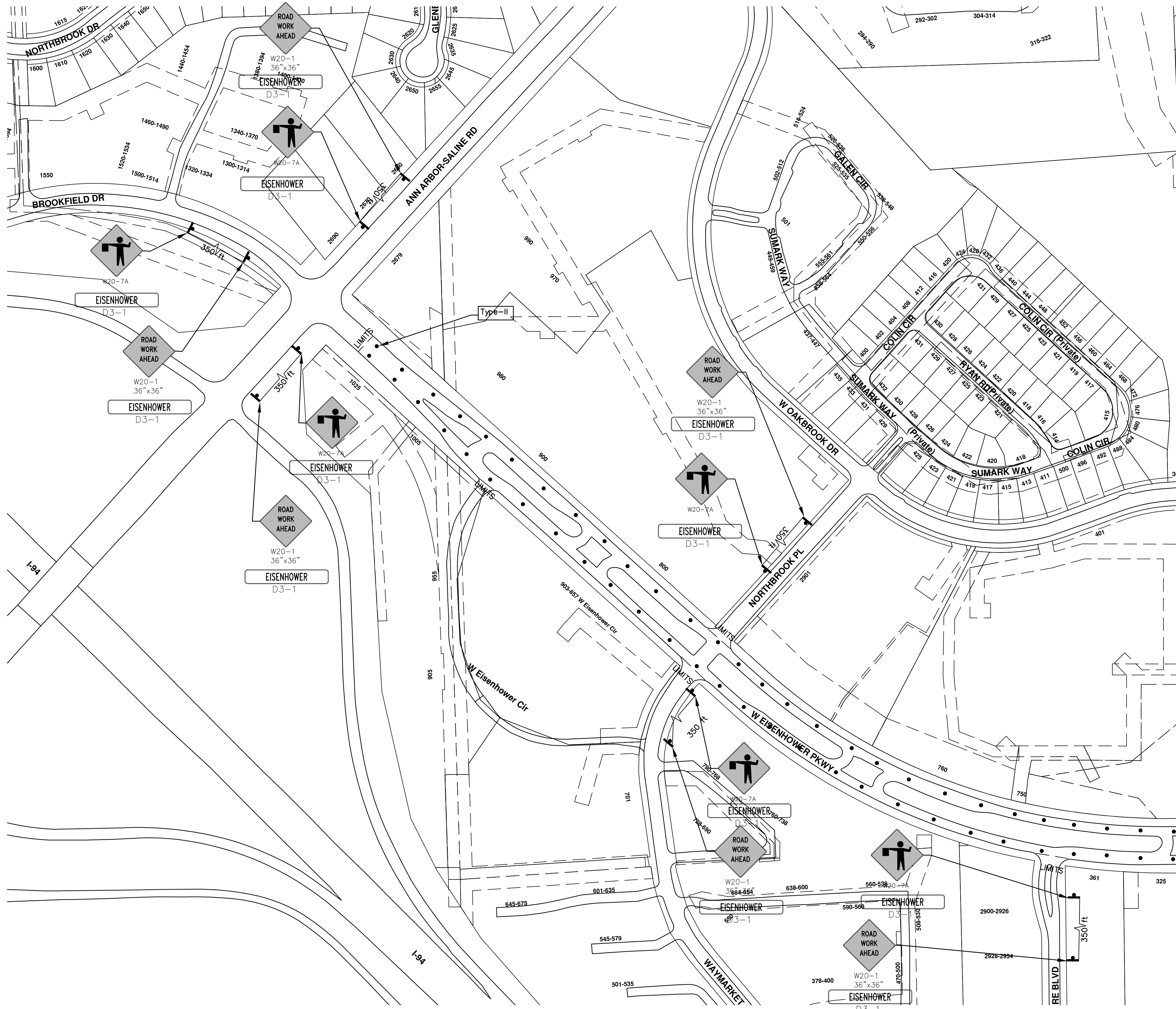
DRAWING No. 2015004 - 12

SHEET No.

12 OF 117



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**

SCALE PLAN: Custom  
 DRAWING No. 2015004-13  
 SHEET No. 13 OF 117

**E. EISENHOWER PKWY**  
**MAINTENANCE OF TRAFFIC**

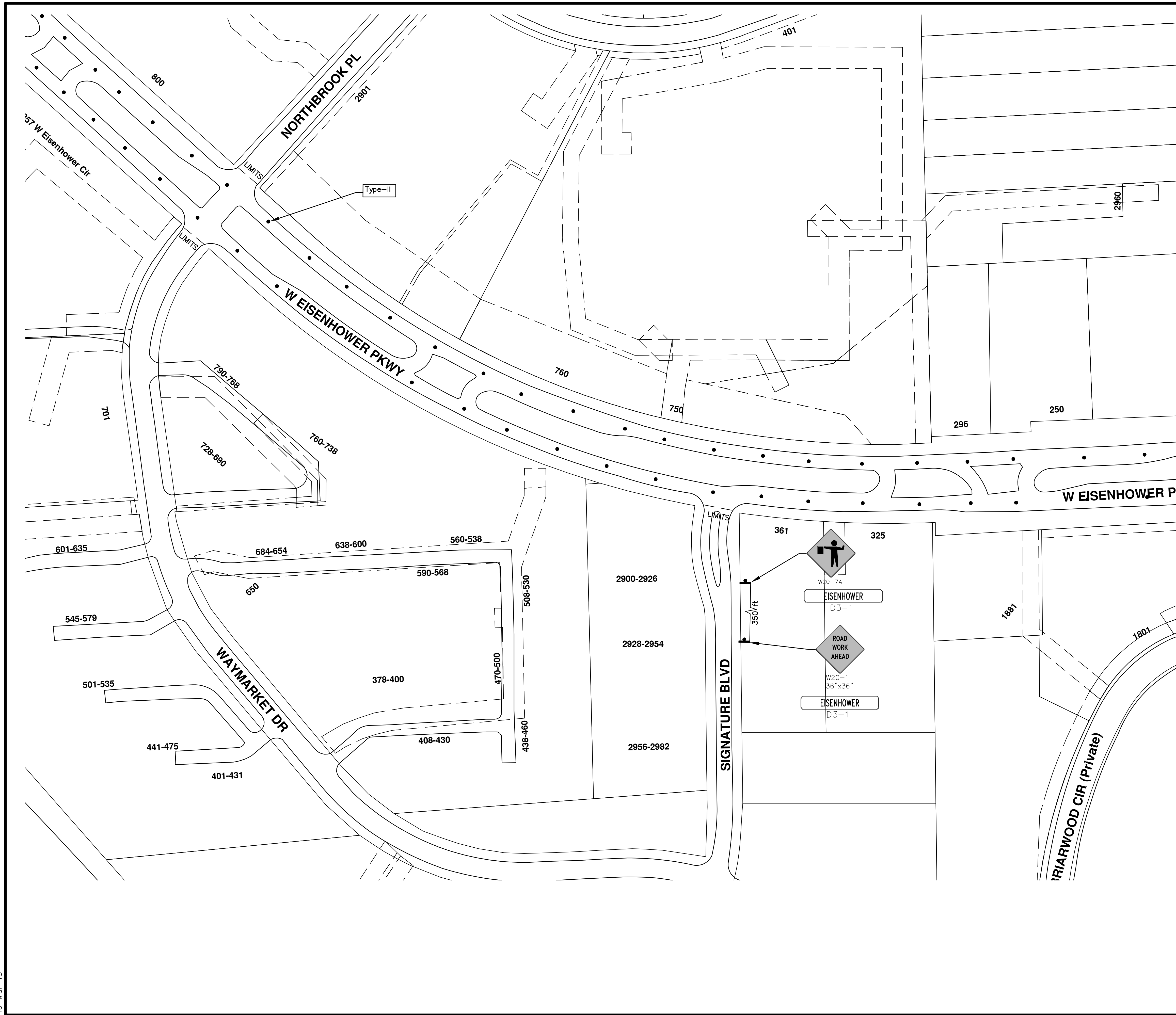
CITY OF ANN ARBOR  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 P.O. BOX 86407  
 ANN ARBOR MI 48108-6647  
 www.a2gov.org

REV.	DESCRIPTION	DATE	DATE	BY	CHECKED

811  
 Know what's below.  
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 E. EISENHOWER PKWY  
 MAINTENANCE OF TRAFFIC

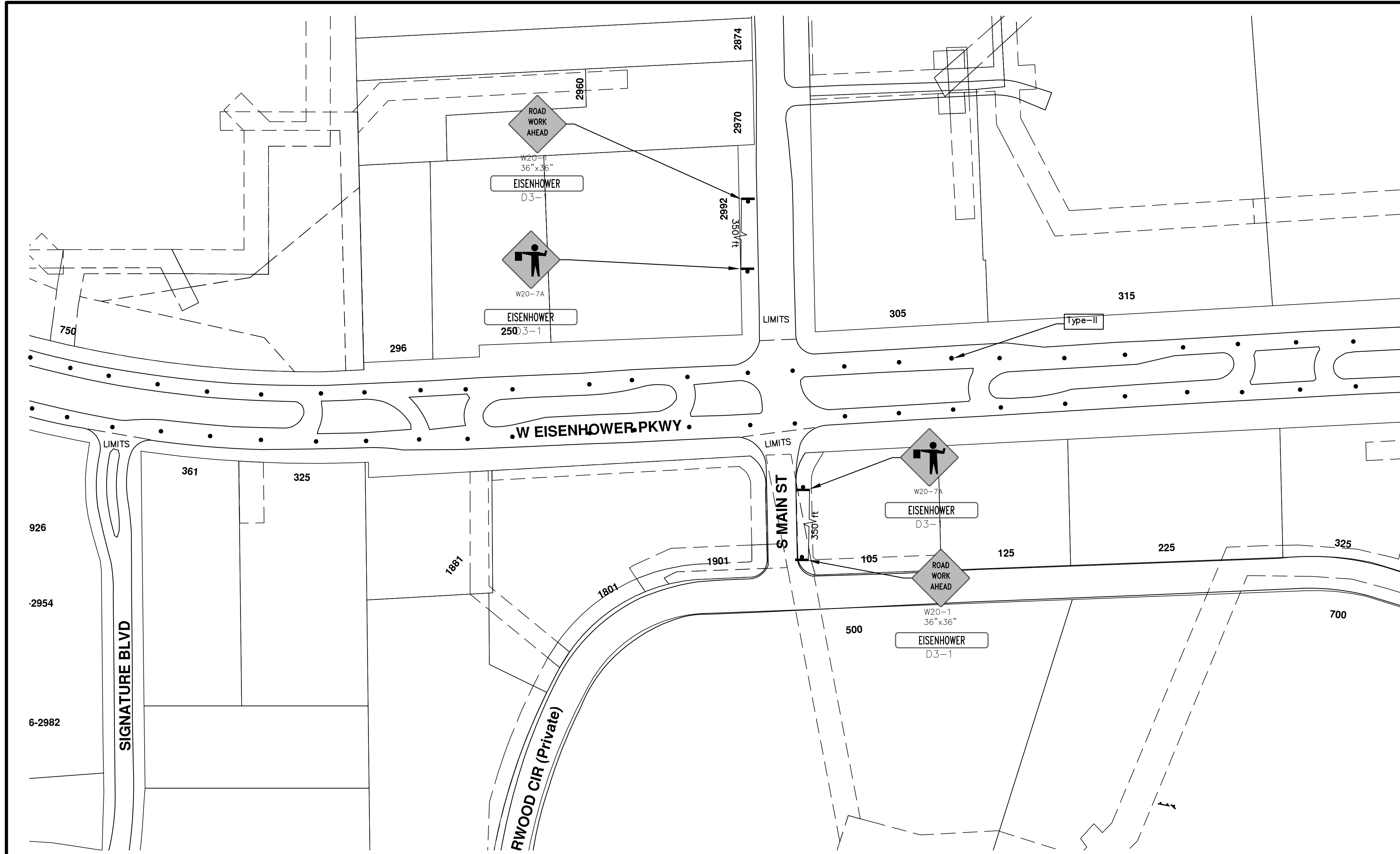
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 SHEET No. 14 OF 117

**811**  
 Know what's below.  
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CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-8647  
 ANN ARBOR 734-794-4410  
 www.a2gov.org

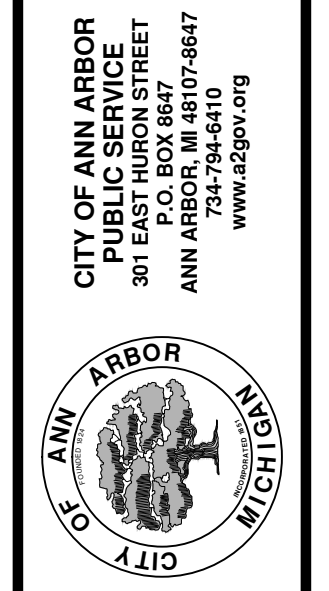
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
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	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-15  
 SHEET No. 15 OF 117

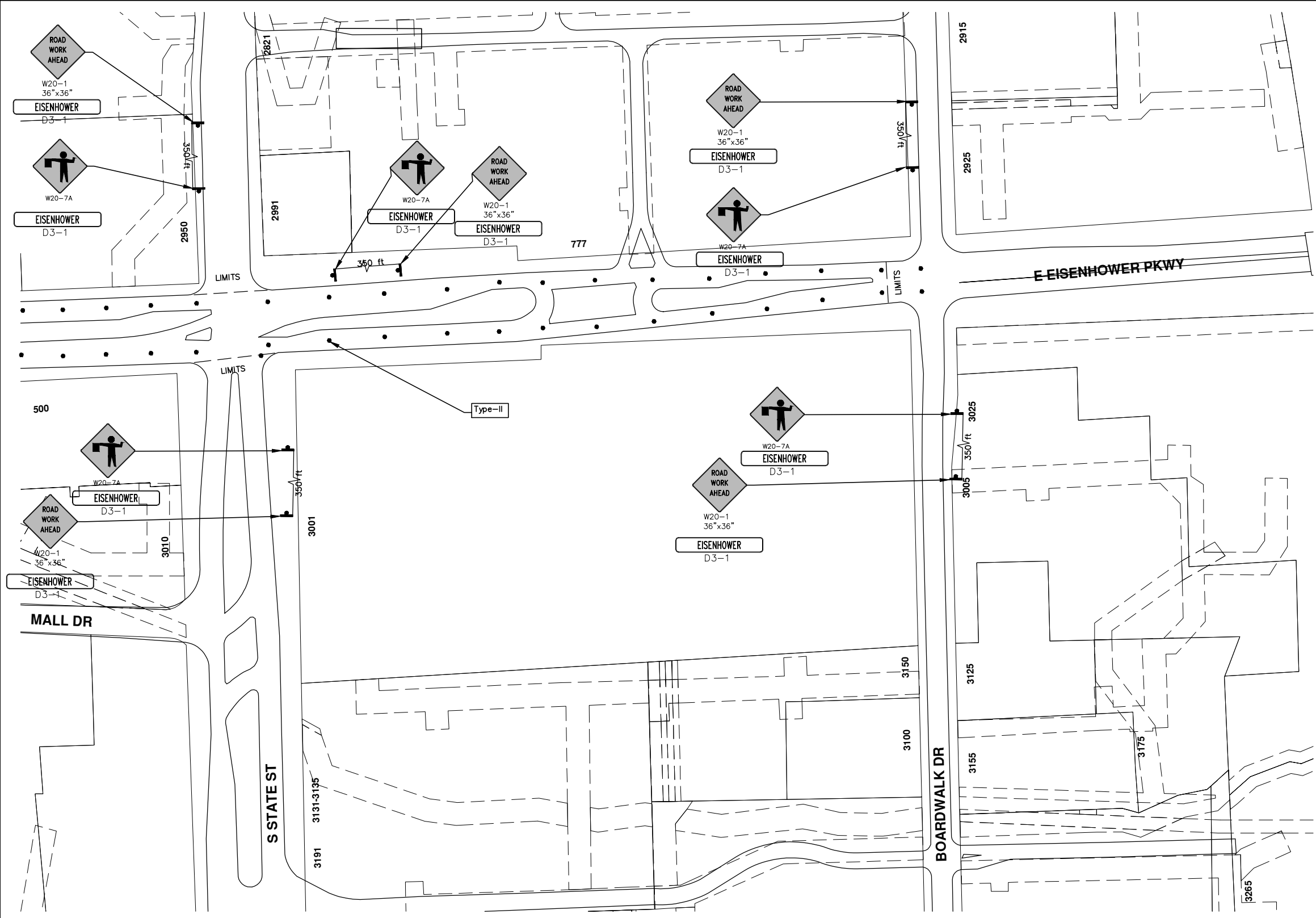


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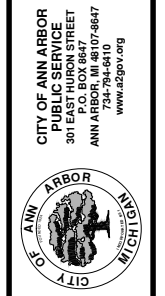


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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
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	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
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	R3-1	NO RIGHT TURN
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	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-16  
 SHEET No. 16 OF 117



REV.	DATE	DESCRIPTION	BY	CHECKED

ADD DESCRIPTION AND MAKE LAYER PLOT  
 CALL BEFORE YOU DIG





# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: S. STATE STREET

IBT No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	28
207	Cold Milling Pavement	Tons	1000
209	Subgrade Undercutting - Type II	C.Y.	150
220	HMA Patching	Tons	3
221	Bit. Finish Wedging	C.Y.	8
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Tons	1000
227	HMA Pavement Base or Leveling - 4E3	Tons	0
230	Rem. Curb & Gutter, Any Type	L.F.	30
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	370
233	Pvmt. Joint & Crack Repair - Detail 7	FT.	200
234	Pvmt. Joint & Crack Repair - Detail 8	FT.	100
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	30
240	4" Sidewalk or Ramp	S.F.	200
241	6" Drive, Sidewalk or Ramp	S.F.	170
245	Detectable Warning, Cast in Place	S.F.	20
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	2
271	21AA Limestone - C.I.P.	C.Y.	150
281	Arrow Panel - Furn. & Operate	Each	2
282	Plastic Drum - Lighted - Furn. & Operate	Each	20
283	Barricade Type III - Furn. & Operate	Each	0
284	Temp Signs Type - B	S.F.	240
285	No Parking Sign	Each	0
286	Sign Portable Changeable Mess. Furn.	Each	2
287	Sign Portable Changeable Mess. Operate	Each	2
295	Tubular Markers, 36", Furn. & Operate	Each	109
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	3308
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	208
597	24" White Thermo.	L.F.	506
598	Pvmt. Marking Symbol	Each	26

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
10	W20-1	"ROAD WORK AHEAD"
10	W20-7a	"FLAGGER IMAGE"
20	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	ROAD CLOSED TO THRU TRAFFIC
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
5. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
6. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
7. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
8. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
9. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

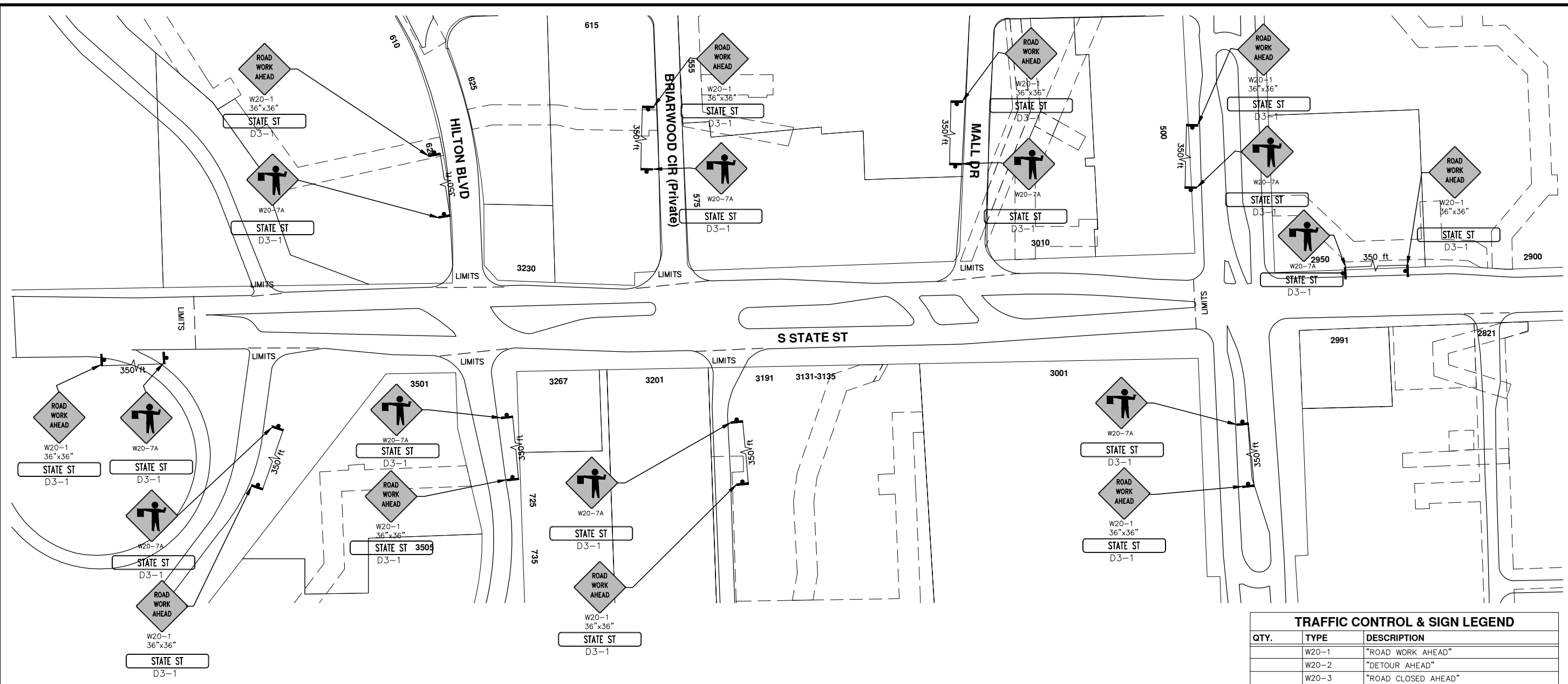
2015 ANNUAL RESURFACING  
S. STATE STREET

DRAWING No.  
2015004 - 20

SHEET No.  
---0 TO 117



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**


SCALE PLAN: Custom

**2015 ANNUAL RESURFACING**

S. STATE STREET  
MAINTENANCE OF TRAFFIC

DRAWING No. 2015004-21

SHEET No. 21 OF 117



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734-794-4410  
www.a2gov.org

REV.	DESCRIPTION	DATE	BY	CHECKED

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# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: PACKARD STREET

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	33
207	Cold Milling Pavement	Tons	1650
208	Cold Mill Pavement, Curb Reveal	Tons	0
209	Subgrade Undercutting - Type II	C.Y.	192
217	Remove & Replace Brick Pavers	S.F.	30
220	HMA Patching	Tons	4
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Each	1650
227	HMA Pavement Wearing - 4E3	Each	0
230	Rem. Curb & Gutter, Any Type	L.F.	1140
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	5750
233	Pvmt. Joint & Crack Repair - Detail 7	Ft.	200
234	Pvmt. Joint & Crack Repair - Detail 8	Ft.	100
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	1140
240	4" Sidewalk or Ramp	S.F.	2430
241	6" Drive, Sidewalk or Ramp	S.F.	3320
245	Detectable Warning, Cast in Place	S.F.	630
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	1
254	Lower Structure Cover	Each	67
255	Lower Mon./Gate Valve Box	Each	37
256	Adjust Structure Cover	Each	67
257	Adjust Curb Inlet Structure Cover	Each	8
258	Adjust Mon. or Gate Valve Box	Each	37
259	Manhole Flange & Cover (MDOT Type A)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	10
268	Flowable Fill	C.Y.	32
271	21AA Limestone - C.I.P.	C.Y.	192
276	Remove Raised Pavement markers	Each	42
282	Plastic Drum - Lighted - Furn. & Operate	Each	40
283	Barricade Type III - Furn. & Operate	Each	0
284	Temp Signs Type - B	S.F.	891
285	No Parking Sign	Each	20
286	Sign, Portable Changeable Mess. Furnish	Each	2
287	Sign, Portable Changeable Mess. Operate	Each	2
295	Tubular Markers, 36", Furn. & Operate	Each	300
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	1005
595	4" Yellow Thermo.	L.F.	9162
596	6" White Thermo.	L.F.	7816
597	24" White Thermo.	L.F.	581
598	Pvmt. Marking Symbol	Each	28
599	Cold Plastic Bike Symbol W/ Arrow or Sharrow	Each	27

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
27	W20-1	"ROAD WORK AHEAD"
27	W20-7a	"FLAGGER IMAGE"
54	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

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4. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
5. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
6. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
7. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
8. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
9. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
10. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
11. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

PACKARD STREET

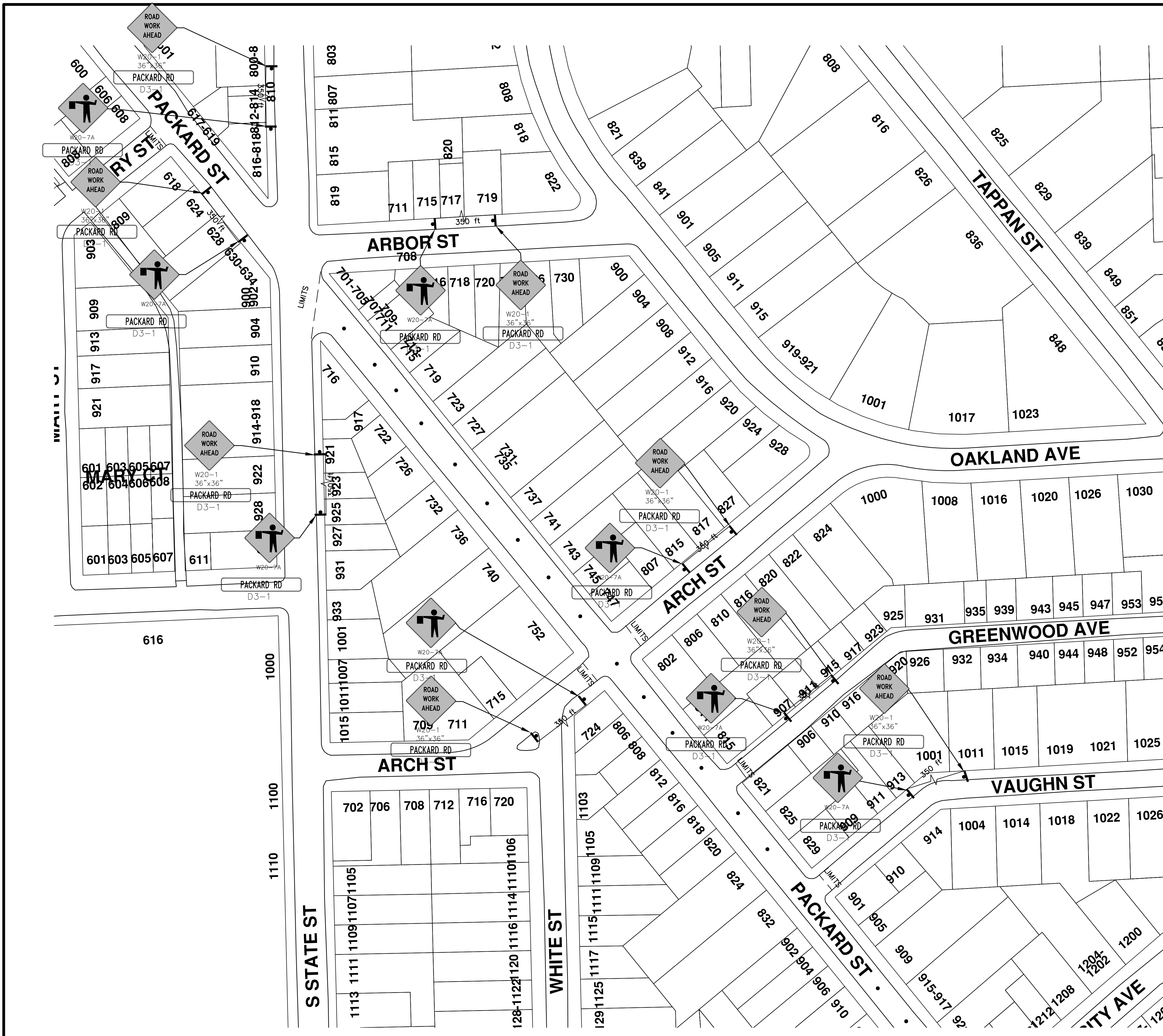
PROJECT DESCRIPTION

DRAWING No. 2015004 - 24

SHEET No. 24 TO 117



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

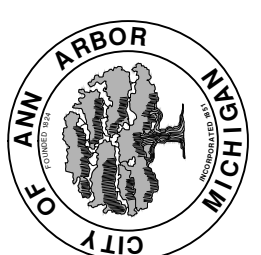
2015 ANNUAL RESURFACING

PACKARD STREET  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom

DRAWING No. 2015004-28

SHEET No. 28 OF 117

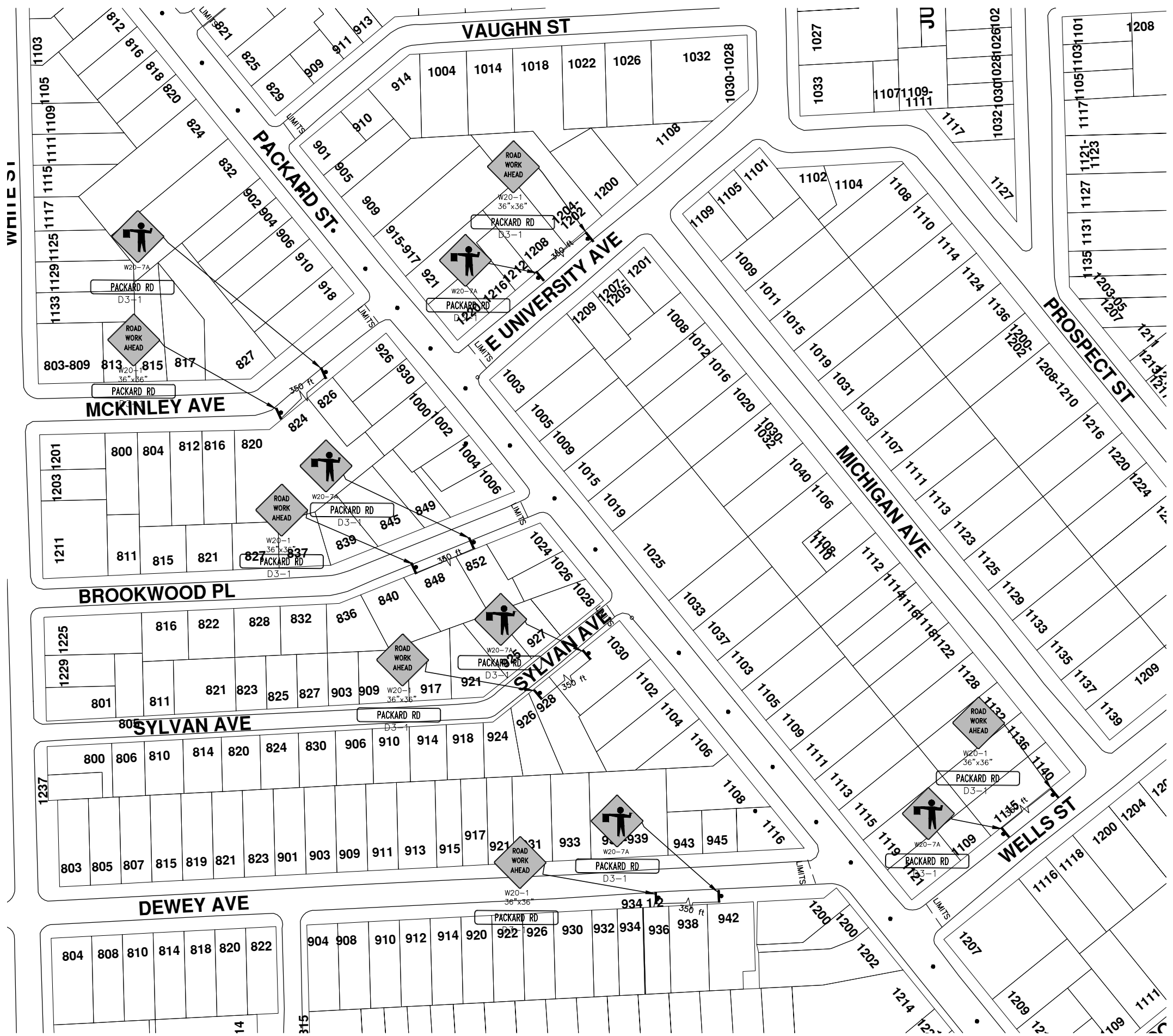


CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-6647  
ANN ARBOR: 734-794-4410  
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**


2015 ANNUAL RESURFACING

PACKARD STREET  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom

DRAWING No. 2015004-27

SHEET No. 27 OF 117



CITY OF ANN ARBOR  
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
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	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

2015 ANNUAL RESURFACING

PACKARD STREET  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom

DRAWING NO.: 2015004-25

SHEET NO.: 25 OF 117

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ANN ARBOR: 734-794-6410  
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# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: NEWPORT ROAD

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	33
207	Cold Milling Pavement	Tons	1020
208	Cold Mill Pavement, Curb Reveal	Tons	0
209	Subgrade Undercutting - Type II	C.Y.	192
220	HMA Patching	Tons	4
221	Bit. Finish Wedging	Tons	8
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Tons	1020
230	Rem. Curb & Gutter, Any Type	L.F.	490
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	1170
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	450
238	Conc. Curb & Gutter H.E.	L.F.	50
240	4" Sidewalk or Ramp	S.F.	550
241	6" Drive, Sidewalk or Ramp	S.F.	370
242	6" S/W, Drive App. H.E.	S.F.	250
245	Detectable Warning, Cast in Place	S.F.	80
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	0
255	Lower Mon. Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	14
271	21AA Limestone - C.I.P.	C.Y.	490
282	Plastic Drum - Lighted - Furn. & Operate	Each	40
283	Barricade Type III - Furn. & Operate	Each	4
284	Temp Signs Type - B	S.F.	231
285	No Parking Sign	Each	20
295	Tubular Markers, 36", Furn. & Operate	Each	130
592	12" Thermo, White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	75
595	4" Yellow Thermo.	L.F.	6090
596	6" White Thermo.	L.F.	6208
597	24" White Thermo.	L.F.	267
598	Pvmt. Marking Symbol	Each	0
599	Cold Plastic Bike Symbol W/ Arrow or Sharrow	Each	9

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
7	W20-1	"ROAD WORK AHEAD"
0	W20-3	"ROAD CLOSED AHEAD"
14	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	ROAD CLOSED TO THRU TRAFFIC
0	TYPE II	TYPE II BARRICADE DRUM
7	W20-7A	TRAFFIC REGULATOR

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
5. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
6. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
7. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
8. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
9. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
10. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

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THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION

2015 ANNUAL RESURFACING

NEWPORT ROAD

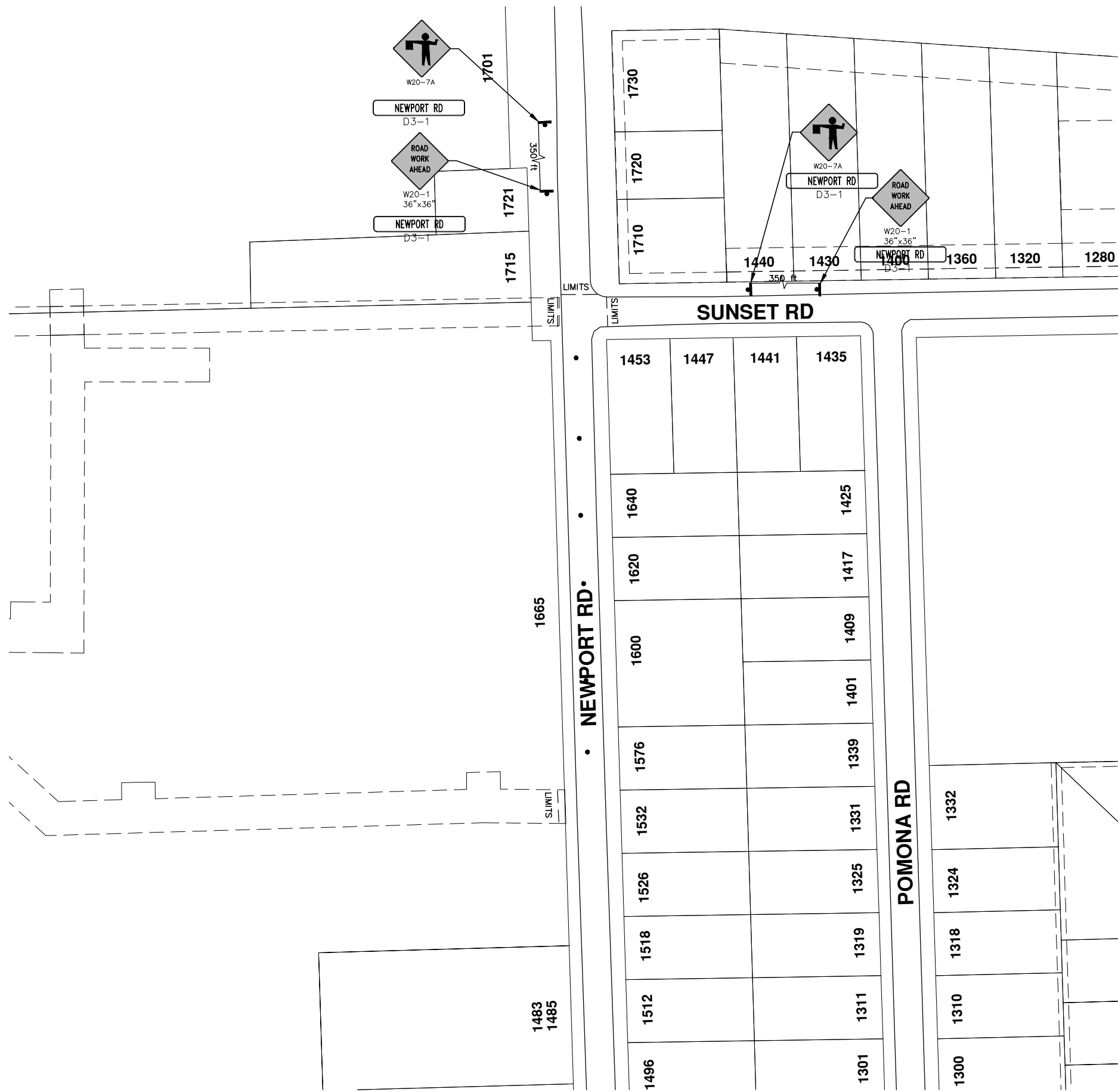
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23 TO 83



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
2	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
1	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
1	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 SCALE PLAN: Custom

DRAWING No.

2015004-35

2015 ANNUAL RESURFACING  
 NEWPORT ROAD  
 MAINTENANCE OF TRAFFIC



CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1007  
 ANN ARBOR: 734.794.5410  
 WWW.A2GOV.ORG

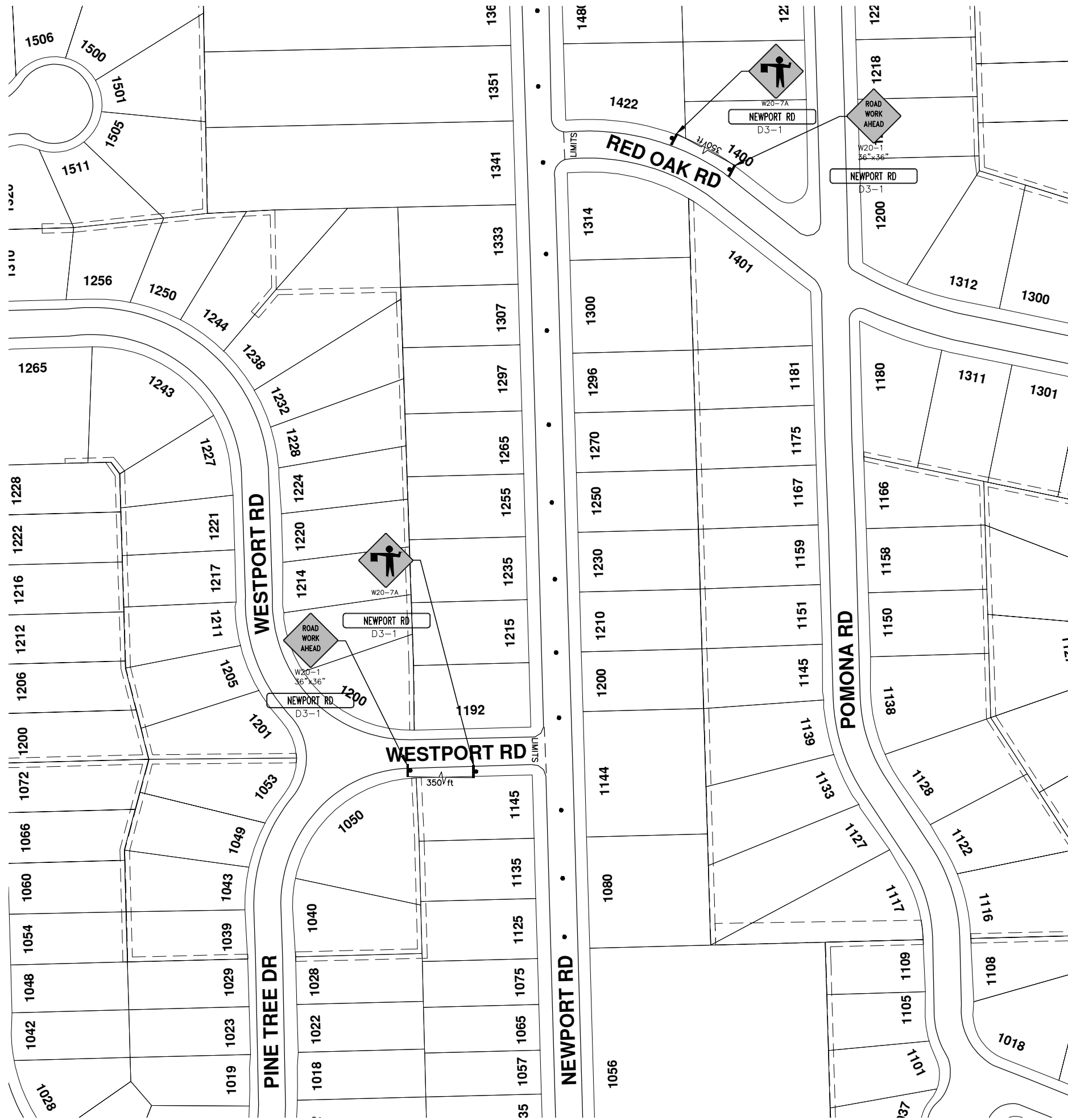
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REV.	DESCRIPTION	DATE	BY	CHECKED

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TRAFFIC CONTROL & SIGN LEGEND		
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
SCALE PLAN: Custom

DRAWING No.  
2015004-34

SHEET No.

34 OF 117

NEWPORT ROAD  
MAINTENANCE OF TRAFFIC

2015 ANNUAL RESURFACING



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734.794.4410  
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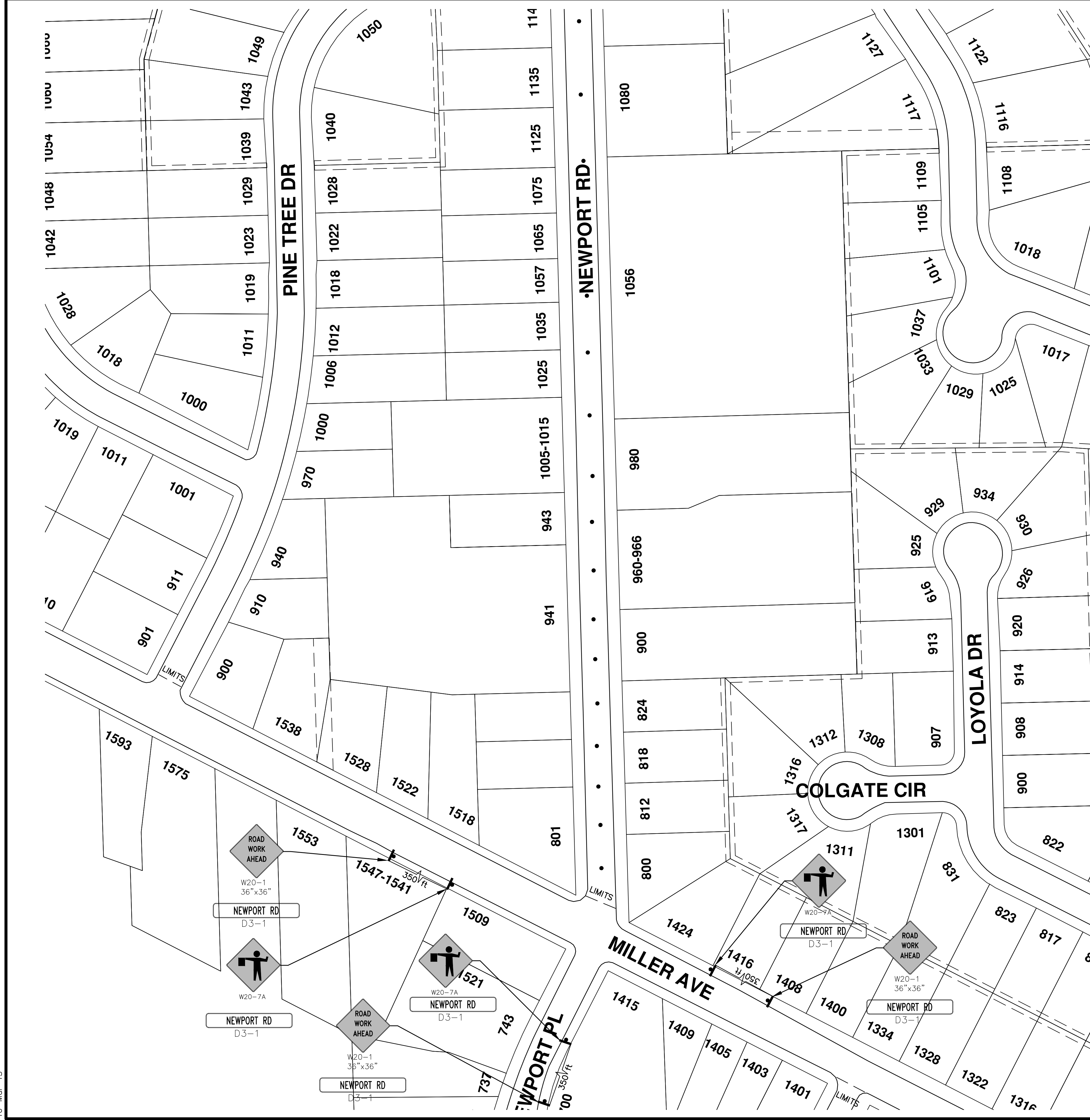
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TRAFFIC CONTROL & SIGN LEGEND		
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE PLAN: Custom

DRAWING No. 2015004-33

SHEET No. 33 OF 117

**2015 ANNUAL RESURFACING**

NEWPORT ROAD  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR MI 48106-6647  
www.a2gov.org

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Know what's below.  
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# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: W. HURON RIVER DR.

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	29
207	Cold Milling Pavement	Tons	840
209	Subgrade Undercutting - Type II	C.Y.	160
220	HMA Patching	Tons	4
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Tons	840
227	HMA Pavement Base or Leveling 4E3	Tons	0
230	Rem. Curb & Gutter, Any Type	L.F.	0
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	0
233	Pvmt. Joint & Crack Repair - Detail 7	Ft.	100
234	Pvmt. Joint & Crack Repair - Detail 8	Ft.	50
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	0
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	0
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
252	Reconstruct Structure	Each	1
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	1
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	1
264	12" Sewer, Trench Detail I, Modified	L.F.	0
271	21AA Limestone - C.I.P.	C.Y.	0
274	Aggregate Shoulder, Class I, 2.5 Inch	Ton	160
281	Arrow panel - Furnish & Operate	Each	2
282	Plastic Drum - Lighted - Furn. & Operate	Each	20
283	Barricade Type III - Furn. & Operate	Each	4
284	Temp Signs Type - B	S.F.	149
285	No Parking Sign	Each	0
286	Sign Portable Changeable Mess. , Furnish	Each	2
287	Sign Portable Changeable Mess. , Operate	Each	2
295	Tubular Markers, 36", Furn. & Operate	each	120
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	7180
595	4" Yellow Thermo.	L.F.	7070
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	0
598	Pvmt. Marking Symbol	Each	0
599	Cold Plastic Bike Symbol W/ Arrow or Sharrow	Each	24

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
3	W20-1	"ROAD WORK AHEAD"
3	W20-7a	"FLAGGER IMAGE"
7	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

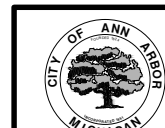
1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
9. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
10. PAVE 1.5 INCH OVERLAY OF BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
11. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
12. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
13. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING  
W. HURON RIVER DRIVE

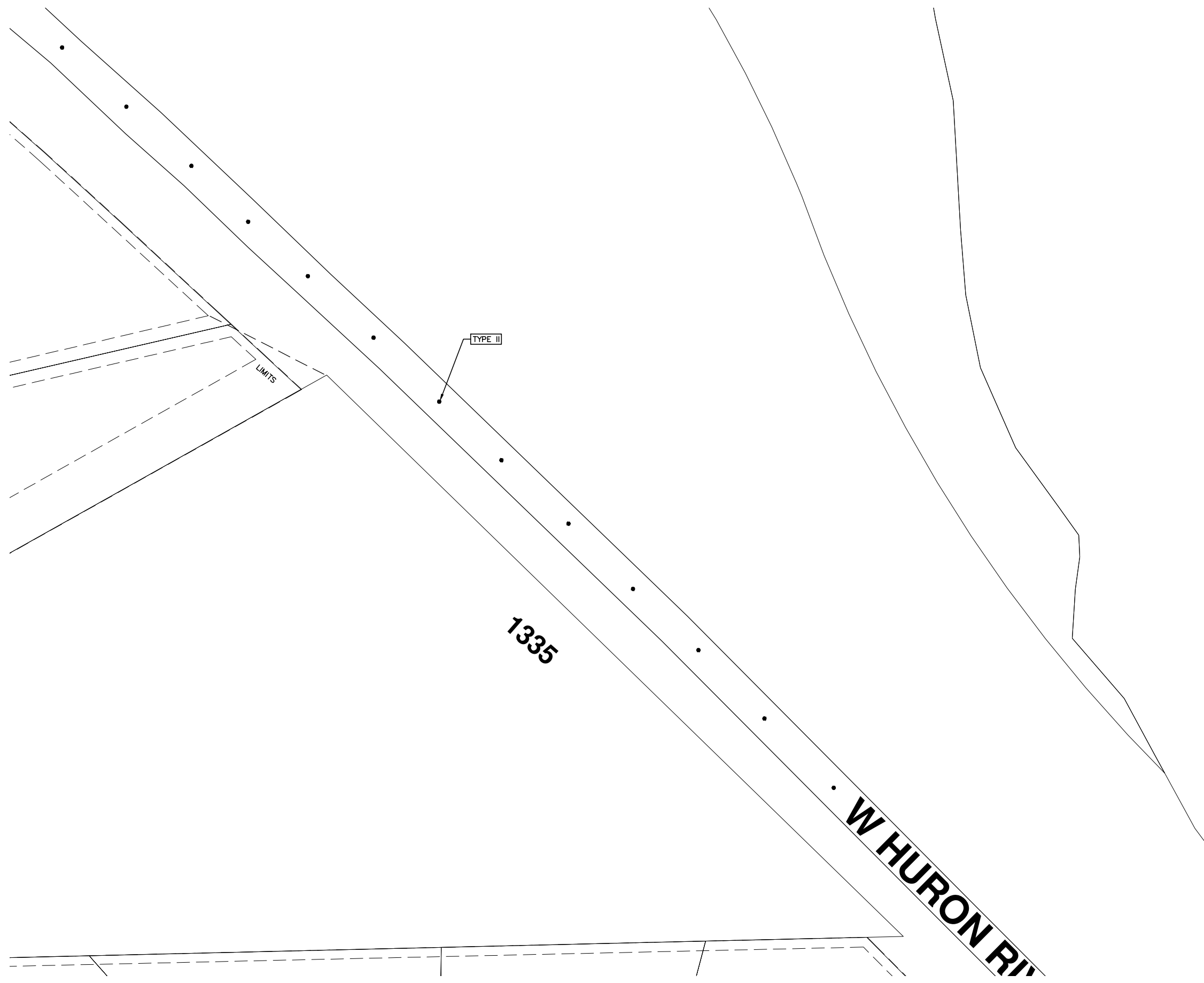
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SHEET No.  
39 OF 117



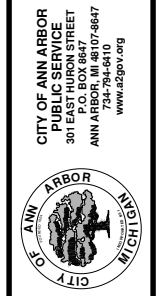


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	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
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	R11-2	"ROAD CLOSED"
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 2015 ANNUAL RESURFACING  
 W. HURON RIVER DRIVE  
 MAINTENANCE OF TRAFFIC  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-44  
 SHEET No. 44 OF 117

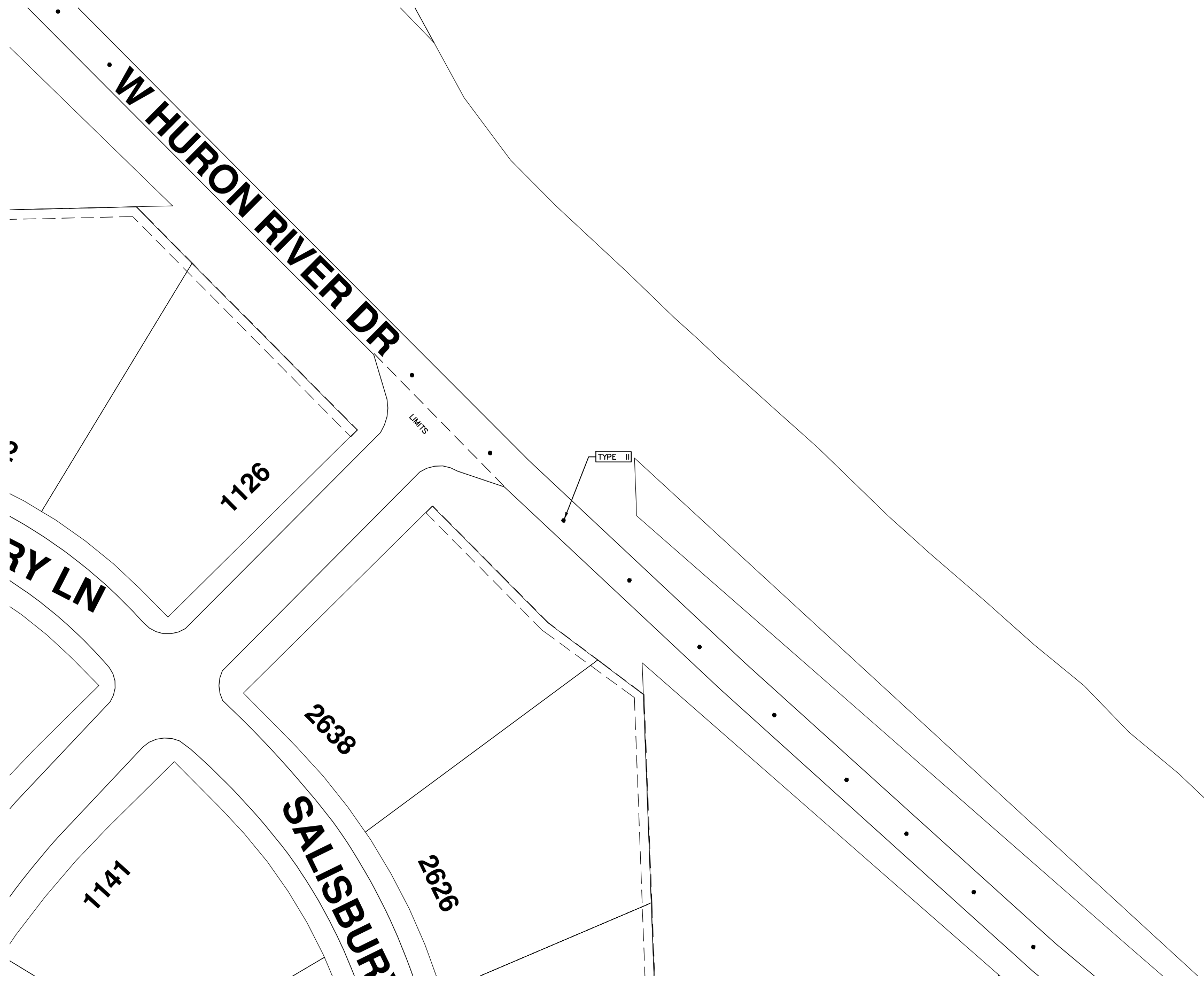


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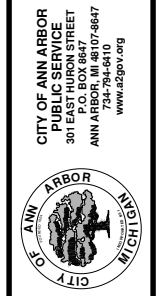


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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 2015 ANNUAL RESURFACING  
 W. HURON RIVER DRIVE  
 MAINTENANCE OF TRAFFIC  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-43  
 SHEET No. 43 OF 117



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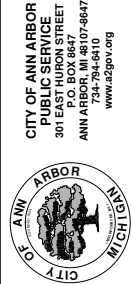
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 2015 ANNUAL RESURFACING

W. HURON RIVER DRIVE  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No.  
 2015004-42

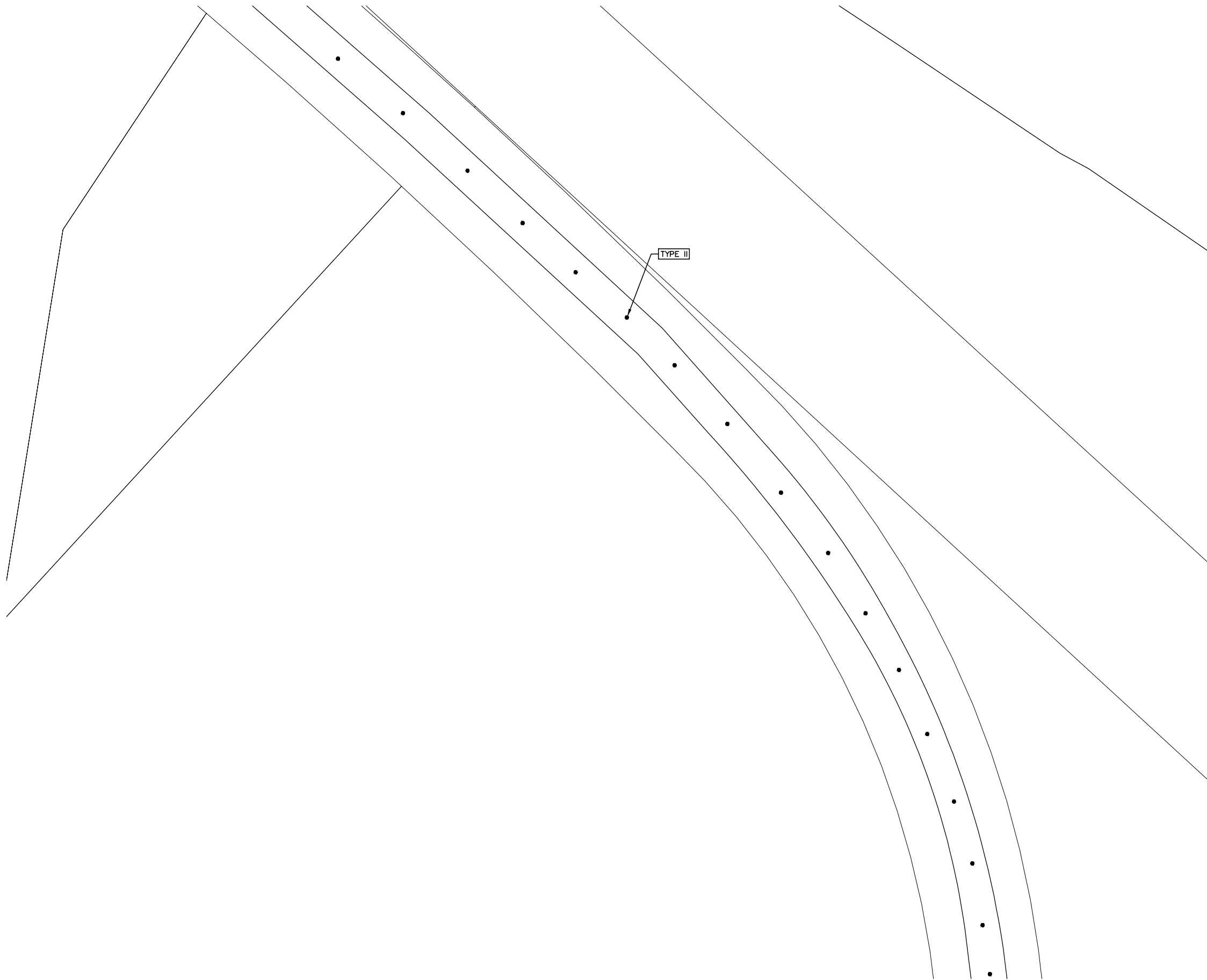
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REV.	DATE	DESCRIPTION	BY	CHECKED
00		ADD DESCRIPTION AND MAKE LAYER PLOT		



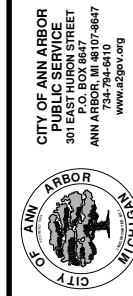
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 W. HURON RIVER DRIVE  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No. 2015004-41  
 SHEET No. 41 OF 117

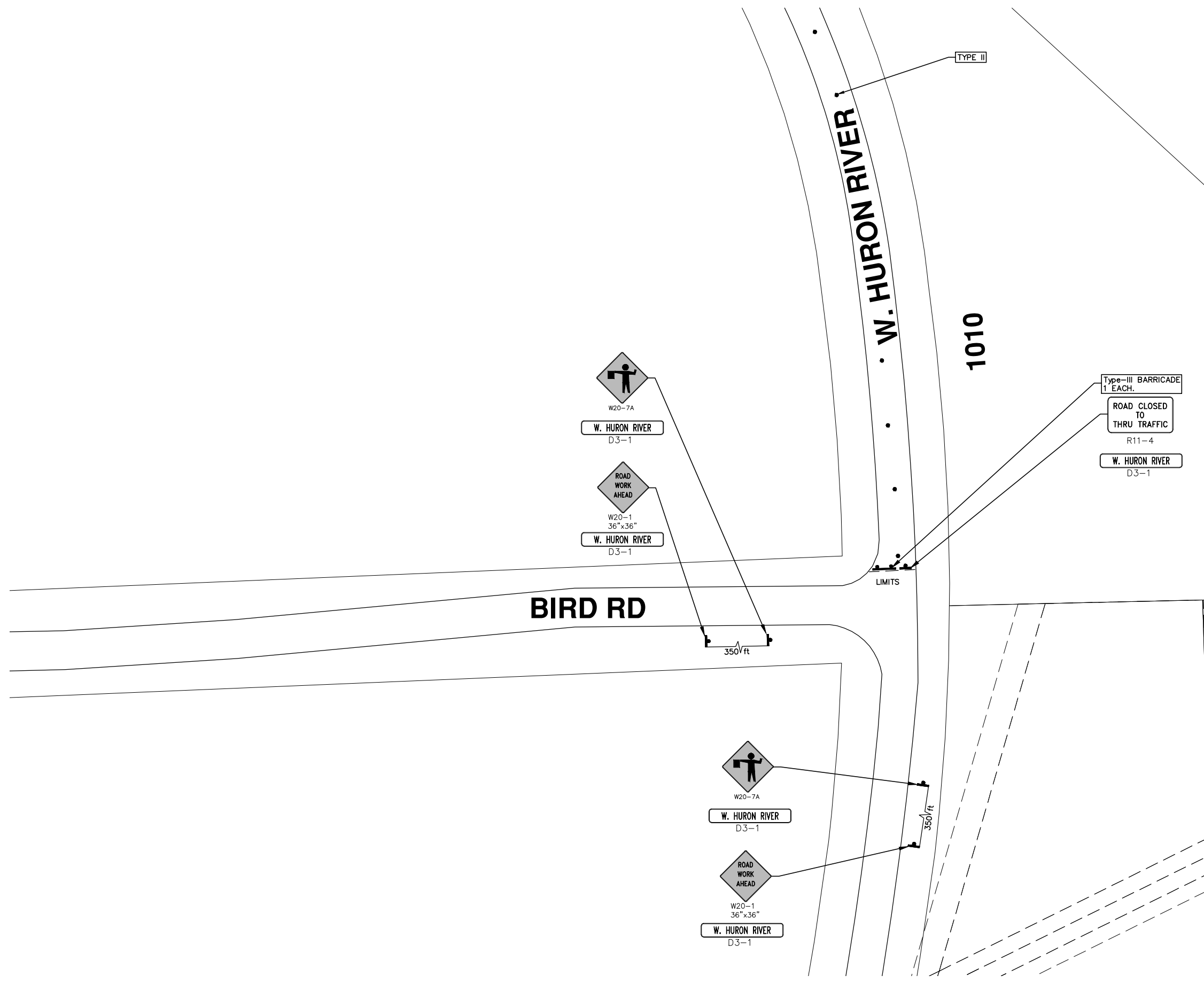


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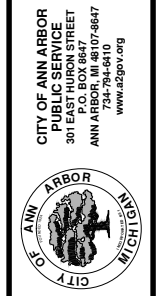


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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 W. HURON RIVER DRIVE  
 MAINTENANCE OF TRAFFIC  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-40  
 SHEET No. 40 OF 117



REV.	DESCRIPTION	DATE	BY	CHECKED





# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: HURON PKWY

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	4
207	Cold Milling Pavement	Tons	1700
209	Subgrade Undercutting - Type II	C.Y.	48
220	HMA Patching	Tons	15
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Tons	1700
227	HMA Pavement Base or Leveling - 4E3	Tons	0
230	Rem. Curb & Gutter, Any Type	L.F.	890
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	890
233	Pvmt. Joint & Crack Repair - Detail 7	Ft.	100
234	Pvmt. Joint & Crack Repair - Detail 8	Ft.	50
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	890
240	4" Sidewalk or Ramp	S.F.	100
241	6" Drive, Sidewalk or Ramp	S.F.	730
243	8" Drive, Sidewalk or Ramp - High Early	S.F.	12
245	Detectable Warning, Cast in Place	S.F.	130
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
260	Inlet Structure Cover (MDOT K)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	25
271	21AA Limestone - C.I.P.	C.Y.	48
281	Arrow Panel - Furnish & Operate	Each	2
282	Plastic Drum - Lighted - Furn. & Operate	Each	20
283	Barricade Type III - Furn. & Operate	Each	0
284	Temp Signs Type - B	S.F.	202
285	No Parking Sign	Each	0
286	Sign, Portable Changeable Mess. , Furnish	Each	2
287	Sign, Portable Changeable Mess. , Operate	Each	2
295	Tubular Markers, 36", Furn. & Operate	Each	106
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	2820
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	162
598	Pvmt. Marking Symbol	Each	28

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
7	W20-1	"ROAD WORK AHEAD"
7	W20-7a	"FLAGGER IMAGE"
10	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
5. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
6. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
7. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
8. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
9. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
10. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

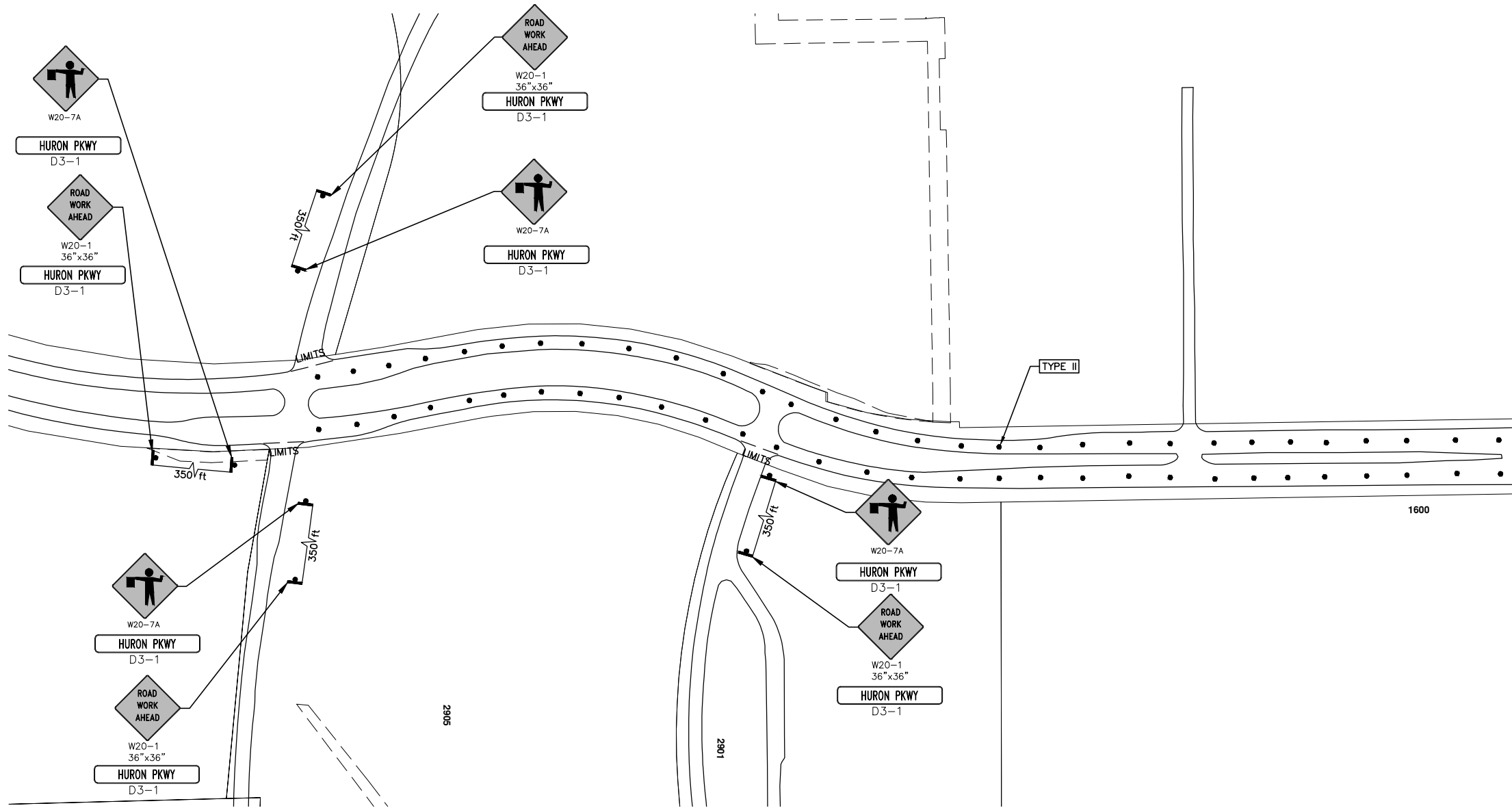
2015 ANNUAL RESURFACING

HURON PKWY

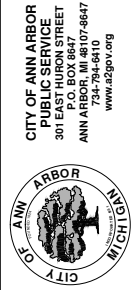
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 SCALE PLAN: Custom  
 2015 ANNUAL RESURFACING  
 HURON PKWY  
 MAINTENANCE OF TRAFFIC  
 DRAWING No. 2015004-47

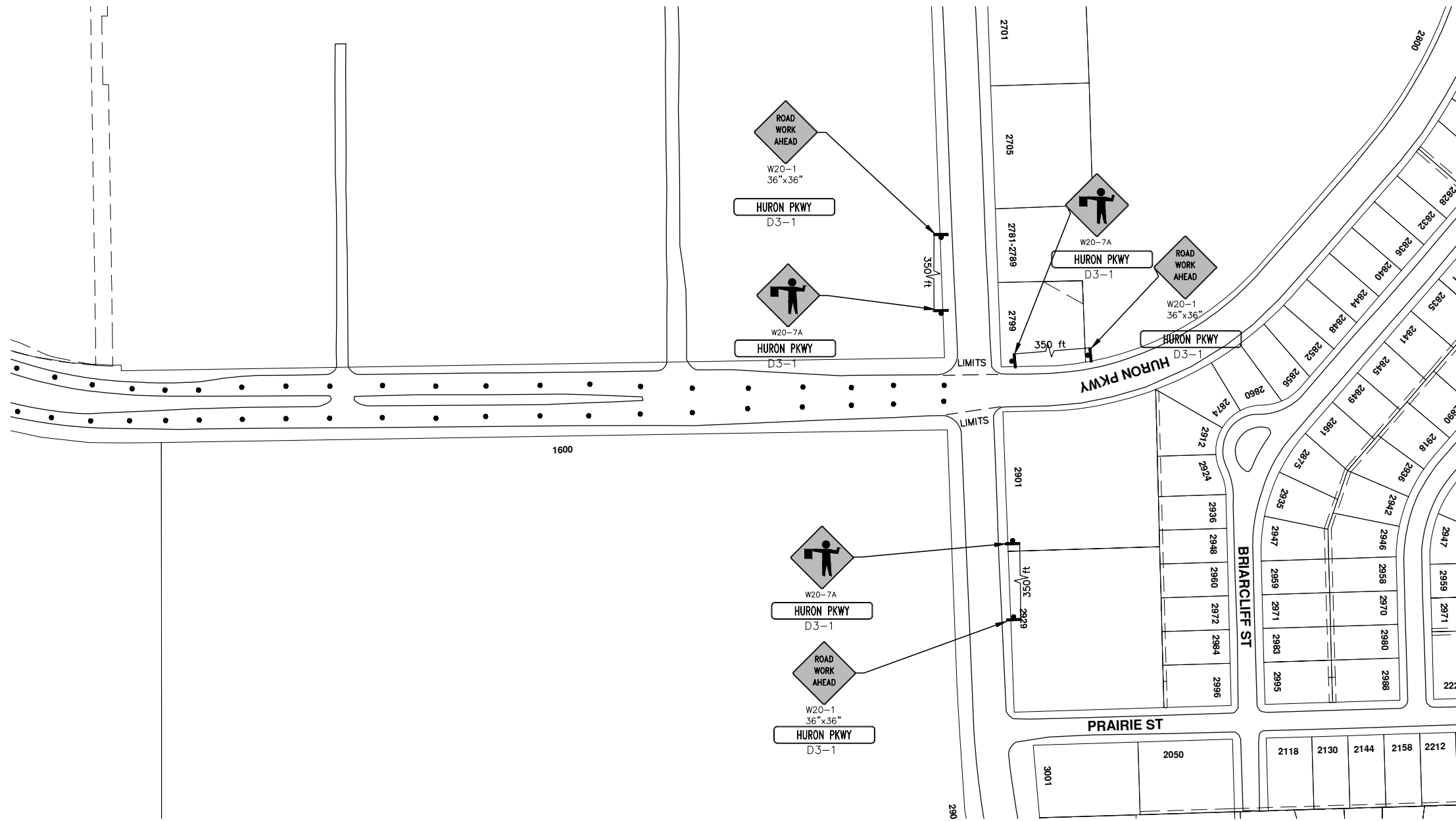
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE PLAN: Custom

DRAWING No. 2015004-48

SHEET No. 48 OF 117

**2015 ANNUAL RESURFACING**

HURON PKWY  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1007-8647  
ANN ARBOR, MI 48106-1007-8647  
www.a2gov.org

REV.	DESCRIPTION	DATE	BY	CHECKED

**811**  
Know what's below.  
Call Before you dig.



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: DHU VARREN ROAD

ITB No. 4371 FILE No. 2015-004



s:\project\_management\Design\2015004 resurfacing\plan production\Primary\Dhu Varren\2015004MTRF - Dhu Varren.dwg Dwg Created: 2-Dec-14 - \_a2 standard bw.stb - Plot Date: 19-Feb-15

QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
207	Cold Milling Pavement	Tons	1370
209	Subgrade Undercutting - Type II	C.Y.	270
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	HMA Pavement Wearing - 5E3	Tons	1370
227	Bit. Pvmnt. Base or Leveling - 4E3	Tons	1370
230	Rem. Curb & Gutter, Any Type	L.F.	110
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	430
233	Pvmnt. Joint & Crack Repair - Detail 7	Ft.	150
234	Pvmnt. Joint & Crack Repair - Detail 8	Ft.	100
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	110
240	4" Sidewalk or Ramp	S.F.	50
241	6" Drive, Sidewalk or Ramp	S.F.	380
245	Detectable Warning, Cast in Place	S.F.	80
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
261	Pt. Drain Structures	Each	0
268	Flowable Fill	C.Y.	4
264	12" Sewer, Trench Detail I, Modified	L.F.	0
271	21AA Limestone - C.I.P.	C.Y.	270
276	Remove Raised Pavement Marker	Each	63
282	Plastic Drum - Lighted - Furnish & Operate	Each	40
283	Barricade Type III - Furnish & Operate	Each	5
284	Temp Signs Type - B	S.F.	253
285	No Parking Sign	Each	0
286	Sign, Portable Changeable Mess. Furnish	Each	2
287	Sign, Portable Changeable Mess. Operate	Each	2
295	Tubular Markers, 36", Furnish & Operate	Each	90
590	Thermo. Pvmnt. Mkg. Railroad Symbol	Each	1
592	12" Thermo. White or Yellow	L.F.	90
594	4" White Thermo.	L.F.	94
595	4" Yellow Thermo.	L.F.	7796
596	6" White Thermo.	L.F.	8473
597	24" White Thermo.	L.F.	431
599	Cold Plastic Bike Symbol W/ Arrow or Sharrow	Each	8

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
5	W20-1	"ROAD WORK AHEAD"
5	W20-7A	"FLAGGER IMAGE"
17	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. REMOVE RAISED PAVEMENT MARKERS FROM THE EXISTING ROADWAY.
5. MILL 1.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
6. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
7. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
8. PAVE 1.5 INCH OVERLAY OF BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
9. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
10. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
11. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

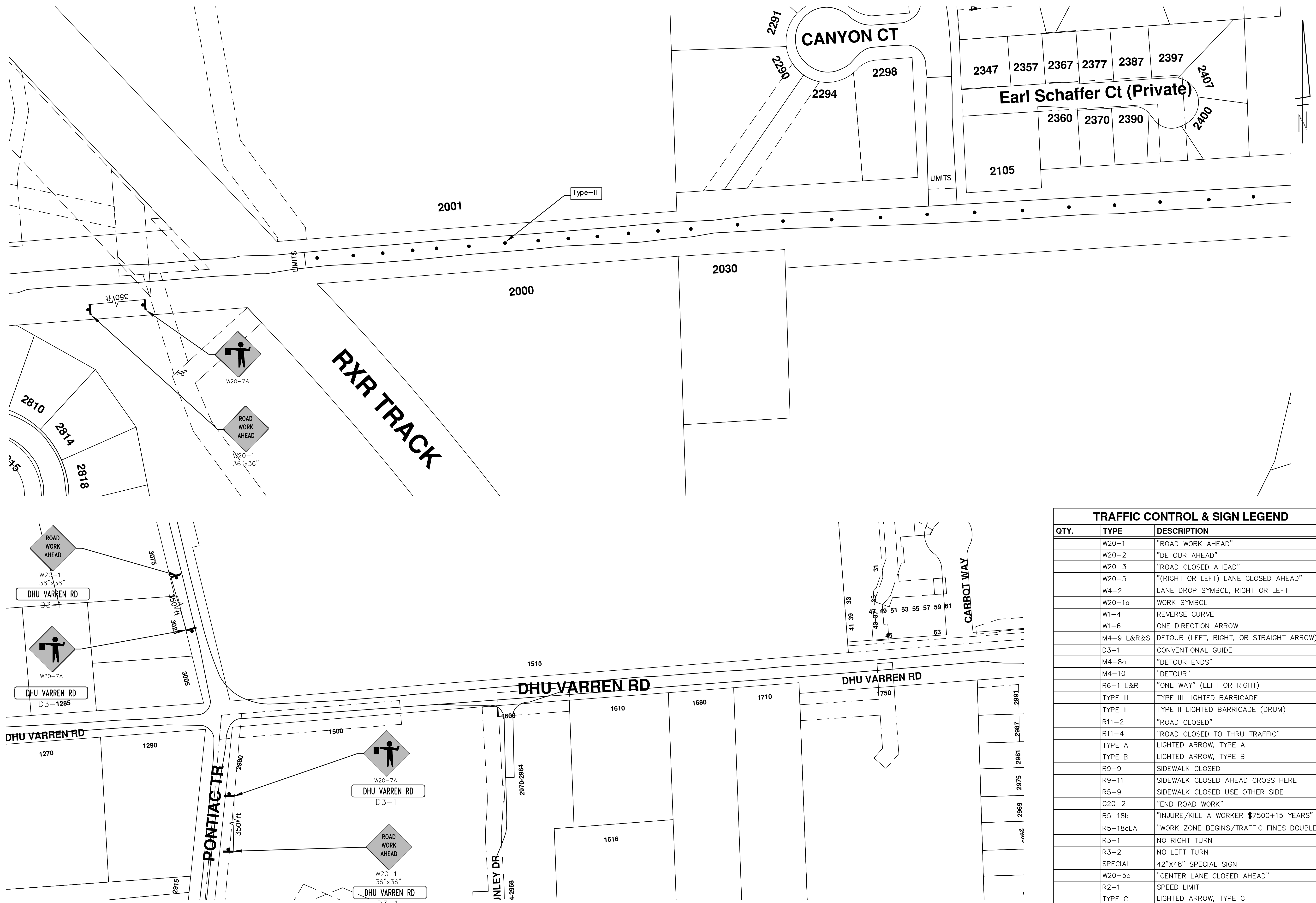
DHU VARREN ROAD

DRAWING No. 2015004 - 51

SHEET No.

51 TO 117

s:\project\_management\Design\2015004 resurfacing\plan production\Primary\Dhu Varren\2015004MTRF - Dhu Varren.dwg Dwg Created: 2-Dec-14 - \_a2 standard bw.stb - Plot Date: 10-Mar-15



TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**


2015 ANNUAL RESURFACING

DHU VARREN ROAD  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom

DRAWING No. 2015004-53

SHEET No. 53 OF 117



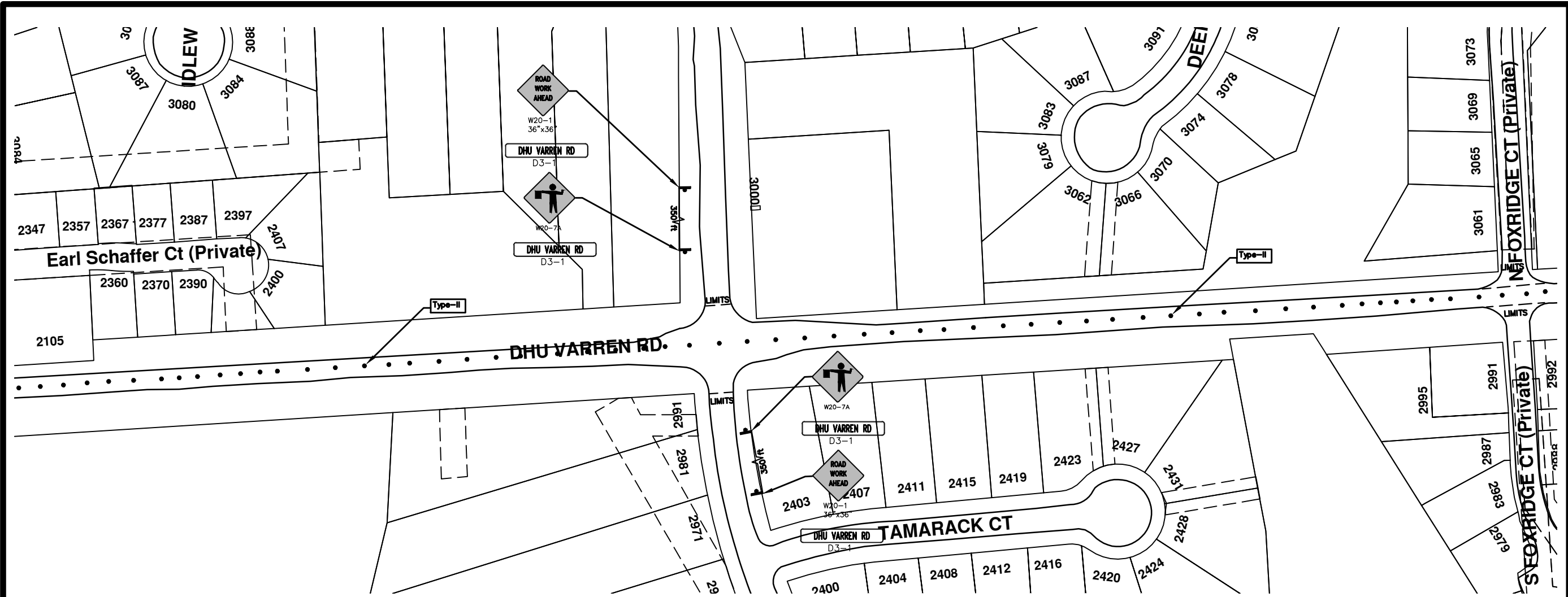
CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-8647  
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NO	ADD DESCRIPTION	AN	MAKE LAYER PLOT	DATE	BY	CHECKED

811  
Know what's below.  
Call Before you dig.



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLa	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**2015 ANNUAL RESURFACING**

SCALE PLAN: Custom

DRAWING No. 2015004-54

SHEET No. 54 OF 117

**811**  
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PUBLIC SERVICE  
301 TOWN CENTER  
ANN ARBOR, MI 48107-9847  
www.a2gov.org

CITY OF ANN ARBOR  
MICHIGAN

DHU VARREN ROAD  
MAINTENANCE OF TRAFFIC

REV.	DATE	DESCRIPTION	BY	CHECKED
00		ADD DESCRIPTION AND MAKE LAYER PLOT		



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: DEPOT STREET

ITB No. 4371 FILE No. 2015-004



s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Depot\2015004MTRF - Depot.dwg Dwg Created: 2-Dec-14 - a2\_standard bw.stb - Plot Date: 19-Feb-15

QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	75
207	Cold Milling Pavement	Tons	1310
209	Subgrade Undercutting - Type II	C.Y.	650
220	HMA Patching	Tons	9
222	HMA Pavement Leveling, Regular	Tons	0
223	HMA Pavement Wearing, Regular	Tons	0
226	Bit. Pvmnt. Wearing, 4E3	Tons	560
227	Bit. Pvmnt. Base/Leveling, 5E3	Tons	750
230	Rem. Curb & Gutter, Any Type	L.F.	1790
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	830
233	Pvmt. Joint Repair - Detail 7	FT.	200
234	Pvmt. Joint Repair - Detail 8	FT.	100
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	1620
238	Conc. Curb & Gutter H.E.	L.F.	180
240	4" Sidewalk or Ramp	S.F.	490
241	6" Drive, Sidewalk or Ramp	S.F.	460
242	6" S/W, Drive App. H.E.	S.F.	120
245	Detectable Warning, Cast in Place	S.F.	20
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	1
254	Lower Structure Cover	Each	16
255	Lower Mon./Gate Valve Box	Each	18
256	Adjust Structure Cover	Each	16
257	Adjust Curb Inlet Structure Cover	Each	9
258	Adjust Mon. or Gate Valve Box	Each	18
259	Manhole Flange & Cover (MDOT Type A)	Each	10
260	Inlet Structure Cover (MDOT K)	Each	1
264	12" Sewer, Trench Detail I, Modified	L.F.	10
267	6" Wrapped Underdrain	L.F.	400
268	Flowable Fill	C.Y.	50
271	21AA Limestone - C.I.P.	C.Y.	650
281	Arrow Panel, Furn. & Operate	Each	1
282	Plastic Drum - Lighted - Furnish & Operate	Each	70
283	Barricade Type III - Furnish & Operate	Each	0
284	Temp Signs Type - B	S.F.	494
285	No Parking Sign	Each	20
592	12" Thermo. White or Yellow	L.F.	256
594	4" White Thermo.	L.F.	131
595	4" Yellow Thermo.	L.F.	2958
596	6" White Thermo.	L.F.	1580
597	24" White Thermo.	L.F.	114
598	Pvmt. Marking Symbol	Each	6
599	Cold Plastic Bike Symbol W/ Arrow or Sharrow	Each	8

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
6	W20-1	"ROAD WORK AHEAD"
6	W20-7a	"FLAGGER IMAGE"
15	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
4	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

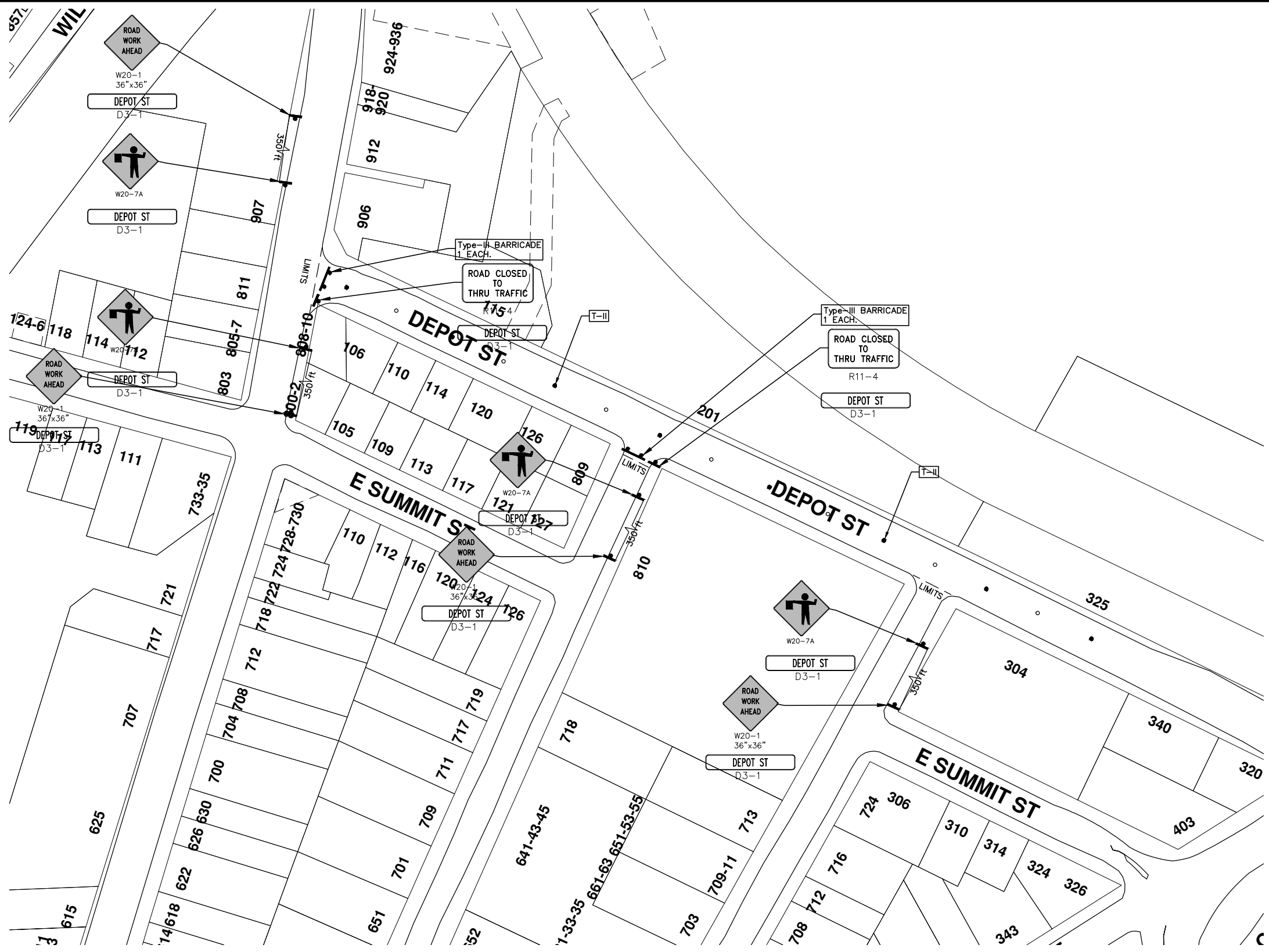
2015 ANNUAL RESURFACING

DEPOT STREET

DRAWING No. 2015004 - 56

SHEET No. 56 TO 117


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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 DEPOT STREET  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No. 2015004-7  
 SHEET No. 57 OF 117

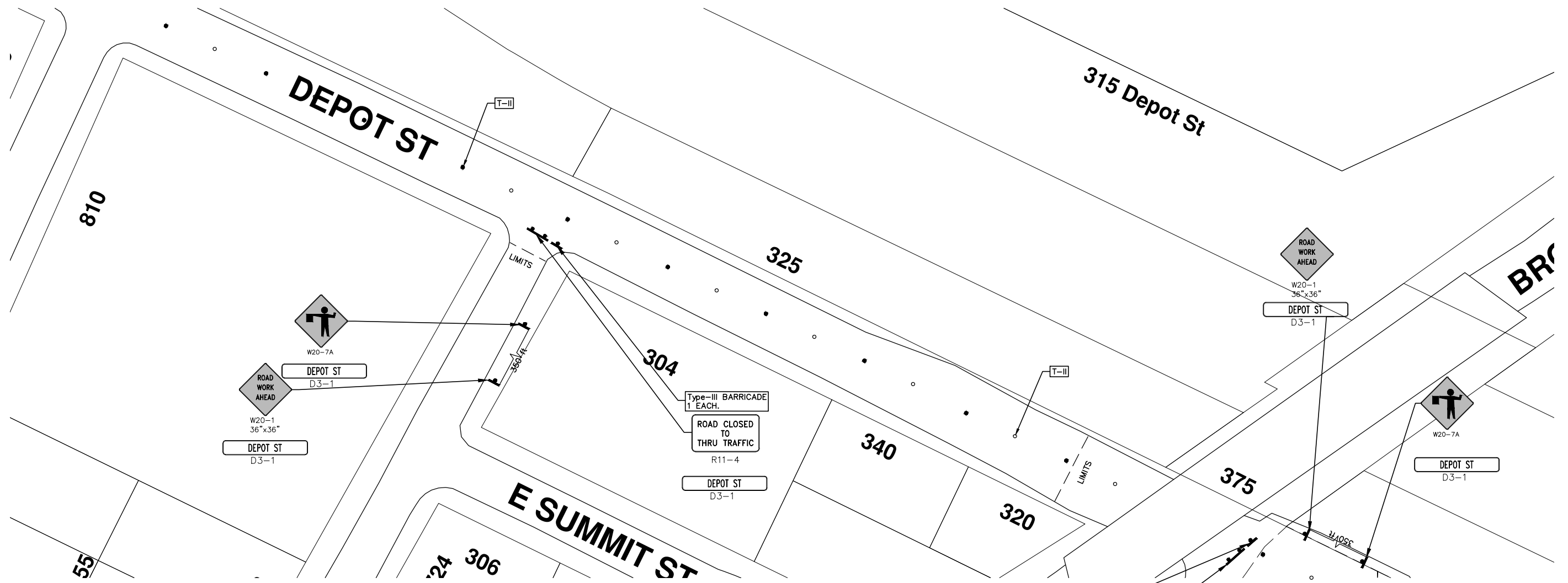


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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 DEPOT STREET  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No. 2015004-----8  
 SHEET No. 58 OF 117

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48107-8647  
 ANN ARBOR 734-794-6410  
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# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: N. THAYER STREET

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	0
207	Cold Milling Pavement	Tons	1560
208	Cold Mill Pavement, Curb Reveal	Tons	0
209	Subgrade Undercutting - Type II	C.Y.	1120
220	HMA Patching	Tons	0
221	Bit. Finish Wedging	Tons	12
222	HMA Pavement Leveling, Regular	Tons	1000
223	HMA Pavement Wearing, Regular	Tons	570
230	Rem. Curb & Gutter, Any Type	L.F.	940
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	3810
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	910
238	Conc. Curb & Gutter - Any Type - High Early	L.F.	30
240	4" Sidewalk or Ramp	S.F.	2210
241	6" Drive, Sidewalk or Ramp	S.F.	1425
242	6" Drive, Sidewalk or Ramp - High Early	S.F.	105
245	Detectable Warning, Cast in Place	S.F.	290
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	17
255	Lower Mon./Gate Valve Box	Each	3
256	Adjust Structure Cover	Each	17
257	Adjust Curb Inlet Structure Cover	Each	20
258	Adjust Mon. or Gate Valve Box	Each	3
259	Manhole Flange & Cover (MDOT Type A)	Each	3
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	0
271	21AA Limestone - C.I.P.	C.Y.	1120
282	Plastic Drum - Lighted - Furn. & Operate	Each	54
283	Barricade Type III - Furn. & Operate	Each	10
284	Temp Signs Type - B	S.F.	701
285	No Parking Sign	Each	38
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	955
597	24" White Thermo.	L.F.	123
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
12	W20-1	"ROAD WORK AHEAD"
12	W20-3	"ROAD CLOSED AHEAD"
24	D3-1	CONVENTIONAL GUIDE
10	TYPE III	TYPE III LIGHTED BARRICADE
10	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

- THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
- IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
- PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
- GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

N. THAYER STREET

PROJECT DESCRIPTION

DRAWING No.  
2015004 - 61

SHEET No.  
61 OF 117

s:\project\_management\Design\2015004 resurfacing\plan\_production\Primary\Thayer st\2015004MTRF - Thayer st.dwg Dwg Created: 2-Dec-14 - \_o2\_standard bw.stb - Plot Date: 19-Feb-15



TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
4	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
4	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
4	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
3	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
3	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 N. THAYER STREET  
 MAINTENANCE OF TRAFFIC

SHEET No. **64 OF 117**

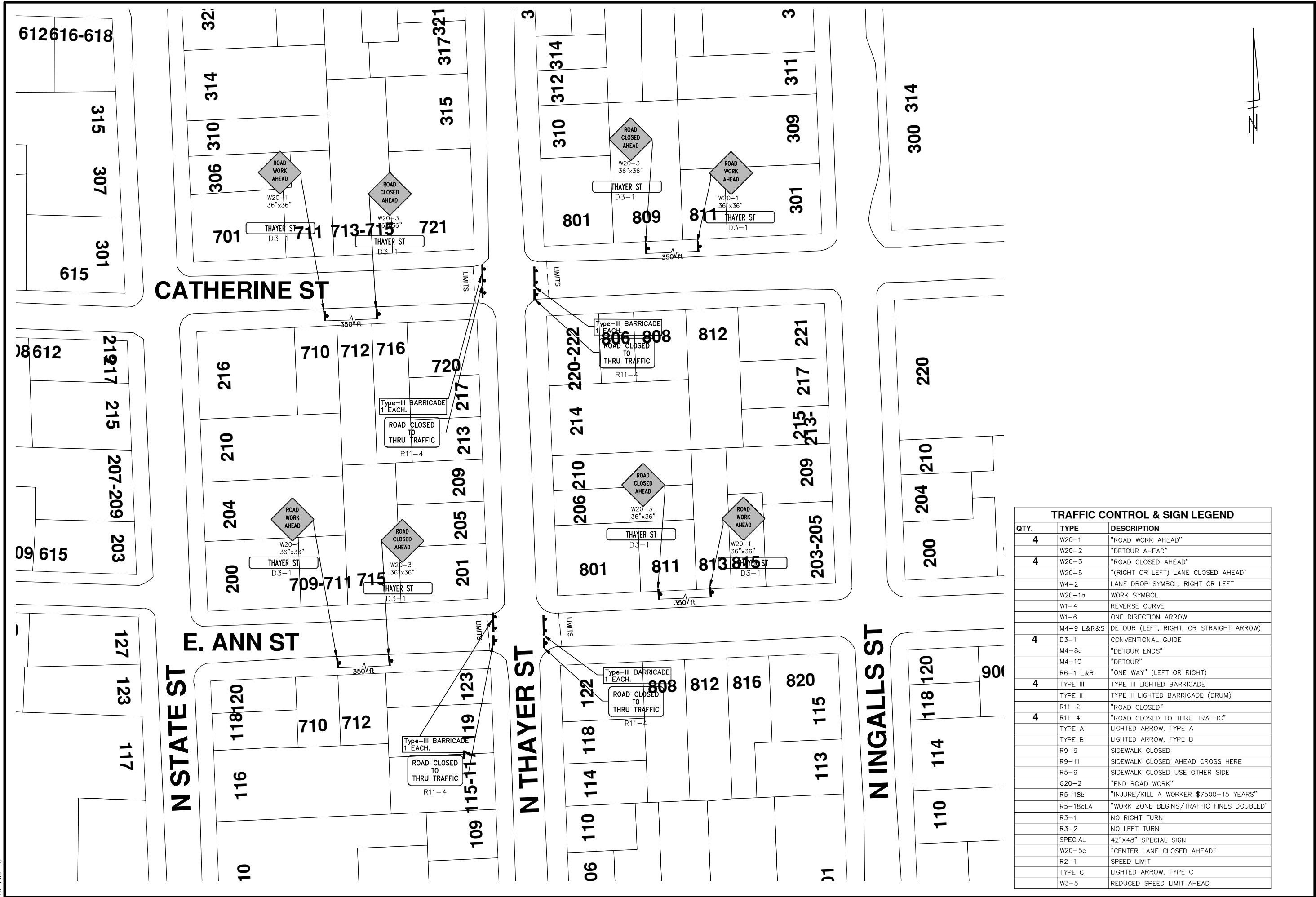
**811**  
 Know what's below.  
 Call Before you dig.

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48107-8647  
 ANN ARBOR 734.794.4410  
 www.a2gov.org

NO.	ADD DESCRIPTION AN MAKE LAYER PLOT	DATE	BY	CHECKED

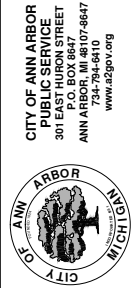


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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
4	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
4	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
4	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
4	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
4	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

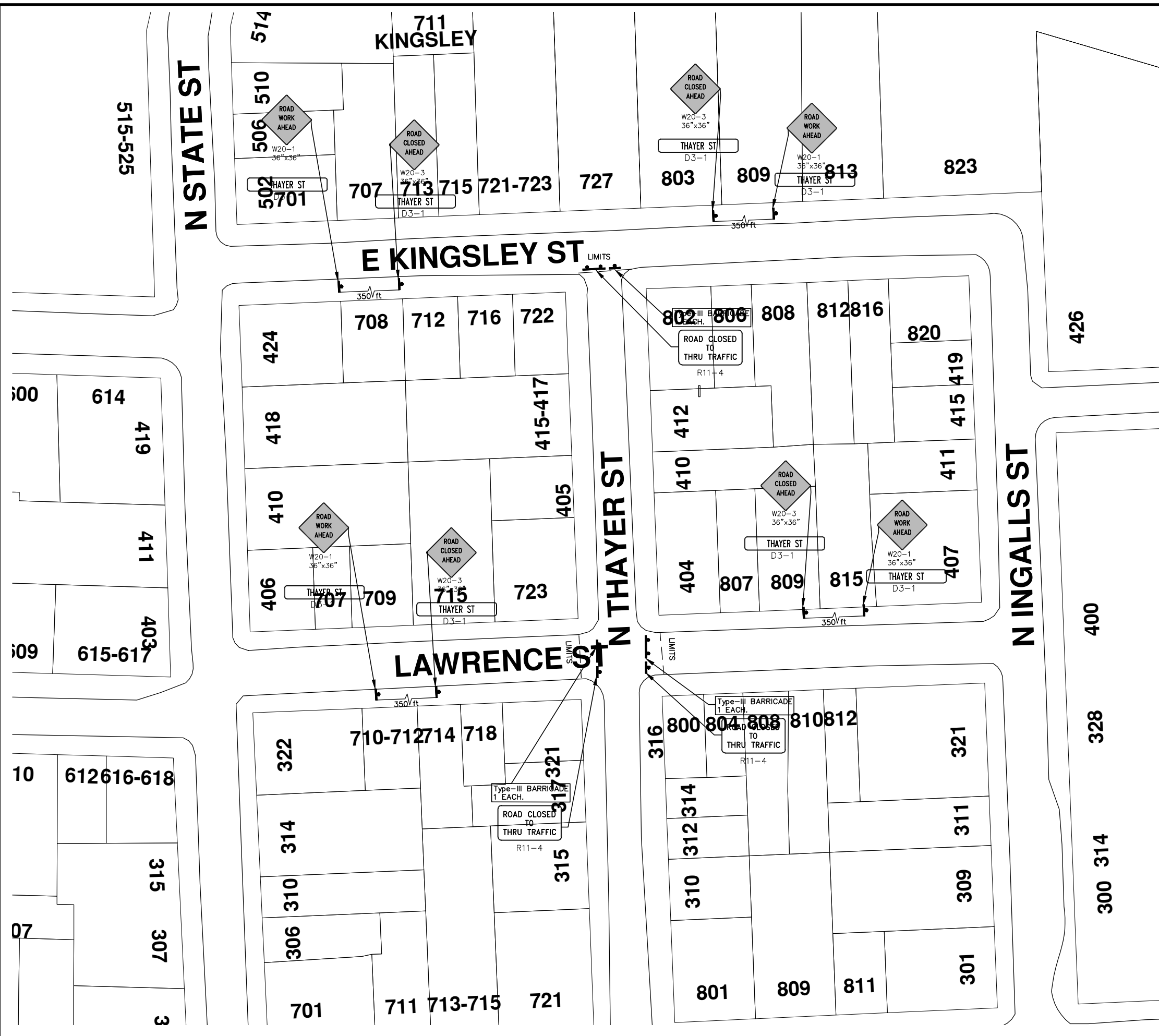
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-63



CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48107-8647  
 ANN ARBOR 734.794.4410  
 www.a2gov.org

NO	ADD DESCRIPTION OR MAKE LAYER PLOT	DATE	BY	CHECKED


s:\project\_management\Design\2015004 resurfacing\plan\_production\Primary\Thayer st\2015004MTRF - Thayer st.dwg Dwg Created: 2-Dec-14 - \_o2\_standard bw.stb - Plot Date: 19-Feb-15



TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
4	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
4	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
4	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
3	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
3	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 N. THAYER STREET  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No. 2015004-62  
 SHEET No. 62 OF 117



CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48107-8647  
 ANN ARBOR BOX 8647  
 ANN ARBOR, MI 48107-8647  
 www.a2gov.org

NO.	ADD. DESCRIPTION	AN. MAKE LAYER PLOT	DATE	BY	CHECKED



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: LINWOOD AVENUE

ITB No. 4371 FILE No. 2015-004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	17
207	Cold Milling Pavement	Tons	620
209	Subgrade Undercutting - Type II	C.Y.	340
220	HMA Patching	Tons	7
221	Bit. Finish Wedging	Tons	8
222	HMA Pavement Leveling, Regular	Tons	410
223	HMA Pavement Wearing, 36A	Tons	210
230	Rem. Curb & Gutter, Any Type	L.F.	940
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	1640
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	790
238	Conc. Curb & Gutter H.E.	L.F.	150
240	4" Sidewalk or Ramp	S.F.	670
241	6" Drive, Sidewalk or Ramp	S.F.	520
242	6" S/W, Drive App. H.E.	S.F.	410
245	Detectable Warning, Cast in Place	S.F.	150
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	60
250	2' Dia. Structure	Each	9
252	Reconstruct Structure	Each	1
254	Lower Structure Cover	Each	12
255	Lower Mon./Gate Valve Box	Each	7
256	Adjust Structure Cover	Each	12
257	Adjust Curb Inlet Structure Cover	Each	10
258	Adjust Mon. or Gate Valve Box	Each	7
259	Manhole Flange & Cover (MDOT Type A)	Each	12
264	12" Sewer, Trench Detail I, Modified	L.F.	90
268	Flowable Fill	C.Y.	26
271	21AA Limestone - C.I.P.	C.Y.	340
282	Plastic Drum - Lighted - Furn. & Operate	Each	50
283	Barricade Type III - Furn. & Operate	Each	6
284	Temp Signs Type - B	S.F.	387
285	No Parking Sign	Each	35
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	466
597	24" White Thermo.	L.F.	48
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
8	W20-1	"ROAD WORK AHEAD"
8	W20-3	"ROAD CLOSED AHEAD"
14	D3-1	CONVENTIONAL GUIDE
6	TYPE III	TYPE III LIGHTED BARRICADE
6	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

- THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
- IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- MILL 3 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
- PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
- GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Linwood Ave\2015004MTRF - Linwood Ave.dwg Dwg Created: 2-Dec-14 - \_a2\_standard bw.stb - Plot Date: 19-Feb-15



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING

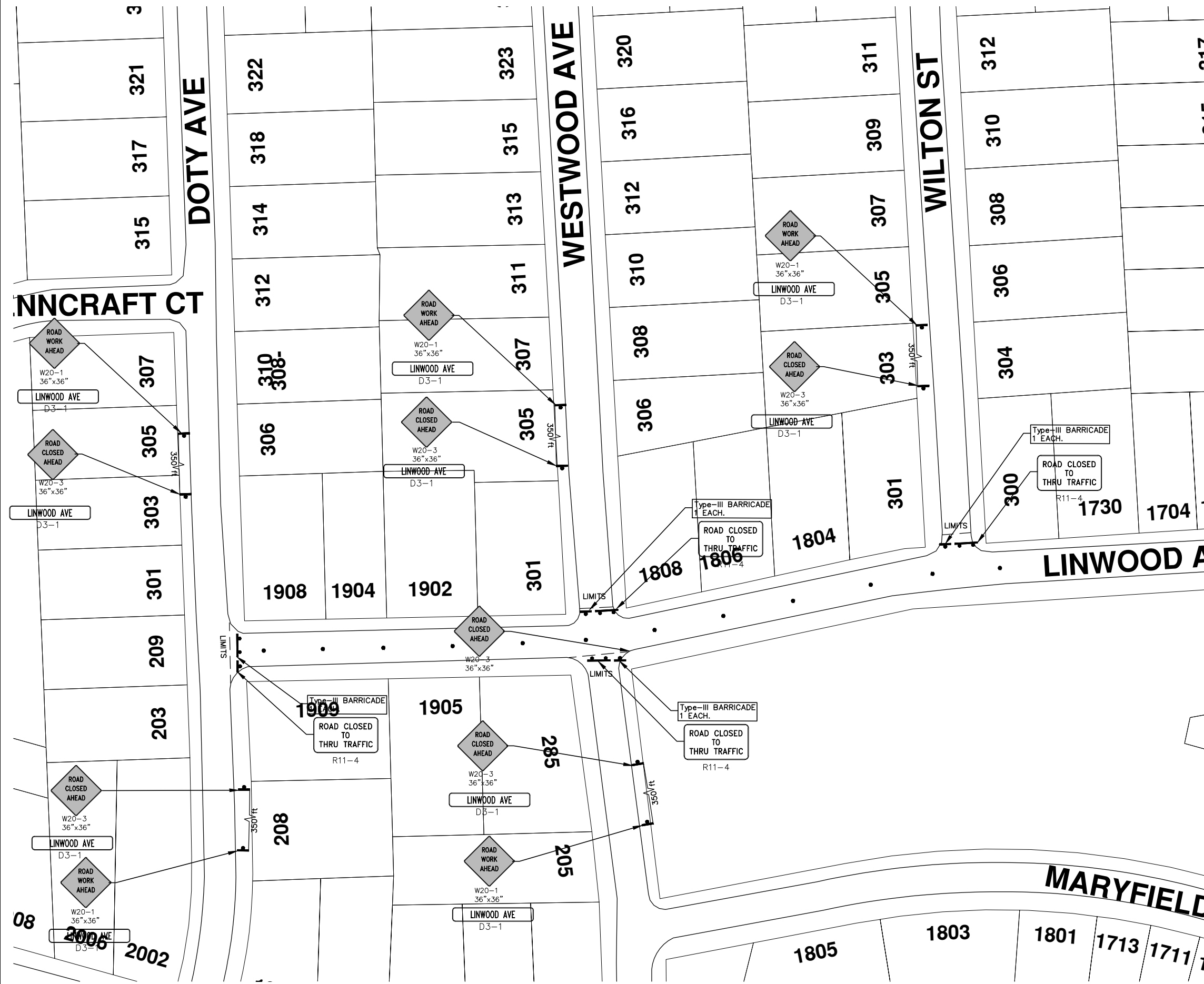
LINWOOD AVENUE

DRAWING No.  
2015004 - 66

SHEET No.  
66 OF 117




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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
5	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
5	W20-3	"ROAD CLOSED AHEAD"
	W4-2	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
5	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
4	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
4	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD


**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 LINWOOD AVENUE  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No. 2015004-68  
 SHEET No. 68 OF 117



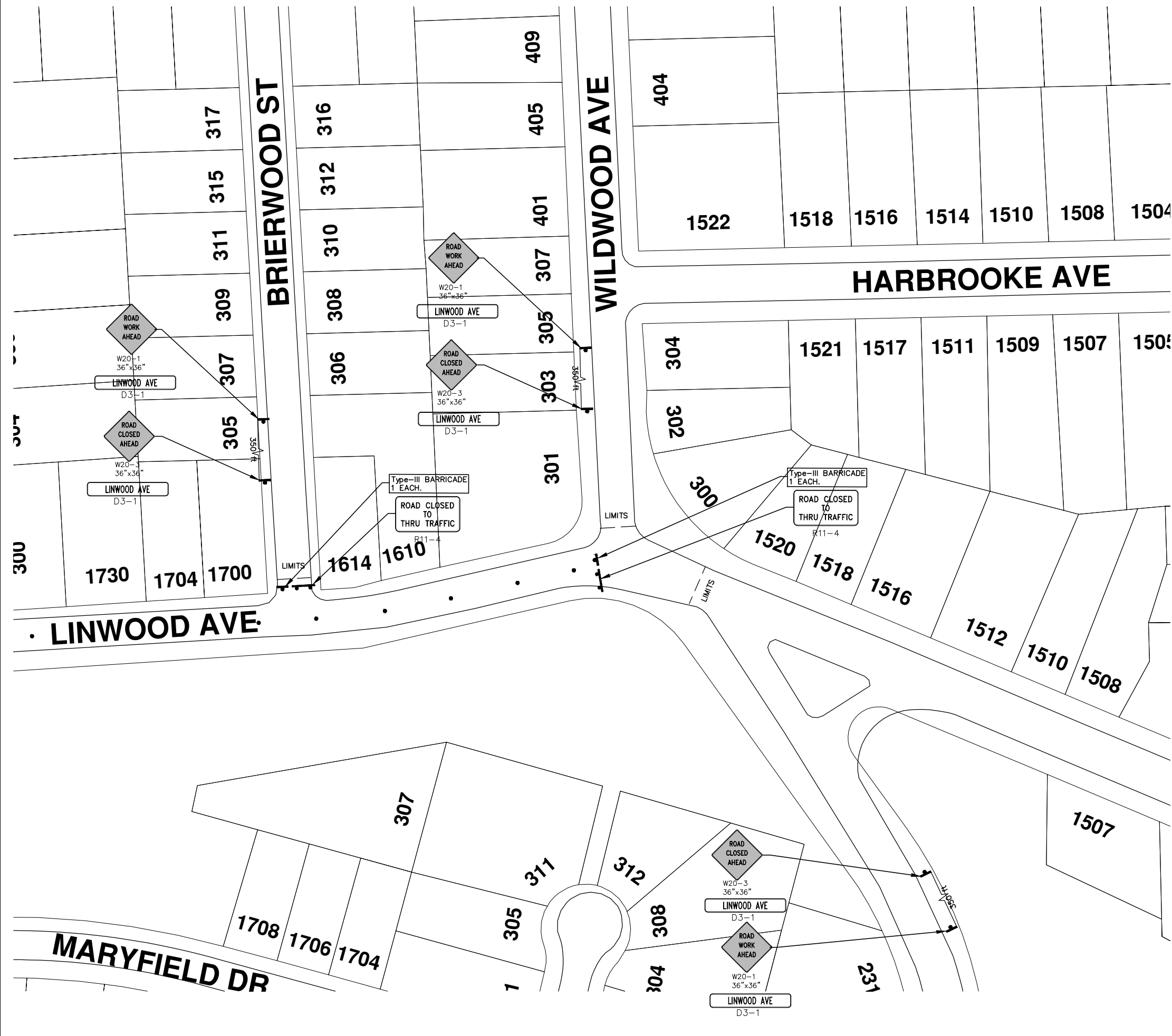
CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1078  
 ANN ARBOR: 734.764.4410  
 WWW.ANARBOR.MI.GOV

REV.	DATE	DESCRIPTION	BY	CHECKED



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Call Before you dig.

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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
3	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
3	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
3	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
2	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
2	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
R3-1	NO RIGHT TURN	
R3-2	NO LEFT TURN	
SPECIAL	42"x48" SPECIAL SIGN	
W20-5c	"CENTER LANE CLOSED AHEAD"	
R2-1	SPEED LIMIT	
TYPE C	LIGHTED ARROW, TYPE C	
W3-5	REDUCED SPEED LIMIT AHEAD	

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**


2015 ANNUAL RESURFACING

LINWOOD AVENUE  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom

DRAWING No. 2015004-67

SHEET No. 67 OF 117



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734.794.4410  
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# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: BRIERWOOD STREET

ITB No. 4371 FILE No. 2015-004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	30
207	Cold Milling Pavement	Tons	310
208	Cold Mill Pavement, Curb Reveal	Tons	13
209	Subgrade Undercutting - Type II	C.Y.	160
220	HMA Patching	Tons	4
221	Bit. Finish Wedging	Tons	8
222	HMA Pavement Leveling, Regular	Tons	180
223	HMA Pavement Wearing, Regular	Tons	140
230	Rem. Curb & Gutter, Any Type	L.F.	450
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	580
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	450
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	580
245	Detectable Warning, Cast in Place	S.F.	20
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	2
254	Lower Structure Cover	Each	5
255	Lower Mon./Gate Valve Box	Each	1
256	Adjust Structure Cover	Each	5
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	1
259	Manhole Flange & Cover (MDOT Type A)	Each	4
264	12" Sewer, Trench Detail I, Modified	L.F.	20
268	Flowable Fill	C.Y.	13
271	21AA Limestone - C.I.P.	C.Y.	160
282	Plastic Drum - Lighted - Furn. & Operate	Each	23
283	Barricade Type III - Furnish & Operate	Each	2
284	Temp Signs Type - B	S.F.	173
285	No Parking Sign	Each	16
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	22
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
4	W20-1	"ROAD WORK AHEAD"
5	W20-3	"ROAD CLOSED AHEAD"
4	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

- THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
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- INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
- PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
- GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING

BRIERWOOD STREET

DRAWING No.  
2015004 - 70

SHEET No.  
70 OF 117



s:\project\_management\Design\2015004 resurfacing\plan\_production\Primary\Brierwood\2015004MTRF - Brierwood st.dwg Dwg Created: 2-Dec-14 - \_a2 standard bw.stb - Plot Date: 19-Feb-15



TRAFFIC CONTROL & SIGN LEGEND			
QTY.	TYPE	DESCRIPTION	
4	W20-1	"ROAD WORK AHEAD"	
	W20-2	"DETOUR AHEAD"	
	W20-3	"ROAD CLOSED AHEAD"	
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"	
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT	
5	W20-1a	WORK SYMBOL	
	W1-4	REVERSE CURVE	
	W1-6	ONE DIRECTION ARROW	
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)	
	D3-1	CONVENTIONAL GUIDE	
	M4-8a	"DETOUR ENDS"	
	M4-10	"DETOUR"	
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)	
	2	TYPE III	TYPE III LIGHTED BARRICADE
		TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
6	R11-2	"ROAD CLOSED"	
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"	
	TYPE A	LIGHTED ARROW, TYPE A	
	TYPE B	LIGHTED ARROW, TYPE B	
	R9-9	SIDEWALK CLOSED	
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE	
	R5-9	SIDEWALK CLOSED USE OTHER SIDE	
	G20-2	"END ROAD WORK"	
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"	
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"	
	R3-1	NO RIGHT TURN	
	R3-2	NO LEFT TURN	
	SPECIAL	42"X48" SPECIAL SIGN	
	W20-5c	"CENTER LANE CLOSED AHEAD"	
	R2-1	SPEED LIMIT	
TYPE C	LIGHTED ARROW, TYPE C		
W3-5	REDUCED SPEED LIMIT AHEAD		



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR: 734.764.4410  
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
2015 ANNUAL RESURFACING  
BRIERWOOD STREET  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
DRAWING No.  
2015004-71

SHEET No.  
71 OF 117

Know what's below.  
Call Before you dig.

NO	ADD DESCRIPTION AN MAKE LAYER PLOT	DATE	BY	CHECKED



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: JEWETT AVENUE

ITB No. 4371 FILE No. 2015-004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	81
207	Cold Milling Pavement	Tons	1260
209	Subgrade Undercutting - Type II	C.Y.	730
220	HMA Patching	Tons	9
221	HMA Pavement Finish Wedging	Tons	12
222	HMA Pavement Leveling, Regular	Tons	840
224	HMA Pavement Wearing, 36A	Tons	420
230	Rem. Curb & Gutter, Any Type	L.F.	500
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	860
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	400
238	Conc. Curb & Gutter H.E.	L.F.	110
240	4" Sidewalk or Ramp	S.F.	230
241	6" Drive, Sidewalk or Ramp	S.F.	370
242	6" S/W, Drive App. H.E.	S.F.	270
245	Detectable Warning, Cast in Place	S.F.	40
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	100
250	2' Dia. Structure	Each	14
254	Lower Structure Cover	Each	19
255	Lower Mon./Gate Valve Box	Each	4
256	Adjust Structure Cover	Each	19
257	Adjust Curb Inlet Structure Cover	Each	18
258	Adjust Mon. or Gate Valve Box	Each	4
259	Manhole Flange & Cover (MDOT Type A)	Each	17
260	Inlet Structure Cover (MDOT K)	Each	2
264	12" Sewer, Trench Detail I, Modified	L.F.	140
268	Flowable Fill	C.Y.	12
271	21AA Limestone - C.I.P.	C.Y.	730
278	Speed Hump (Standard)	S.Y.	155
282	Plastic Drum - Lighted - Furn. & Operate	Each	90
283	Barricade Type III - Furn. & Operate	Each	4
284	Temp Signs Type - B	S.F.	338
285	No Parking Sign	Each	64
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	160
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	160
597	24" White Thermo.	L.F.	64
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
7	W20-1	"ROAD WORK AHEAD"
7	W20-3	"ROAD CLOSED AHEAD"
16	D3-1	CONVENTIONAL GUIDE
4	TYPE III	TYPE III LIGHTED BARRICADE
4	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. CONSTRUCT TRAFFIC CALMING DEVICES IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.
13. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
14. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
15. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING  
JEWETT AVENUE

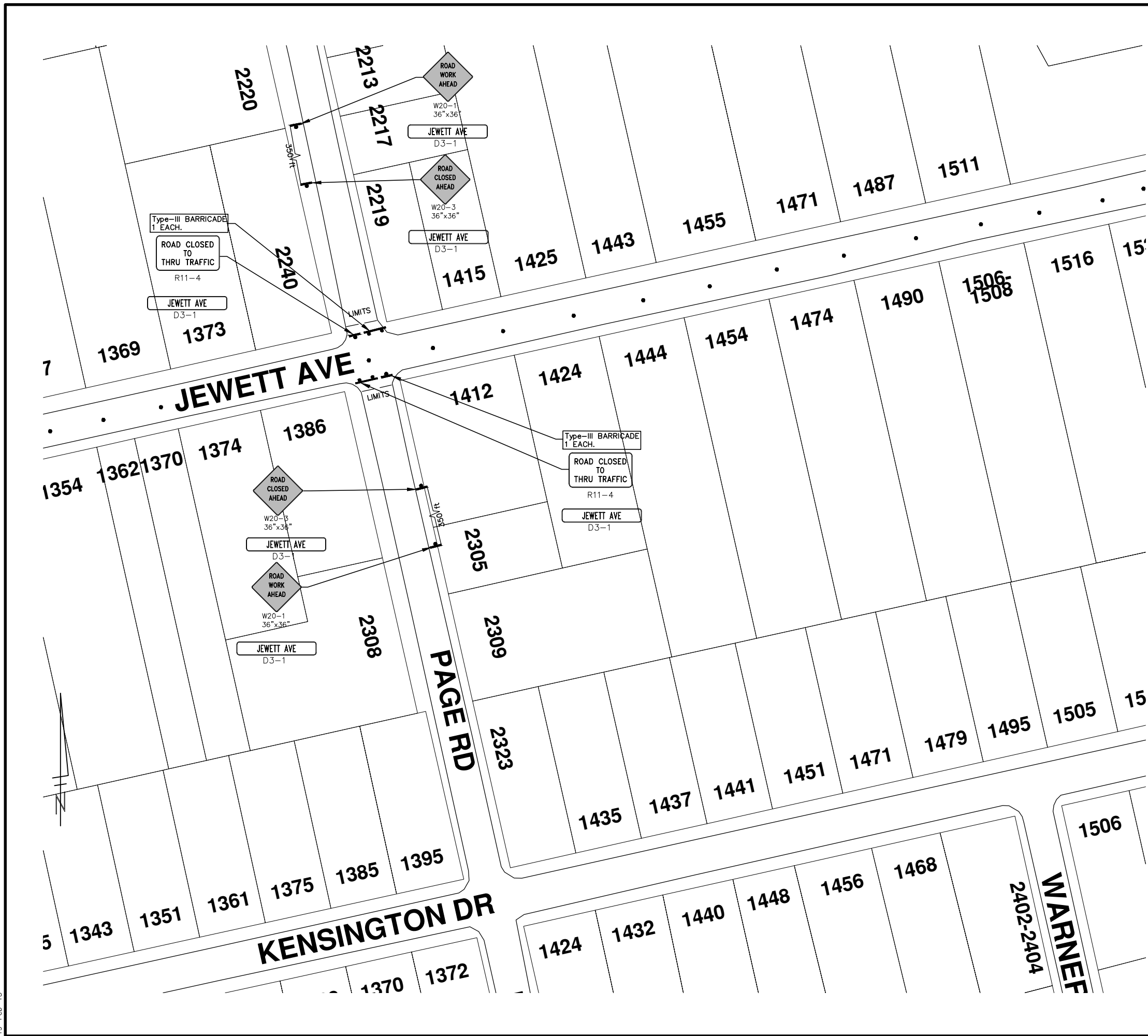
DRAWING No.  
2015004 - 73

SHEET No.  
73 OF 117





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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
2	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
2	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
2	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



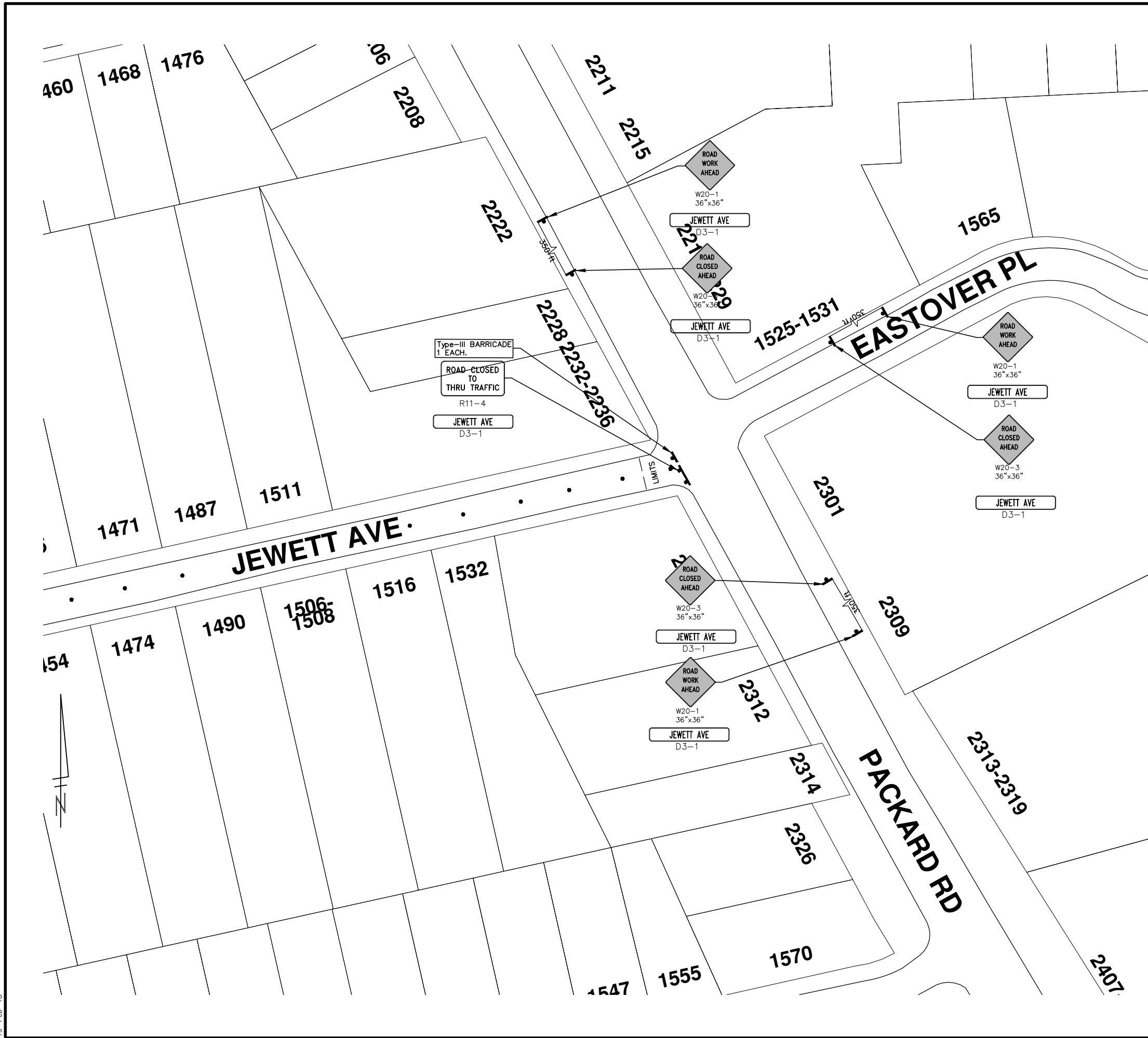
NO	ADD DESCRIPTION OR MAKE LAYER PLOT	DATE	BY	CHECKED

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1007  
 ANN ARBOR: 734.794.4410  
 WWW.ANARBOR.MI.GOV

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
 2015 ANNUAL RESURFACING  
 JEWETT AVENUE  
 MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
 DRAWING No. 2015004-75  
 SHEET No. 75 OF 117

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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
3	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
3	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
3	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
1	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
1	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE PLAN: Custom

DRAWING No. 2015004-76

SHEET No. 76 OF 117

**2015 ANNUAL RESURFACING**

JEWETT AVENUE  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734.794.4410  
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**811**  
Know what's below.  
Call Before you dig.



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: S. REVENA BLVD.

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	55
207	Cold Milling Pavement	Tons	1270
208	Cold Mill Pavement, Curb Reveal	Tons	0
209	Subgrade Undercutting - Type II	C.Y.	410
220	HMA Patching	Tons	6
221	Bit. Finish Wedging	Tons	16
222	HMA Pavement Leveling, Regular	Tons	760
223	HMA Pavement Wearing, Regular	Tons	510
230	Rem. Curb & Gutter, Any Type	L.F.	1310
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	3270
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	1310
240	4" Sidewalk or Ramp	S.F.	940
241	6" Drive, Sidewalk or Ramp	S.F.	800
242	6" S/W, Drive App. H.E.	S.F.	1550
245	Detectable Warning, Cast in Place	S.F.	100
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	8
254	Lower Structure Cover	Each	14
255	Lower Mon./Gate Valve Box	Each	4
256	Adjust Structure Cover	Each	14
257	Adjust Curb Inlet Structure Cover	Each	18
258	Adjust Mon. or Gate Valve Box	Each	4
259	Manhole Flange & Cover (MDOT Type A)	Each	14
260	Inlet Structure Cover (MDOT K)	Each	1
264	12" Sewer, Trench Detail I, Modified	L.F.	80
268	Flowable Fill	C.Y.	36
271	21AA Limestone - C.I.P.	C.Y.	410
282	Plastic Drum - Lighted - Furn. & Operate	Each	20
283	Barricade Type III - Furn. & Operate	Each	9
284	Temp Signs Type - B	S.F.	387
285	No Parking Sign	Each	41
295	Tubular Markers, 36", Furn. & Operate	Each	46
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	588
597	24" White Thermo.	L.F.	63
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
10	W20-1	"ROAD WORK AHEAD"
10	W20-3	"ROAD CLOSED AHEAD"
18	D3-1	CONVENTIONAL GUIDE
9	TYPE III	TYPE III LIGHTED BARRICADE
9	R11-4	ROAD CLOSED TO THRU TRAFFIC
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

S. REVENA BLVD.

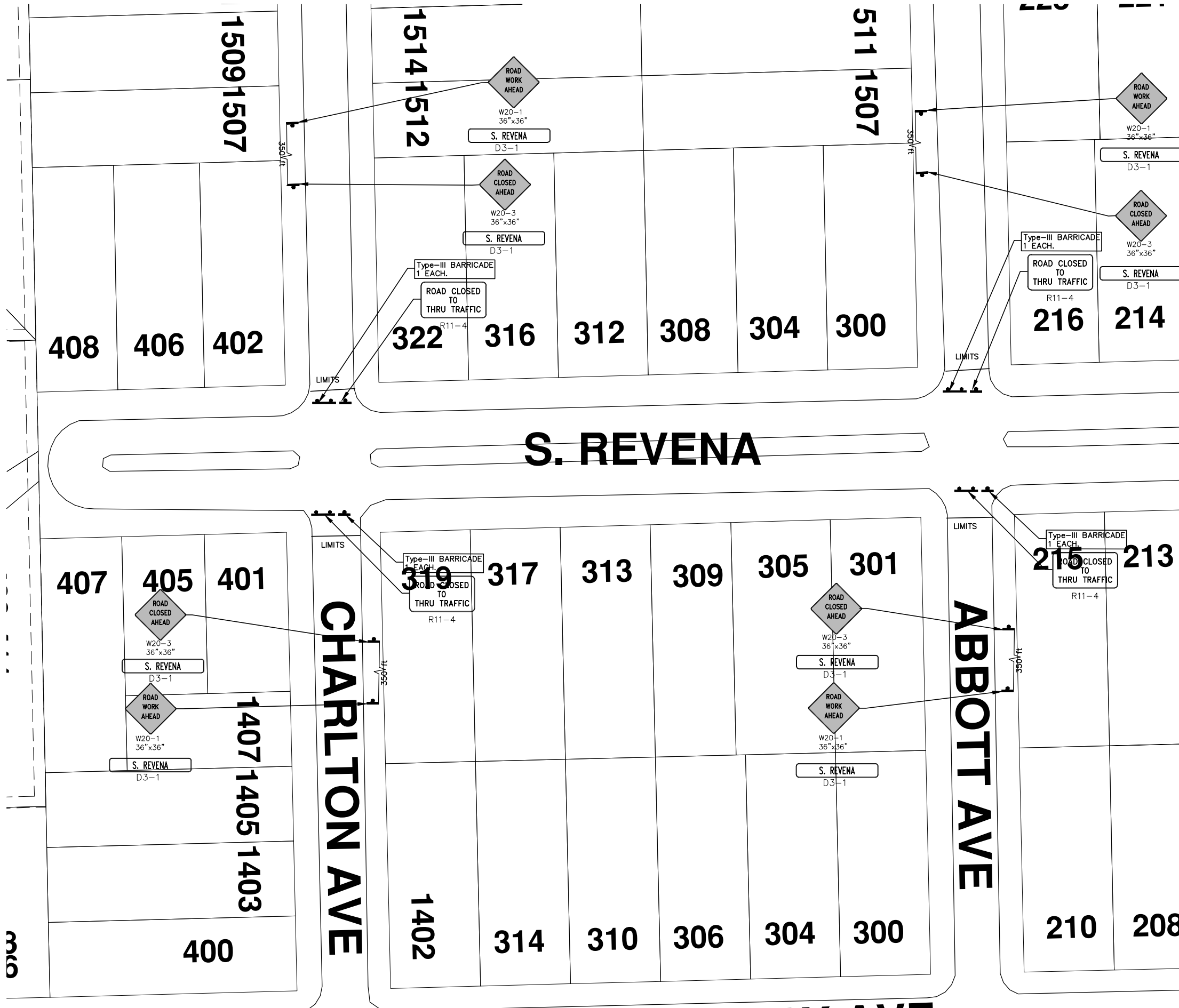
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SHEET No.

79 OF 117



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
4	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
4	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
4	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
4	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
4	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE PLAN: Custom

DRAWING No. 2015004-82

SHEET No. 82 OF 117

**2015 ANNUAL RESURFACING**

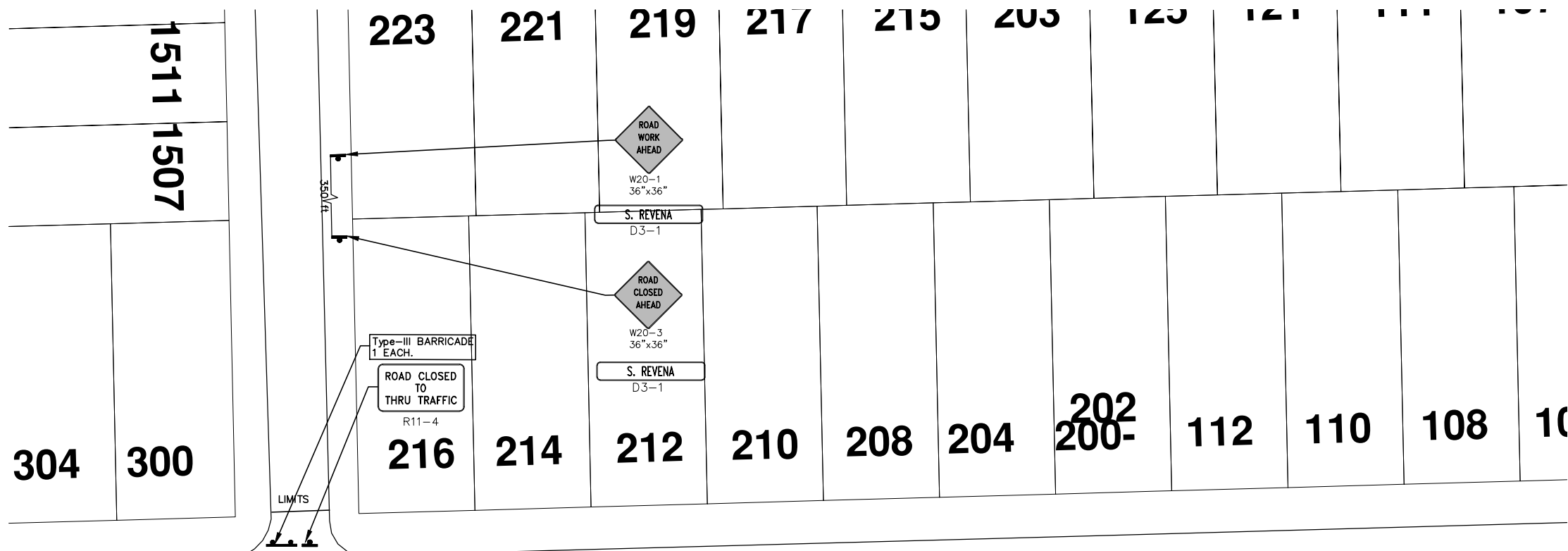
S. REVENA BLVD  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734.794.4410  
www.a2gov.org

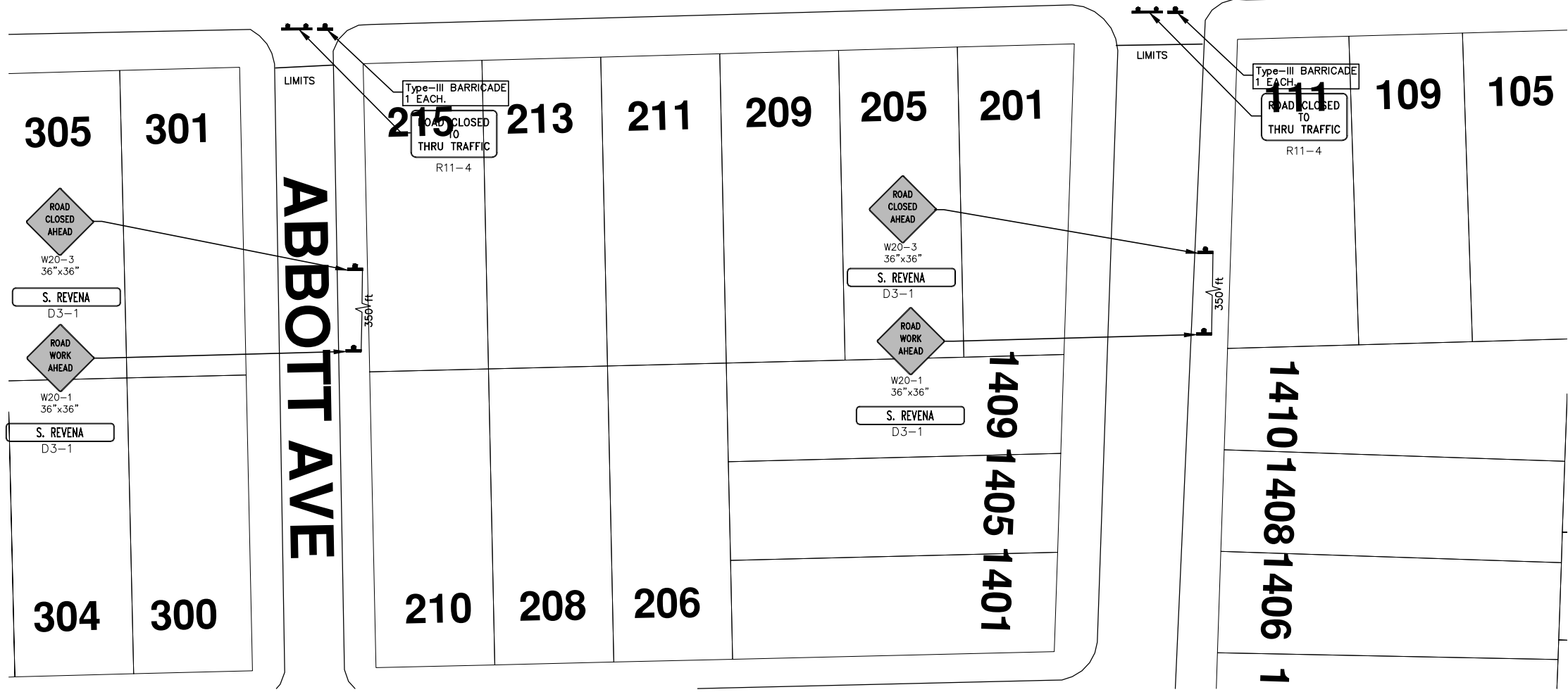
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811  
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# S REVENA BLVD



TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
3	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
3	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
3	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
3	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
3	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE PLAN: Custom

DRAWING No. 2015004-81

SHEET No. 81 OF 117

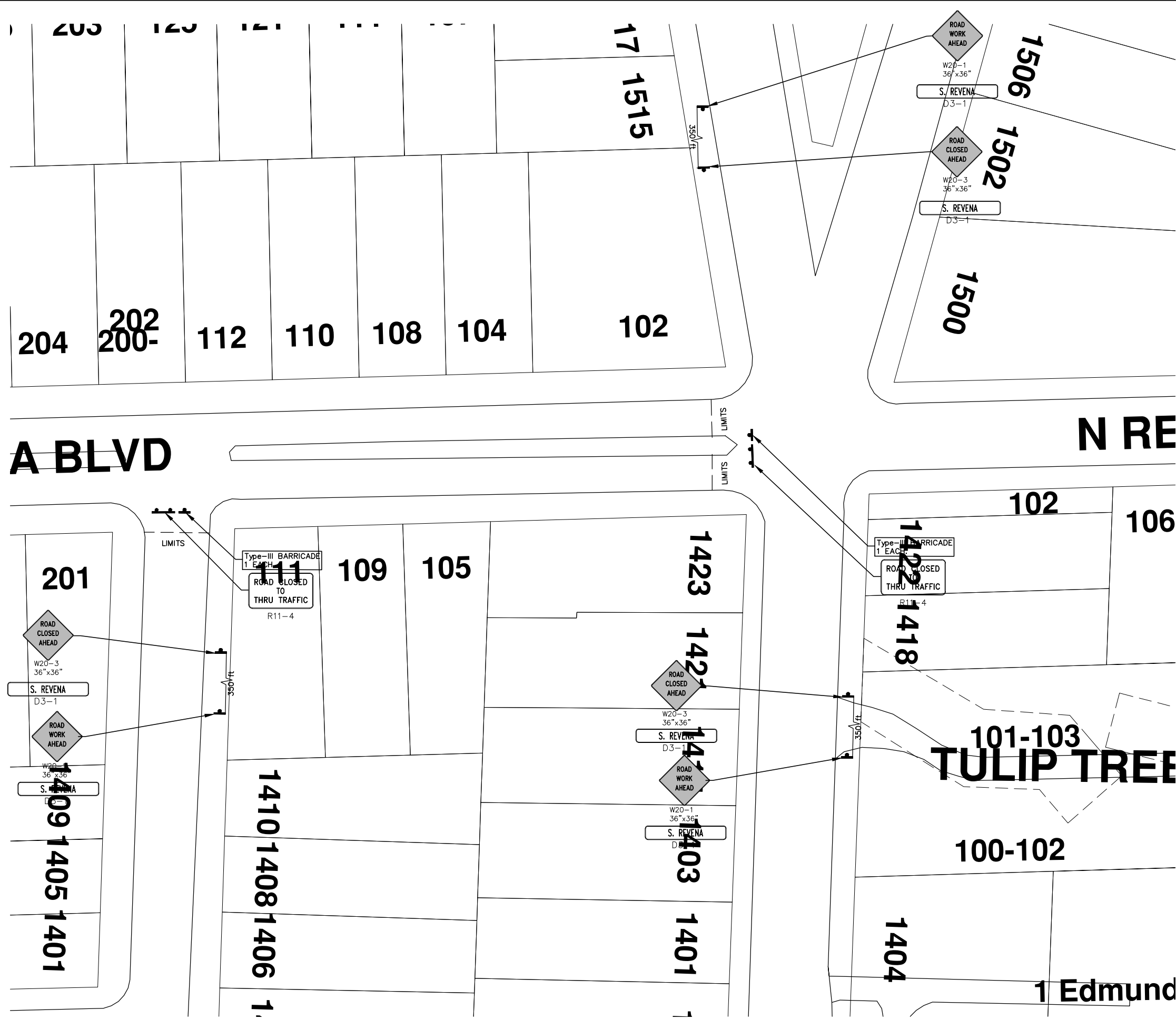
**2015 ANNUAL RESURFACING**

S. REVENA BLVD  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734.794.6410  
www.a2gov.org

NO.	ADD DESCRIPTION OR MAKE LAYER PLOT	DATE	BY	CHECKED

s:\project\_management\Design\2015004 resurfacing\plan\_production\Primary\S\_Revena\2015004MTRF - S\_Revena.dwg Dwg Created: 3-Dec-14 - \_o2\_standard bw.stb - Plot Date: 19-Feb-15



TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
3	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
3	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
3	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
2	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
2	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
2	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE PLAN: Custom

DRAWING No. 2015004-80

SHEET No. 80 OF 117

**2015 ANNUAL RESURFACING**

S. REVENA BLVD  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1007  
ANN ARBOR: 734.794.4410  
WWW.A2GOV.ORG

REV.	DATE	DESCRIPTION	BY	CHECKED

Know what's below. Call Before you dig.





# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: PINE VALLEY BLVD.

ITB No. 4371 FILE No. 2015-004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	65
207	Cold Milling Pavement	Tons	910
208	Cold Mill Pavement, Curb Reveal	Tons	0
209	Subgrade Undercutting - Type II	C.Y.	520
220	HMA Patching	Tons	7
221	Bit. Finish Wedging	Tons	8
222	HMA Pavement Leveling, Regular	Tons	610
224	HMA Pavement Wearing, 36A	Tons	310
230	Rem. Curb & Gutter, Any Type	L.F.	830
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	1010
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	804
238	Conc. Curb & Gutter - Any Type - High Early	L.F.	26
240	4" Sidewalk or Ramp	S.F.	500
241	6" Drive, Sidewalk or Ramp	S.F.	410
242	6" Drive, Sidewalk or Ramp - High Early	S.F.	110
245	Detectable Warning, Cast in Place	S.F.	40
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2" Dia. Structure	Each	0
254	Lower Structure Cover	Each	18
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	18
257	Adjust Curb Inlet Structure Cover	Each	9
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	18
260	Inlet Structure Cover (MDOT K)	Each	2
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	23
271	21AA Limestone - C.I.P.	C.Y.	520
282	Plastic Drum - Furn. & Operate	Each	62
283	Barricade Type III - Furn. & Operate	Each	4
284	Temp Signs Type - B	S.F.	302
285	No Parking Sign	Each	44
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	286
597	24" White Thermo.	L.F.	40
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
6	W20-1	"ROAD WORK AHEAD"
6	W20-3	"ROAD CLOSED AHEAD"
12	D3-1	CONVENTIONAL GUIDE
4	TYPE III	TYPE III LIGHTED BARRICADE
4	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

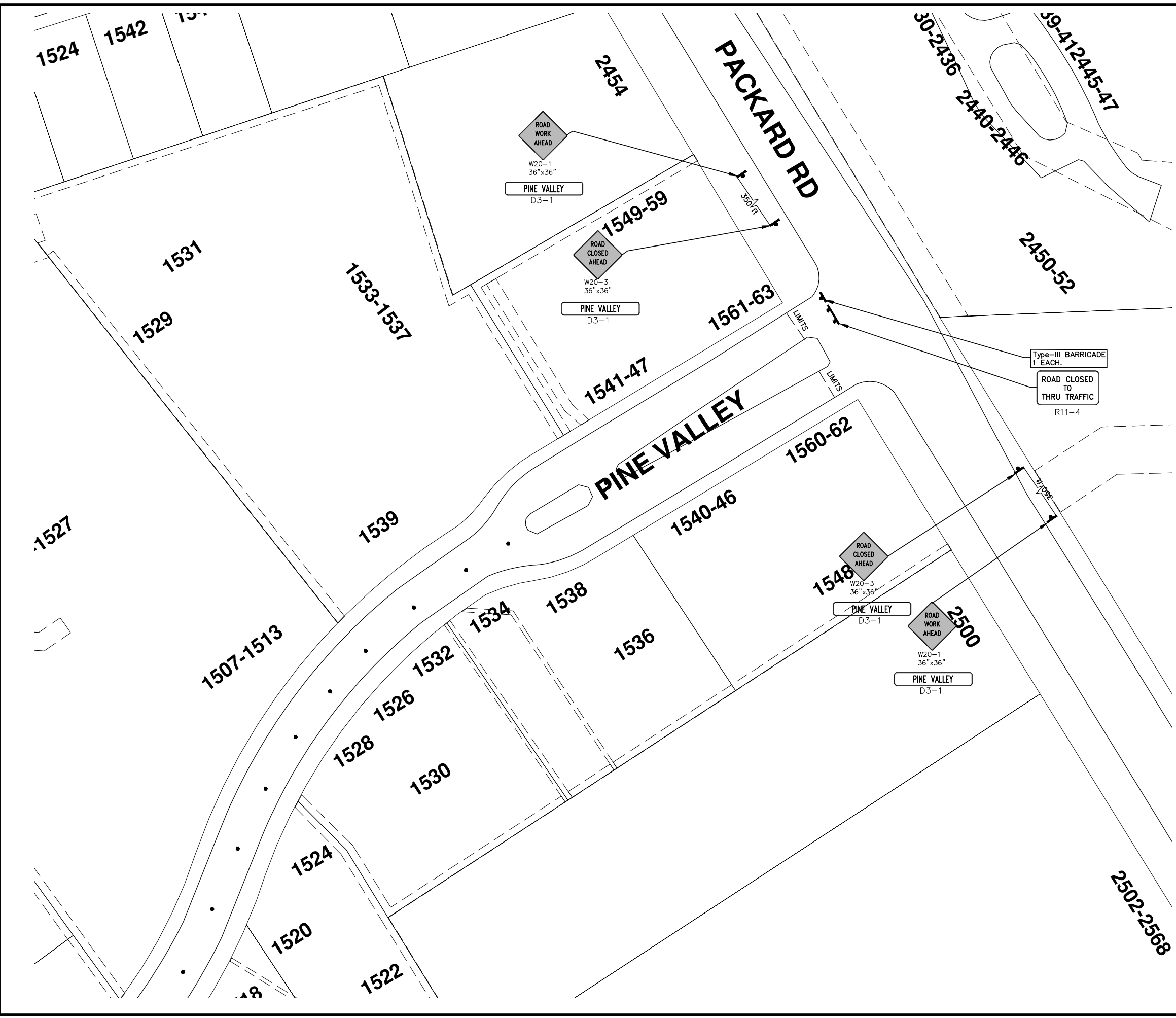
PINE VALLEY BLVD.

DRAWING No. 2015004 - 85

SHEET No. 85 OF 117

s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Pine\_Valley\2015004MTRF - Pine\_Valley.dwg Dwg Created: 3-Dec-14 - a2 standard bw.stb - Plot Date: 19-Feb-15

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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
2	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
1	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
1	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**


2015 ANNUAL RESURFACING

PINE VALLEY BLVD  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom

DRAWING No. 2015004-86

SHEET No. 86 OF 117



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1007  
ANN ARBOR 734.794.4410  
WWW.ANARBOR.MI.GOV

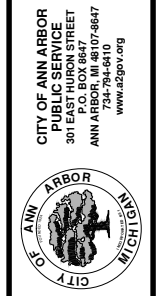
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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
4	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
4	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
4	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
4	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
4	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"X48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 2015 ANNUAL RESURFACING  
 PINE VALLEY BLVD  
 MAINTENANCE OF TRAFFIC  
 SCALE PLAN: Custom  
 DRAWING No. 2015004-87  
 SHEET No. 87 OF 117



REV.	DATE	DESCRIPTION	BY	CHECKED







# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: TACOMA STREET

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	28
207	Cold Milling Pavement	Tons	270
209	Subgrade Undercutting - Type II	C.Y.	160
220	HMA Patching	Tons	3
222	HMA Pavement Leveling, Regular	Tons	180
224	HMA Pavement Wearing, 36A	Tons	90
230	Rem. Curb & Gutter, Any Type	L.F.	490
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	300
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	490
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	300
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	4
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	4
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	3
261	Pl. Drain Structures	Each	2
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	14
271	21AA Limestone - C.I.P.	C.Y.	160
282	Plastic Drum - Lighted - Furn. & Operate	Each	18
283	Barricade Type III - Furn. & Operate	Each	2
284	Temp Signs Type - B	S.F.	101
285	No Parking Sign	Each	13
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	70
597	24" White Thermo.	L.F.	15
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
3	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING

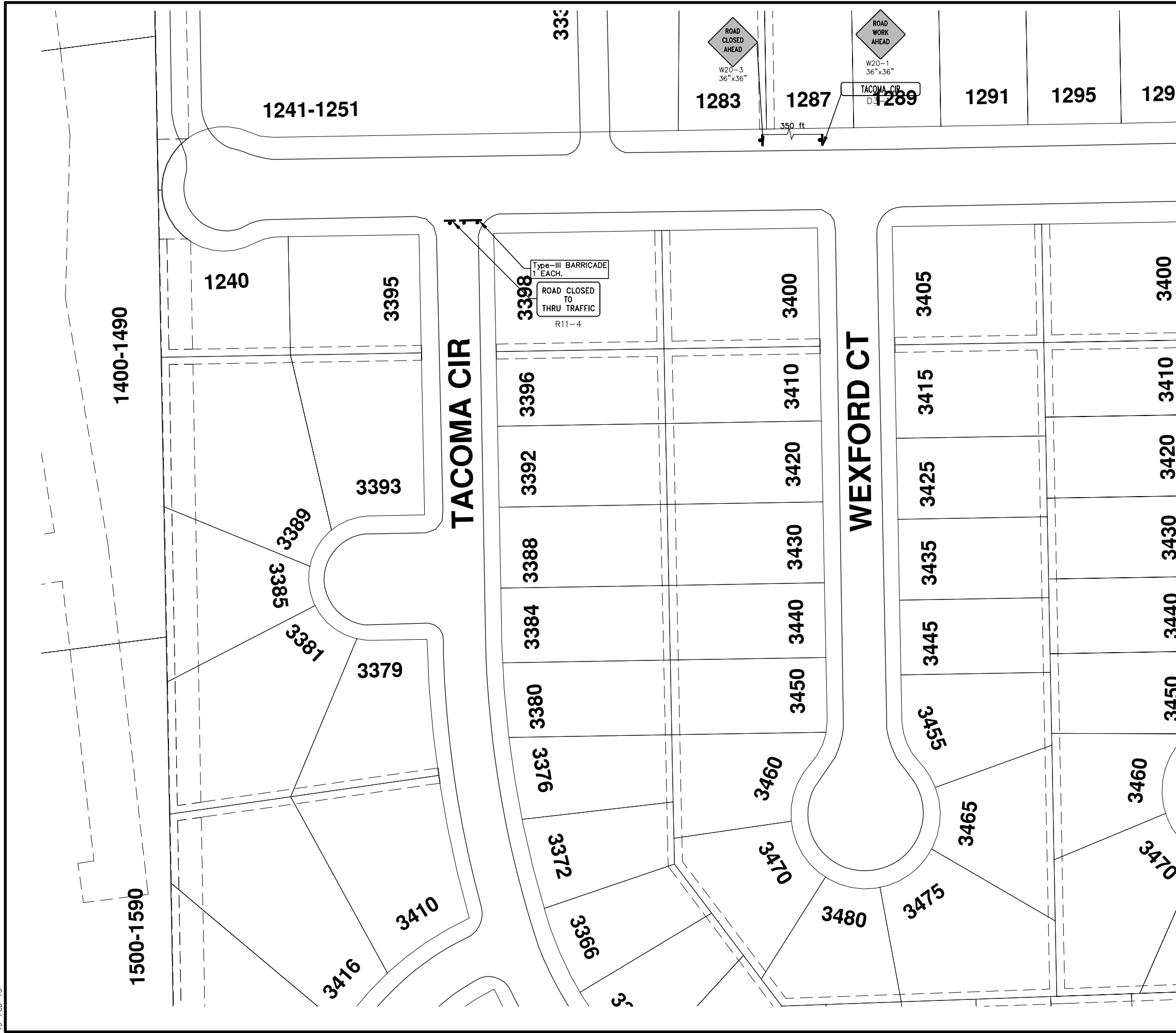
TACOMA STREET

DRAWING No.  
2015004 - 90

SHEET No.  
90 OF 117



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TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
1	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
1	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
1	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
1	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
1	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
2015 ANNUAL RESURFACING

SCALE PLAN: Custom

DRAWING No. 2015004-93

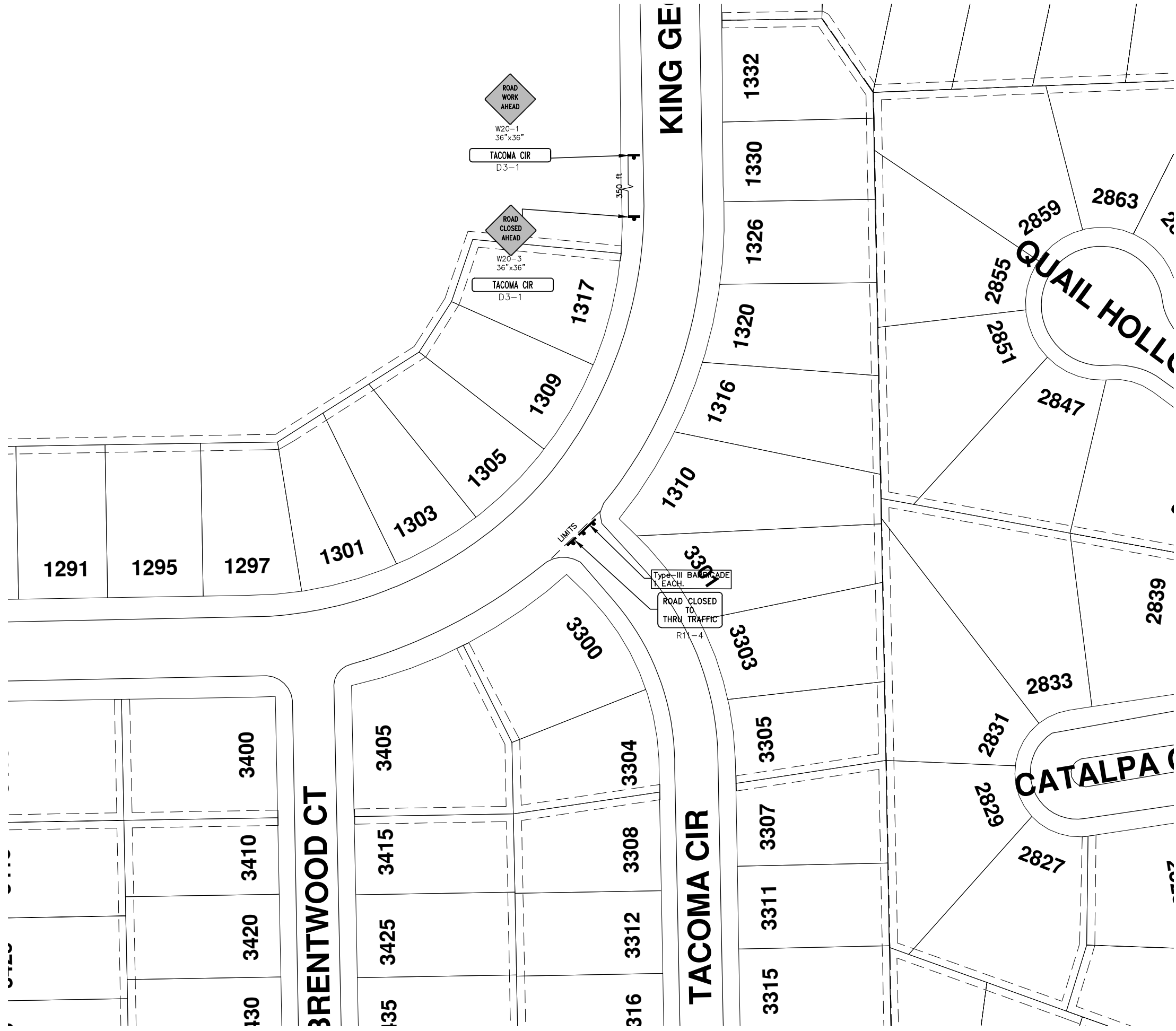
SHEET No. 93 OF 117

**TACOMA CIRCLE**  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR: 734.794.4410  
www.a2gov.org

REV.	DESCRIPTION	DATE	BY	CHECKED





TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
1	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
1	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
1	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
1	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
	R11-2	"ROAD CLOSED"
1	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
2015 ANNUAL RESURFACING

SCALE PLAN: Custom

DRAWING No. 2015004-91

SHEET No. 91 OF 117

**TACOMA CIRCLE**  
MAINTENANCE OF TRAFFIC

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR BOX 8647  
ANN ARBOR MI 48107-8647  
www.a2gov.org

REV.	DESCRIPTION	DATE	BY	CHECKED

**811**  
Know what's below.  
Call Before you dig.





# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: VINTAGE VALLEY RD.

ITB No. 4371 FILE No. 2015-004



s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Vintage\_Valley\2015004MTRF - Vintage Valley.dwg Dwg Created: 3-Dec-14 - \_a2\_standard bw.stb - Plot Date: 19-Feb-15

QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	50
207	Cold Milling Pavement	Tons	730
209	Subgrade Undercutting - Type II	C.Y.	360
220	HMA Patching	Tons	6
221	Bit. Finish Wedging	Tons	8
222	HMA Pavement Leveling, Regular	Tons	420
223	HMA Pavement Wearing, Regular	Tons	310
230	Rem. Curb & Gutter, Any Type	L.F.	570
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	300
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	550
238	Conc. Curb & Gutter H.E.	L.F.	30
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	0
242	6" S/W, Drive App. H.E.	S.F.	220
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	4
251	Double Inlet Structure	Each	1
252	Reconstruct Structure	Each	1
254	Lower Structure Cover	Each	12
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	12
257	Adjust Curb Inlet Structure Cover	Each	6
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	11
264	12" Sewer, Trench Detail I, Modified	L.F.	40
268	Flowable Fill	C.Y.	16
271	21AA Limestone - C.I.P.	C.Y.	360
282	Plastic Drum - Lighted - Furn. & Operate	Each	43
283	Barricade Type III - Furn. & Operate	Each	3
284	Temp Signs Type - B	S.F.	238
285	No Parking Sign	Each	31
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	22
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
5	W20-1	"ROAD WORK AHEAD"
5	W20-3	"ROAD CLOSED AHEAD"
10	D3-1	CONVENTIONAL GUIDE
3	TYPE III	TYPE III LIGHTED BARRICADE
3	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING


- THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
- IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
- PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
- GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

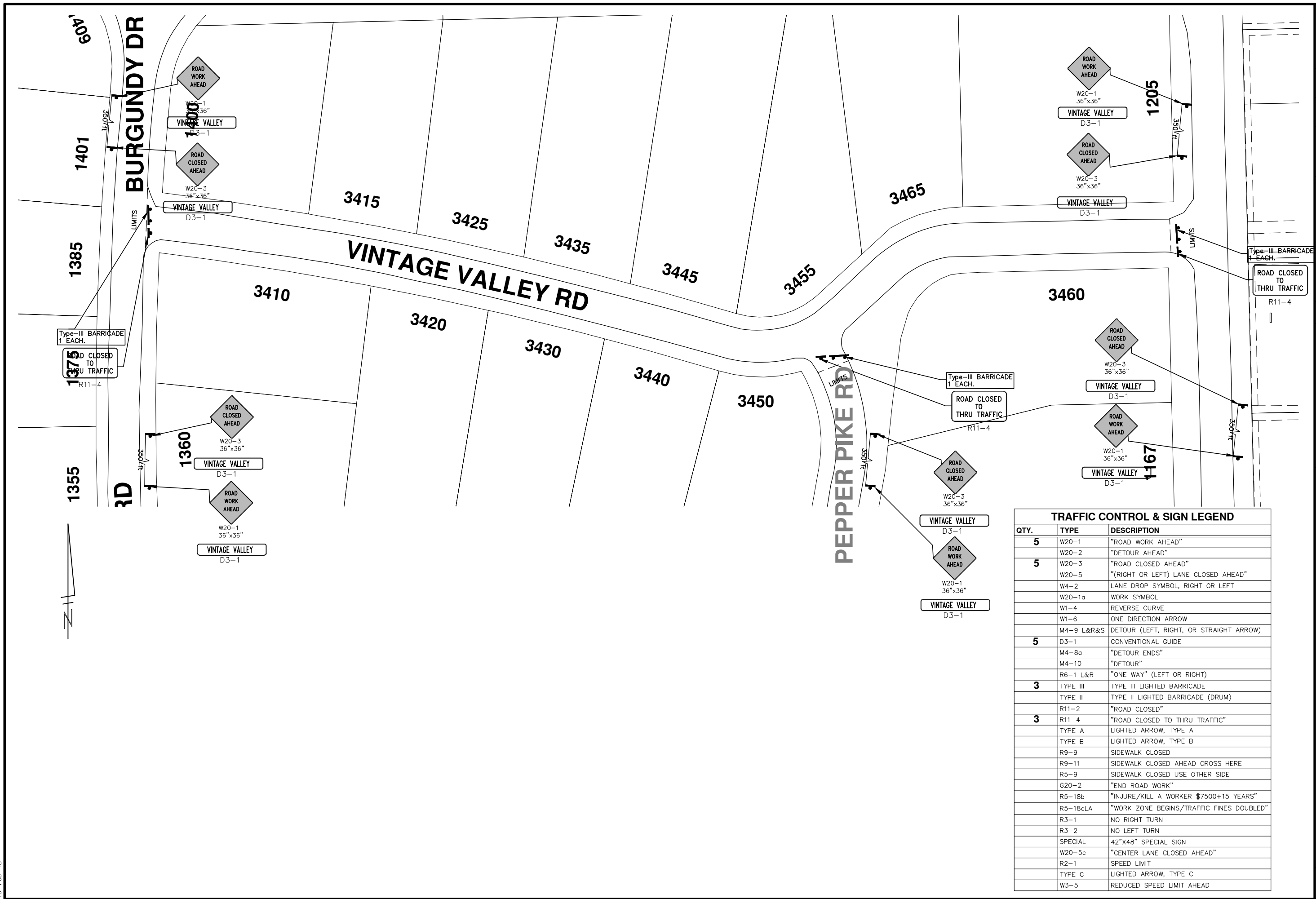
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



**PROJECT MANAGEMENT SERVICE UNIT**  
CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING  
VINTAGE VALLEY ROAD  
DRAWING No.  
2015004 - 94  
SHEET No.  
94 OF 117

s:\project\_management\Design\2015004 resurfacing\plan\_production\Primary\Vintage Valley\2015004MTRF - Vintage Valley.dwg Dwg Created: 3-Dec-14 - \_a2\_standard bw.stb - Plot Date: 19-Feb-15



TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
5	W20-1	"ROAD WORK AHEAD"
	W20-2	"DETOUR AHEAD"
5	W20-3	"ROAD CLOSED AHEAD"
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT
	W20-1a	WORK SYMBOL
	W1-4	REVERSE CURVE
	W1-6	ONE DIRECTION ARROW
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)
5	D3-1	CONVENTIONAL GUIDE
	M4-8a	"DETOUR ENDS"
	M4-10	"DETOUR"
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)
3	TYPE III	TYPE III LIGHTED BARRICADE
	TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
3	R11-2	"ROAD CLOSED"
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
	TYPE A	LIGHTED ARROW, TYPE A
	TYPE B	LIGHTED ARROW, TYPE B
	R9-9	SIDEWALK CLOSED
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE
	R5-9	SIDEWALK CLOSED USE OTHER SIDE
	G20-2	"END ROAD WORK"
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"
	R3-1	NO RIGHT TURN
	R3-2	NO LEFT TURN
	SPECIAL	42"x48" SPECIAL SIGN
	W20-5c	"CENTER LANE CLOSED AHEAD"
	R2-1	SPEED LIMIT
	TYPE C	LIGHTED ARROW, TYPE C
	W3-5	REDUCED SPEED LIMIT AHEAD

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

2015 ANNUAL RESURFACING

VINTAGE VALLEY ROAD MAINTENANCE OF TRAFFIC

SHEET No. 95 OF 117

**811**  
Know what's below. Call Before you dig.

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734-794-4410  
www.a2gov.org

CITY OF ANN ARBOR  
MICHIGAN

SCALE PLAN: Custom

DRAWING No. 2015004-95

REV.	DATE	DESCRIPTION	BY	CHECKED



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: BURGUNDY ROAD

ITB No. 4371 FILE No. 2015004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	53
207	Cold Milling Pavement	Tons	760
209	Subgrade Undercutting - Type II	C.Y.	390
220	HMA Patching	Tons	6
222	HMA Pavement Leveling, Regular	Tons	440
223	HMA Pavement Wearing, Regular	Tons	330
230	Rem. Curb & Gutter, Any Type	L.F.	630
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	140
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	290
238	Conc. Curb & Gutter H.E.	L.F.	340
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	0
242	6" S/W, Drive App. H.E.	S.F.	140
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	7
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	7
257	Adjust Curb Inlet Structure Cover	Each	2
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	0
271	21AA Limestone - C.I.P.	C.Y.	0
282	Plastic Drum - Lighted - Furnish & Operate	Each	40
283	Barricade Type III - Furnish & Operate	Each	2
284	Temp Signs Type - B	S.F.	153
285	No Parking Sign	Each	33
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	0
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
3	W20-1	"ROAD WORK AHEAD"
3	W20-3	"ROAD CLOSED AHEAD"
8	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

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THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING  
BURGUNDY ROAD

DRAWING No.  
2015004 - 97

SHEET No.  
97 OF 117







# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: LONDONDERRY ROAD

ITB No. 4371 FILE No. 2015-004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
207	Cold Milling Pavement	Tons	600
208	Cold Mill Pavement, Curb Reveal	Tons	0
209	Subgrade Undercutting - Type II	C.Y.	270
219	Machine Grading	C.Y.	111
221	Bit. Finish Wedging	Tons	8
222	HMA Pavement Leveling, Regular	Tons	340
223	HMA Pavement Wearing, Regular	Tons	260
230	Rem. Curb & Gutter, Any Type	L.F.	150
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	200
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	380
238	Conc. Curb & Gutter H.E.	L.F.	70
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	150
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	2
254	Lower Structure Cover	Each	8
255	Lower Mon./Gate Valve Box	Each	4
256	Adjust Structure Cover	Each	8
257	Adjust Curb Inlet Structure Cover	Each	5
258	Adjust Mon. or Gate Valve Box	Each	4
259	Manhole Flange & Cover (MDOT Type A)	Each	5
264	12" Sewer, Trench Detail I, Modified	L.F.	20
271	21AA Limestone - C.I.P.	C.Y.	270
272	Agg. Base Course, 21AA - C.I.P.	C.Y.	111
284	Temp Signs Type - B	S.F.	0
285	No Parking Sign	Each	0
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	24
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
0	W20-1	"ROAD WORK AHEAD"
0	W20-3	"ROAD CLOSED AHEAD"
0	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

**NOTE:  
THIS WORK  
FOLLOWS WATER  
MAIN PROJECT AND  
WILL UTILIZE  
EXISTING TRAFFIC  
CONTROL PLACED  
BY OTHERS.**

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. MAINTAIN TRAFFIC AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 6 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

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THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

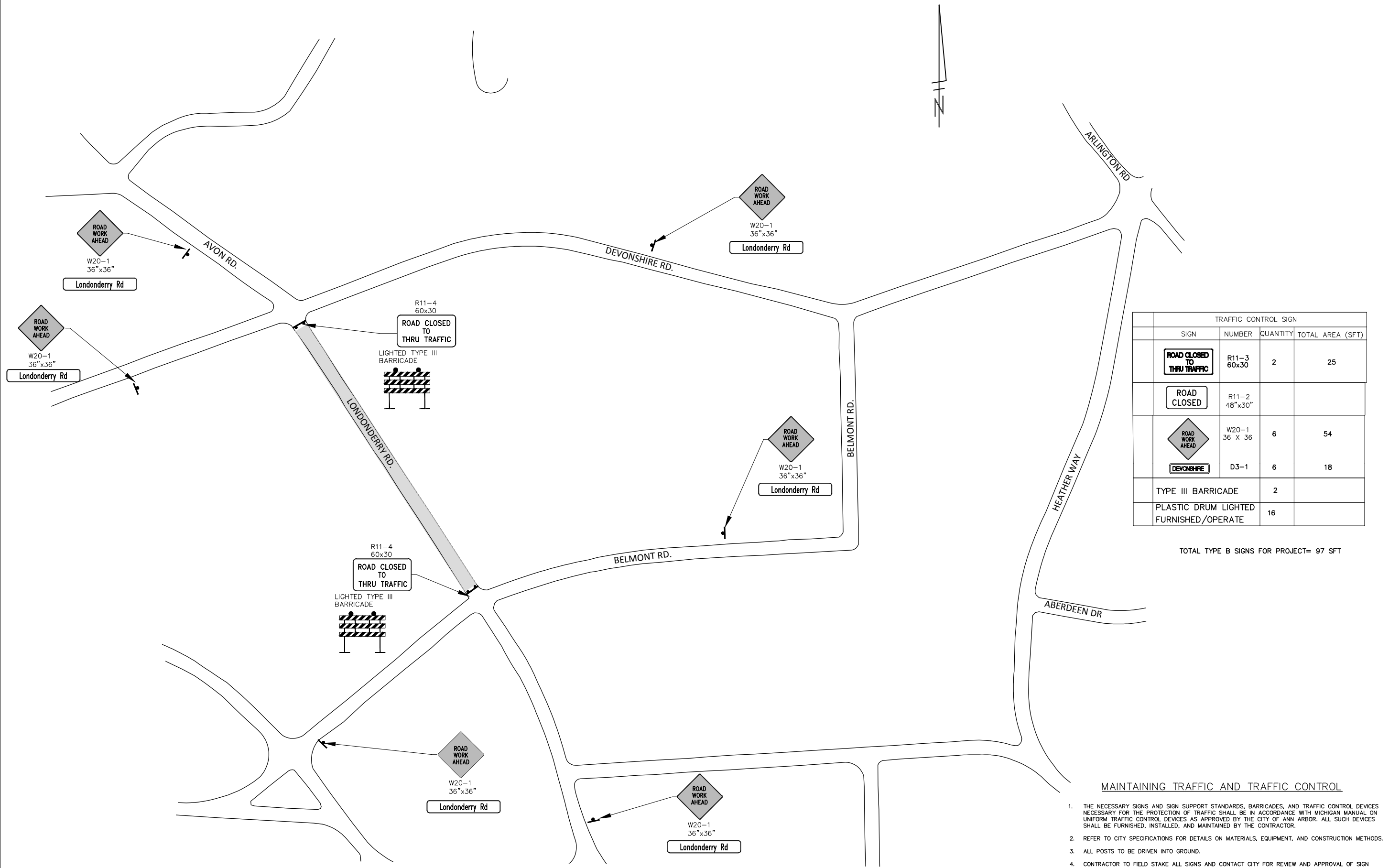
LONDONDERRY ROAD

DRAWING No. 2015004 - 100

SHEET No.

100 OF 117

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TRAFFIC CONTROL SIGN			
SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
	R11-3 60x30	2	25
	R11-2 48"x30"		
	W20-1 36 X 36	6	54
	D3-1	6	18
TYPE III BARRICADE		2	
PLASTIC DRUM LIGHTED FURNISHED/OPERATE		16	

TOTAL TYPE B SIGNS FOR PROJECT= 97 SFT

**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
 2015004MTRF - LONDONDERRY (1)

SCALE PLAN: 1" = 100'  
 DRAWING No. 2015004-----  
 SHEET No. --- OF 100

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1007  
 ANN ARBOR: 734.764.4410  
 WWW.ANARBOR.MI.GOV

REV.	DESCRIPTION	DATE	BY	CHECKED
00	ADD DESCRIPTION AN MAKE LAYER PLOT			

Know what's below.  
Call Before you dig.



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: DEVONSHIRE ROAD

ITB No. 4371 FILE No. 2015-004



QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
207	Cold Milling Pavement	Tons	690
209	Subgrade Undercutting - Type II	C.Y.	390
219	Machine Grading	C.Y.	65
220	HMA Patching	Tons	6
222	HMA Pavement Leveling, Regular	Tons	440
223	HMA Pavement Wearing, Regular	Tons	440
230	Rem. Curb & Gutter, Any Type	L.F.	200
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	200
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	100
238	Conc. Curb & Gutter H.E.	L.F.	260
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	0
242	6" S/W, Drive App. H.E.	S.F.	476
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	12
254	Lower Structure Cover	Each	0
255	Lower Mon./Gate Valve Box	Each	4
256	Adjust Structure Cover	Each	0
257	Adjust Curb Inlet Structure Cover	Each	12
258	Adjust Mon. or Gate Valve Box	Each	4
259	Manhole Flange & Cover (MDOT Type A)	Each	0
264	12" Sewer, Trench Detail I, Modified	L.F.	120
271	21AA Limestone - C.I.P.	C.Y.	390
278	Speed Hump (Standard)	S.Y.	36
282	Plastic Drum - Lighted - Furnish & Operate	Each	0
283	Barricade Type III - Furnish & Operate	Each	0
284	Temp Signs Type - B	S.F.	0
285	No Parking Sign	Each	0
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	24
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
0	W20-1	"ROAD WORK AHEAD"
0	W20-3	"ROAD CLOSED AHEAD"
0	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

**NOTE:  
THIS WORK  
FOLLOWS WATER  
MAIN PROJECT AND  
WILL UTILIZE  
EXISTING TRAFFIC  
CONTROL PLACED  
BY OTHERS.**

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. MAINTAIN TRAFFIC AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 6 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

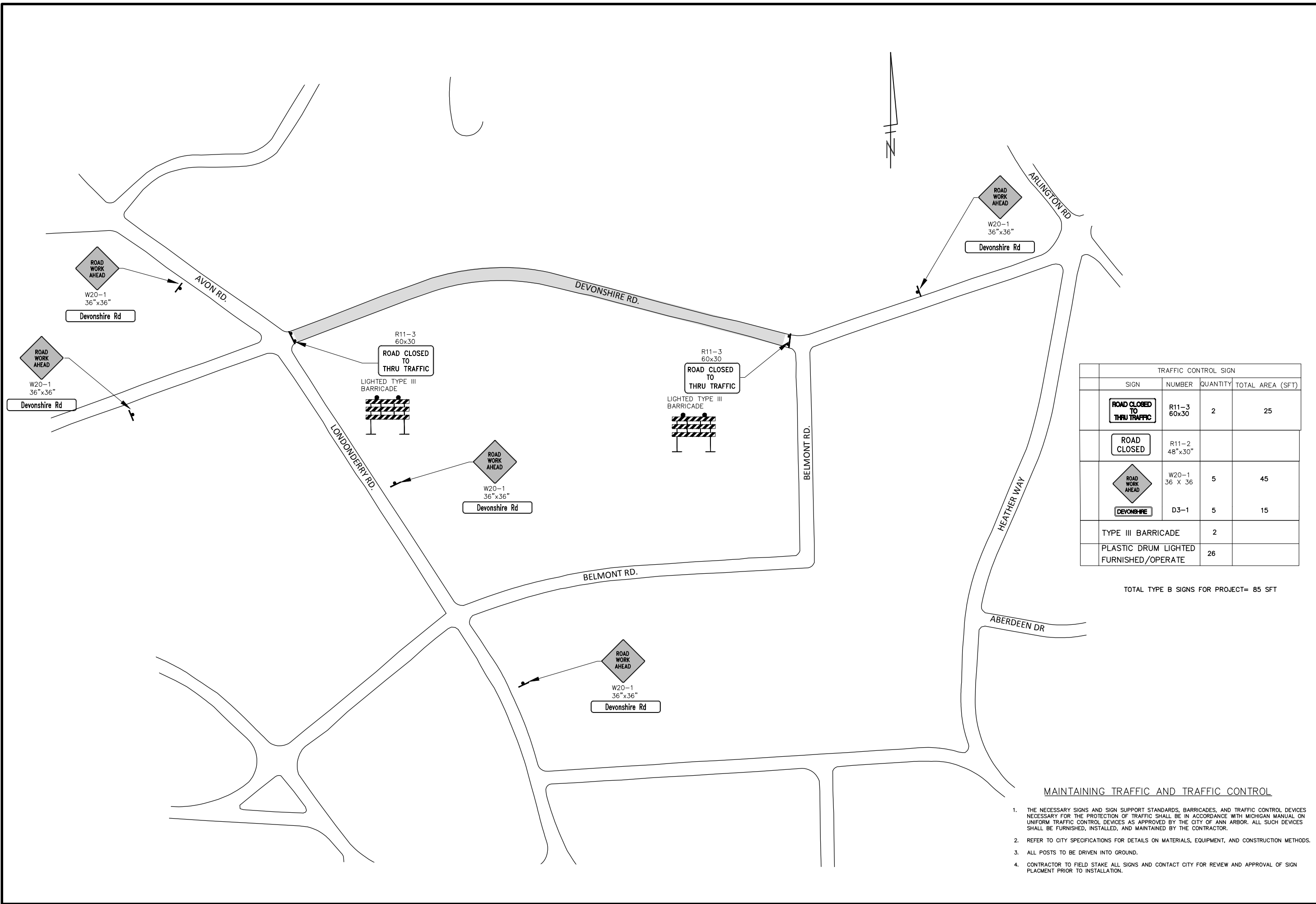
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING  
DEVONSHIRE ROAD

DRAWING No.  
2015004 - 103

SHEET No.  
103 OF 117

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TRAFFIC CONTROL SIGN			
SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
	R11-3 60x30	2	25
	R11-2 48"x30"		
	W20-1 36 X 36	5	45
	D3-1	5	15
TYPE III BARRICADE		2	
PLASTIC DRUM LIGHTED FURNISHED/OPERATE		26	

TOTAL TYPE B SIGNS FOR PROJECT= 85 SFT

**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**

SCALE PLAN: 1" = 100'  
 DRAWING No. 2015004-104

2015004MTRF - DEVONSHIRE (1)

SHEET No. 104 OF 117

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1007  
 ANN ARBOR PHONE: 734.794.4410  
 WWW.ANARBOR.MI.GOV

REV.	DESCRIPTION	DATE	BY	CHECKED
00	ADD DESCRIPTION AN MAKE LAYER PLOT			

Know what's below.  
Call Before you dig.





# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: BELMONT ROAD

ITB No. 4371 FILE No. 2015-004



s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Belmont\2015004MTRF - BELMONT.dwg Dwg Created: 22-Dec-14 - \_o2\_standard.bw.stb - Plot Date: 19-Feb-15

QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	0
207	Cold Milling Pavement	Tons	960
209	Subgrade Undercutting - Type II	C.Y.	390
219	Machine grading	C.Y.	66
220	HMA Patching	Tons	8
222	HMA Pavement Leveling, Regular	Tons	530
223	HMA Pavement Wearing, Regular	Tons	530
230	Rem. Curb & Gutter, Any Type	L.F.	920
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	380
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	100
238	Conc. Curb & Gutter H.E.	L.F.	250
239	Conc. Curb & Gutter - Any Type - Slip Form	L.F.	1405
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	0
242	6" Drive, Sidewalk or Ramp - High Early	S.F.	1011
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2" Dia. Structure	Each	6
254	Lower Structure Cover	Each	14
255	Lower Mon./Gate Valve Box	Each	1
256	Adjust Structure Cover	Each	14
257	Adjust Curb Inlet Structure Cover	Each	8
258	Adjust Mon. or Gate Valve Box	Each	1
259	Manhole Flange & Cover (MDOT Type A)	Each	6
264	12" Sewer, Trench Detail I, Modified	L.F.	60
268	Flowable Fill	C.Y.	26
271	21AA Limestone - C.I.P.	C.Y.	390
272	Agg. Base Course, 21AA - C.I.P.	C.Y.	157
282	Plastic Drum - Lighted - Furnish & Operate	Each	0
283	Barricade Type III - Furnish & Operate	Each	0
284	Temp Signs Type - B	S.F.	0
285	No Parking Sign	Each	0
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	0
597	24" White Thermo.	L.F.	26
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
0	W20-1	"ROAD WORK AHEAD"
0	W20-3	"ROAD CLOSED AHEAD"
0	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	ROAD CLOSED TO THRU TRAFFIC

**NOTE:  
THIS WORK  
FOLLOWS WATER  
MAIN PROJECT AND  
WILL UTILIZE  
EXISTING TRAFFIC  
CONTROL PLACED  
BY OTHERS.**

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 6 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

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THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING

BELMONT ROAD

DRAWING No.  
2015004-106

SHEET No.  
106 OF 117

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TRAFFIC CONTROL SIGN			
SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
	R11-3 60x30	2	25
	R11-2 48"x30"		
	W20-1 36 X 36	5	45
	D3-1	5	15
TYPE III BARRICADE		2	
PLASTIC DRUM LIGHTED FURNISHED/OPERATE		26	

TOTAL TYPE B SIGNS FOR PROJECT= 85 SFT

**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.



Know what's below. Call Before you dig.

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1007  
ANN ARBOR  
734.764.4410  
www.a2gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
2015 ANNUAL RESURFACING

2015004MTRF - BELMONT (1)

SCALE PLAN: 1" = 100'

DRAWING No.  
2015004-104

SHEET No.



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: LAWRENCE STREET

ITB No. 4371 FILE No. 2015-004



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QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
207	Cold Milling Pavement	Tons	388
209	Subgrade Undercutting - Type II	C.Y.	240
222	HMA Pavement Leveling, Regular	Tons	280
223	HMA Pavement Wearing, Regular	Tons	280
230	Rem. Curb & Gutter, Any Type	L.F.	100
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	200
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	0
238	Conc. Curb & Gutter H.E.	L.F.	329
239	Conc. Curb & Gutter - Any Type - Slip Form	L.F.	1136
240	4" Sidewalk or Ramp	S.F.	200
242	6" Drive, Sidewalk or Ramp - High Early	S.F.	2222
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	4
255	Lower Mon./Gate Valve Box	Each	3
256	Adjust Structure Cover	Each	4
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	3
259	Manhole Flange & Cover (MDOT Type A)	Each	3
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	21
271	21AA Limestone - C.I.P.	C.Y.	0
283	Barricade Type III - Furn. & Operate	Each	0
284	Temp Signs Type - B	S.F.	0
285	No Parking Sign	Each	0
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	85
597	24" White Thermo.	L.F.	85
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
0	W20-1	"ROAD WORK AHEAD"
0	W20-3	"ROAD CLOSED AHEAD"
0	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

**NOTE:  
THIS WORK  
FOLLOWS WATER  
MAIN PROJECT AND  
WILL UTILIZE  
EXISTING TRAFFIC  
CONTROL PLACED  
BY OTHERS.**

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 6 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
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12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

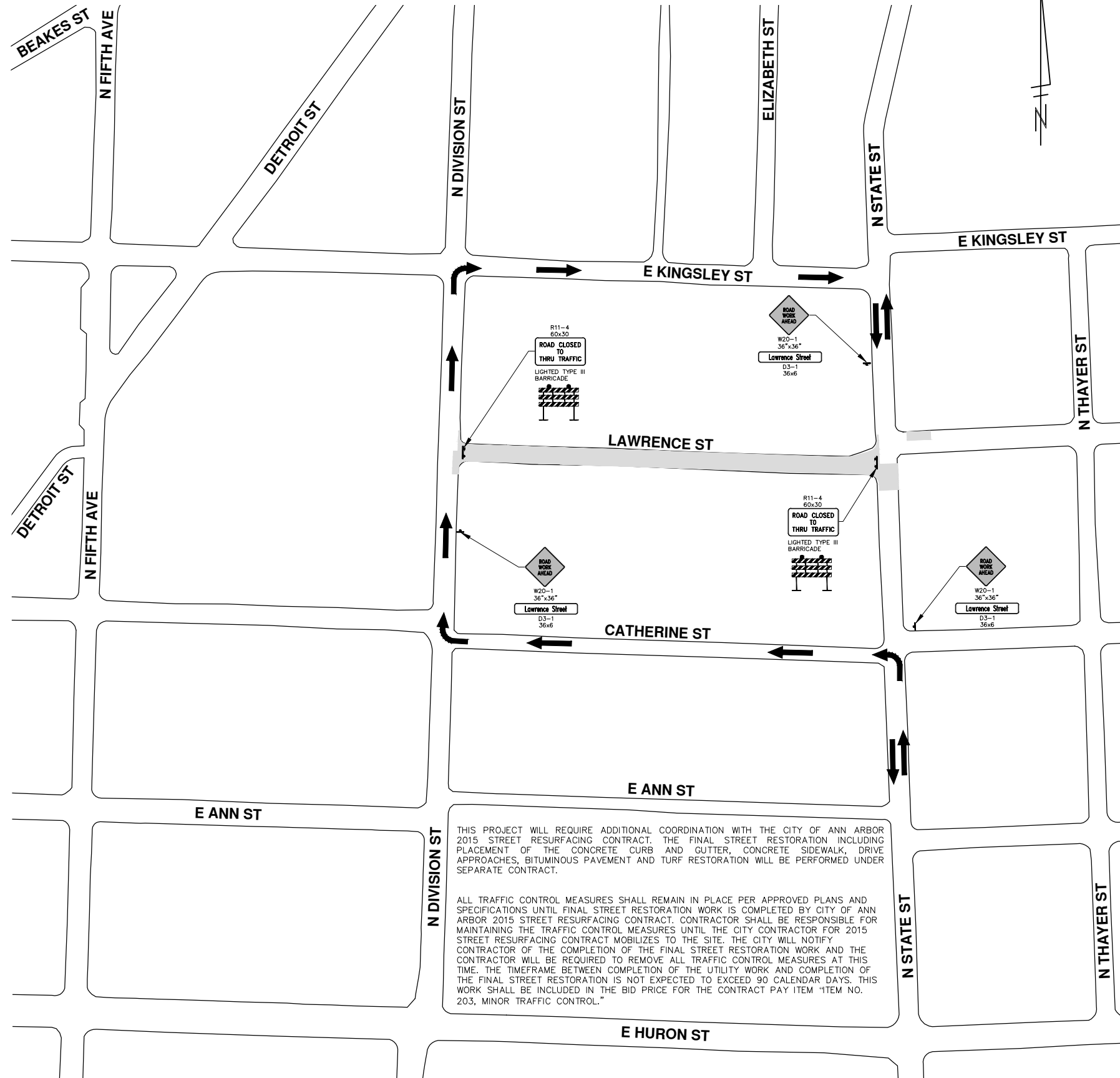
2015 ANNUAL RESURFACING  
LAWRENCE STREET

PROJECT DESCRIPTION

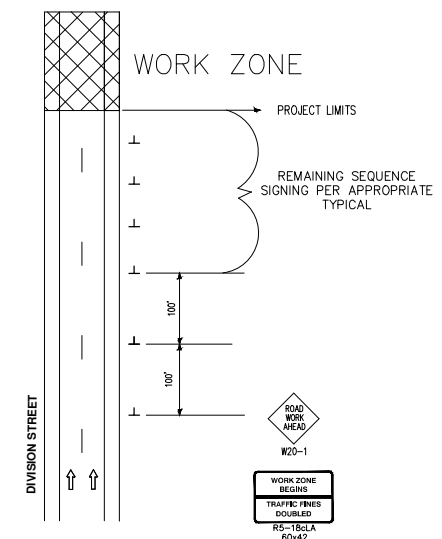
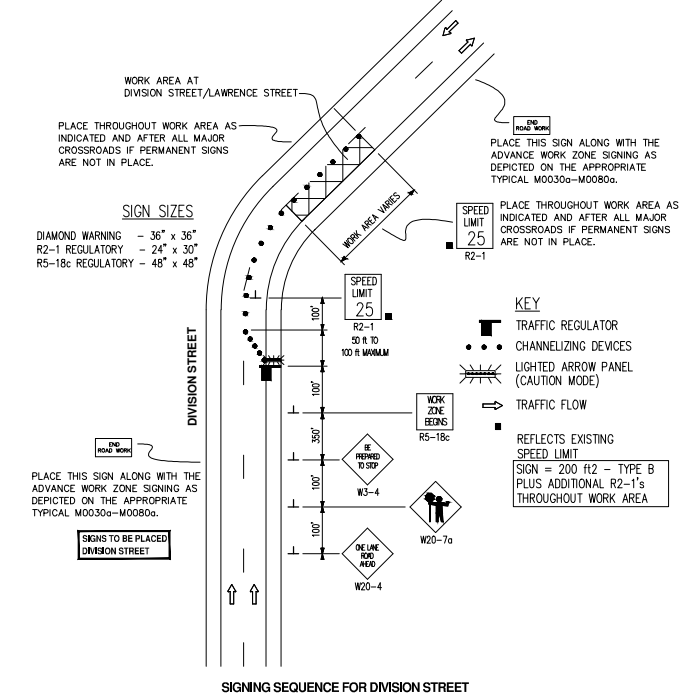
DRAWING No.  
2015004 - 109

SHEET No.  
109 OF 117

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**TRAFFIC CONTROL TO BE FOLLOWED DURING WATER MAIN WORK IN DIVISION STREET / LAWRENCE STREET INTERSECTION**



TYPICAL ADVANCE SIGNING TREATMENT FOR LONG, INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE OPERATIONS OF LESS THAN TWO MILES IN LENGTH WHERE TRAFFIC CONTROL DEVICES MAY REMAIN AT END OF WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY

**LEGEND:**  
ONE WAY STREET.

**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR 734.764.6410  
www.a2gov.org

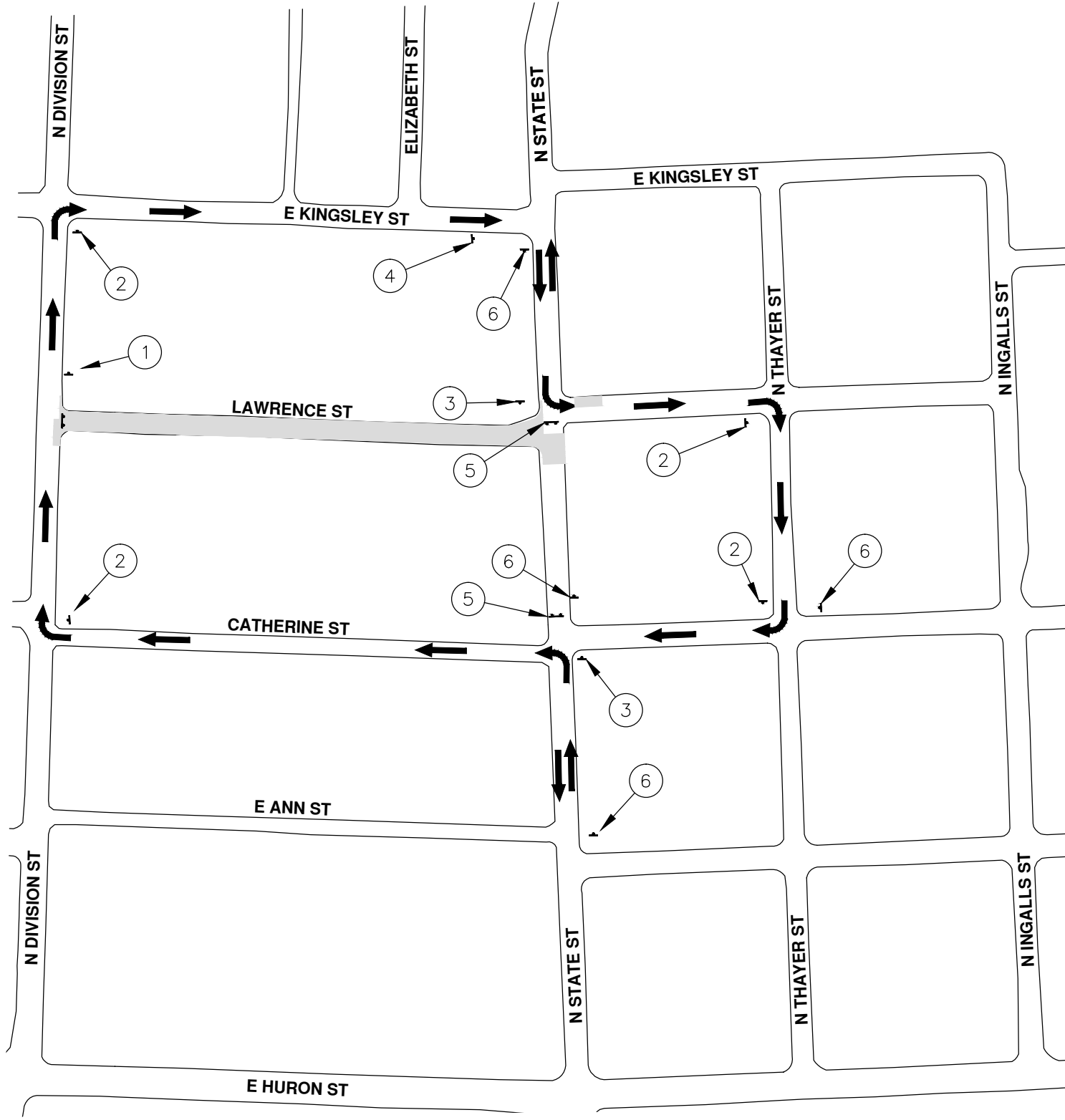
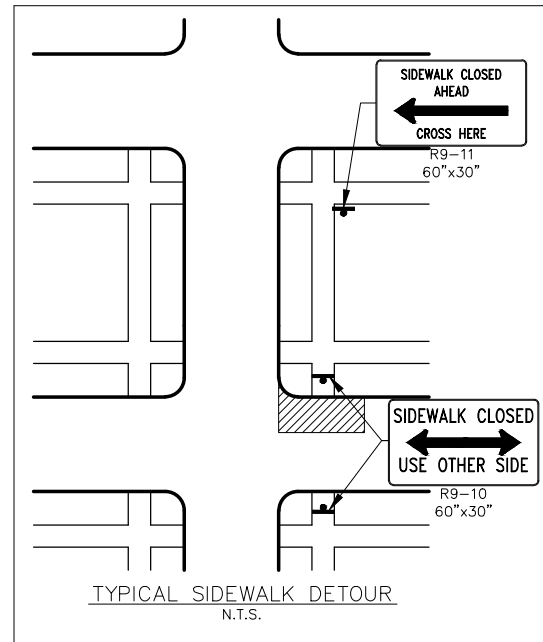


**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
2015004MTRF - LAWRENCE (1)

SCALE PLAN: 1" = 100'  
DRAWING No. 2015004-111  
SHEET No. 111 OF 117



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**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.

**NOTES:**

1. ONLY ONE CORNER OF AN INTERSECTION CAN BE CLOSED AT A TIME TO PEDESTRIAN TRAFFIC. MISCELLANEOUS QUANTITIES FOR FURNISHING AND PLACING TYPE B SIGNS HAVE BEEN PROVIDED
2. CONTRACTOR TO NOTIFY CITY 1 WEEK IN ADVANCE TO SCHEDULE CLOSURE OF N. STATE STREET.
2. COVER CONFLICTING SIGNS AS NEEDED OR AS DIRECTED BY ENGINEER.
3. REMOVE OR OBSCURE AS DIRECTED CONFLICTING PAVEMENT MARKINGS AND SYMBOLS
4. ALL TRAFFIC CONTROL DEVICES MUST MEET CURRENT MMUTCD PART 6 STANDARDS.
5. PARKING METERS IN WORK ZONE TO BE BAGGED OR REMOVED AS DIRECTED BY ENGINEER.
6. CONTRACTOR TO PROVIDE TRAFFIC REGULATORS AS DIRECTED BY ENGINEER.

TRAFFIC CONTROL SIGNS				
	SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
①	N STATE ST	D3-1	1	1.5
	DETOUR	M4-9S 30x30	1	7
②	N STATE ST	D3-1	4	6
	DETOUR	M4-9R 30x24	4	28
③	N STATE ST	D3-1	2	3
	DETOUR	M4-9L 30x24	2	14
④	N STATE ST	D3-1	1	1.5
	DETOUR ENDS	M4-8a 24x18	1	3
⑤	ROAD CLOSED	R11-2 60x30	2	25
⑥	N STATE ST CLOSED TO THRU TRAFFIC FOLLOW DETOUR	SPECIAL 48x60	4	80
	END ROAD WORK	G20-2 48"x24"	1	
	SIDEWALK CLOSED USE OTHER SIDE	R9-10 60x30	2	25
	DETOUR	M4-9B 30x24	2	10
	SIDEWALK CLOSED CROSS HERE	R9-11 60x30	2	25
	SIDEWALK CLOSED	R9-9 30x18	2	8
	SIDEWALK CLOSED AHEAD CROSS HERE	R9-11 48x36	2	24
	ROAD WORK AHEAD	W20-1 48 X 48	4	
	LAWRENCE ST	D3-1	4	23
	ROAD CLOSED TO THRU TRAFFIC	R11-4 60x30	3	
	SPEED LIMIT 25	R2-1 24"x30"	2	
	BE PREPARED TO STOP	W3-4 48"x48"	1	
	ONE LANE ROAD AHEAD	W20-4 48"x48"	1	
	WORK ZONE BEGINS TRAFFIC FINES DOUBLED	R5-18cLA 60x42	1	
	WORK ZONE BEGINS	R5-15c 30"x36"	1	



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
ANN ARBOR, MI 48107-8410  
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
2015 ANNUAL RESURFACING  
2015004MTRF - LAWRENCE (2)  
SCALE PLAN: 1" = 100'  
DRAWING No. 2015004-110  
SHEET No. 110 OF 117

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING PROJECT LOCATION: DUNCAN STREET

ITB No. 4371 FILE No. 2015-004



s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Duncan\2015004MTRF - Duncan.dwg Dwg Created: 15-Jan-15 - \_a2\_standard bw.stb - Plot Date: 19-Feb-15

QUANTITIES			
ITEM #	DESCRIPTION	Units	Total
207	Cold Milling Pavement	Tons	2210
209	Subgrade Undercutting - Type II	C.Y.	630
219	Machine Grading	C.Y.	167
222	HMA Pavement Leveling, Regular	Tons	740
223	HMA Pavement Wearing, Regular	Tons	740
230	Rem. Curb & Gutter, Any Type	L.F.	100
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	400
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	0
238	Conc. Curb & Gutter H.E.	L.F.	560
239	Conc. Curb & Gutter - Any Type - Slip Form	L.F.	1928
240	4" Sidewalk or Ramp	S.F.	1061
241	6" Drive, Sidewalk or Ramp	S.F.	370
245	Detectable Warning, Cast in Place	S.F.	70
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	15
255	Lower Mon./Gate Valve Box	Each	6
256	Adjust Structure Cover	Each	15
257	Adjust Curb Inlet Structure Cover	Each	18
258	Adjust Mon. or Gate Valve Box	Each	6
259	Manhole Flange & Cover (MDOT Type A)	Each	11
264	12" Sewer, Trench Detail I, Modified	L.F.	0
271	21AA Limestone - C.I.P.	C.Y.	590
282	Plastic Drum - Lighted - Furnish & Operate	Each	0
283	Barricade Type III - Furnish & Operate	Each	0
284	Temp Signs Type - B	S.F.	0
285	No Parking Sign	Each	0
592	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	125
597	24" White Thermo.	L.F.	16
598	Pvmt. Marking Symbol	Each	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
0	W20-1	"ROAD WORK AHEAD"
0	W20-3	"ROAD CLOSED AHEAD"
0	D3-1	CONVENTIONAL GUIDE
0	TYPE III	TYPE III LIGHTED BARRICADE
0	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

**NOTE:  
THIS WORK  
FOLLOWS WATER  
MAIN PROJECT AND  
WILL UTILIZE  
EXISTING TRAFFIC  
CONTROL PLACED  
BY OTHERS.**

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. MAINTAIN TRAFFIC AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 6 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS (GAS), TELEPHONE (TEL), ELECTRICAL POWER (PWR), CABLE TV (CTV) AND FIBER OPTIC LINES (FIBER) ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.



### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

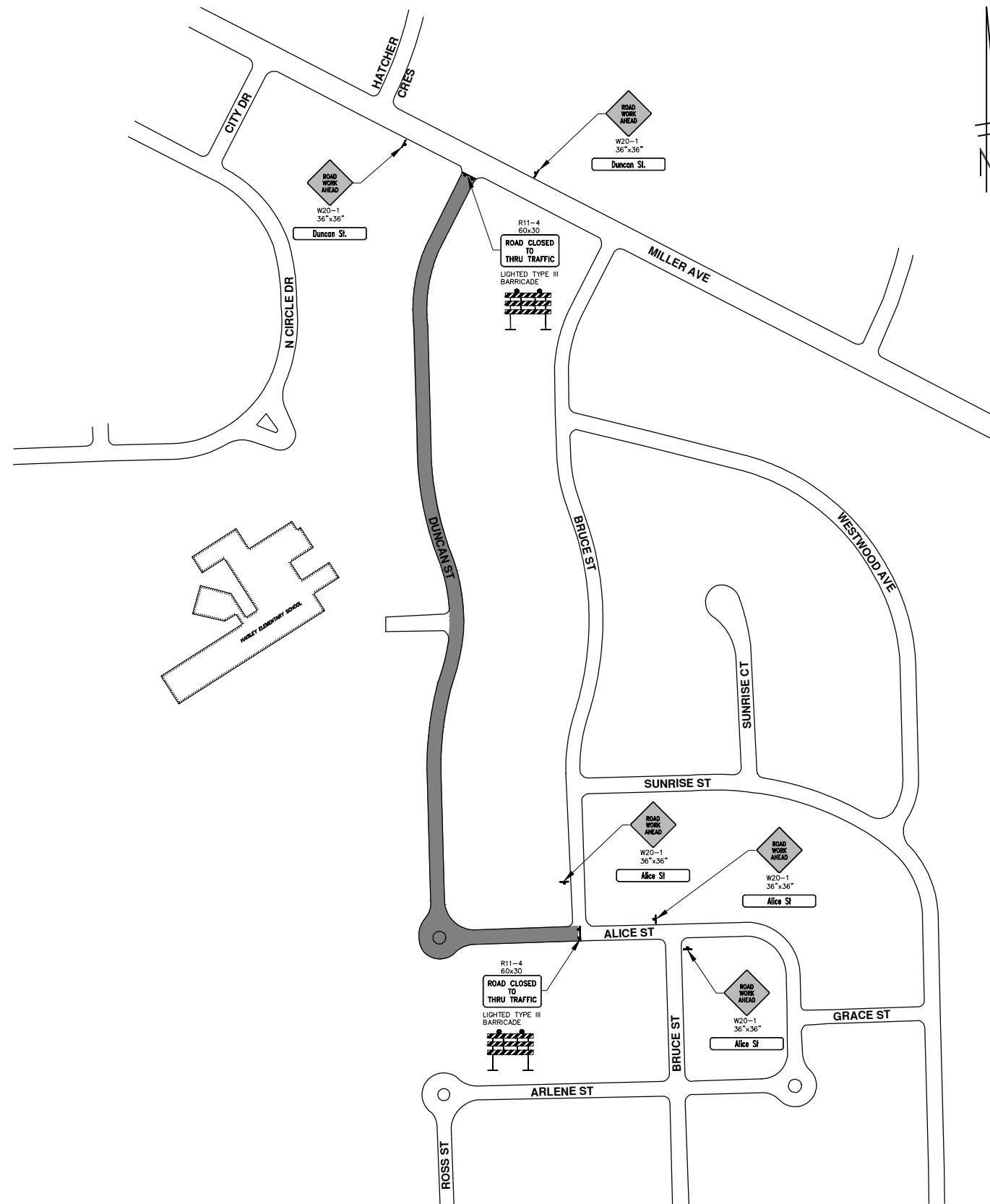
PROJECT DESCRIPTION  
2015 ANNUAL RESURFACING

DUNCAN STREET

DRAWING No.  
2015004 - 112

SHEET No.  
112 OF 117

s:\project\_management\Design\2015004\_resurfacing\plan\_production\Primary\Duncan\2013027Dtr.dwg Dwg Created: 19-Feb-15 - \_a2\_standard bw.stb - Plot Date: 19-Feb-15



THIS PROJECT WILL REQUIRE ADDITIONAL COORDINATION WITH THE CITY OF ANN ARBOR 2015 STREET RESURFACING CONTRACT. THE FINAL STREET RESTORATION INCLUDING PLACEMENT OF THE CONCRETE CURB AND GUTTER, CONCRETE SIDEWALK, DRIVE APPROACHES, BITUMINOUS PAVEMENT AND TURF RESTORATION WILL BE PERFORMED UNDER SEPARATE CONTRACT.

ALL TRAFFIC CONTROL MEASURES SHALL REMAIN IN PLACE PER APPROVED PLANS AND SPECIFICATIONS UNTIL FINAL STREET RESTORATION WORK IS COMPLETED BY CITY OF ANN ARBOR 2015 STREET RESURFACING CONTRACT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TRAFFIC CONTROL MEASURES UNTIL THE CITY CONTRACTOR FOR 2015 STREET RESURFACING CONTRACT MOBILIZES TO THE SITE. THE CITY WILL NOTIFY CONTRACTOR OF THE COMPLETION OF THE FINAL STREET RESTORATION WORK AND THE CONTRACTOR WILL BE REQUIRED TO REMOVE ALL TRAFFIC CONTROL MEASURES AT THIS TIME. THE TIMEFRAME BETWEEN COMPLETION OF THE UTILITY WORK AND COMPLETION OF THE FINAL STREET RESTORATION IS NOT EXPECTED TO EXCEED 90 CALENDAR DAYS. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE CONTRACT PAY ITEM "ITEM NO. 203, MINOR TRAFFIC CONTROL."

**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.



CITY OF ANN ARBOR  
PUBLIC SERVICE  
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**2015 ANNUAL RESURFACING**  
2015004MTRF - DUNCAN (1)

SCALE PLAN: 1" = 150'  
DRAWING No. 2015004-113

SHEET No. 113 OF 117

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



# CITY OF ANN ARBOR PROJECT MANAGEMENT 2015 ANNUAL RESURFACING

## PROJECT LOCATION: PEPPER PIKE STREET

ITB No. 4371 FILE No. 2015-004



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QUANTITIES		Units	Total
206	Remove HMA Pavement	S.Y.	28
207	Cold Milling Pavement	Tons	290
209	Subgrade Undercutting - Type II	C.Y.	150
220	HMA Patching	Tons	3
222	HMA Pavement Leveling, Regular	Tons	160
223	HMA Pavement Wearing, Regular	Tons	130
230	Rem. Curb & Gutter, Any Type	L.F.	120
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	220
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	70
240	4" Sidewalk or Ramp	S.F.	50
241	6" Drive, Sidewalk or Ramp	S.F.	80
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	2
254	Lower Structure Cover	Each	1
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	1
257	Adjust Curb Inlet Structure Cover	Each	2
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	1
264	12" Sewer, Trench Detail I, Modified	L.F.	20
271	21AA Limestone - C.I.P.	C.Y.	150
282	Plastic Drum - Lighted - Furn. & Operate	Each	18
283	Barricade Type III - Furn. & Operate	Each	2
284	Temp Signs Type - B	S.F.	105
285	No Parking Sign	Each	12
596	Rec. Polyurea Pvmt. Mkg., 6" White or Yellow	L.F.	0
597	Rec. Polyurea Pvmt. Mkg., 24" White	L.F.	0

TRAFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
4	D3-1	CONVENTIONAL GUIDE
2	R11-4	"ROAD CLOSED TO THRU TRAFFIC"
0	TYPE II	TYPE II BARRICADE DRUM

### CONSTRUCTION METHOD AND SEQUENCING

1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER.
2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
6. MILL 3.5 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER.
8. GRADE, SHAPE, AND RE-COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
11. PAVE 1.5 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

### NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

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### PROJECT MANAGEMENT SERVICE UNIT

CITY OF ANN ARBOR PUBLIC SERVICE  
301 EAST HURON STREET, P.O. BOX 8647  
ANN ARBOR, MICHIGAN 48107-8647  
734-794-6410 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

2015 ANNUAL RESURFACING

PEPPER PIKE STREET

PROJECT DESCRIPTION

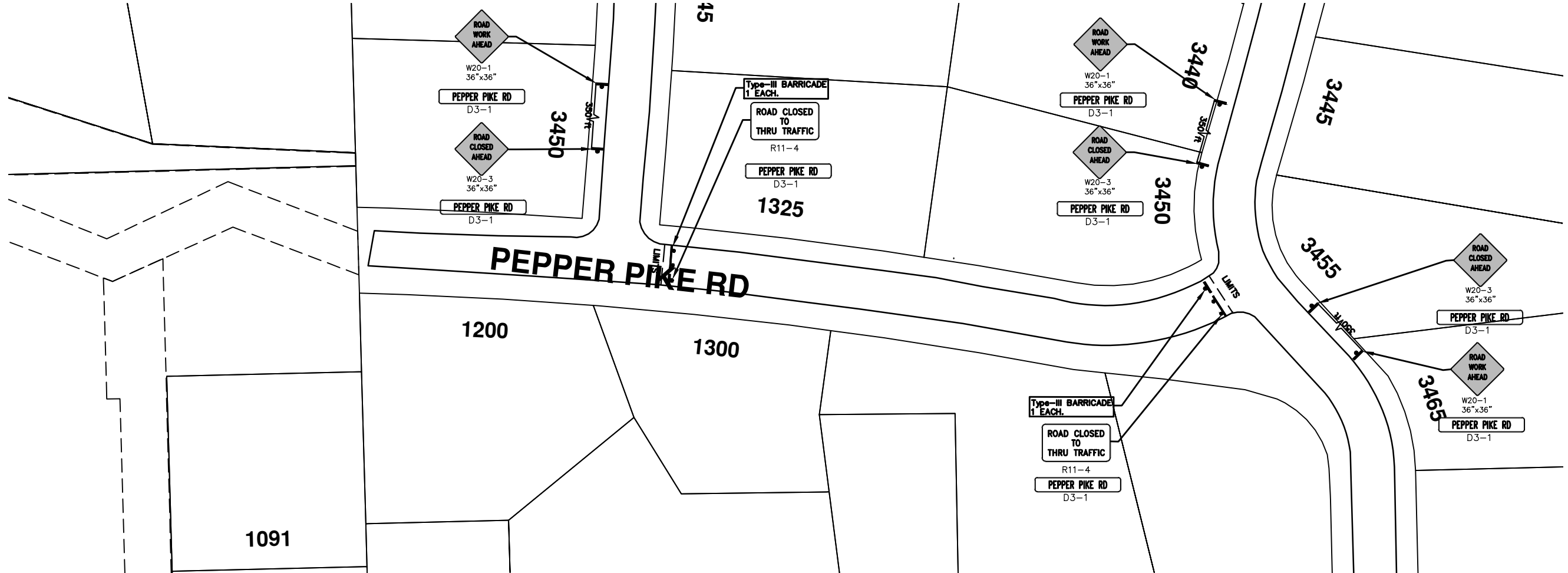
DRAWING No.  
2015004 - 115

SHEET No.

115 OF 117



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TRAFFIC CONTROL & SIGN LEGEND			
QTY.	TYPE	DESCRIPTION	
3	W20-1	"ROAD WORK AHEAD"	
	W20-2	"DETOUR AHEAD"	
3	W20-3	"ROAD CLOSED AHEAD"	
	W20-5	"(RIGHT OR LEFT) LANE CLOSED AHEAD"	
	W4-2	LANE DROP SYMBOL, RIGHT OR LEFT	
8	W20-1a	WORK SYMBOL	
	W1-4	REVERSE CURVE	
	W1-6	ONE DIRECTION ARROW	
	M4-9 L&R&S	DETOUR (LEFT, RIGHT, OR STRAIGHT ARROW)	
	D3-1	CONVENTIONAL GUIDE	
	M4-8a	"DETOUR ENDS"	
	M4-10	"DETOUR"	
	R6-1 L&R	"ONE WAY" (LEFT OR RIGHT)	
	2	TYPE III	TYPE III LIGHTED BARRICADE
		TYPE II	TYPE II LIGHTED BARRICADE (DRUM)
2	R11-2	"ROAD CLOSED"	
	R11-4	"ROAD CLOSED TO THRU TRAFFIC"	
	TYPE A	LIGHTED ARROW, TYPE A	
	TYPE B	LIGHTED ARROW, TYPE B	
	R9-9	SIDEWALK CLOSED	
	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE	
	R5-9	SIDEWALK CLOSED USE OTHER SIDE	
	G20-2	"END ROAD WORK"	
	R5-18b	"INJURE/KILL A WORKER \$7500+15 YEARS"	
	R5-18cLA	"WORK ZONE BEGINS/TRAFFIC FINES DOUBLED"	
	R3-1	NO RIGHT TURN	
	R3-2	NO LEFT TURN	
SPECIAL	42"X48" SPECIAL SIGN		
W20-5c	"CENTER LANE CLOSED AHEAD"		
R2-1	SPEED LIMIT		
TYPE C	LIGHTED ARROW, TYPE C		
W3-5	REDUCED SPEED LIMIT AHEAD		



REV.	DATE	DESCRIPTION	BY	CHECKED
00		ADD DESCRIPTION AND MAKE LAYER PLOT		

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 TOWN CENTER STREET  
ANN ARBOR, MI 48107-8847  
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
2015 ANNUAL RESURFACING  
PEPPER PIKE  
MAINTENANCE OF TRAFFIC

SCALE PLAN: Custom  
DRAWING No.  
2015004-116

SHEET No.  
116 OF 117