



CITY OF ANN ARBOR PROJECT MANAGEMENT

COLONY RD, ESSEX RD, AND MANCHESTER RD CONCRETE PAVEMENT REPAIRS

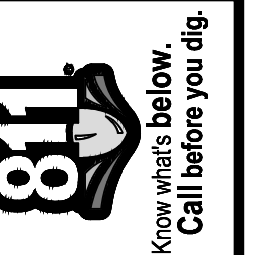
BID No. 4379, FILE No. 2015024

NOTES

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.

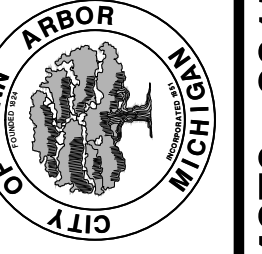
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION (INCLUDING REFERENCED M.D.O.T. PUBLICATIONS) AND THIS PROJECT'S CONTRACT DOCUMENTS.



01	BID SET	3-31-2015	RAG	DAD	CHECKED
00	REVIEW 1	2-27-2015	RAG	DAD	DRAWN
	REV.	DATE	DESCRIPTION		

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



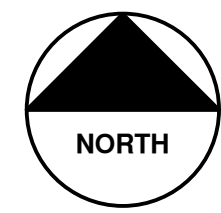
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
CONCRETE PAVEMENT REPAIRS

SCALE
DRAWING No.
2015024-1
SHEET No.
1 OF 25

© COLONY ESSEX MANCHESTER CONCRETE PAVEMENT REPAIR; BID No. 4379; 2015024

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25	ESSEX RD. STA 7+50 TO 10+25 JOINTING PLAN



VICINITY MAP

PROJECT MANAGEMENT SERVICE UNIT

PREPARED UNDER THE SUPERVISION OF

David Arthur Dykman
DAVID ARTHUR DYKMAN, P.E. - MI LICENSE No. 52912
PROJECT MANAGER

3 / 30 / 2015
DATE

CONSTRUCTION NOTES:

1. Driveways and entrances to buildings, real property, and the like shall not be blocked unless approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
4. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specification.
5. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
6. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
7. The location of material stock piles and on-site staging areas to be approved by the Engineer.
8. All structures within concrete pavement repairs areas shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
9. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.
10. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
11. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "General Conditions."

SOIL EROSION & SEDIMENT CONTROL GENERAL NOTES:

NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN SOIL EROSION CONTROL MEASURES AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
5. ALL MUD/DIRT TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLIATIVE AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

1. THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:

- 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, AND INLET FILTERS ON EXISTING DRAINAGE FEATURES PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. COMPLETE ALL GRADING AND FINE GRADING.
- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.8. CLEAN OUT STORM SEWER SYSTEMS.
- 1.9. REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES UPON FINAL INSPECTION AND APPROVAL BY THE ENGINEER.
- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

TREE PROTECTION

1. CONTRACTOR SHALL NOT STORE OR PLACE EQUIPMENT AND/OR MATERIALS INSIDE DRIP LINE OF ANY CITY TREE. MECHANICAL DAMAGE TO CITY OWNED TREES (I.E. BARK DAMAGE, BRANCH BREAKAGE) IS NOT PERMITTED. CONTRACTOR IS RESPONSIBLE FOR PROPERLY PRUNING TREES TO PREVENT DAMAGE. IF BRANCHES GREATER THAN 2" IN DIAMETER REQUIRE PRUNING, CONTRACTOR TO CONTACT FORESTRY FOR CONSULTATION AND EVALUATION AT (734) 794-6350. NO ROOTS OF CITY-OWNED TREES GREATER THAN 2 INCHES IN DIAMETER ARE TO BE CUT. IF CONTRACTOR ENCOUNTERS CITY-OWNED TREES WITH ROOTS GREATER THAN 2 INCHES IN DIAMETER THAT THEY DETERMINE NEED TO BE CUT, CONTACT FORESTRY IMMEDIATELY FOR EVALUATION. ALL TRENCHING AND BORE PITS OF ANY KIND SHALL BE CLEAR OF TREE DRIP LINES. IF ANY CITY-OWNED STREET TREES ARE DAMAGED BY THIS WORK, THE CONTRACTOR MUST CONTACT FORESTRY AS SOON AS POSSIBLE SO THAT THE DAMAGE CAN BE ASSESSED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DAMAGE REMEDIATION.

EXISTING LEGEND

	FIRE HYDRANT		WATER MAIN
	GATE VALVE IN BOX		STORM SEWER
	GATE VALVE IN WELL		SANITARY SEWER
	STOP BOX		GAS MAIN
	WATER VAULT		ELECTRICAL OVER HEAD
	WELL		ELECTRICAL UNDER GROUND
	CATCH BASIN (SQ)		BOUNDARY
	CATCH BASIN (RD)		BUILDING
	STORM MANHOLE		CENTERLINE OF DITCH
	NON-CURB CATCH BASIN (SQ)		CENTERLINE/CROWN OF ROAD
	SANITARY MANHOLE		EDGE OF WATER
	CLEAN-OUT		FENCE
	POST		GRAVEL
	PEDESTRIAN SIGNAL		STONE WALL
	SIGN		R.O.W.
	HAND HOLE		TREELINE
	ORNAMENTAL LIGHT		WETLAND
	FLOOD LIGHT		TREE (DECIDUOUS)
	UNKNOWN MANHOLE		TREE (CONIFEROUS)
	TELEPHONE MANHOLE		STUMP
	TELEPHONE RISER		SHRUB (DECIDUOUS)
	GAS VALVE		
	GAS VENT		
	GAS BOX		
	ELECTRICAL RISER		
	TRANSFORMER		
	UTILITY POLE		
	LAMP POLE		
	GUY ANCHOR		
	GUY POLE		
	MONITORING WELL		
	MAILBOX		
	SOIL BORING		
	TRAVERSE POINT		
	BENCH MARK		
	IRON PIPE		
	MON BOX		

PROPOSED LEGEND

	HYDRANT (PLAN)		WATER MAIN
	WATER GATE WELL		STORM SEWER
	REDUCER		SANITARY SEWER
	WATER GATE VALVE		CENTERLINE OF DITCH
	WATER STOP BOX		CENTERLINE OF ROAD
	WATER VAULT		FENCE
	INLET		SILT FENCE
	DOUBLE INLET		LOT/UNIT
	INLET JUNCTION CHAMBER		CURB
	ROUND CATCH BASIN		TEMPORARY GRADING PERMIT
	STORM MANHOLE		WATER EASEMENT
	DRAIN ARROW		STORM EASEMENT
	FLARED END SECTION		SANITARY EASEMENT
	SANITARY MANHOLE		R.O.W.
	CLEAN-OUT		LIMITS OF CONSTRUCTION
	BARREL		STONE WALL
	SIGN		DETECTABLE WARNING
	PUSH BUTTON		ASPHALT
			CONCRETE
			SIDEWALK
			TREE (DECIDUOUS)
			TREE (CONIFEROUS)



	DAD	DAD	CHECKED
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	3-31-2015	2-27-2015	DATE
01	BID SET	REVIEW 1	REV.
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CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
PO BOX 8647
ANN ARBOR MI 48106-8647
www.a3gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

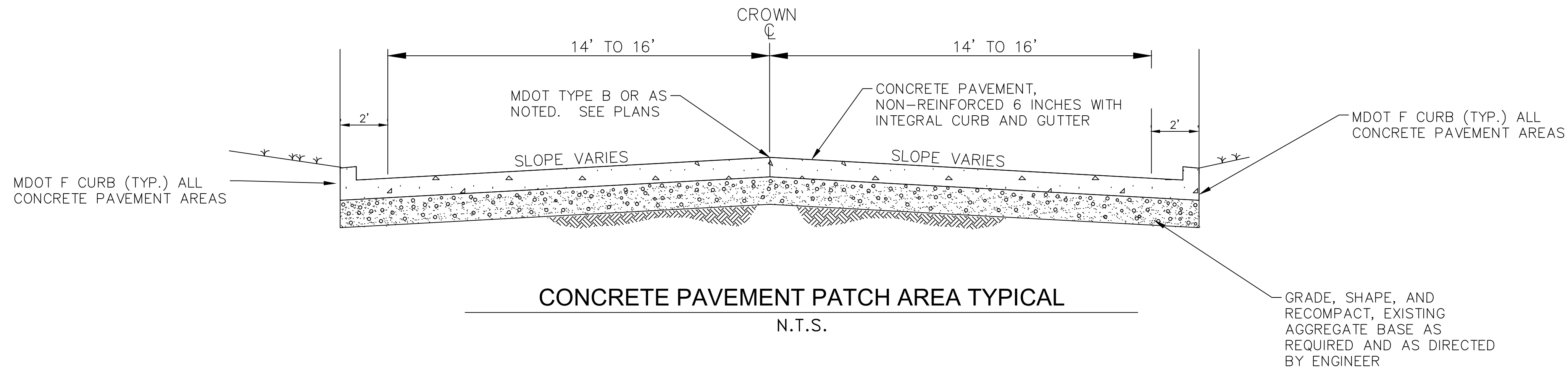
**COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR**

NOTES AND LEGEND

SCALE PLAN: #####
DRAWING No. 2015024-2

SHEET No. 2 OF 25

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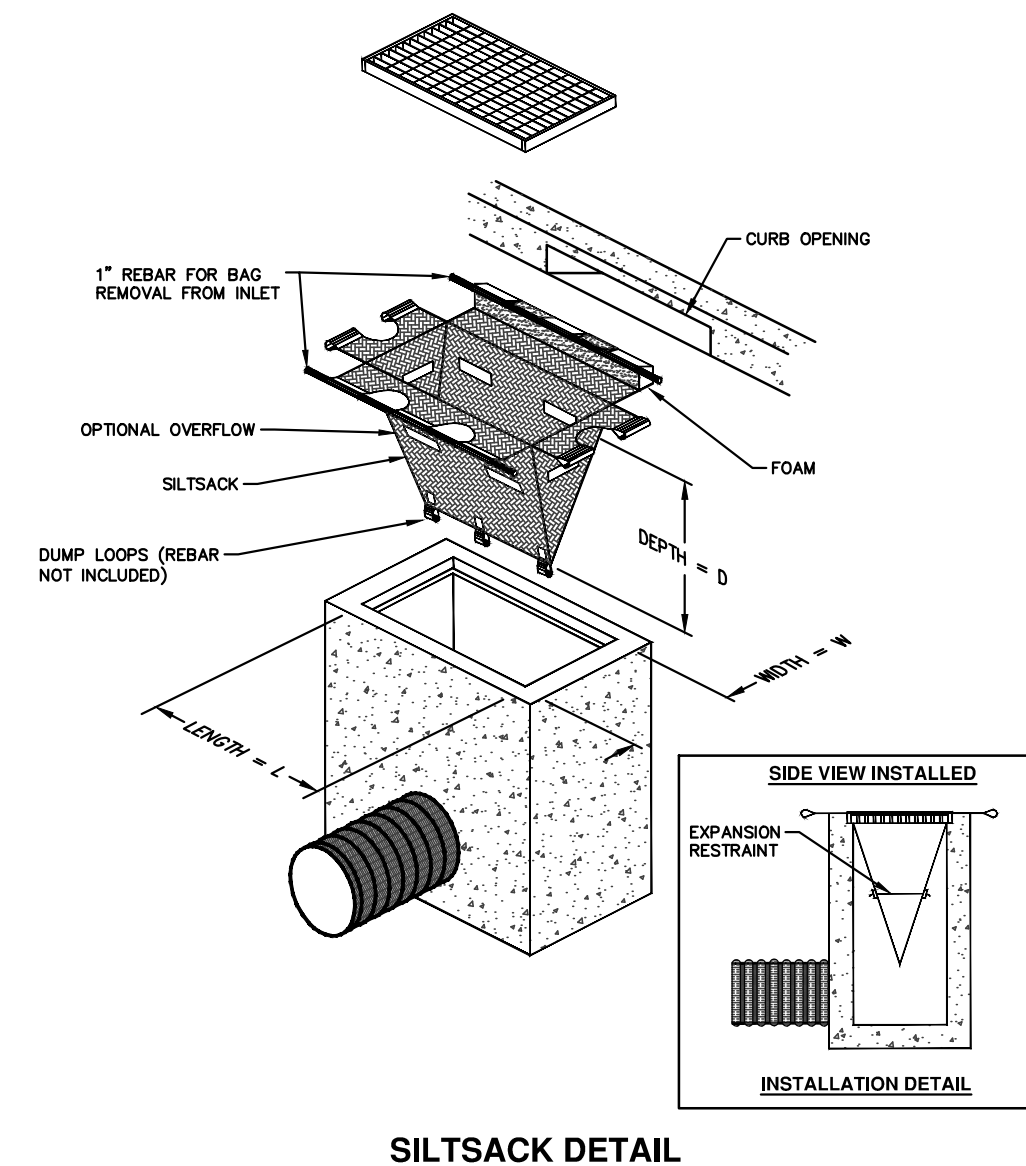
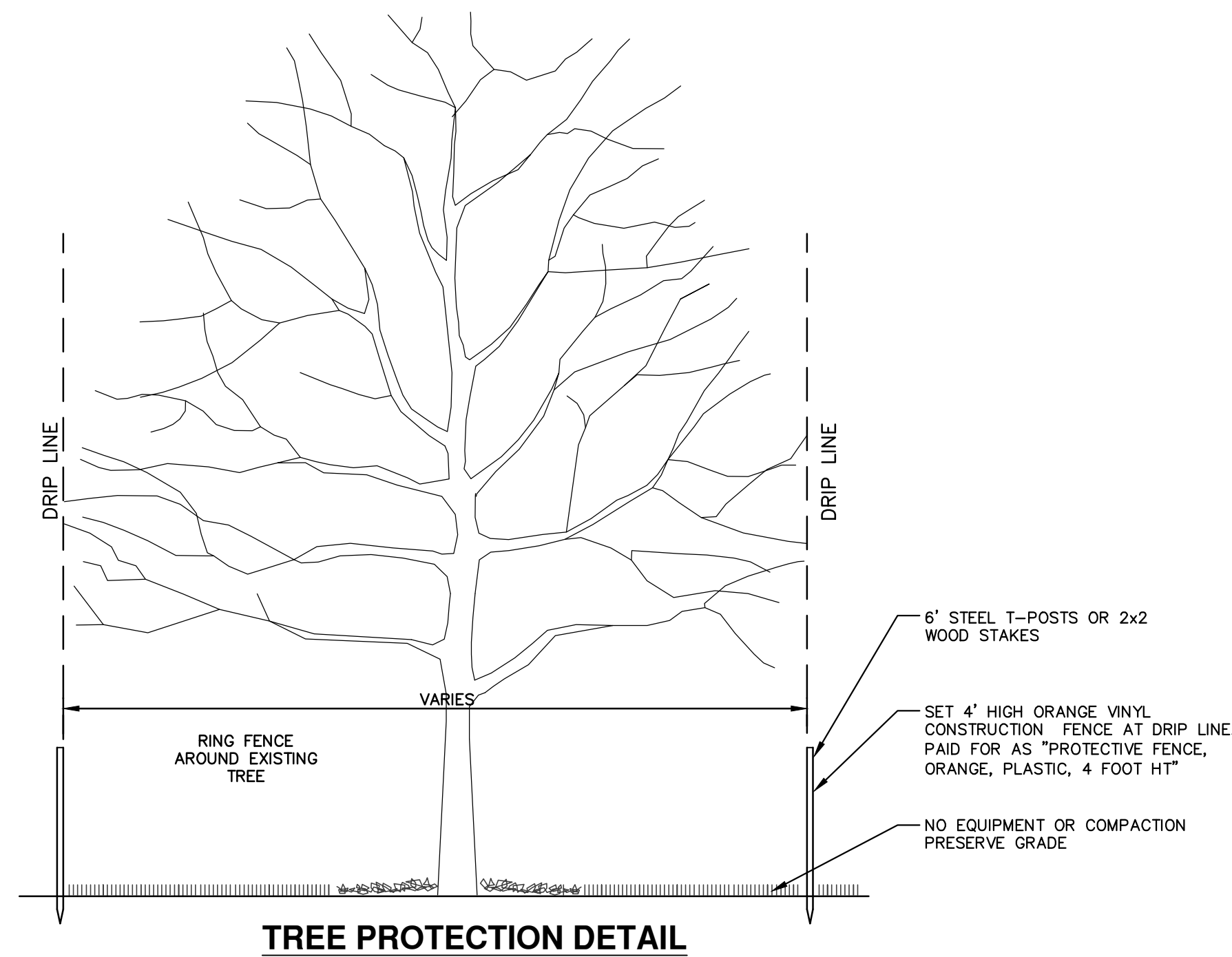
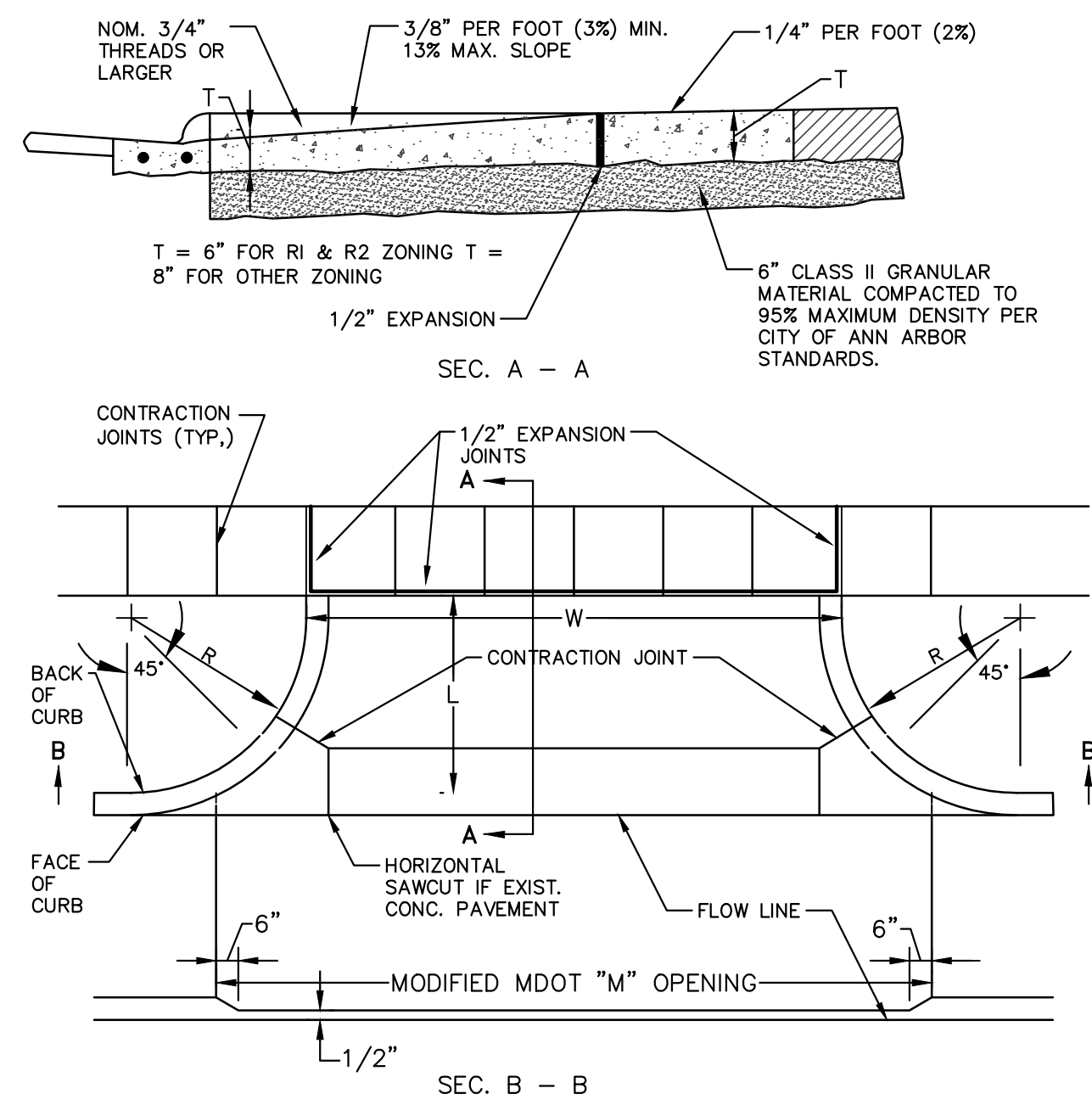


PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
RIGHT-OF-WAY PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER		DAN WOODEN (734) 794-6350
SANITARY		MARK COZART (734) 794-6350
STORM	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT	KEVIN ERNST (734) 794-6350
FORESTRY	W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	STEVEN GOEBEL (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016



NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	REQUIRED VALUE	TEST METHOD
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4633	135 LBS
MILLEN BURST	ASTM D-3786	800 PSF
TRAPEZOID TEAR	ASTM D-4533	150 LBS
UV RESISTANCE	ASTM D-4355	80%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

HI-FLOW SILTSACK

(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	REQUIRED VALUE	TEST METHOD
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4633	135 LBS
MILLEN BURST	ASTM D-3786	420 PSF
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC-1

OIL-ABSORBANT SILTSACK

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS THAT THE CONTRACTOR INSTALL THE REBAR AS SHOWN IN THIS DETAIL TO PROVIDE A FULLY FUNCTIONING UNIT. ALL COSTS ASSOCIATED WITH FURNISHING, CLEANING AS MANY TIMES AS REQUIRED, DISPOSAL OF SEDIMENT, AND REMOVING THE INLET FILTER WHEN NO LONGER NEEDED IS INCLUDED IN THE ITEM OF WORK AND WILL NOT BE PAID FOR SEPARATELY.

CONTRACTOR SHALL NOT STORE OR PLACE EQUIPMENT AND/OR MATERIALS INSIDE DRIP LINE OF ANY CITY TREE. MECHANICAL DAMAGE TO CITY OWNED TREES (I.E. BARK DAMAGE, BRANCH BREAKAGE) IS NOT PERMITTED. CONTRACTOR IS RESPONSIBLE FOR PROPERLY PRUNING TREES TO PREVENT DAMAGE. IF BRANCHES GREATER THAN 2" IN DIAMETER REQUIRE PRUNING, CONTRACTOR TO CONTACT FORESTRY FOR CONSULTATION AND EVALUATION AT (734) 794-6350. NO ROOTS OF CITY-OWNED TREES GREATER THAN 2 INCHES IN DIAMETER ARE TO BE CUT. IF CONTRACTOR ENCOUNTERS CITY-OWNED TREES WITH ROOTS GREATER THAN 2 INCHES IN DIAMETER THAT THEY DETERMINE NEED TO BE CUT, CONTACT FORESTRY IMMEDIATELY FOR EVALUATION. ALL TRENCHING AND BORE PITS OF ANY KIND SHALL BE CLEAR OF TREE DRIP LINES. IF ANY CITY-OWNED STREET TREES ARE DAMAGED BY THIS WORK, THE CONTRACTOR MUST CONTACT FORESTRY AS SOON AS POSSIBLE SO THAT THE DAMAGE CAN BE ASSESSED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DAMAGE REMEDIATION.

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

DATE	DESCRIPTION	REV.
3-31-2015		01
2-27-2015		00

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

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

COLONY ESSEX MANCHESTER CONCRETE PAVEMENT REPAIR

NOTES

SCALE PLAN: #####

DRAWING No. 2015024-3

SHEET No. 3 OF 25

SYMBOL (Cp) AND (C3p)

SYMBOL	LOAD TRANSFER	JOINT USE
(Cp)	YES	PAVEMENT
(C3p)	NO	SHOULDER

SAWED JOINT DETAIL
SAWED JOINT SEALED WITH LOW MODULUS HOT-POURED RUBBER-ASPHALT TYPE JOINT SEALING COMPOUND.

* DEPTH OF RELIEF CUT FOR JOINT (Cp) AND (C3p) SHALL BE 1/4" THE SLAB THICKNESS FOR PAVEMENTS LESS THAN OR EQUAL TO 7" IN THICKNESS AND 1/2" THE SLAB THICKNESS FOR PAVEMENTS GREATER THAN 7" THICK.

LOAD TRANSFER ASSEMBLY METHOD
DOWEL BAR INSERTER METHOD

SYMBOL (W)

SAWED JOINT DETAIL
SAWED JOINT SEALED WITH LOW MODULUS HOT-POURED RUBBER-ASPHALT TYPE JOINT SEALING COMPOUND.

* DEPTH OF RELIEF CUT FOR JOINT 1/4" THE SLAB THICKNESS.

TRANSVERSE AND INTERSECTION PLANE OF WEAKNESS JOINTS

DEPARTMENT DIRECTOR
KIM T. STOUDES

APPROVED BY: *John C. Knapp*
ENGINEER OF DELIVERY

PREPARED BY: *Maria A. Van Pelt*
DESIGN DIVISION

CHECKED BY: *M.L.L.*
ENGINEER OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)

9-10-2010 F.H.K.A. APPROVAL
8-9-2010 PLAN DATE
R-39-1 SHEET 1 OF 4

SYMBOL (E2), (E3) AND (E4)

SAWED JOINT DETAIL
SAWED JOINT SEALED WITH LOW MODULUS HOT-POURED RUBBER-ASPHALT TYPE JOINT SEALING COMPOUND.

NOTE:
THE FINAL WIDTH OF THE GROOVE SHALL BE 1" ± 1/4" PLUS ANY INCREASE OR MINUS ANY DECREASE IN THE WIDTH OF THE RELIEF CUT. THE FINAL SAW CUT SHALL BE TO THE TOP OF THE FIBER FILLER WITH A MINIMUM DEPTH AS SHOWN AND SHALL BE CENTERED OVER THE FIBER FILLER WITH A HORIZONTAL TOLERANCE OF 1/4". FIBER FILLER FOR EXPANSION JOINTS IN CONCRETE SHOULDERS SHALL BE FREE OF HOLES OR OTHER DEFECTS AND TRIMMED TO FIT SHOULDER CONFIGURATIONS.

SYMBOL	LOAD TRANSFER ASSEMBLY	JOINT USE
(E2)	YES	PAVEMENT
(E3)	NO	PAVEMENT & SHOULDER
(E4)	NO	SHOULDER

OUTSIDE EDGE TREATMENT

SYMBOL (U)

SAWED JOINT OR A FORMED JOINT MADE BY PLACING 1/2" HARDSHED OR OTHER APPROVED MATERIAL FLOOR WITH THE SURFACE OF THE CONCRETE BASE COURSE AND LINE TO POSITION AND LINE BEFORE THE CONCRETE HAS SET.

TRANSVERSE PLANE OF WEAKNESS JOINTS IN CONCRETE BASE COURSE

DEPARTMENT DIRECTOR
KIM T. STOUDES

APPROVED BY: *John C. Knapp*
ENGINEER OF DELIVERY

PREPARED BY: *Maria A. Van Pelt*
DESIGN DIVISION

CHECKED BY: *M.L.L.*
ENGINEER OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)

9-10-2010 F.H.K.A. APPROVAL
8-9-2010 PLAN DATE
R-39-1 SHEET 2 OF 4

SYMBOL (H)

TRANSVERSE END OF POUR JOINT (SPLIT HEADER METHOD)

DEFORMED BAR SPACING

NOTE: THE HOLE SPACING MAY BE ADJUSTED 1" HORIZONTALLY, RAISED 1/4", OR LOWERED 1" FROM THE ABOVE LOCATIONS TO AVOID DRILLING INTO THE REINFORCEMENT.

TRANSVERSE END OF POUR JOINT (DRILLED IN METHOD)

DEFORMED BAR SPACING

NOTE: THE HOLE SPACING MAY BE ADJUSTED 1" HORIZONTALLY, RAISED 1/4", OR LOWERED 1" FROM THE ABOVE LOCATIONS TO AVOID DRILLING INTO THE REINFORCEMENT.

TRANSVERSE END OF POUR JOINT (PLASTIC TUBE METHOD)

DEFORMED BAR SPACING

NOTE: THE USE OF FORCE TO INSERT THE BAR WILL NOT BE PERMITTED.

TRANSVERSE END OF POUR JOINT (DRILLED IN METHOD)

DEFORMED BAR SPACING

NOTE: THE HOLE SPACING MAY BE ADJUSTED 1" HORIZONTALLY, RAISED 1/4", OR LOWERED 1" FROM THE ABOVE LOCATIONS TO AVOID DRILLING INTO THE REINFORCEMENT.

TRANSVERSE END OF POUR JOINT (DRILLED IN METHOD)

DEFORMED BAR SPACING

NOTE: THE HOLE SPACING MAY BE ADJUSTED 1" HORIZONTALLY, RAISED 1/4", OR LOWERED 1" FROM THE ABOVE LOCATIONS TO AVOID DRILLING INTO THE REINFORCEMENT.

TRANSVERSE END OF POUR JOINT (DRILLED IN METHOD)

DEFORMED BAR SPACING

NOTE: THE HOLE SPACING MAY BE ADJUSTED 1" HORIZONTALLY, RAISED 1/4", OR LOWERED 1" FROM THE ABOVE LOCATIONS TO AVOID DRILLING INTO THE REINFORCEMENT.

DEPARTMENT DIRECTOR
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PREPARED BY: *Maria A. Van Pelt*
DESIGN DIVISION

CHECKED BY: *M.L.L.*
ENGINEER OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)

9-10-2010 F.H.K.A. APPROVAL
8-9-2010 PLAN DATE
R-39-1 SHEET 3 OF 4

SYMBOL (H)

TRANSVERSE END OF POUR JOINT (PLASTIC TUBE METHOD)

DEFORMED BAR SPACING

NOTE: THE USE OF FORCE TO INSERT THE BAR WILL NOT BE PERMITTED.

NOTES:
LOAD TRANSFER ASSEMBLIES ARE DETAILED ON THE CURRENT STANDARD PLAN R-40-SERIES.
TRANSVERSE JOINTS SHALL BE SPACED ACCORDING TO THE CURRENT STANDARD PLAN R-40-SERIES.
A TRANSVERSE END OF POUR JOINT (DRILLED IN METHOD) SYMBOL (H), SHALL BE CONSTRUCTED WHEN IT IS ANTICIPATED THAT THE SECOND POUR WILL BE DELAYED 7 DAYS OR LONGER.
A TRANSVERSE END OF POUR JOINT (SPLIT HEADER METHOD) OR (PLASTIC TUBE METHOD) SHALL BE USED AT THE END OF THE DAY'S POUR OR WHEN THERE IS AN UNAVOIDABLE INTERRUPTION OF THE WORK FOR MORE THAN ONE-HALF HOUR AND LESS THAN 7 DAYS. THE JOINT SHALL BE CONSTRUCTED ACCORDING TO TRANSVERSE END OF POUR JOINT (SPLIT HEADER METHOD) OR (PLASTIC TUBE METHOD) SYMBOL (H).
EXPANSION JOINT SEAL CROSS-SECTION SHALL BE APPROVED BY THE ENGINEER.
THE EXPANSION JOINT MATERIAL IN THE SHOULDERS SHALL BE SUPPORTED BY ONE OF THE FOLLOWING METHODS:
1. A CONTINUOUS SUPPORT WIRE, AS SPECIFIED FOR EXPANSION LOAD TRANSFER ASSEMBLIES, AS DETAILED ON STANDARD PLAN R-40-SERIES, SHALL BE USED ON EACH SIDE OF EXPANSION MATERIAL. THIS WIRE SHALL BE EQUIPPED WITH STAKES AND STAKE PROCEEDS TO HOLD THE EXPANSION MATERIAL IN PLACE DURING CONCRETE PLACEMENT. STAKES SHALL BE AS SPECIFIED ON STANDARD PLAN R-40-SERIES, SPACED NOT MORE THAN 2'-0" APART.
2. "U" OR "J" SHAPE STAPLES OF WIRE (0.312" NOMINAL DIAMETER) SHALL BE SPACED ON 2'-0" CENTERS EACH SIDE OF THE EXPANSION MATERIAL. EACH VERTICAL LEG OF THE STAPLE SHALL BE AT LEAST 1'-3" LONG.
3. OTHER EQUIVALENT METHODS MAY BE USED WHEN APPROVED BY THE ENGINEER.

JOINTS SHALL NOT BE SEALED IN CONCRETE BASE COURSE.
WHEN CONCRETE SHOULDERS ARE CAST SEPARATELY FROM MAIN LINE CONCRETE PAVEMENT, A KEYWAY MAY BE USED TO FACILITATE THE PLACING OF LANE TIES. WHEN A KEYWAY GROOVE IS USED, IT SHALL BE CONTINUOUS AND UNIFORM.
THE LOCATION OF TRANSVERSE JOINTS IN CONCRETE SHOULDERS SHALL MATCH THE LOCATION OF ADJACENT TRANSVERSE PAVEMENT JOINTS. CORRESPONDING TRANSVERSE CONCRETE SHOULDER AND PAVEMENT JOINTS SHALL BE (C3p) SHOULDER WITH (Cp) PAVEMENT, (E4) SHOULDER WITH (E2) PAVEMENT, AND (E3) BEING THE SAME IN BOTH SHOULDER AND PAVEMENT.
DEFORMED BARS FOR TRANSVERSE END OF POUR JOINTS (DRILLED IN METHOD) SHALL BE GROUDED INTO EXISTING PAVEMENT WITH A GROUT SELECTED FROM THE PREQUALIFIED MATERIALS LISTED IN THE DEPARTMENT'S "MATERIALS SOURCE GUIDE" UNDER ADHESIVE SYSTEMS. FOR GROUDED BARS AND TIE BARS FOR FULL-DEPTH PAVEMENT REPAIRS.

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BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)

9-10-2010 F.H.K.A. APPROVAL
8-9-2010 PLAN DATE
R-39-1 SHEET 4 OF 4

SYMBOL (B)

LONGITUDINAL BULKHEAD JOINT - SYMBOL (B)
ALL SYMBOL (B) JOINTS SHALL BE SAWS AND SEALED EXCEPT JOINTS WITHOUT LANE TIES AND JOINTS PARALLEL TO VERTICAL FACES WHICH WOULD PROHIBIT SAWS.

SYMBOL (D) AND (S)

LONGITUDINAL LANE TIE JOINT - SYMBOL (D)
LONGITUDINAL SMOOTH LANE TIE JOINT - SYMBOL (S)
SYMBOL (D) AND SYMBOL (S) TIE BARS SHALL BE PLACED AT THE PROPER SPACING LONGITUDINALLY, AND TRANSVERSELY AT 90° WITH THE JOINT.

MAXIMUM ALLOWABLE LANE TIE SPACING SYMBOLS (B), (D), (L2), AND (S)	GRADE	MAXIMUM ALLOWABLE LANE TIE SPACING FROM NEAREST FREE EDGE	* INCLUDES ANY TIED COMBINATION OF LANE WIDTH, VALLEY GUTTER, CURB & GUTTER, OR SHOULDER
2'-10"	3'-7"	12" OR LESS	** FOR WIDTHS GREATER THAN 48" USE #6 DEFORMED BARS AT 1'-2" SPACING.
1'-11"	2'-7"	OVER 12" THROUGH 11"	
1'-9"	1'-11"	OVER 11" THROUGH 24"	
1'-2"	1'-4"	OVER 24" THROUGH 36"	
1'-4"	1'-1"	36" OR GREATER **	

MAXIMUM ALLOWABLE LANE TIE SPACING FROM NEAREST FREE EDGE

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BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

LONGITUDINAL PAVEMENT JOINTS

9-30-2014 F.H.K.A. APPROVAL
4-22-2013 PLAN DATE
R-41-H SHEET 1 OF 2

SYMBOL (L2)

LONGITUDINAL BULKHEAD JOINT
FOR WIDENING EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE (USING EPOXY ANCHORED LANE TIES)

NOTE:
SYMBOL (L2) JOINT USED FOR WIDENING CONCRETE PAVEMENTS WITHOUT IMA OVERLAYS SHALL BE SAWS AND SEALED ACCORDING TO THE SYMBOL (B) JOINT.
THE LONGITUDINAL JOINT USED FOR WIDENING EXISTING CONCRETE BASE COURSE OR CONCRETE PAVEMENT HAVING A IMA SURFACE SHALL HAVE EPOXY ANCHORED LANE TIES PLACED AS SPECIFIED.
TAPERED PAVEMENT THICKNESS OVER THE DISTANCE OF PAVEMENT WIDENING OR IN THE LANE WIDTH WHEN WIDENING IS FOR TWO OR MORE LANES.

NOTE:
ALL LANE TIE BARS SHALL BE DEFORMED EXCEPT SYMBOL (S) WHICH WILL BE SMOOTH.
THE EPOXY COATED S BARS ARE TO BE FACTORY COATED WITH AN APPROVED BOND RELEASE AGENT, UNIFORMLY APPLIED BY DIPPING AND WITHOUT EXCESSIVE DRIPS OR THICKNESS.
THE INSTALLATION OF LANE TIE BARS AND THE SAWS OF LONGITUDINAL JOINTS WILL NOT BE REQUIRED FOR TEMPORARY CONCRETE PAVEMENT UNLESS SPECIFIED ON PLANS OR IN THE PROPOSAL. THE EDGING OF TEMPORARY CONCRETE PAVEMENT WILL NOT BE REQUIRED.
FOR JOINT LAYOUT DETAILS, SEE STANDARD PLAN R-42-SERIES.
SAWS, PROCEDURES AND RELATED OPERATIONS ARE DESCRIBED IN THE CURRENT STANDARD SPECIFICATIONS.
NO SAWS OR SEALED JOINTS SHALL BE CONSTRUCTED BETWEEN THE PAVEMENT AND CURB OR PAVEMENT AND GUTTER, WHERE THESE ITEMS ARE CAST INTERSECTINGLY.
WHEN JOINTED PLAIN CONCRETE IS SPECIFIED AT INTERSECTIONS, SYMBOL (S) JOINTS ARE TO BE USED FOR THE LONGITUDINAL JOINT BETWEEN THE E2 JOINT AT THE SPRINGLINE OF THE SIDE STREET AND THE THROUGH LANE GUTTER PAN LINE. WHEN THE E2 JOINT IS MOVED TO THE THROUGH LANE GUTTER PAN LINE, USE SYMBOL (D) JOINT AS NORMALLY REQUIRED.

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BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

LONGITUDINAL PAVEMENT JOINTS

9-30-2014 F.H.K.A. APPROVAL
4-22-2013 PLAN DATE
R-41-H SHEET 2 OF 2

SECTION A - A INTEGRAL CURB & GUTTER, DETAIL B

SECTION A - A INTEGRAL CURB & GUTTER, DETAIL C

SECTION A - A INTEGRAL CURB & GUTTER, DETAIL D

SECTION A - A INTEGRAL CURB & GUTTER, DETAIL F

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BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

INTEGRAL CURB AND GUTTER

1-25-2013 F.H.K.A. APPROVAL
10-22-2012 PLAN DATE
R-31-F SHEET 1 OF 2

SECTION C - C INTEGRAL CURB & GUTTER, DETAIL B

SECTION C - C INTEGRAL CURB & GUTTER, DETAIL C

SECTION C - C INTEGRAL CURB & GUTTER, DETAIL D

SECTION C - C INTEGRAL CURB & GUTTER, DETAIL F

PLAN IN CATCH BASIN AREA
SEE STANDARD PLAN R-31-SERIES FOR REINFORCING DETAILS

NOTE:
DETAILS OF CURB FACES ARE SPECIFIED ON STANDARD PLAN R-30-SERIES.
WHEN THE CURB PROFILE IS PROFILED SEPARATE FROM THE INTEGRAL PAVEMENT AND GUTTER, AND DELAY EXCEEDS 30 MINUTES, EPOXY COATED ANCHORING BARS SPACED AT 1'-0" CENTER TO CENTER SHALL BE USED TO THE CURB AND UNDERLYING CONCRETE.
AGGREGATE BASE, WHEN SPECIFIED ON TYPICAL CROSS SECTIONS, SHALL EXTEND 2'-0" BEYOND THE BACK OF INTEGRAL CURB AND GUTTER. EVEN IF THE GRADING SECTION MUST BE WIDENED TO DO SO, NO PAVEMENT WILL BE MADE FOR THE ADDITIONAL AGGREGATE BASE THAT IS REQUIRED TO CONSTRUCT THE INTEGRAL CURB AND GUTTER ALTERNATE.
TRANSVERSE JOINTS IN THE INTEGRAL CURB SHALL BE AS SPECIFIED ON THIS STANDARD PLAN.
FIBER FILLER USED FOR PAVEMENT EXPANSION JOINTS SHALL EXTEND TO BACK OF CURB.
CATCH BASIN "COVER B" OR OTHER APPROVED COVERS SHALL BE SUBSTITUTED FOR COVERS SPECIFIED ON THE PLANS ONLY WHEN THE INTEGRAL CURB AND GUTTER ALTERNATE IS USED.

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BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

INTEGRAL CURB AND GUTTER

1-25-2013 F.H.K.A. APPROVAL
10-22-2012 PLAN DATE
R-31-F SHEET 2 OF 2



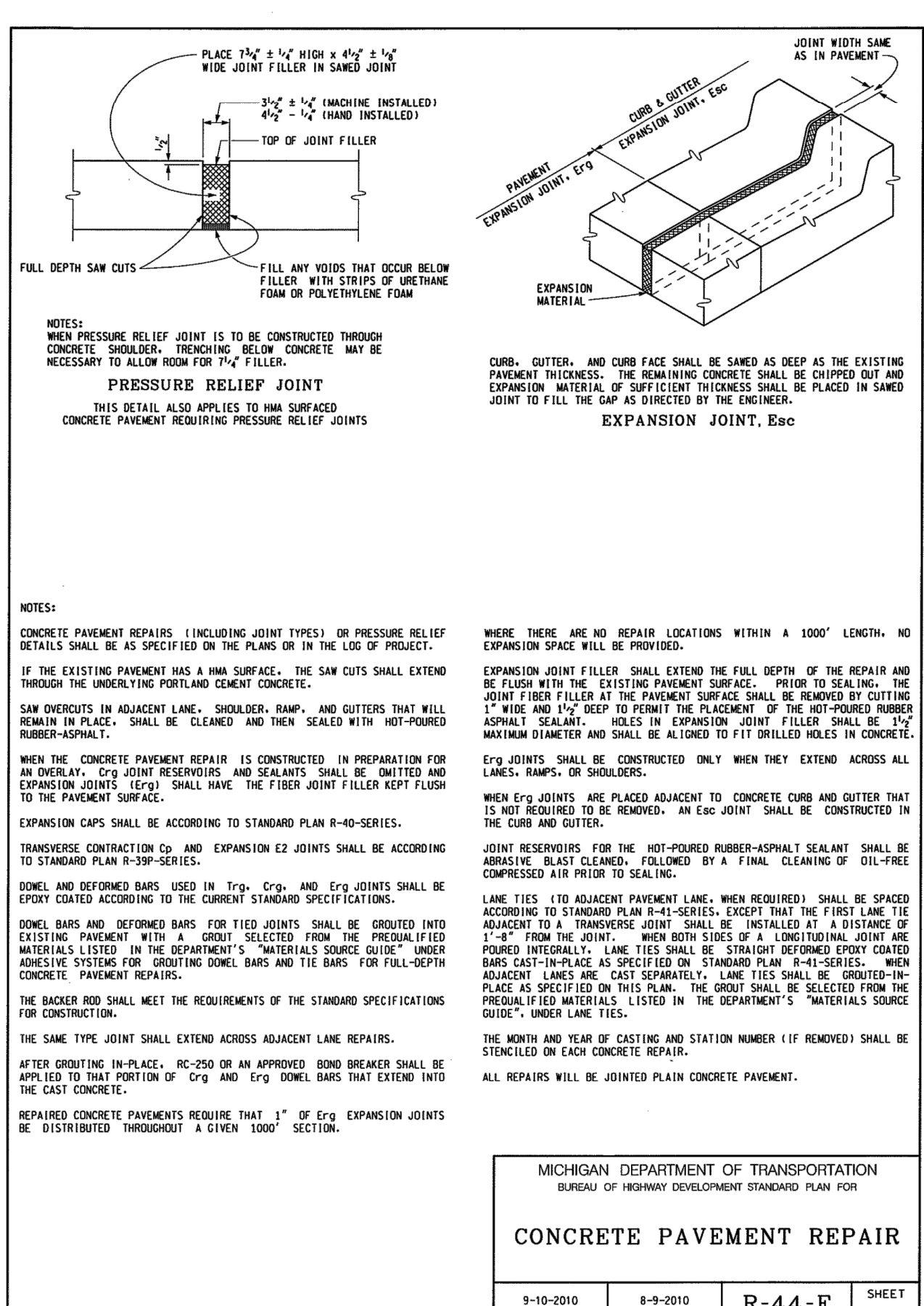
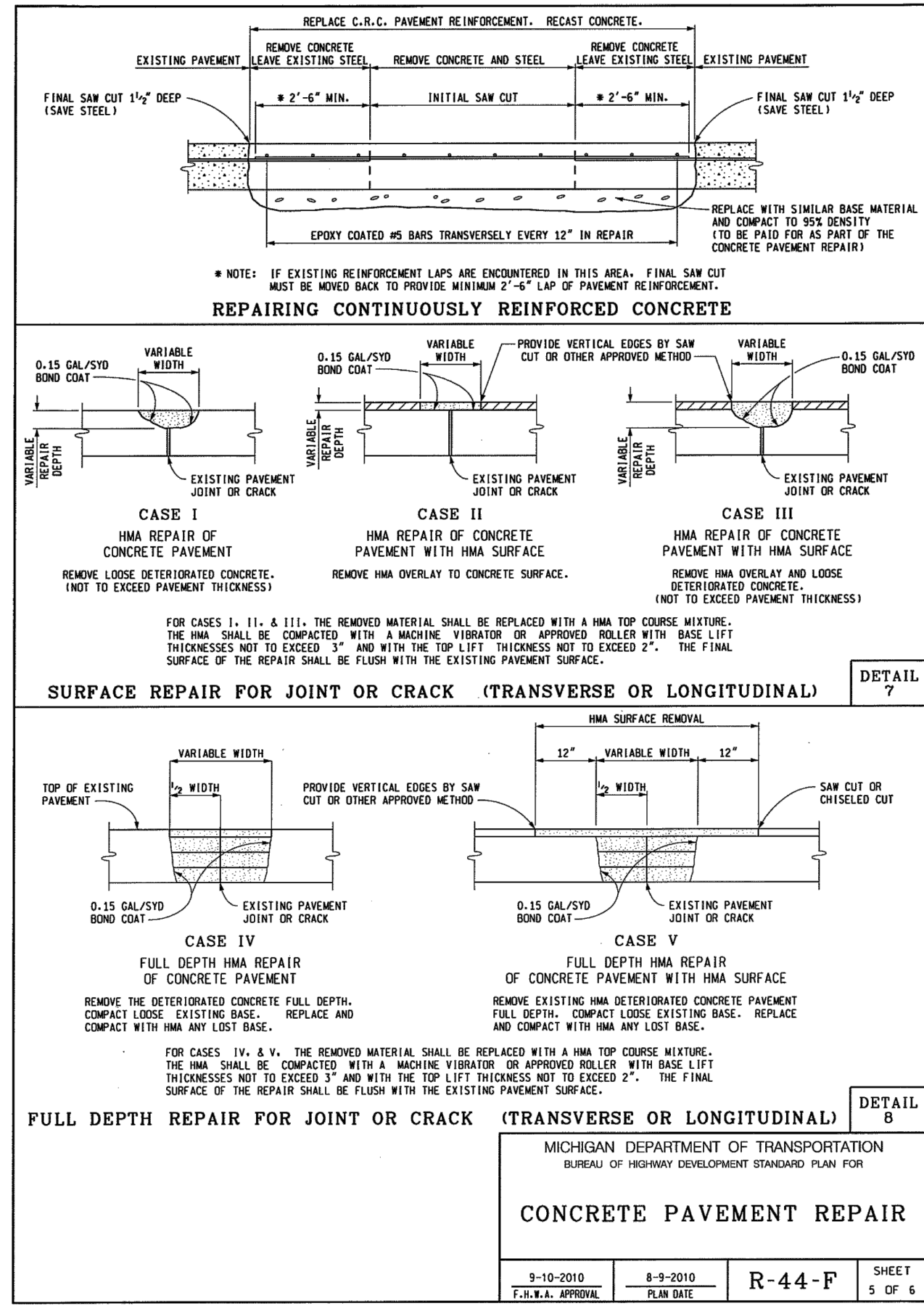
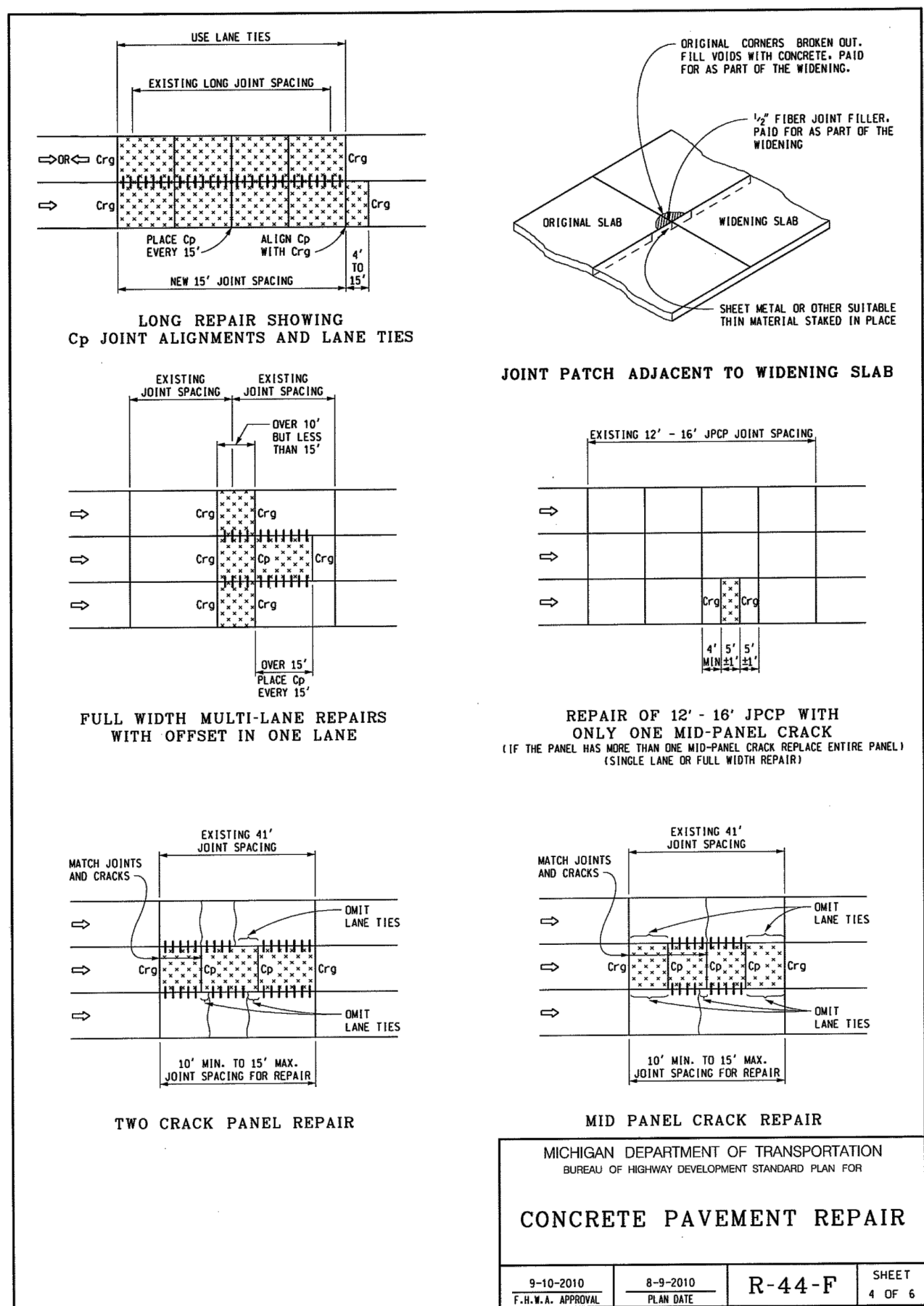
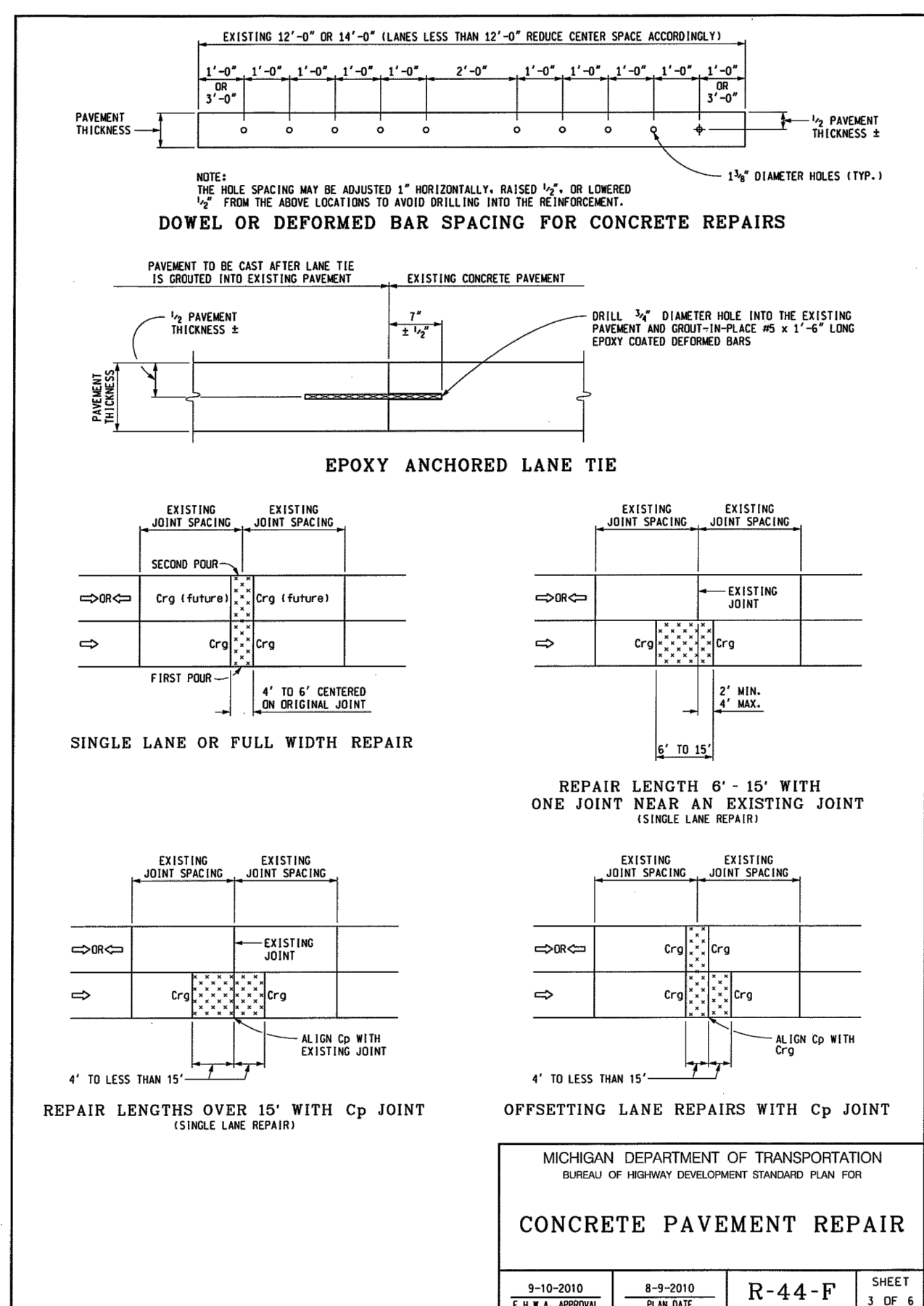
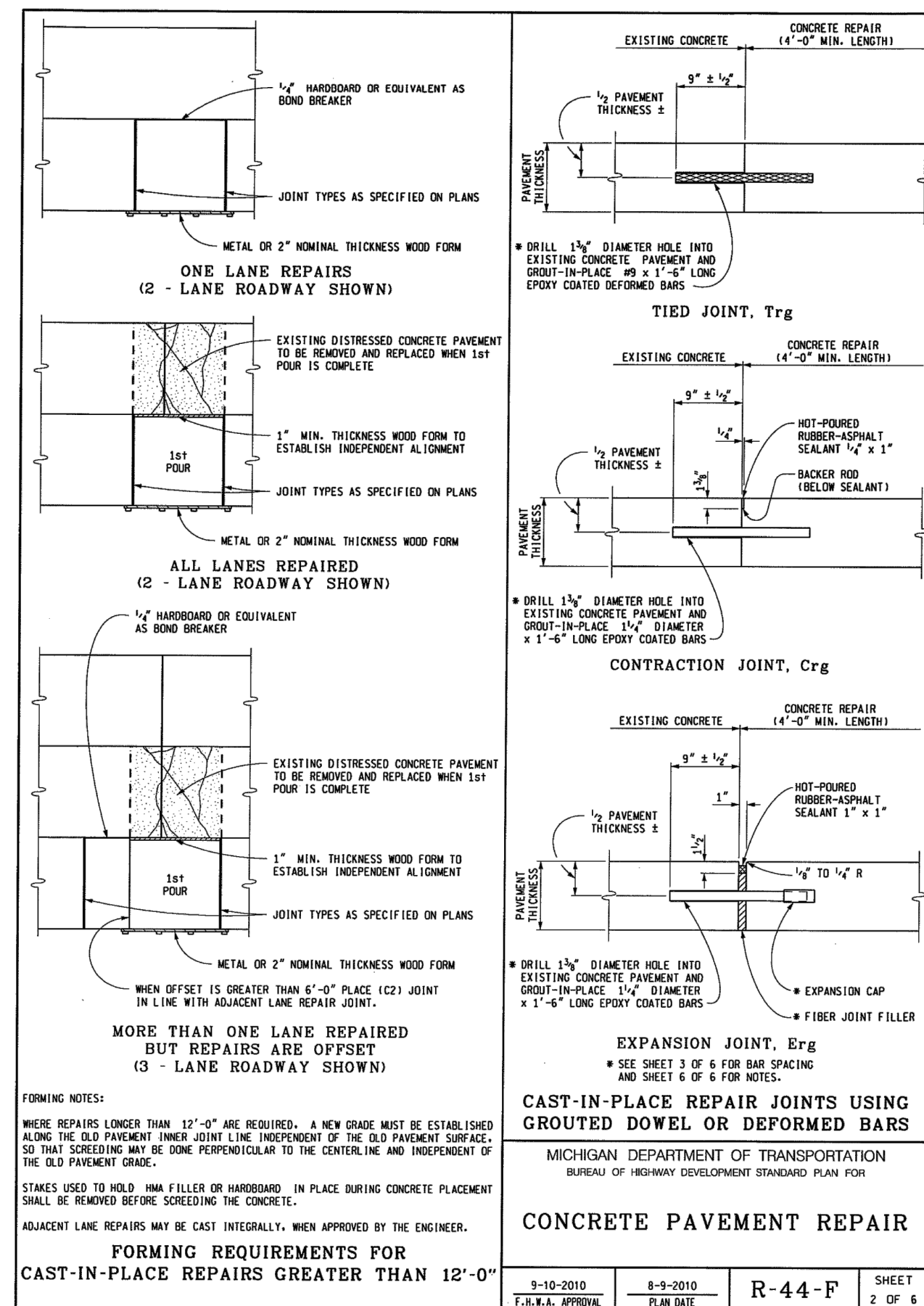
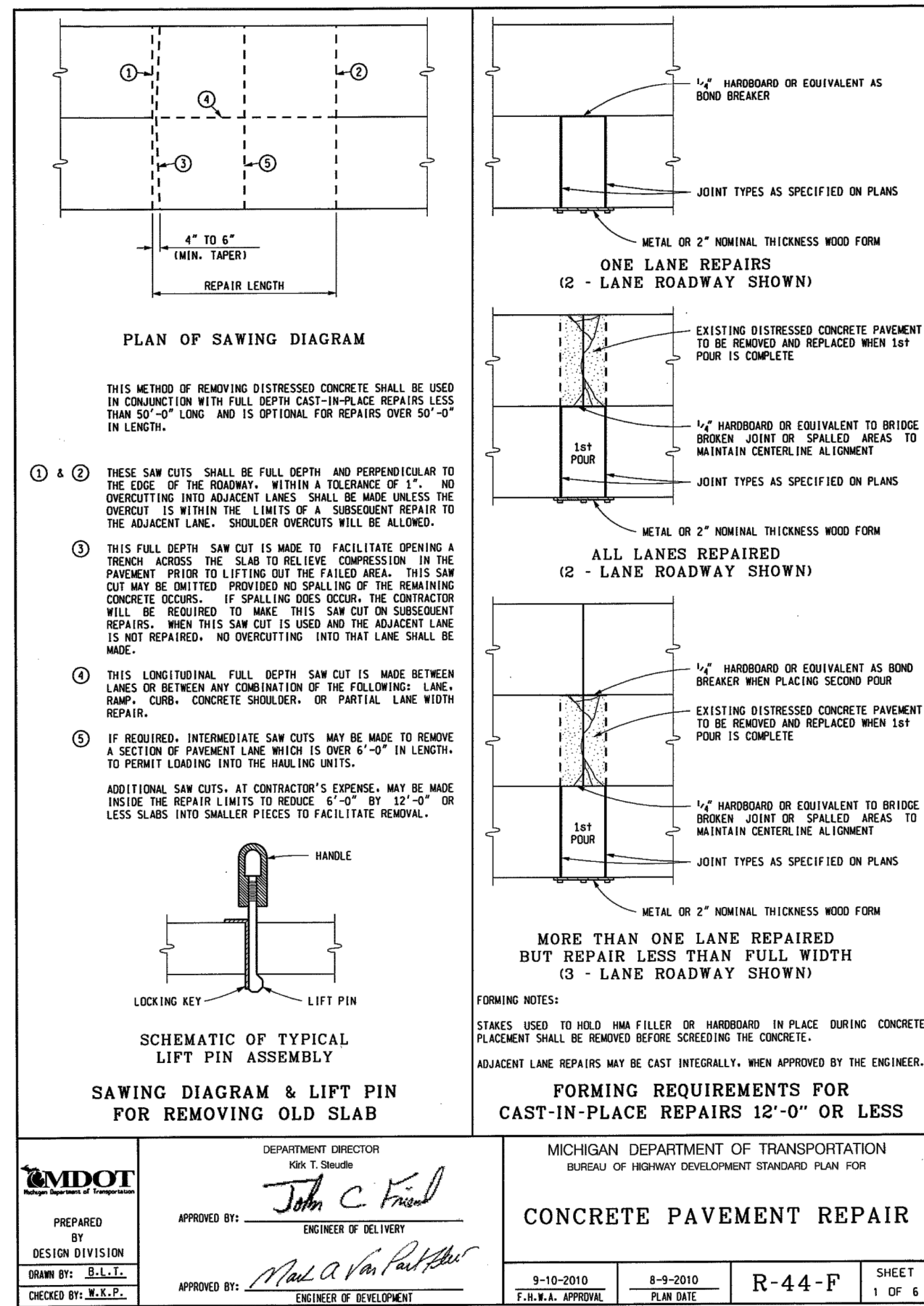
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01	BID SET	3-31-2015	REV.
00	REVIEW 1	2-27-2015	DRAWN

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
DETAILS

SHEET NO. 4 OF 25



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01	BID SET	3-31-2015	RAG	DAD	CHECKED
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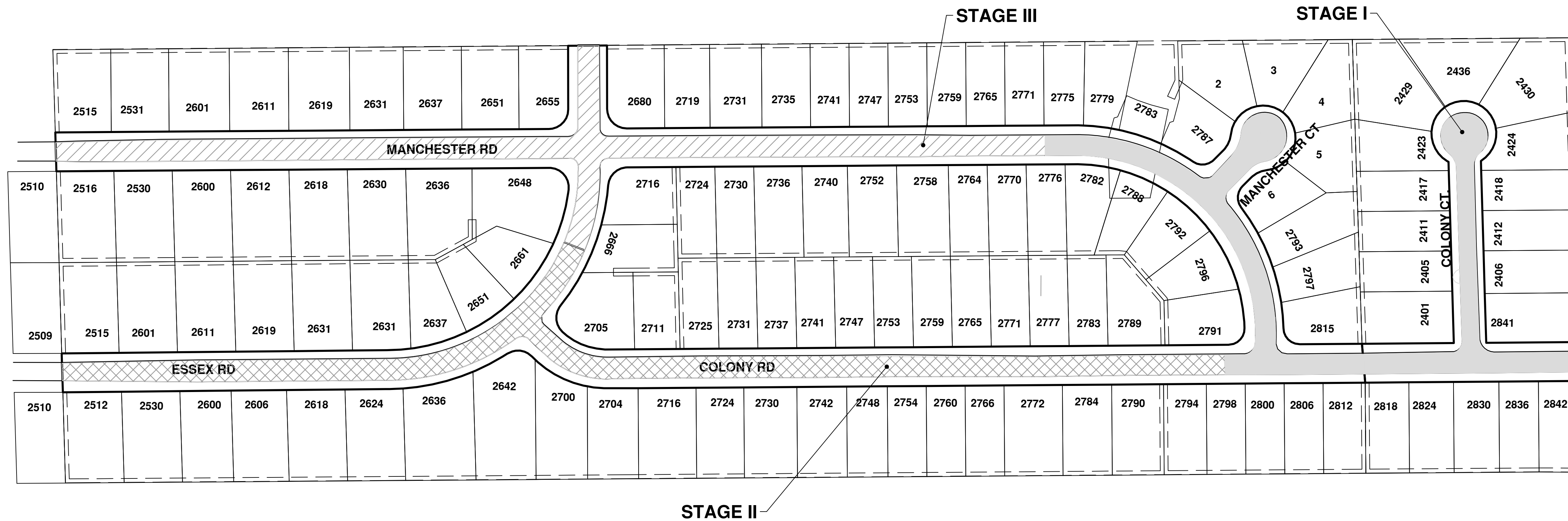
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
DETAILS

DRAWING NO. 2015024-5

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CONSTRUCTION SEQUENCE

THE CONTRACTOR SHALL REVIEW THE TRAFFIC MAINTENANCE PLANS, DETOUR PLANS, AND THE CONTRACT DOCUMENTS AND NOTE THAT EACH OF THE MAJOR STAGES OF CONSTRUCTION (STAGES 1 THROUGH 3) ARE SHOWN FOR THE PURPOSE OF COMPLETING THE CONCRETE PAVEMENT REPAIRS AND SIDEWALK WHILE MAINTAINING ACCESS TO ALL RESIDENCES SOLELY ACCESSED OFF OF COLONY RD, MANCHESTER RD, ESSEX RD, AND COLONY COURT. EACH CONSTRUCTION STAGE SHOWN ON SHEET 4 WILL BE BUILT CONSTRUCTING ONE SIDE OF ROAD AT A TIME. CONTRACTOR WILL BE REQUIRED TO KEEP ONE SIDE OF ROAD OPEN AT ALL TIMES FOR RESIDENTS AND EMERGENCY VEHICLES. CONTRACTOR WILL BE REQUIRED TO REMOVE ONLY ENOUGH OF CONCRETE PAVEMENT THAT CAN BE PLACED BACK IN SAME DAY; 25 FEET OF REMOVAL PROPERLY SECURED IS ALL THAT CAN BE LEFT OPEN AT END OF EACH DAY. WERE STORM SEWER STRUCTURES TO BE REPLACED ARE IN FRONT OF DRIVES, CONTRACTOR TO SCHEDULE REMOVAL, REPLACEMENT, BACKFILL, CONCRETE PLACEMENT, AND CURE TIME TO BE COMPLETED IN NO MORE THAN 5 DAYS FROM START TO FINISH. THE INTENT IS TO HAVE CONTRACTOR ALSO WORKING ON RESTORING LAWN AREAS AS SOON AS POSSIBLE AND COMPLETE WORK IN EACH STAGE BEFORE MOVING ON TO NEXT STAGE. WHEN CONTRACTOR NEEDS TO UTILIZE BOTH LANES TO PLACE CONCRETE REPAIRS FLAG CONTROL WILL BE REQUIRED TO BE USED TO CONTROL ACCESS. CONTRACTOR WILL SUBMIT DETAILED SCHEDULE OF WORK ITEMS AND PROPOSED COMPLETION DATES ON WEEKLY BASIS. THESE WORK ITEMS AND DATES WILL BE DISCUSSED AND ADJUSTED AS NEEDED AT WEEKLY PROGRESS MEETING. THE CONTRACTOR MAY CHOOSE TO ADJUST THE LIMITS OR SEQUENCING OF CONSTRUCTION IN ORDER TO COMPLETE THE WORK MORE EFFICIENTLY. HOWEVER, CHANGES TO THE RECOMMENDED STAGES MUST BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO CONSTRUCTION AND MUST ASSURE THAT ACCESS IS MAINTAINED AS DESCRIBED ABOVE.

STAGE I

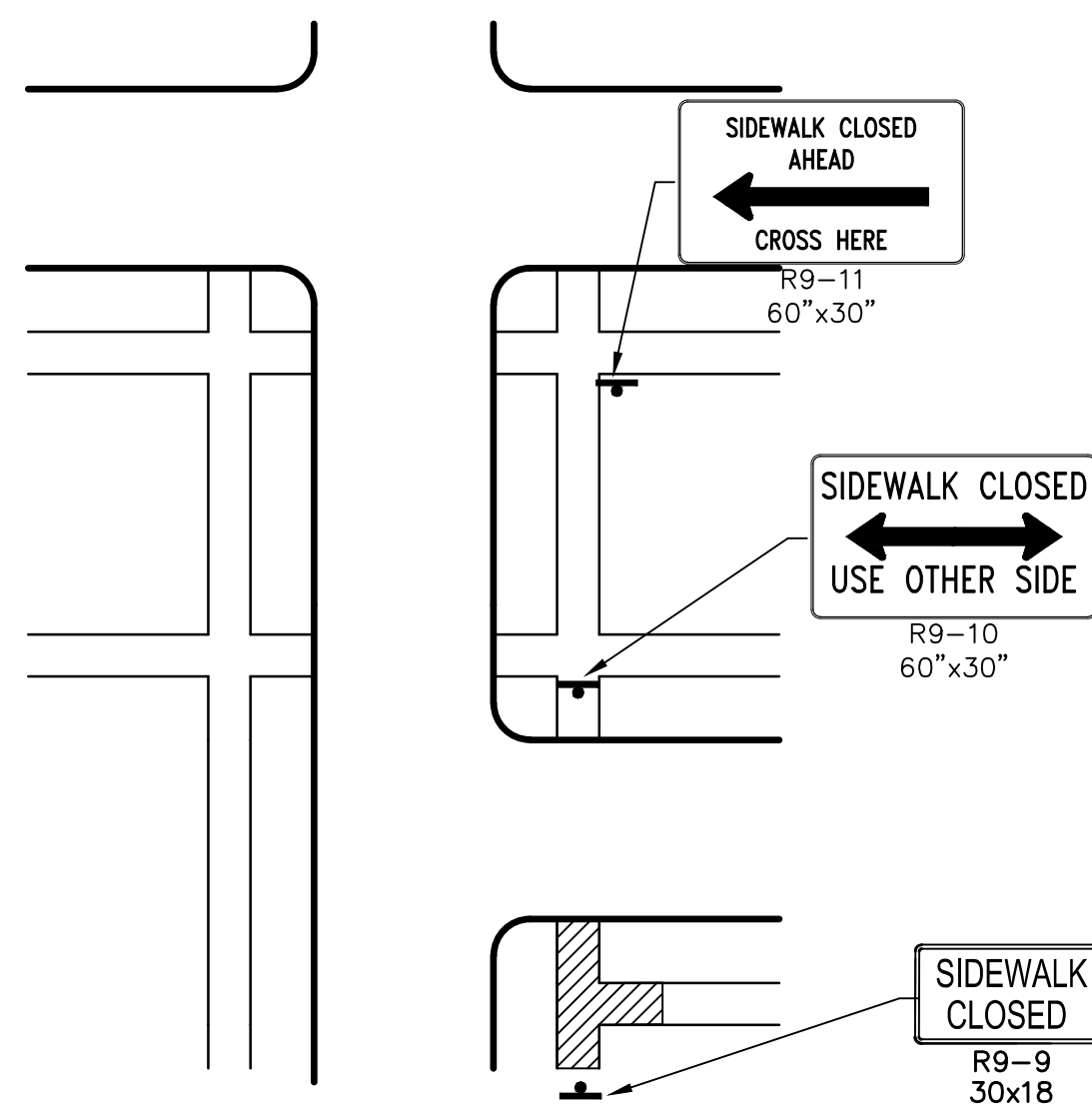
1. PLACE MESSAGE BOARDS 1 WEEK PRIOR TO START OF CONSTRUCTION. PLACE MESSAGE PER ENGINEER.
2. INSTALL TRAFFIC CONTROL DEVICES FOR DETOUR AND MAINTENANCE OF TRAFFIC PER STAGE I.
3. PLACE NO PARKING SIGNS.
4. PLACE SOIL EROSION CONTROL ITEMS AND TREE PROTECTION.
5. CONSTRUCT STORM SEWER INLETS ON COLONY AND MANCHESTER COURT.
6. REMOVE AND REPLACE CONCRETE PAVEMENT AND SIDEWALK.
7. FINISH RESTORATION, CLEAN STREET, AND COMPLETE PRELIMINARY PUNCH LIST FOR STAGE I.
8. REMOVE SOIL EROSION CONTROL MEASURES AND TREE PROTECTION.
9. REMOVE NO PARKING SIGNS, DETOUR AND CONSTRUCTION SIGNAGE.

STAGE II

1. ADJUST MESSAGE ON MESSAGE BOARDS, PLACE MESSAGE PER ENGINEER.
2. INSTALL TRAFFIC CONTROL DEVICES FOR DETOUR AND MAINTENANCE OF TRAFFIC PER STAGE II.
3. PLACE NO PARKING SIGNS.
4. PLACE SOIL EROSION CONTROL ITEMS AND TREE PROTECTION.
5. CONSTRUCT STORM SEWER FRONT OF 2724 AND 2731 COLONY COURT.
6. REMOVE AND REPLACE CONCRETE PAVEMENT AND SIDEWALK.
7. FINISH RESTORATION, CLEAN STREET, AND COMPLETE PRELIMINARY PUNCH LIST FOR STAGE II.
8. REMOVE SOIL EROSION CONTROL MEASURES AND TREE PROTECTION.
9. REMOVE NO PARKING SIGNS, DETOUR AND CONSTRUCTION SIGNAGE.

STAGE III

1. ADJUST MESSAGE ON MESSAGE BOARDS, PLACE MESSAGE PER ENGINEER.
2. INSTALL TRAFFIC CONTROL DEVICES FOR DETOUR AND MAINTENANCE OF TRAFFIC PER STAGE III.
3. PLACE NO PARKING SIGNS.
4. PLACE SOIL EROSION CONTROL ITEMS AND TREE PROTECTION.
5. CONSTRUCT STORM SEWER FRONT OF 2611, 2612, 2636, 2637, 2648, 2735 AND 2736 MANCHESTER RD.
6. REMOVE AND REPLACE CONCRETE PAVEMENT AND SIDEWALK.
7. FINISH RESTORATION, CLEAN STREET, AND COMPLETE PRELIMINARY PUNCH LIST FOR STAGE III AND OVERALL PROJECT PUNCH LIST.
8. REMOVE SOIL EROSION CONTROL MEASURES AND TREE PROTECTION.
9. REMOVE NO PARKING SIGNS, DETOUR AND CONSTRUCTION SIGNAGE.



TYPICAL SIDEWALK DETOUR
N.T.S.

PEDESTRIAN TRAFFIC CONTROL SIGNS			
SIGN	NUMBER	QUANTITY	TOTAL SFT
	R9-10 60x30	3	38
	R9-11 60x30	3	38
	R9-9 30x18	3	14
	R9-11 48x36	3	36

SIDEWALK DETOUR

1. SIGNS PROVIDED AS NEEDED. PEDESTRIAN DETOUR PLACED AS DIRECTED BY ENGINEER

TRAFFIC NOTES FOR STAGE 1, 2, AND 3

1. CONTRACTOR SHALL PLACE PORTABLE, CHANGEABLE MESSAGE SIGNS A MINIMUM OF ONE (1) WEEK PRIOR TO THE START OF CONSTRUCTION IN LOCATIONS INDICATED BY ENGINEER. MESSAGE TO BE PROVIDED BY THE ENGINEER.
2. SIGN SPACING PER MMUTCD 6C-4 OR AS DIRECTED BY ENGINEER.
3. ONE SIDE OF SIDEWALK TO BE OPEN FOR USE AT ALL TIMES.
4. ALL TRAFFIC CONTROL DEVICES TO MEET CURRENT MMUTCD PART 6 STANDARDS.
5. MAINTAIN ACCESS TO PROPERTIES AND EMERGENCY VEHICLES AT ALL TIMES.
6. CONTRACTOR TO PROVIDE TRAFFIC REGULATORS AS NEEDED AND AS DIRECTED BY ENGINEER.
7. COVER CONFLICTING SIGNS AS NEEDED OR AS DIRECTED BY ENGINEER, PAID AS PART OF MINOR TRAFFIC CONTROL.



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00	REVIEW 1	2-27-2015	RAG	DAD

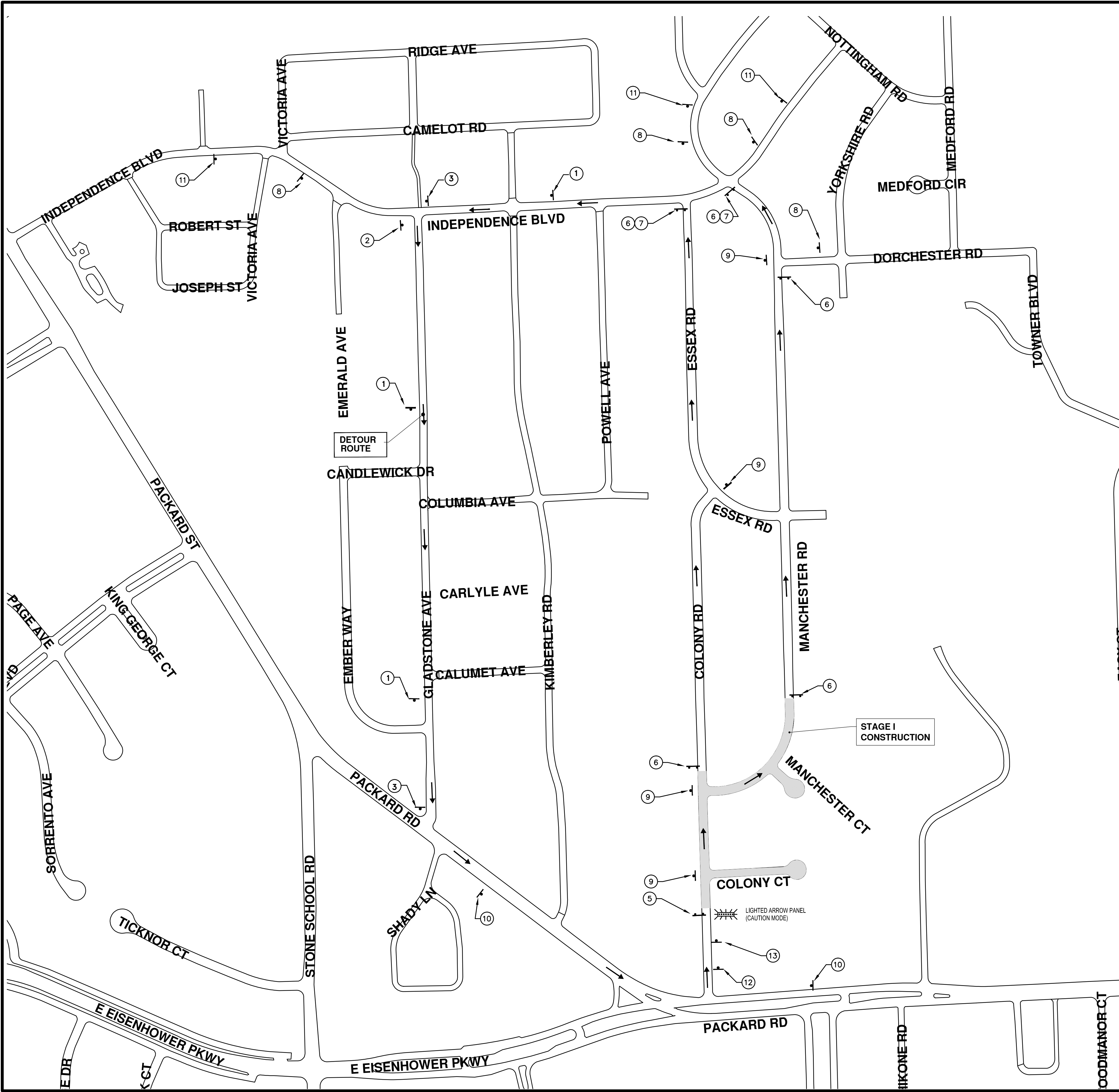
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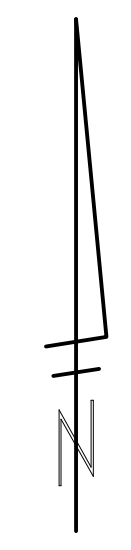
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
PROJECT LAYOUT

SCALE PLAN: 1" = 100'
DRAWING No. 2015024-6

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TRAFFIC CONTROL SIGN				
	SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
①	ESSEX/COLONY DETOUR ↑	D3-1 M4-9S 30x30	3	6 19
②	ESSEX/COLONY DETOUR →	D3-1 M4-9R 30x24	1	2 5
③	ESSEX/COLONY DETOUR ←	D3-1 M4-9L 30x24	2	4 10
⑤	TYPE III BARRICADE WITH ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3 60x30	1	13
⑥	TYPE III BARRICADE WITH ROAD CLOSED	R11-2 48x30	5	50
⑦	DETOUR →	M4-10R 30"x24"	2	10
⑧	SOUTH BOUND ESSEX AND MANCHESTER ROADS CLOSED FOLLOW DETOUR	SPECIAL 48x60	4	80
⑨	ONE WAY →	R6-1R 36x12	4	12
⑩	ROAD WORK AHEAD COLONY RD.	W20-1 48 X 48 D3-1	2	32 4
⑪	ROAD WORK AHEAD ESSEX RD	W20-1 48 X 48 D3-1	3	48 6
⑫	ONE LANE ROAD AHEAD	W20-4 48 X 48	1	16
⑬	WORK ZONE BEGINS	R5-18c 36 x 30	1	8



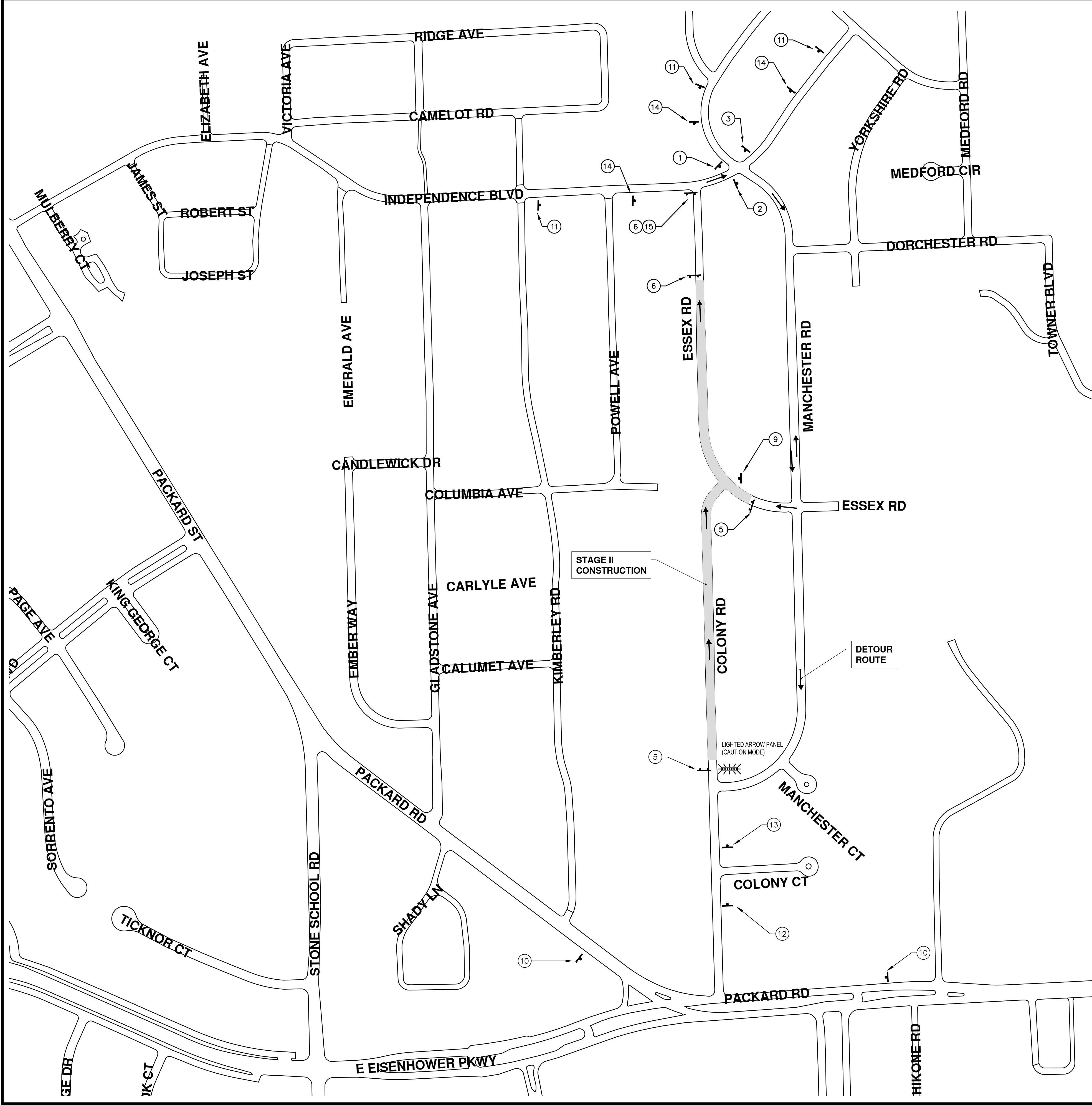
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00	REVIEW 1	2-27-2015	RAG	DAD

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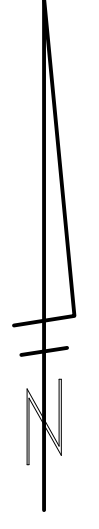


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
TRAFFIC AND DETOUR STAGE I

SCALE PLAN: 1" = 200'
DRAWING No. 2015024-7



TRAFFIC CONTROL SIGN				
	SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
①		D3-1 M4-9S 30x30	1	2 7
②		D3-1 M4-9R 30x24	1	2 5
③		D3-1 M4-9L 30x24	1	2 5
⑤		R11-3 60x30	2	13
⑥		R11-2 48x30	2	20
⑨		R6-1R 36x12	1	3
⑩		W20-1 48 X 48	2	32
		D3-1	2	4
⑪		W20-1 48 X 48	3	16
		D3-1	3	6
⑫		W20-4 48 X 48	1	16
⑬		R5-18c 36 x 30	1	8
⑭		SPECIAL 48x60	3	60
⑮		M4-10L 30"x24"	1	5



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

TRAFFIC AND DETOUR STAGE II

SCALE PLAN: 1" = 200'

DRAWING No. 2015024-8

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

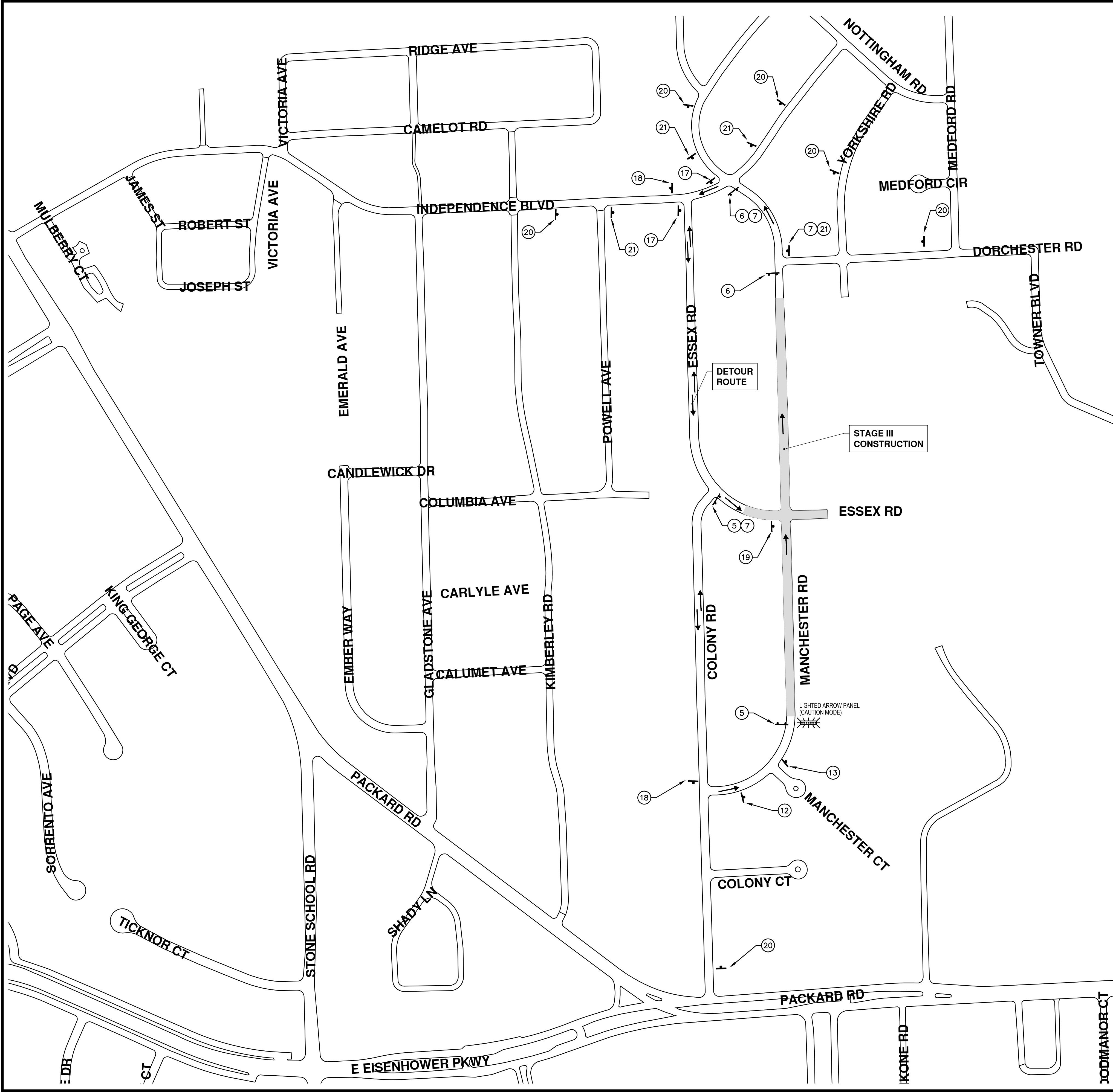
REV.	DATE	DESCRIPTION
01	3-31-2015	BID SET
00	2-27-2015	REVIEW 1

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CITY OF ANN ARBOR
MICHIGAN

SHEET No. 8 OF 25

S:\Project Management\Design\2015024\Colony Essex Manchester\Plan Production\Primary\2015024\TRST3.dwg Dwg Created: 19-Feb-15 - _a2_standard bw.stb - Plot Date: 31-Mar-15



TRAFFIC CONTROL SIGN				
	SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
⑤	TYPE III BARRICADE WITH ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3 60x30	2	25
⑥	TYPE III BARRICADE WITH ROAD CLOSED	R11-2 48"x30"	2	20
⑦	DETOUR	M4-10R 30"x24"	3	15
⑫	ONE LANE ROAD AHEAD	W20-4 48 X 48	1	16
⑬	WORK ZONE BEGINS	R5-18c 36 x 30	1	8
⑰	MANCHESTER RD DETOUR	D3-1 M4-9R 30x24	2	10
⑱	MANCHESTER RD DETOUR	D3-1 M4-9L 30x24	2	10
⑲	ONE WAY	R6-1L 36x12	1	3
⑳	ROAD WORK AHEAD MANCHESTER RD	W20-1 48 X 48 D3-1	6 6	96 12
㉑	SOUTH BOUND MANCHESTER ROAD CLOSED FOLLOW DETOUR	SPECIAL 48x60	4	80

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1" = 200'

DRAWING No. 2015024-9

SHEET No. 9 OF 25

COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

TRAFFIC AND DETOUR STAGE III

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01 BID SET
00 REVIEW 1
REV.

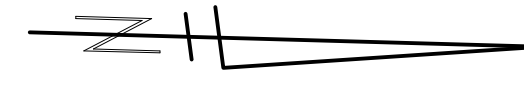
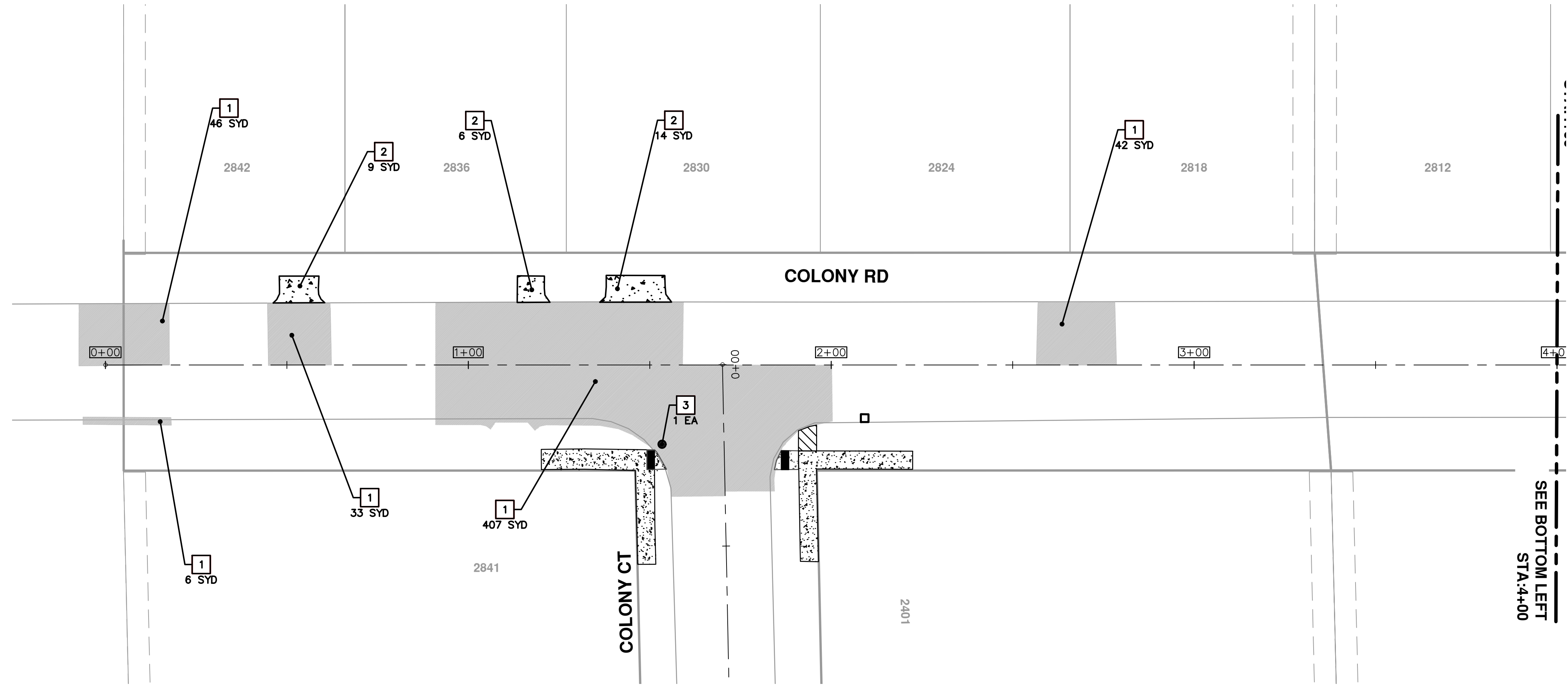
3-31-2015
2-27-2015
DATE

RAG
RAG
DRAWN
CHECKED

DAD
DAD
DAD
CHECKED

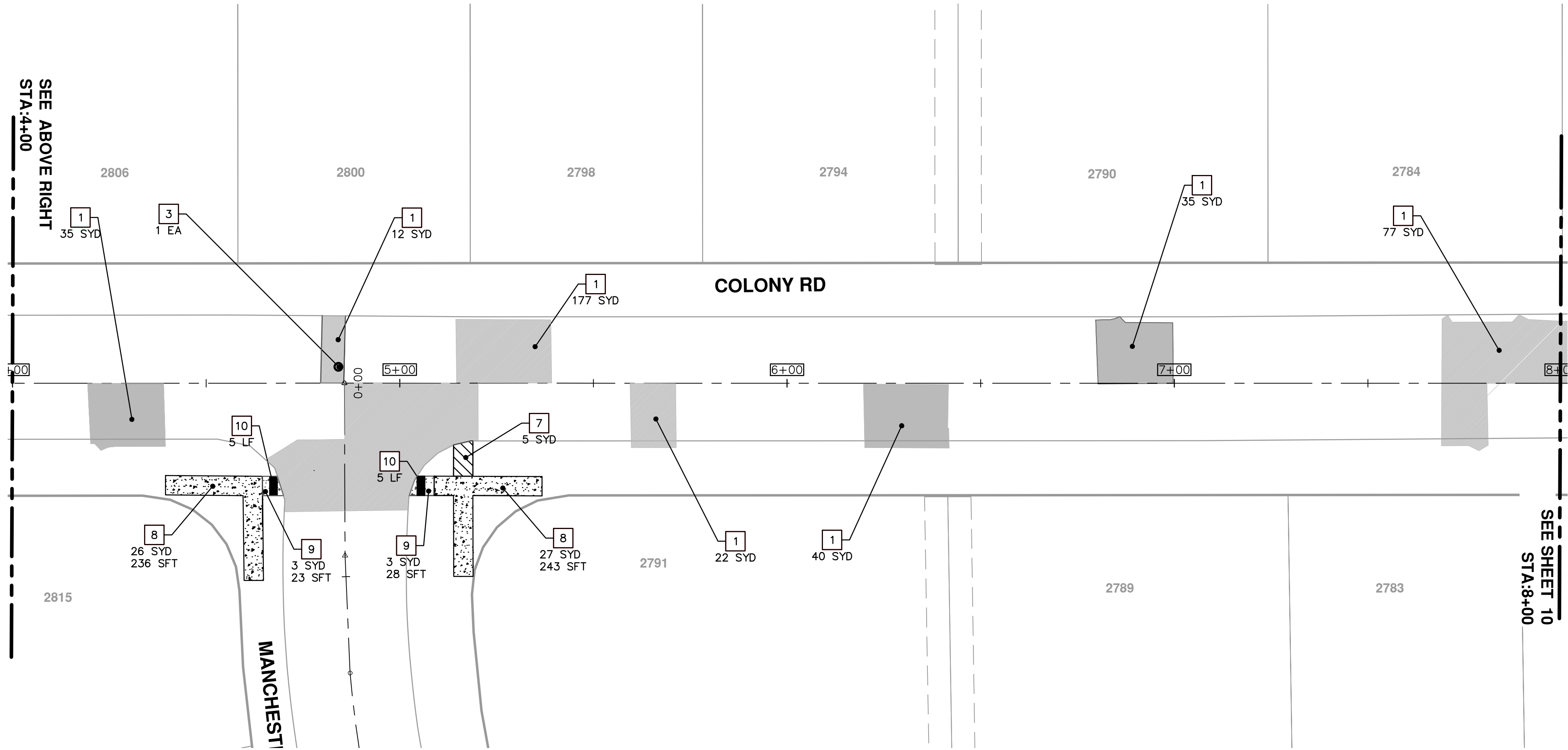
811
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S:\Project_Management\Design\2015024_Colony_Essex_Manchester\Plan_Production\Primary\2015024RESFI.dwg_Dwg_Created: 18-Dec-14 - _s2_standard_b.w.stb - Plot Date: 31-Mar-15



SEE BOTTOM LEFT
STA:4+00

SEE ABOVE RIGHT
STA:4+00



SEE SHEET 10
STA:8+00

CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR


COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

COLONY RD
STA 0+00 TO 8+00 REMOVAL AND CONSTRUCTION PLAN

REG. NO. 2015024-10

SHEET No. 10 OF 25



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REV.	DATE	DESCRIPTION
1	2-27-2015	DRAWN
2	3-31-2015	DAG

BID SET
REV. 1

DATE
2-27-2015

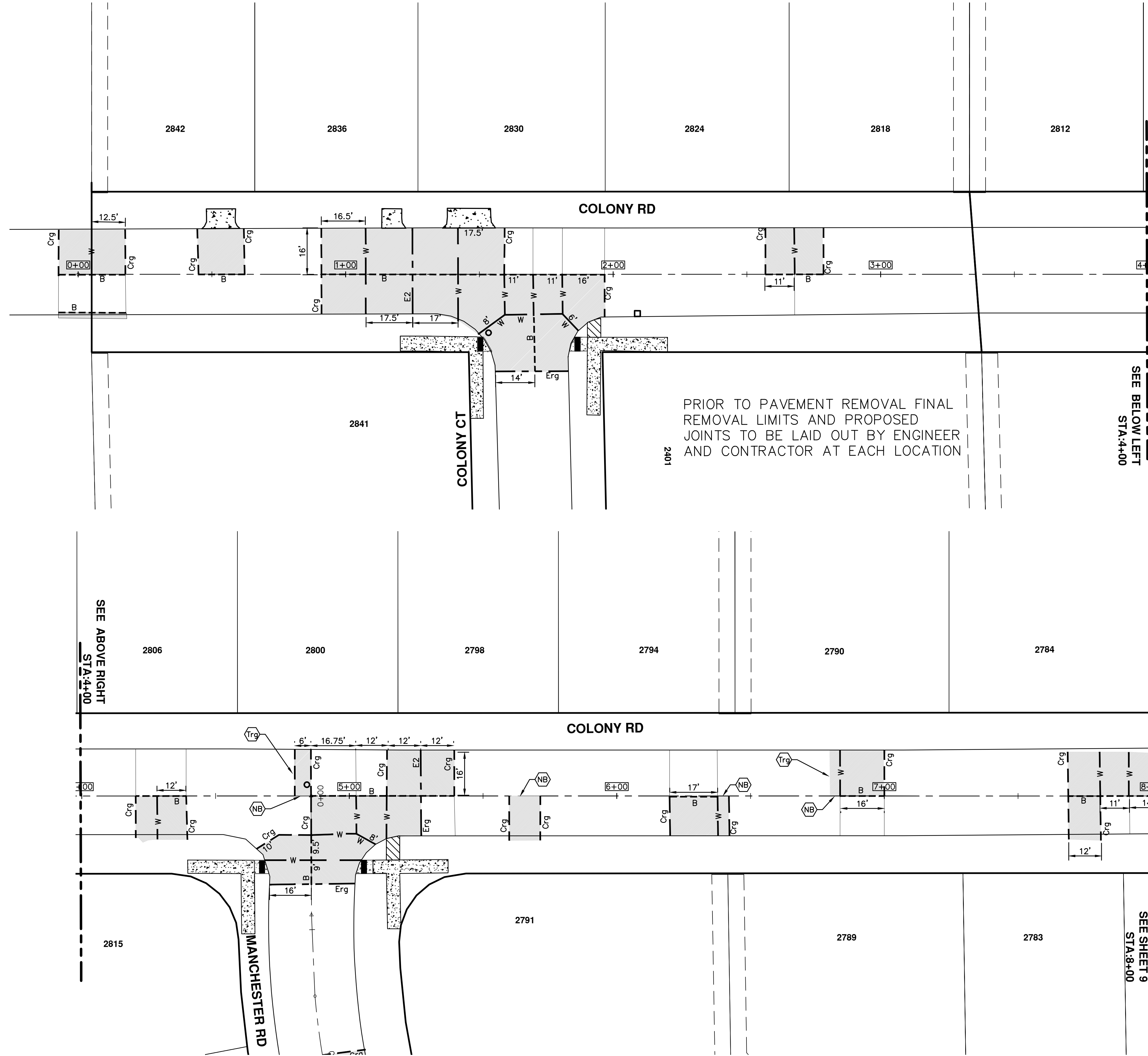
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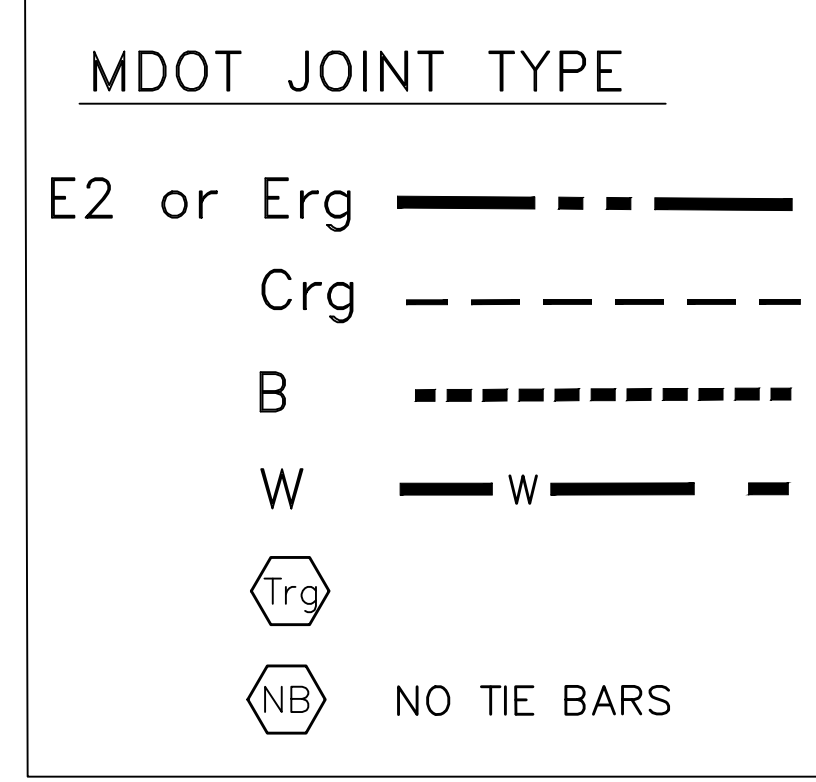


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PRIOR TO PAVEMENT REMOVAL FINAL
REMOVAL LIMITS AND PROPOSED
JOINTS TO BE LAID OUT BY ENGINEER
AND CONTRACTOR AT EACH LOCATION



SEE ABOVE RIGHT
STA:4+00

SEE SHEET 9
STA:8+00

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR

SCALE PLAN: 1" = 20'
 DRAWING No. 2015024-11

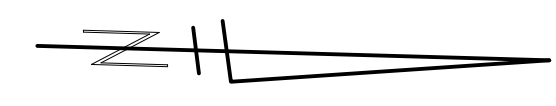
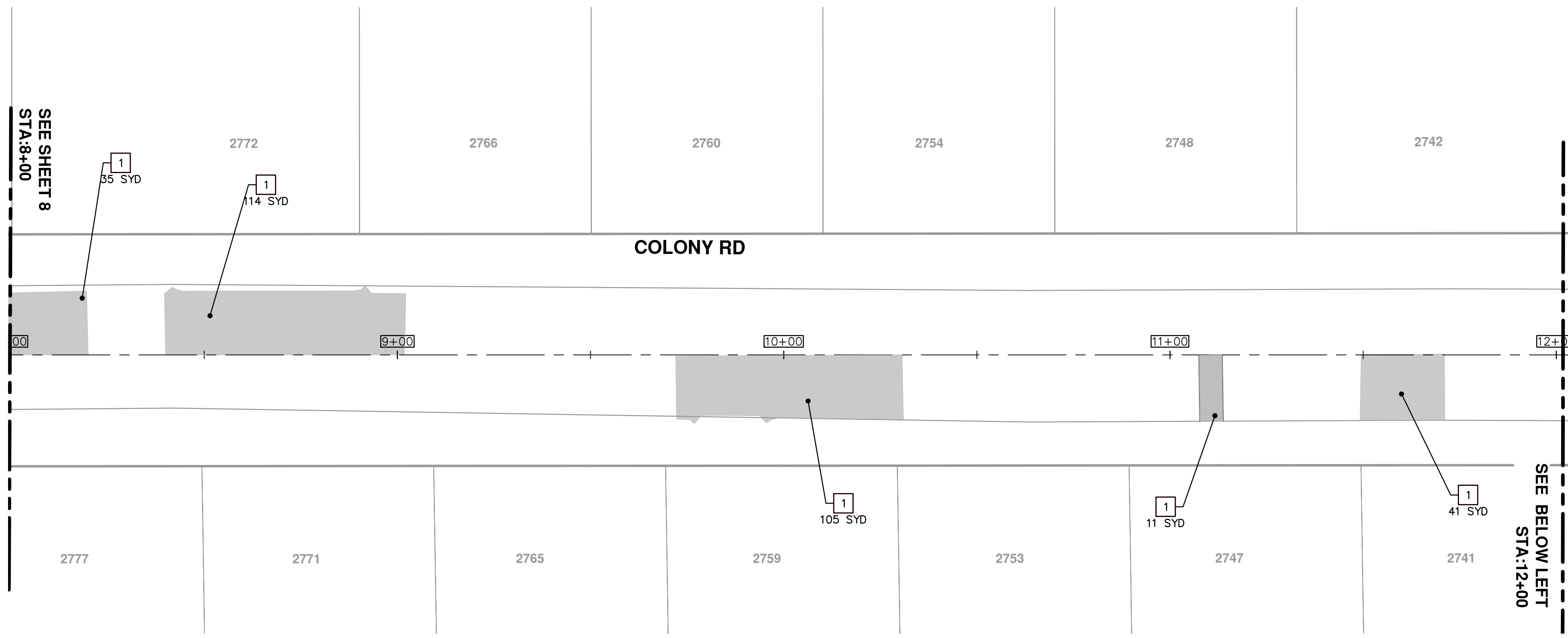
COLONY RD
 STA 0+00 TO 8+00 JOINTING PLAN

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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00	REVIEW 1	2-27-2015	RAG	DAD

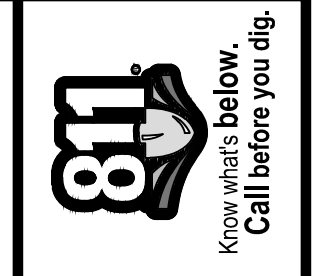
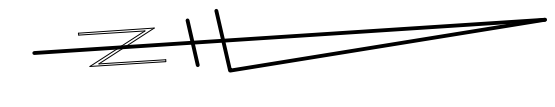
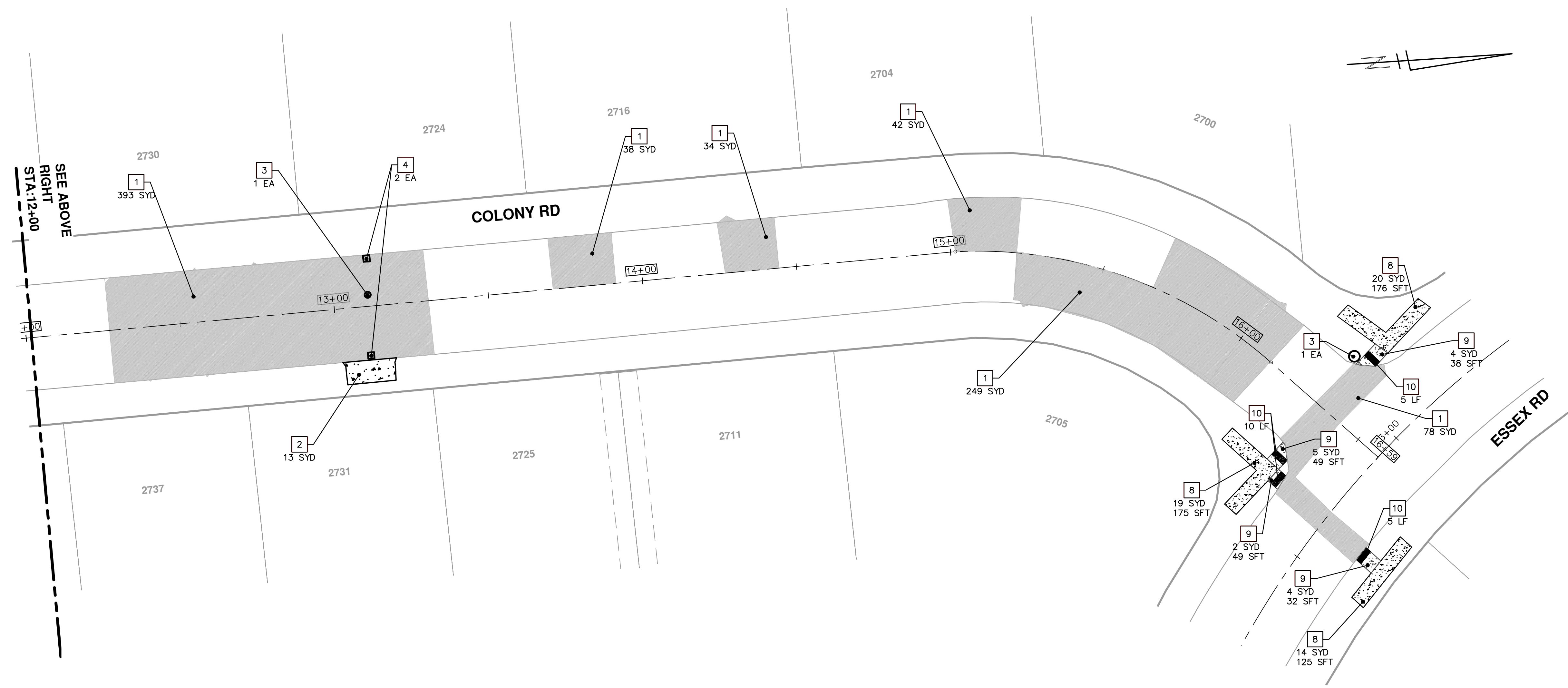
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CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE



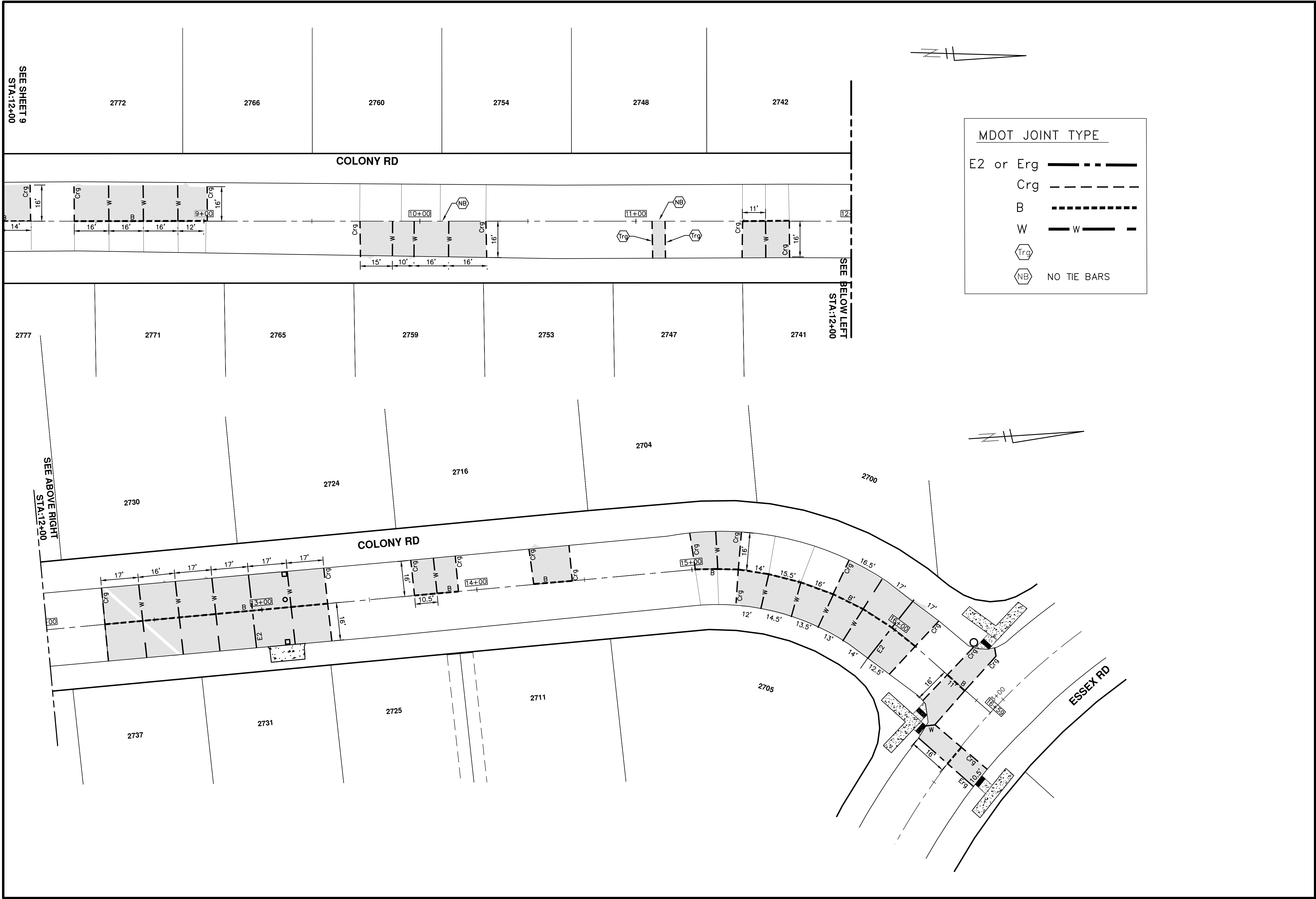
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00	REVIEW 1	2-27-2015	RAG	DAD

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
COLONY RD
STA 8+00 TO 16+00 REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN: 1" = 20'
DRAWING No. 2015024-12



SEE SHEET 9
STA:12+00

SEE BELOW LEFT
STA:12+00

SEE ABOVE RIGHT
STA:12+00

MDOT JOINT TYPE

E2 or Erg ————

Crg - - - - -

B - - - - -

W ————

Trg (hexagon symbol)

NB (hexagon symbol) NO TIE BARS

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR

SCALE PLAN: 1" = 20'

DRAWING No. 2015024-13

COLONY RD
STA 8+00 TO 16+00 JOINTING PLAN

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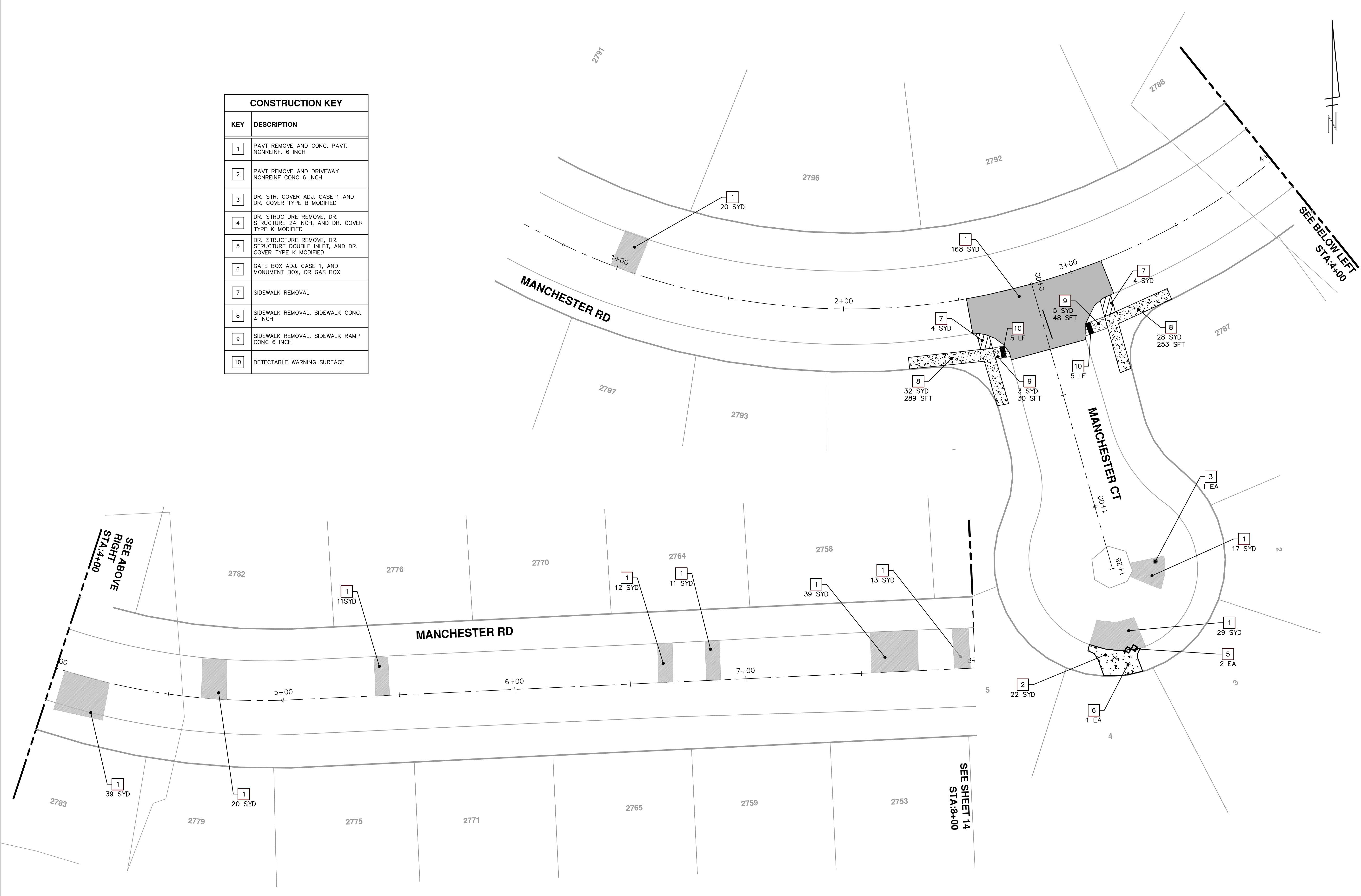
REV. DESCRIPTION DATE DRAWN CHECKED

01	BID SET	3-31-2015	RAG	DAD	DAD
00	REVIEW 1	2-27-2015	RAG	DRAWN	CHECKED

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CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE



01	BID SET	3-31-2015	RAG	DAD
00	REVIEW 1	2-27-2015	RAG	DAD
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

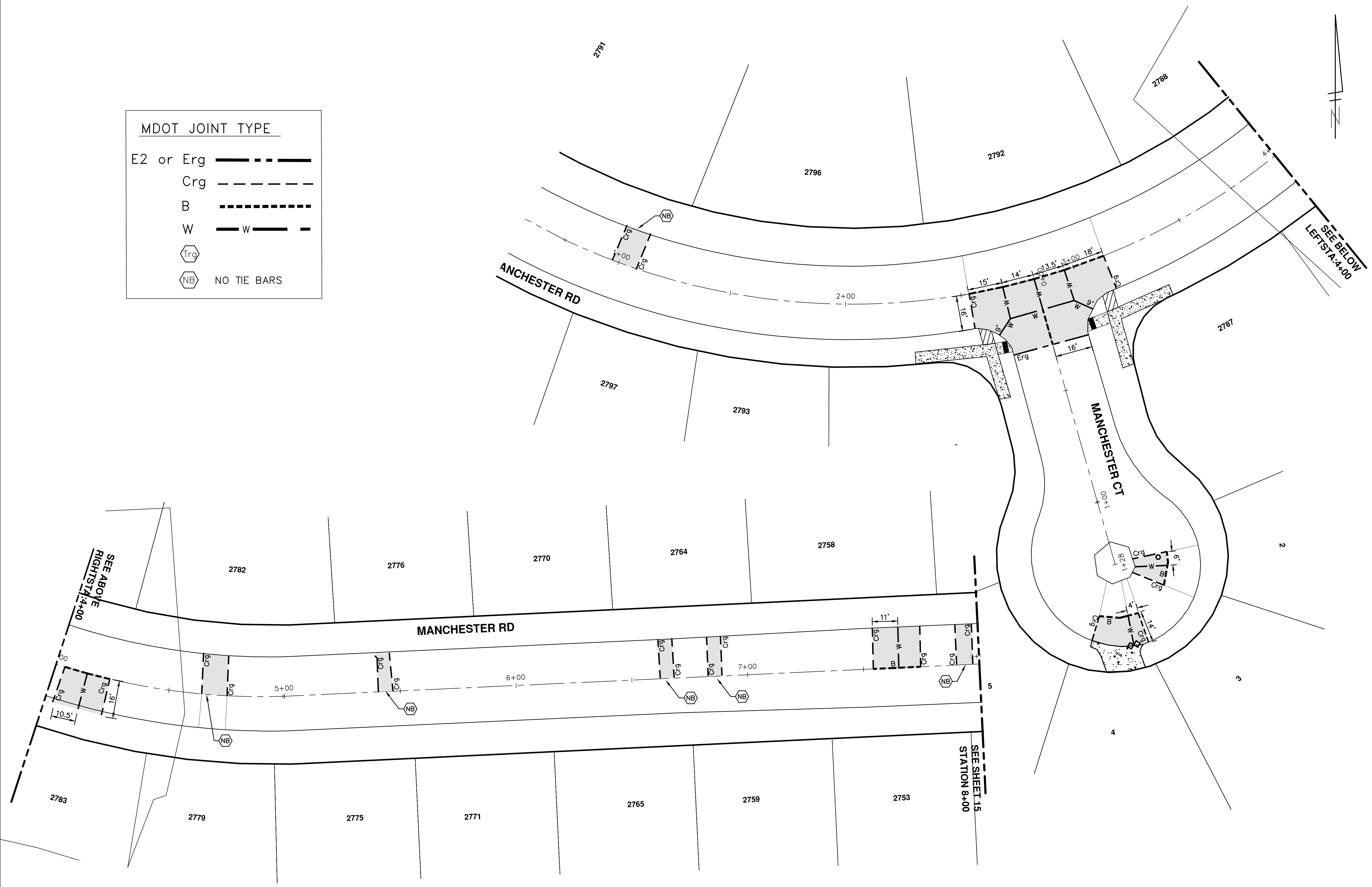
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 ANN ARBOR, MI 48106-0867
 ANN ARBOR: 734-794-4410
 www.a2gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
 MANCHESTER RD
 STA 0+00 TO 8+00 AND MANCHESTER CT REMOVAL AND CONSTRUCTION

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MDOT JOINT TYPE	
E2 or Erg	— — — — —
Crg	- - - - -
B	— — — — —
W	— W — — —
Trg	⬡
NB	NO TIE BARS



SEE ABOVE
RIGHT STA: 4+00

SEE SHEET 15
STATION 8+00

SEE BELOW
LEFT STA: 4+00

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
 MANCHESTER RD
 STA 0+00 TO 8+00 AND MANCHESTER CT JOINTING PLAN

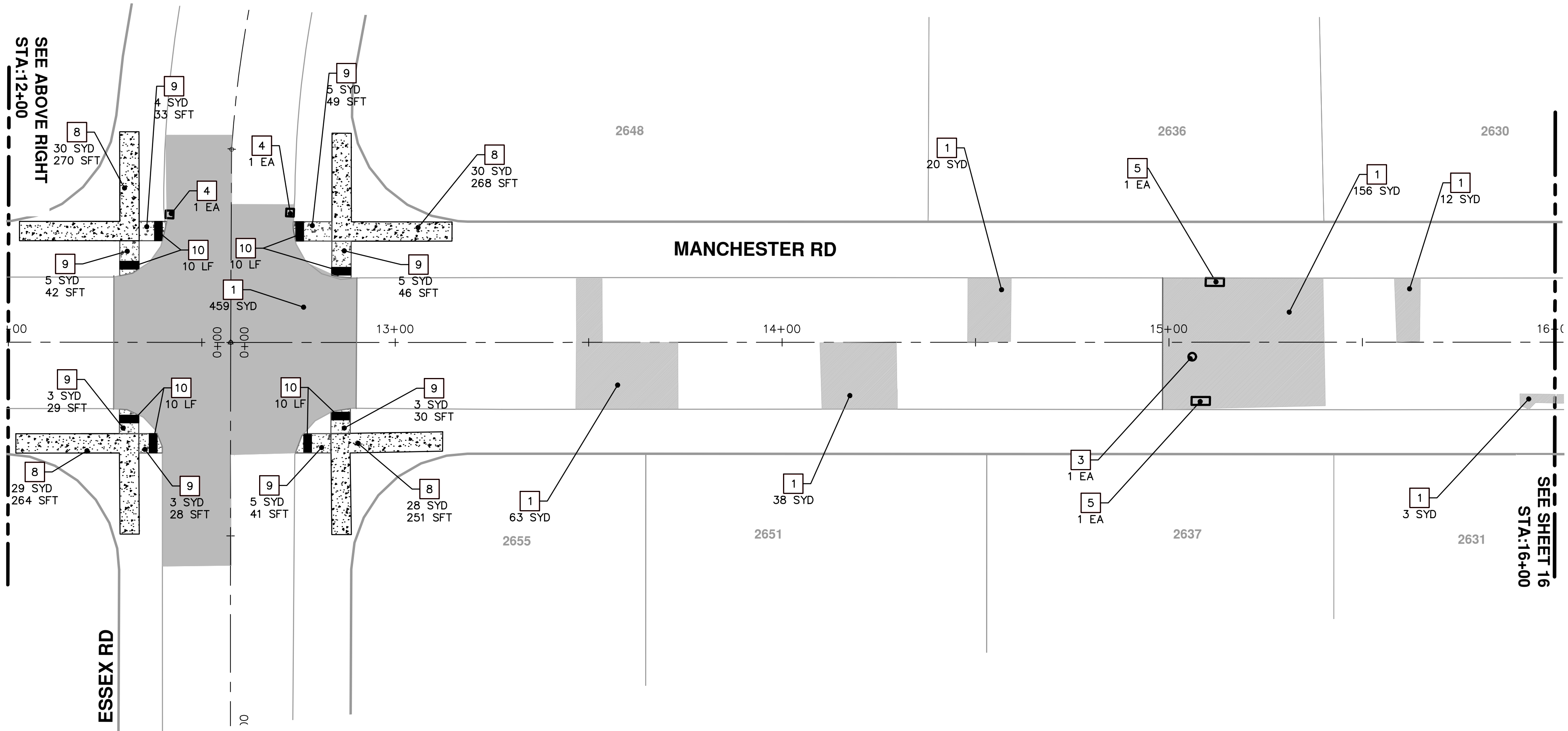
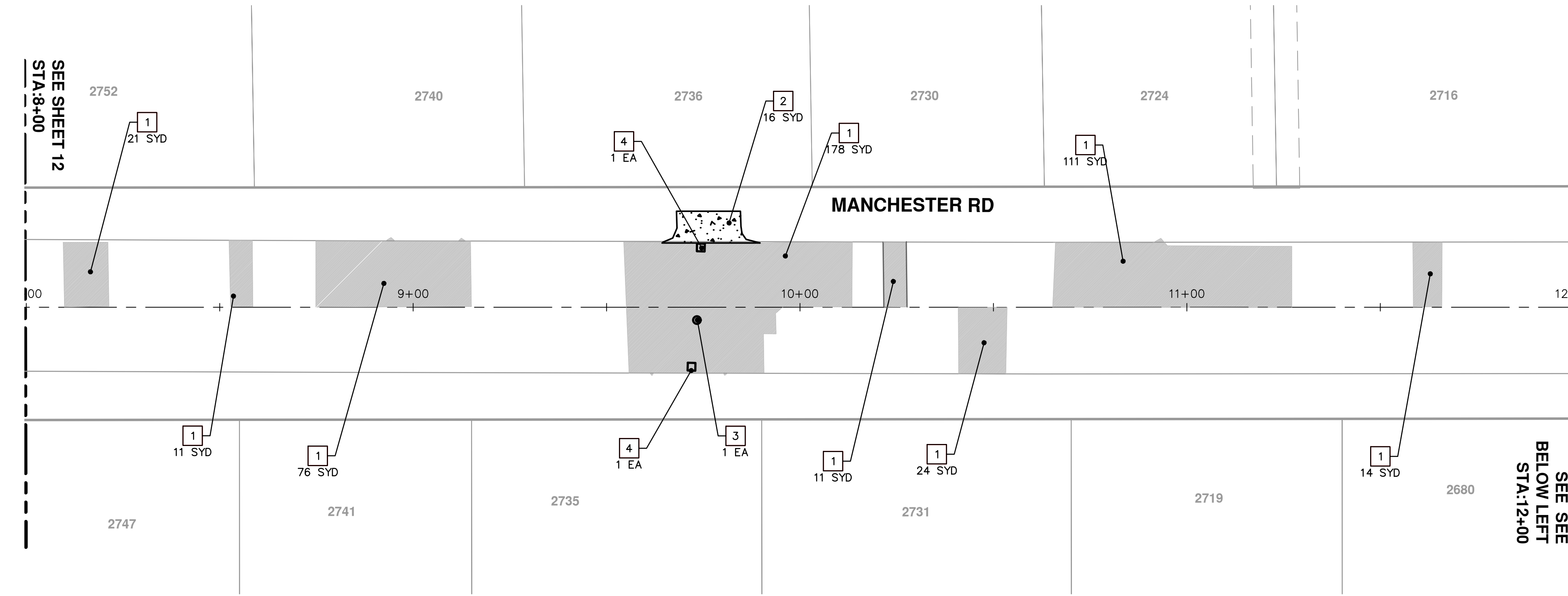
SCALE PLAN: 1" = 20'
 DRAWING No. 2015024-15

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 ANN ARBOR, MI 48106-8647
 ANN ARBOR: 734.784.4410
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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	BID SET	3-31-2015	RAG	DAD
00	REVIEW 1	2-27-2015	RAG	DAD

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CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
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6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
 MANCHESTER RD
 STA 8+00 TO 16+00 REMOVAL AND CONSTRUCTION PLAN

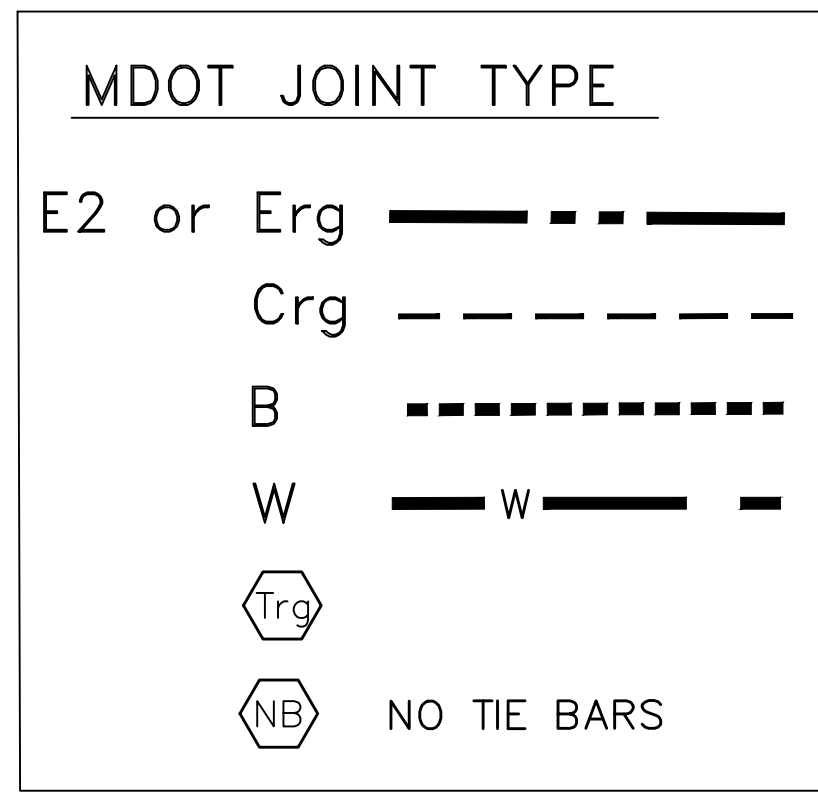
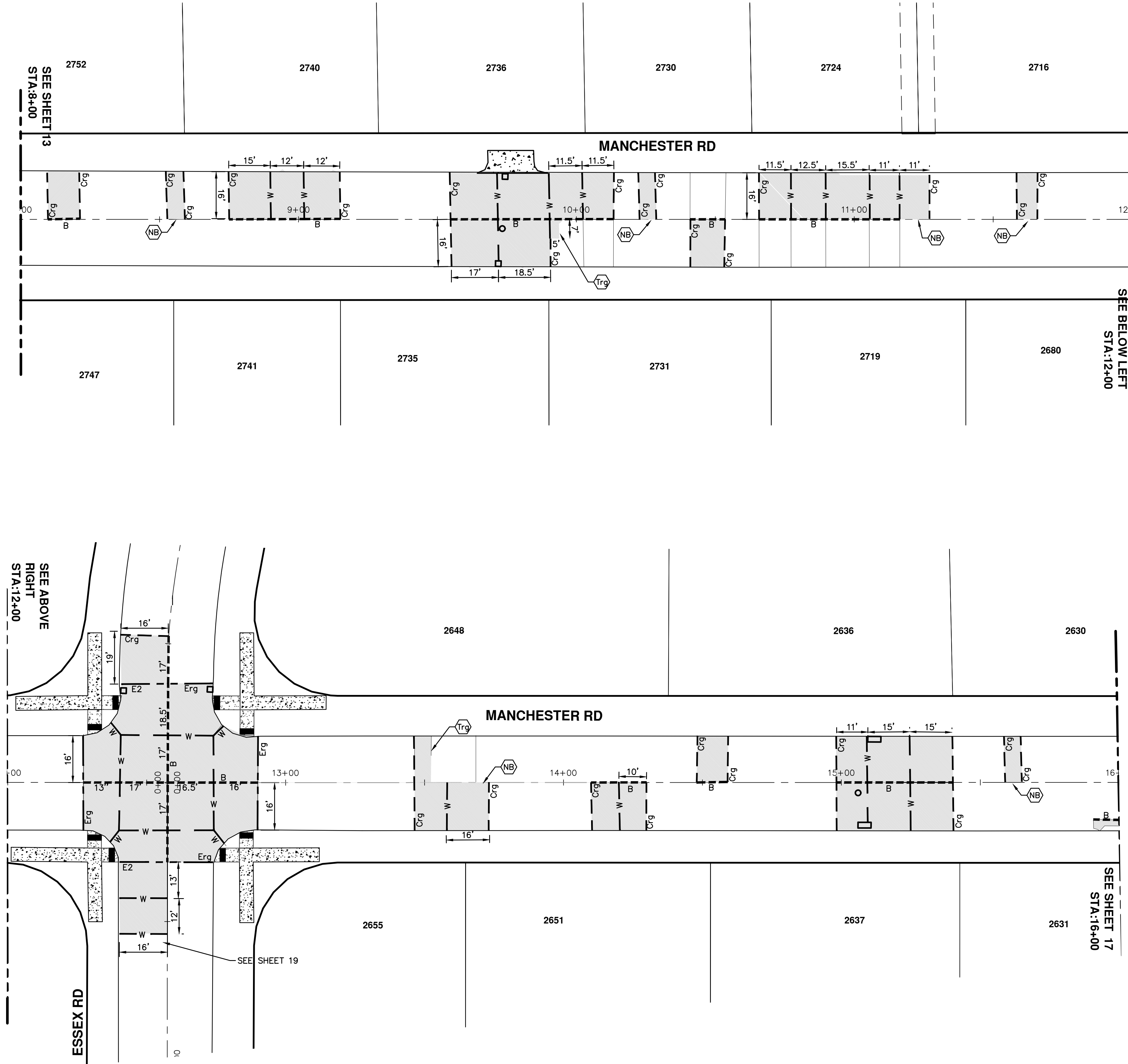
SCALE PLAN: 1" = 20'
 DRAWING No. 2015024-16

811
 Know what's below.
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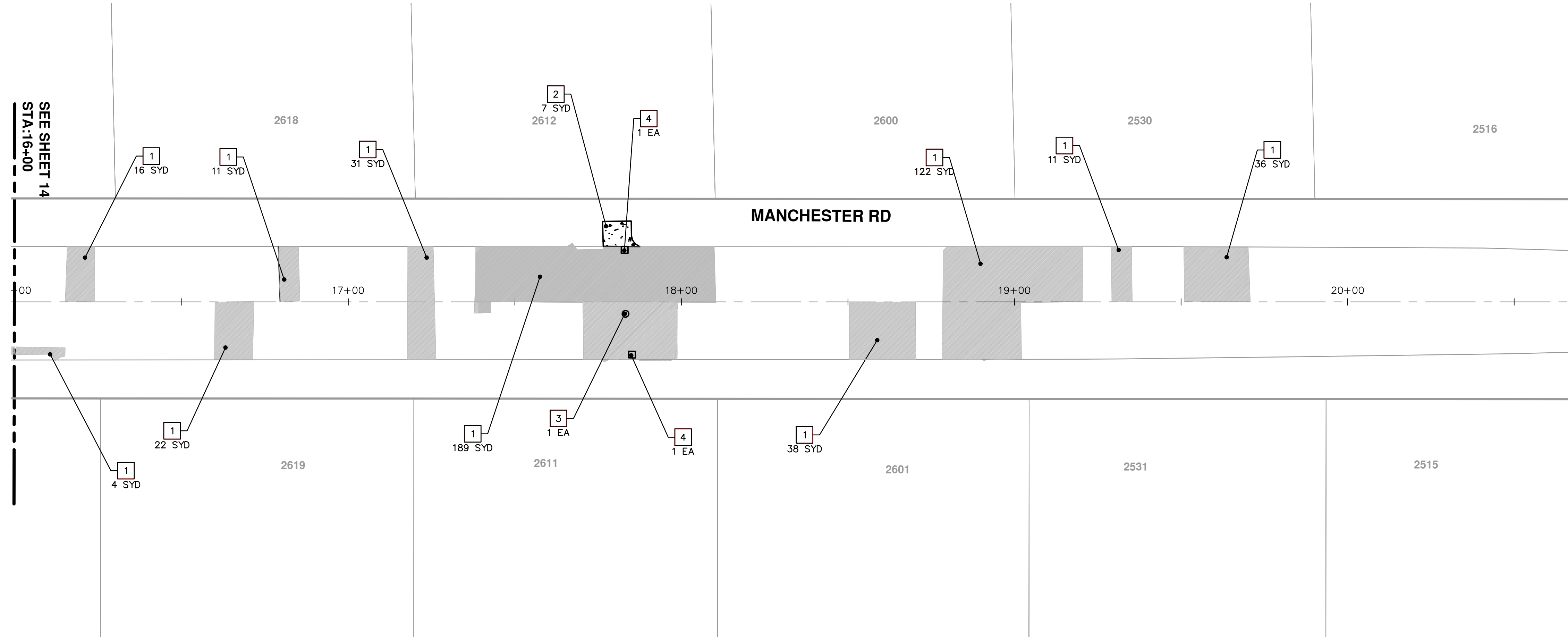
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00	REVIEW 1	2-27-2015	RAG	DAD

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01 BID SET 00 REVIEW 1 REV.	3-31-2015 2-27-2015 DATE	RAG RAG DRAWN	DAD DAD CHECKED
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR COLONY ESSEX MANCHESTER CONCRETE PAVEMENT REPAIR MANCHESTER RD STA 8+00 TO 16+00 JOINTING PLAN			
SCALE PLAN: 1" = 20' DRAWING No. 2015024-17		SHEET No. 17 OF 25	

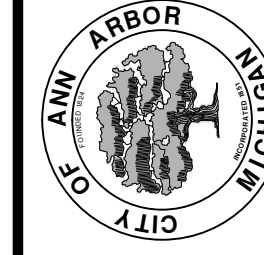


SEE SHEET 14
STA: 16+00

CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
 MANCHESTER RD
 STA 16+00 TO 20+00 REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN: 1" = 20'
 DRAWING No. 2015024-18

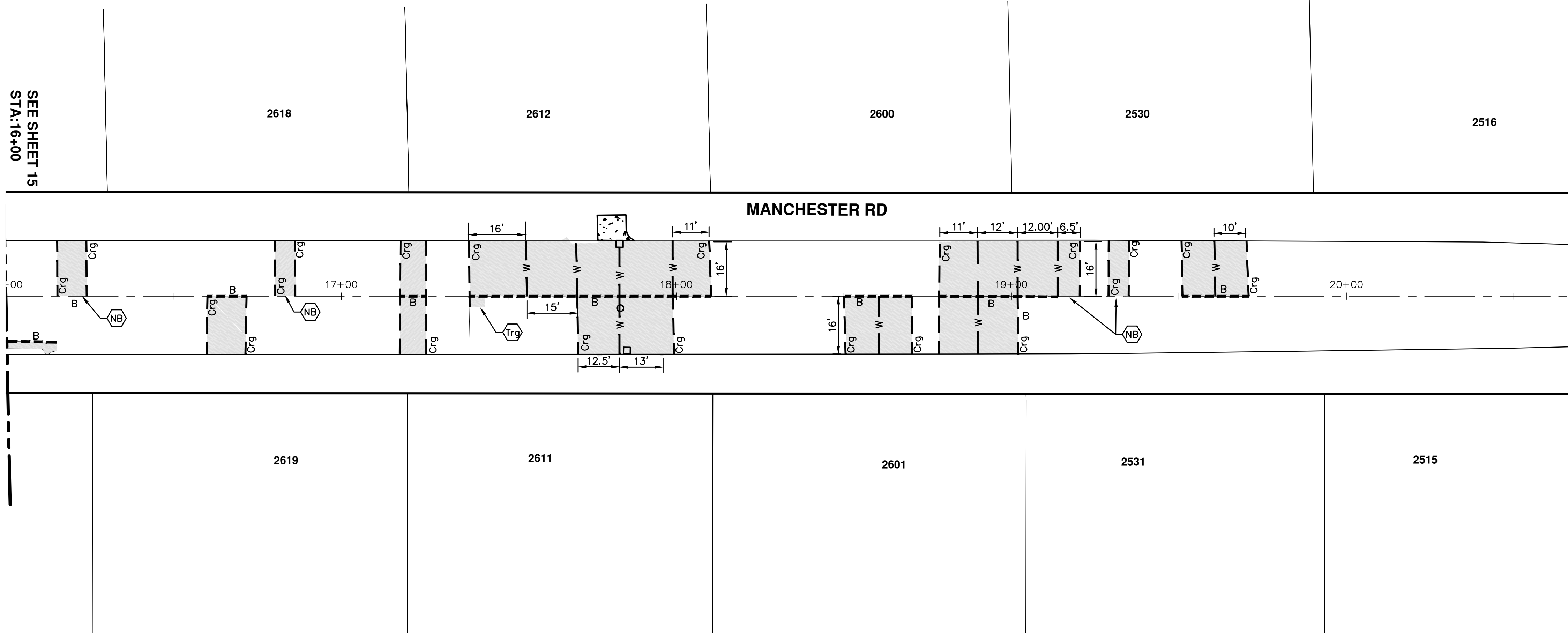


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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	BID SET	3-31-2015	RAG	DAD
00	REVIEW 1	2-27-2015	RAG	DAD



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SEE SHEET 15
STA:16+00

2618

2612

2600

2530

2516

MANCHESTER RD

2619

2611

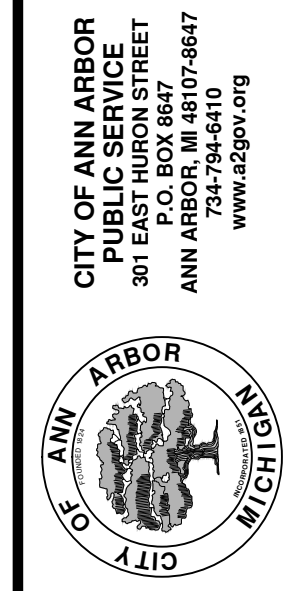
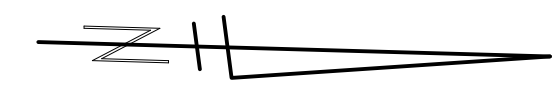
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2531

2515

MDOT JOINT TYPE

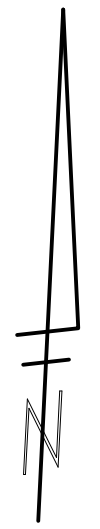
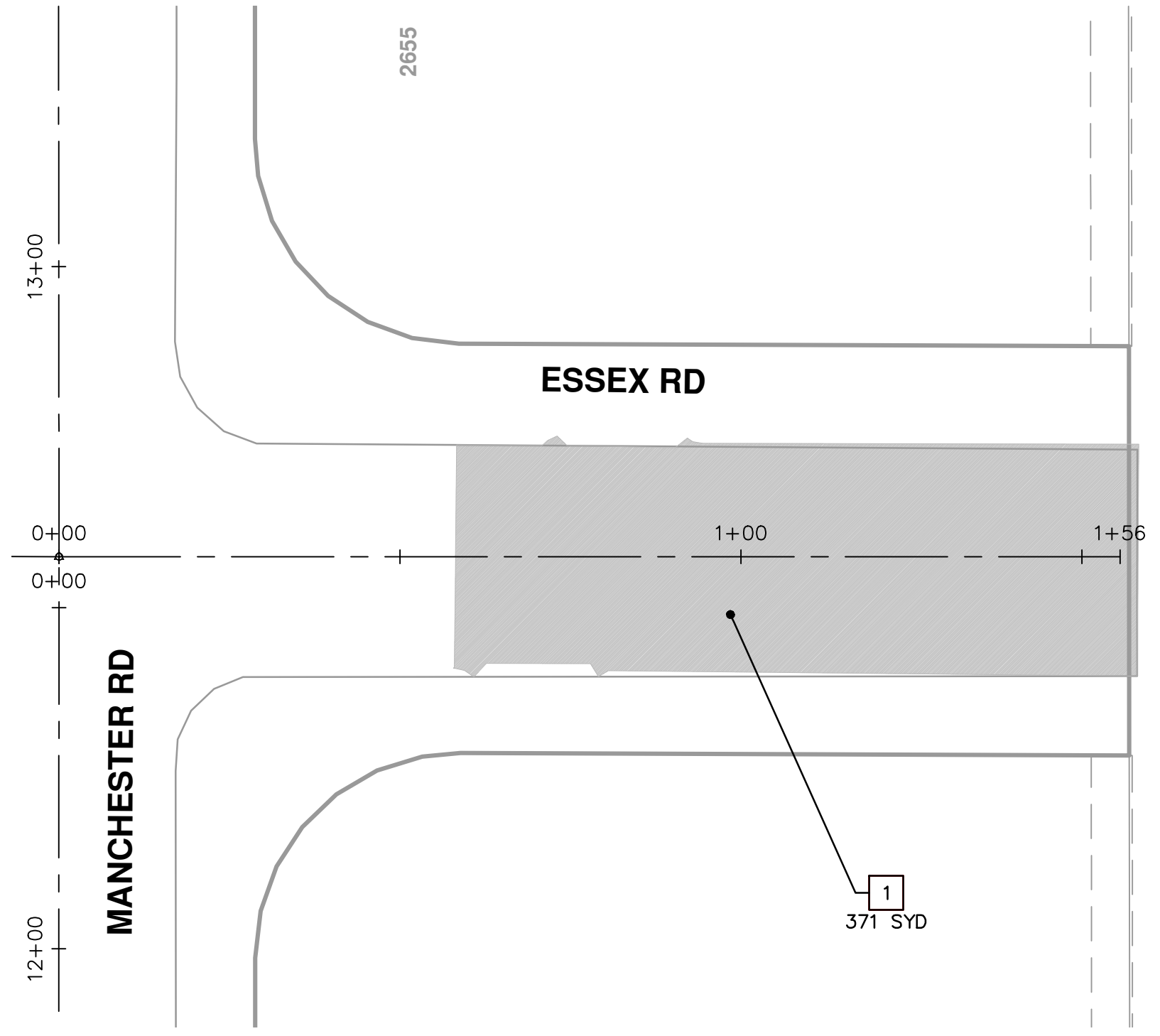
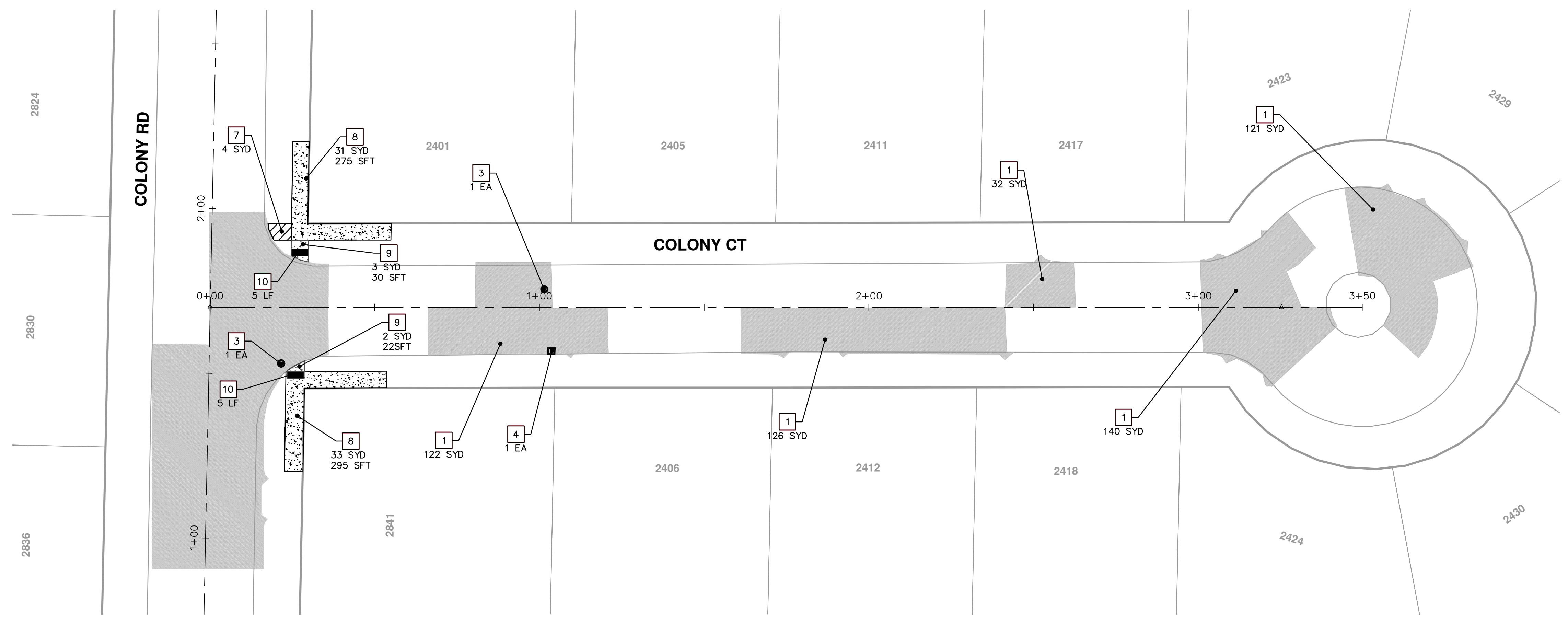
- E2 or Erg
- Crg
- B
- W
- Trg
- NO TIE BARS



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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00	REVIEW 1	2-27-2015	RAG	DAD



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CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

COLONY ESSEX MANCHESTER

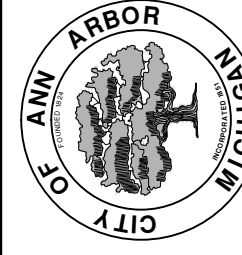
CONCRETE PAVEMENT REPAIR

COLONY CT AND ESSEX EAST
STA 0+00 TO 1+55 REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN: 1" = 20'


DRAWING No. 2015024-20

SHEET No. 20 OF 25



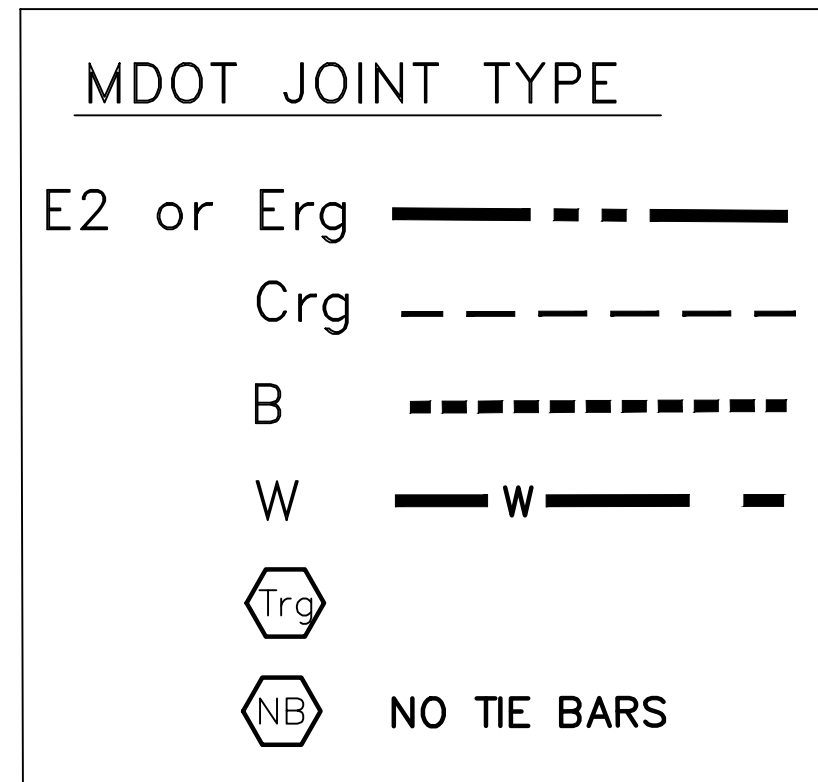
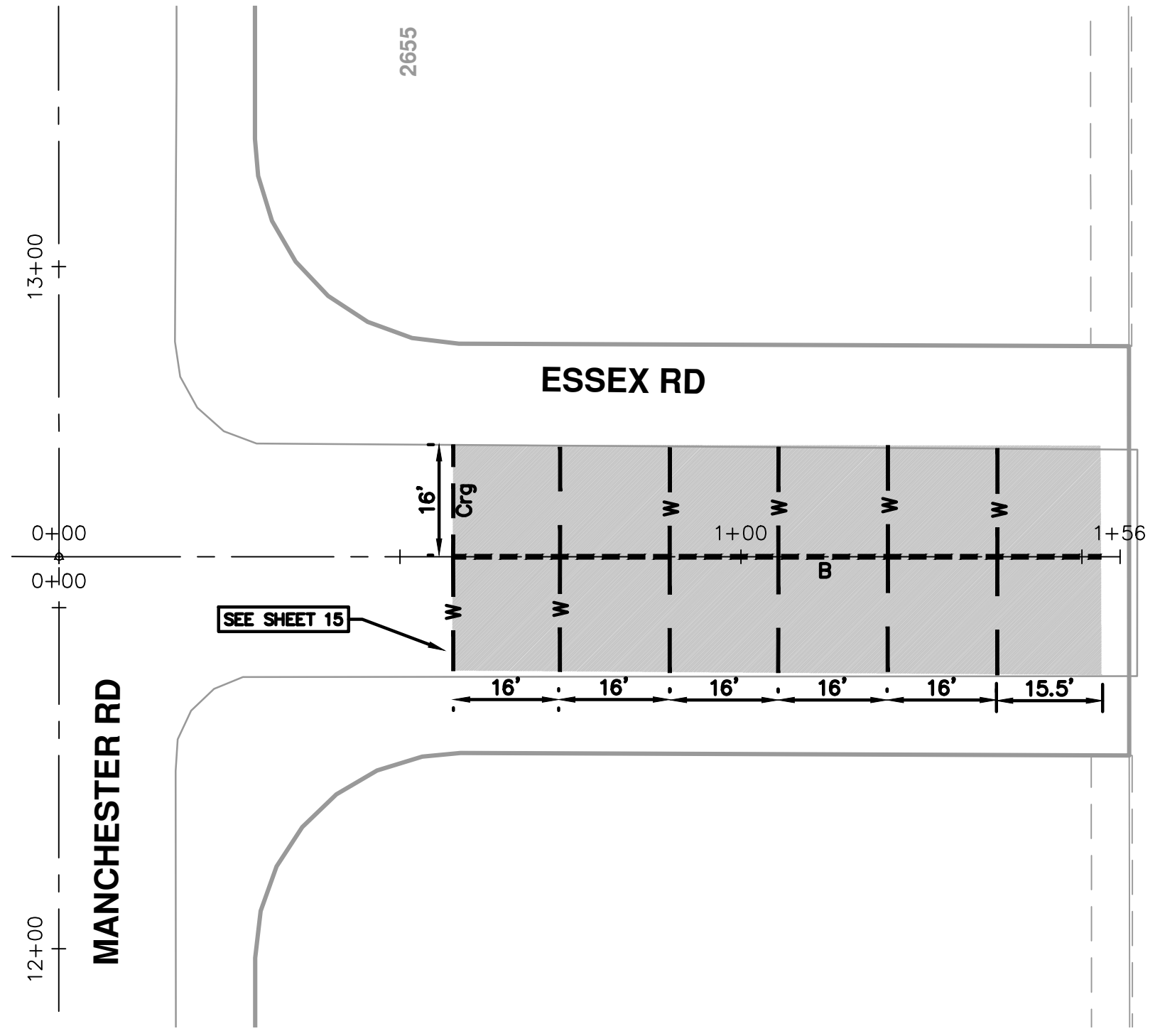
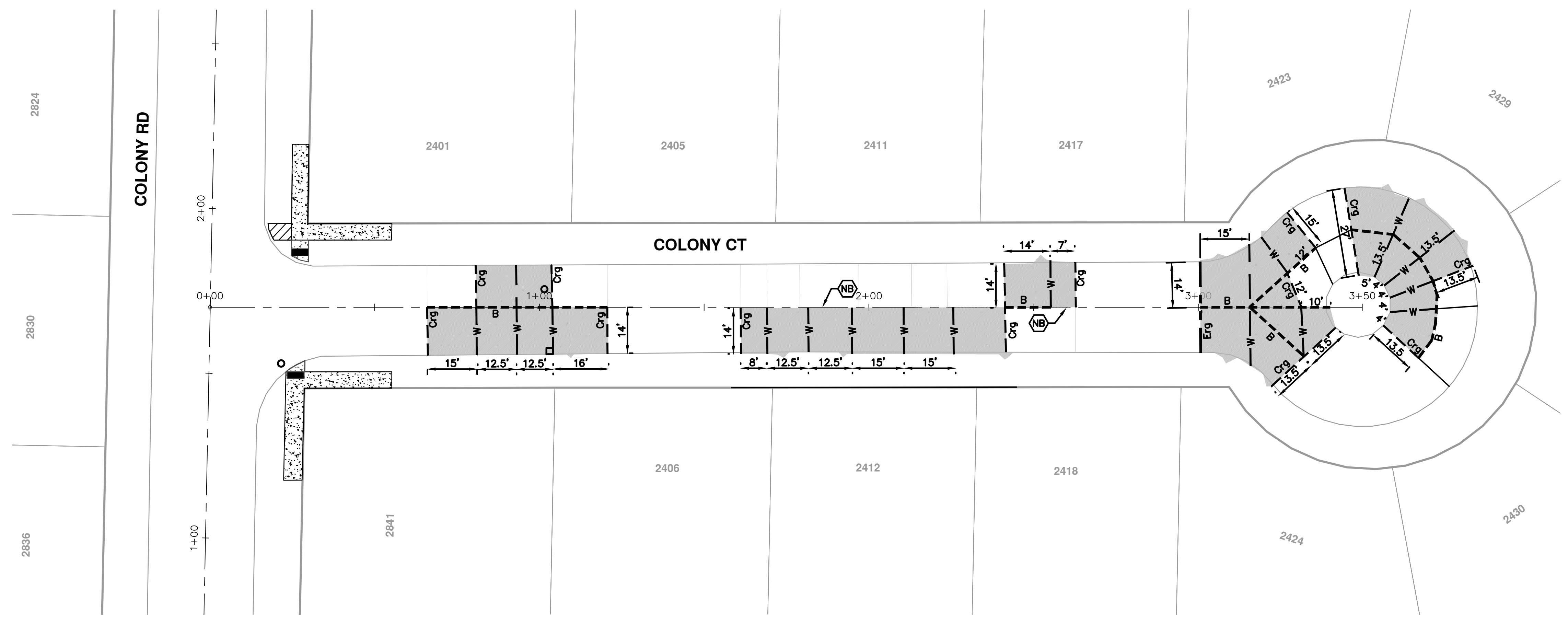
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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	BID SET	3-31-2015	RAG	DAD
00	REVIEW 1	2-27-2015	RAG	DAD



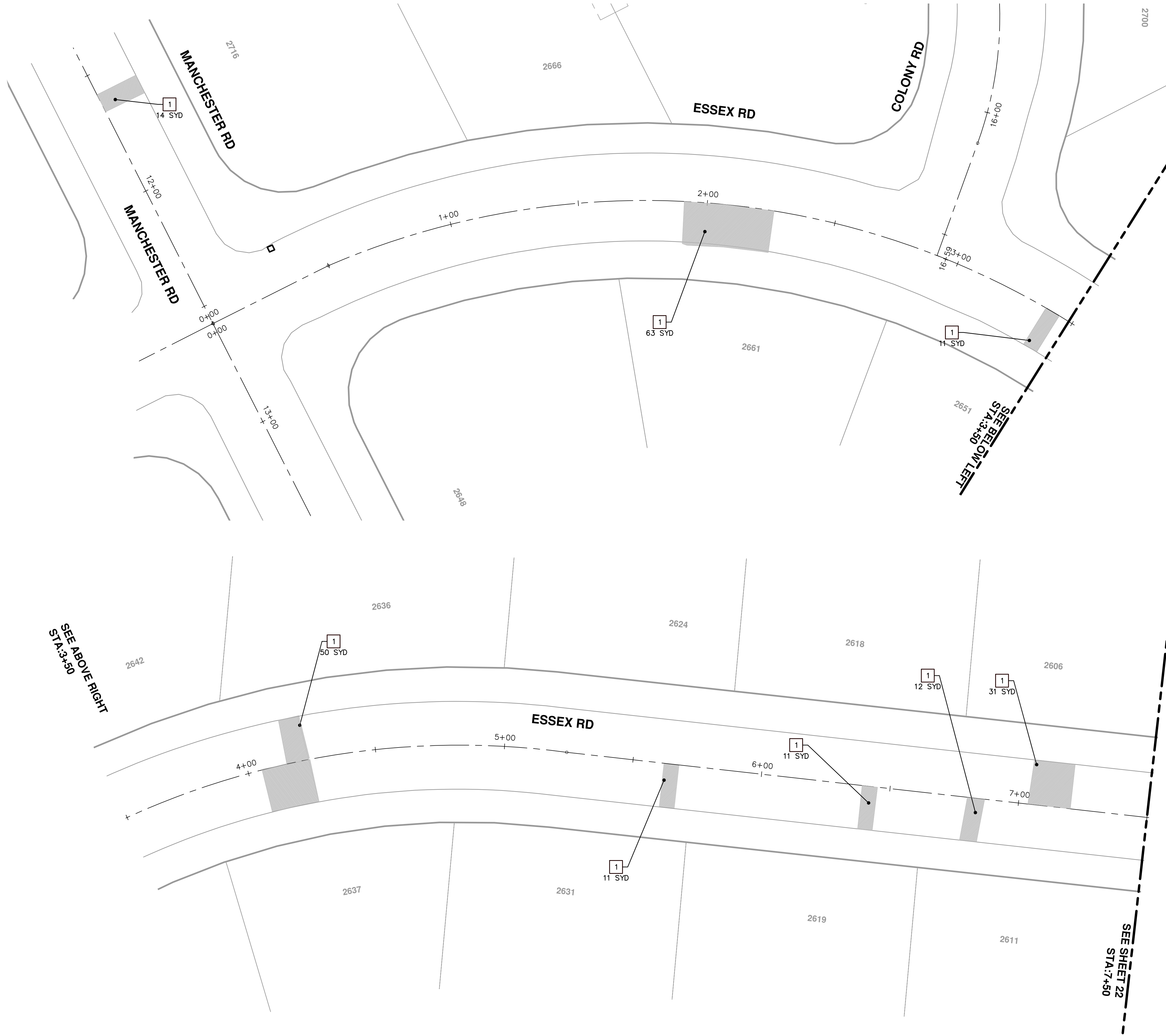
Know what's below.
Call Before you dig.

S:\Project Management\Design\2015024 Colony Essex Manchester\Plan Production\Primary\2015024CJOINT.dwg Dwg Created: 6-Feb-15 --_a2 standard bw.stb -- Plot Date: 31-Mar-15



 <small>Know what's below. Call before you dig.</small>					
 <small>CITY OF ANN ARBOR MICHIGAN</small>	PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR COLONY ESSEX MANCHESTER CONCRETE PAVEMENT REPAIR <small>COLONY CT AND ESSEX EAST STA 0+00 1+55 JOINTING PLAN</small>				
<small>SCALE PLAN: 1" = 20'</small> 	<small>DRAWING No.</small> 2015024-21				
<small>SHEET No.</small> 21 OF 25	<small>REV.</small> 00 <small>REVIEW 1</small>	<small>DESCRIPTION</small> 01 BID SET 00 REVIEW 1	<small>DATE</small> 3-31-2015 2-27-2015	<small>RAG</small> RAG RAG	<small>DAD</small> DAD DAD
<small>CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET ANN ARBOR MI 48106-8647 ANN ARBOR 734-794-4410 www.a2gov.org</small>					

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SEE ABOVE RIGHT
STA: 3+50

SEE SHEET 22
STA: 7+50



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
 ESSEX RD
 STA 0+00 TO 7+50 REMOVAL AND CONSTRUCTION PLAN

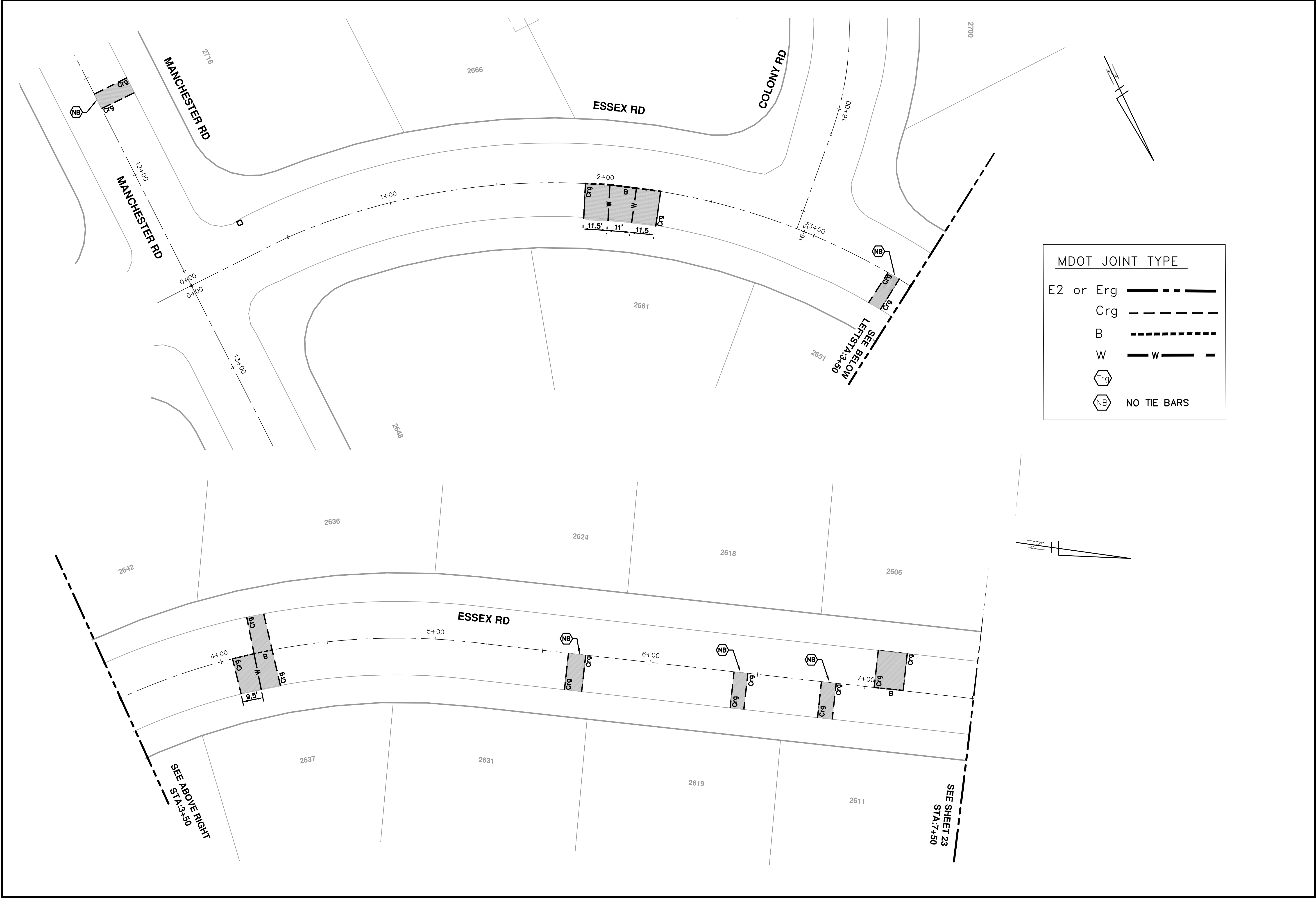
SCALE PLAN: 1" = 20'
 DRAWING No. 2015024-22


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

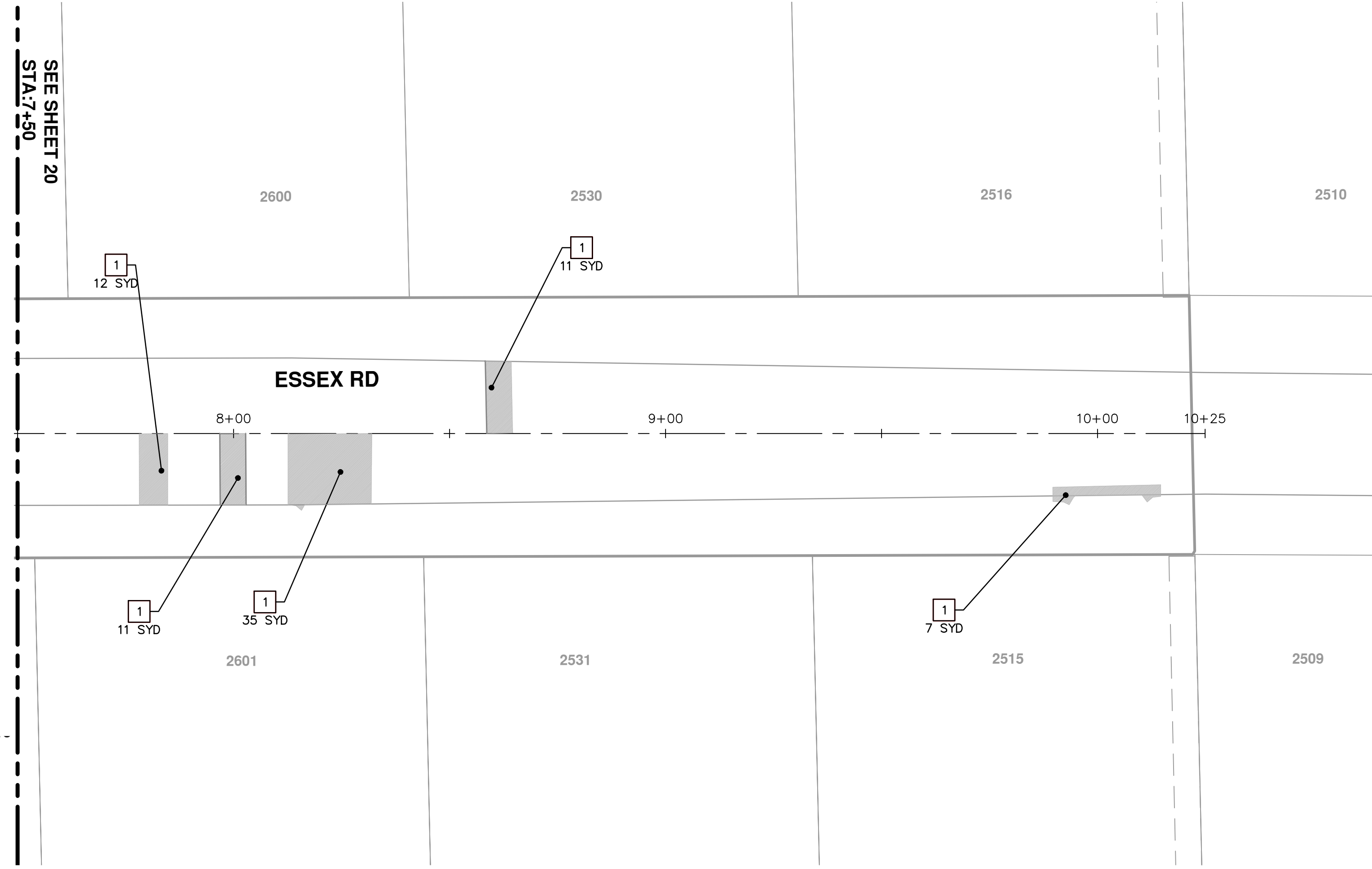
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	BID SET	3-31-2015	RAG	DAD
00	REVIEW	2-27-2015	RAG	DAD

CITY OF ANN ARBOR
 PUBLIC SERVICE
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-8647
 ANN ARBOR: 734-794-4410
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR COLONY ESSEX MANCHESTER CONCRETE PAVEMENT REPAIR	CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET ANN ARBOR, MI 48106-8647 ANN ARBOR: 734.764.4410 www.a2gov.org
SCALE PLAN: 1" = 20' DRAWING No. 2015024-23	SHEET No. 23 OF 25
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR COLONY ESSEX MANCHESTER CONCRETE PAVEMENT REPAIR ESSEX RD STA 0+00 TO 7+50 JOINTING PLAN	CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET ANN ARBOR, MI 48106-8647 ANN ARBOR: 734.764.4410 www.a2gov.org
REV. 00 DATE 2-27-2015 DESCRIPTION	REV. 01 DATE 3-31-2015 DESCRIPTION
REV. 00 DATE 2-27-2015 DESCRIPTION	REV. 01 DATE 3-31-2015 DESCRIPTION
REV. 00 DATE 2-27-2015 DESCRIPTION	REV. 01 DATE 3-31-2015 DESCRIPTION
REV. 00 DATE 2-27-2015 DESCRIPTION	REV. 01 DATE 3-31-2015 DESCRIPTION
REV. 00 DATE 2-27-2015 DESCRIPTION	REV. 01 DATE 3-31-2015 DESCRIPTION



SEE SHEET 20
STA: 7+50

CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 COLONY ESSEX MANCHESTER
 CONCRETE PAVEMENT REPAIR
 ESSEX RD
 STA 7+50 TO 10+25 REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN: 1" = 20'
 DRAWING No.
 2015024-24

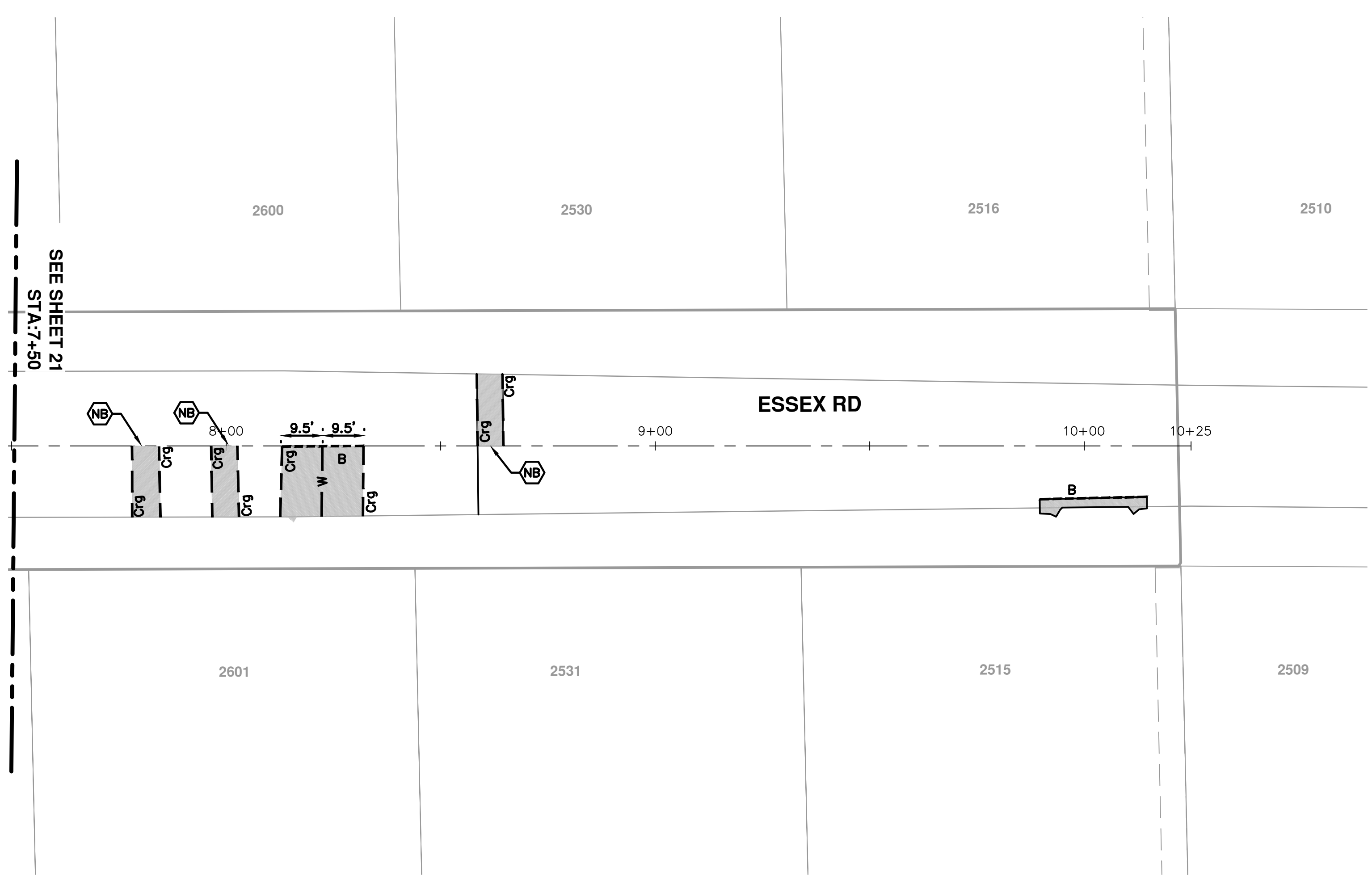
SHEET No.
 24 OF 25

CITY OF ANN ARBOR
 PUBLIC SERVICE
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 ANN ARBOR, MI 48106-8647
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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	BID SET	3-31-2015	RAG	DAD
00	REVIEW 1	2-27-2015	RAG	DAD





SEE SHEET 21
STA: 7+50

MDOT JOINT TYPE	
E2 or Erg	
CrG	
B	
W	
	NO TIE BARS