

# Appendix **A**

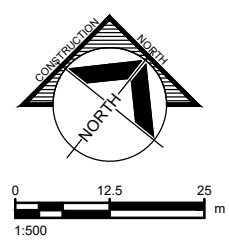
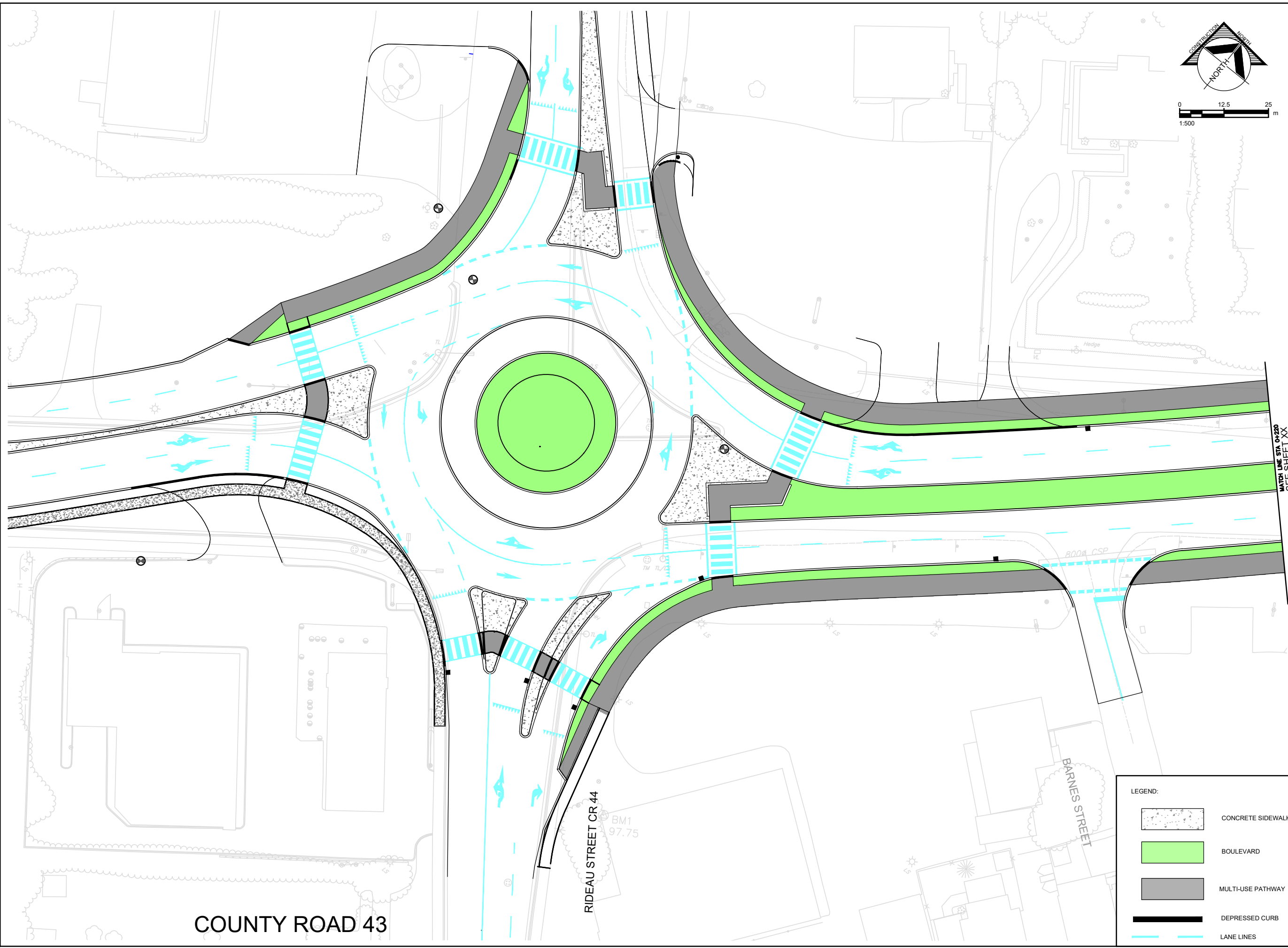
## 2021 Design

- Corridor Plans
  - Typical Cross-Section
  - Bridge General Arrangement Plan
-

- **Corridor Plans**

Project Management Initials: \_\_\_\_\_ Designer: \_\_\_\_\_ Checked: \_\_\_\_\_ Approved: \_\_\_\_\_  
 Project Management Initials: \_\_\_\_\_ Designer: \_\_\_\_\_ Checked: \_\_\_\_\_ Approved: \_\_\_\_\_

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COUNTY ROAD 43

RIDEAU STREET CR 44

BARNES STREET

LEGEND:

	CONCRETE SIDEWALK
	BOULEVARD
	MULTI-USE PATHWAY
	DEPRESSED CURB
	LANE LINES

MATCH LINE STA. 0+220  
SEE SHEET XX

**PROJECT**  
 COUNTY ROAD 43  
 Widening From County  
 Road 44 to Colonnade Dr.  
 Kemptville

**CLIENT**  
 UNITED COUNTIES OF  
 LEEDS & GRENVILLE  
 25 CENTRAL AVE W.  
 BROCKVILLE, ON  
 K6V 4N6  
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 www.leedsgrrenville.com

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**NOTES**

**REGISTRATION**

**ISSUE/REVISION**

I/R	DATE	DESCRIPTION

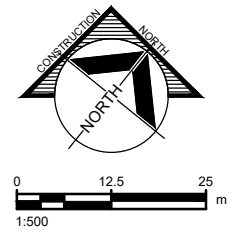
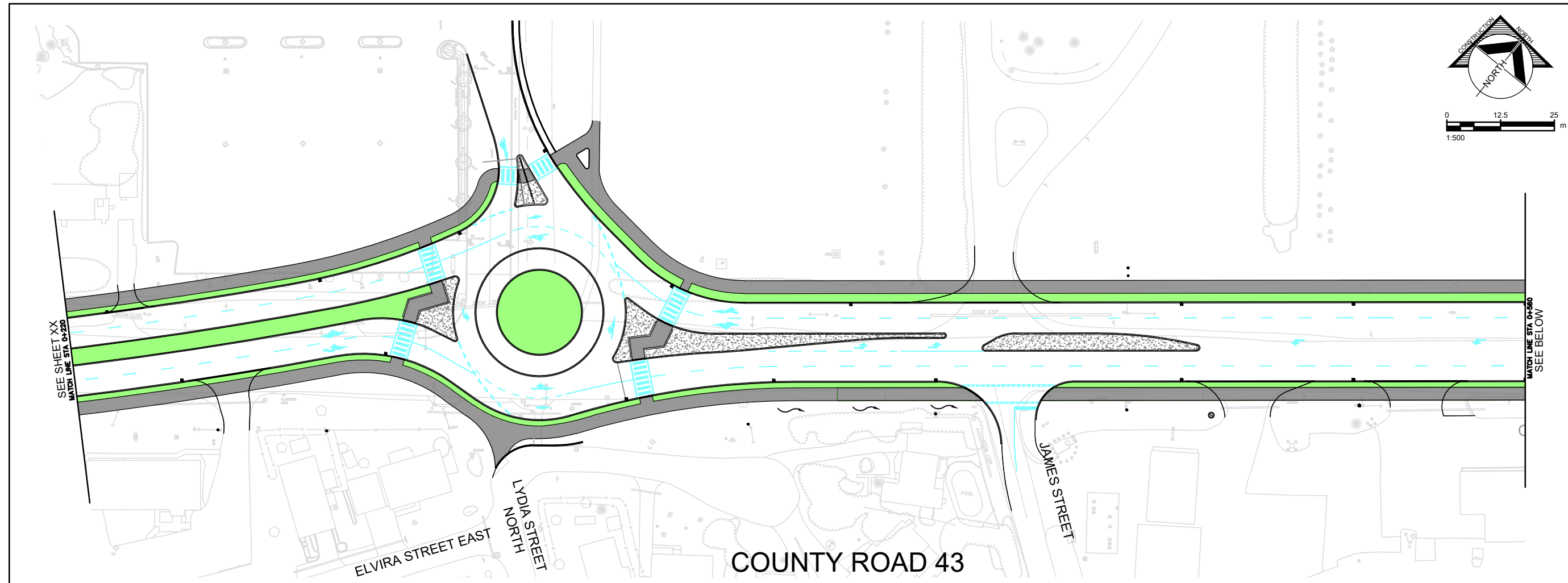


**PROJECT NUMBER**  
 60526242

**SHEET TITLE**  
 COUNTY ROAD 43  
 GEOMETRY  
 STA. 0+040 to STA. 0+220

**SHEET NUMBER**  
 1

Project Management Initials: \_\_\_\_\_ Designer: \_\_\_\_\_ Checked: \_\_\_\_\_ Approved: \_\_\_\_\_  
 Project Management Initials: \_\_\_\_\_ Designer: \_\_\_\_\_ Checked: ARCH D ZAPRAGWENT



**PROJECT**  
 COUNTY ROAD 43  
 Widening From County  
 Road 44 to Colonnade Dr.  
 Kemptville

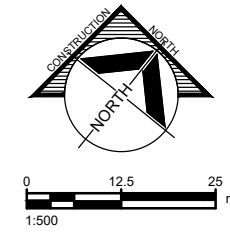
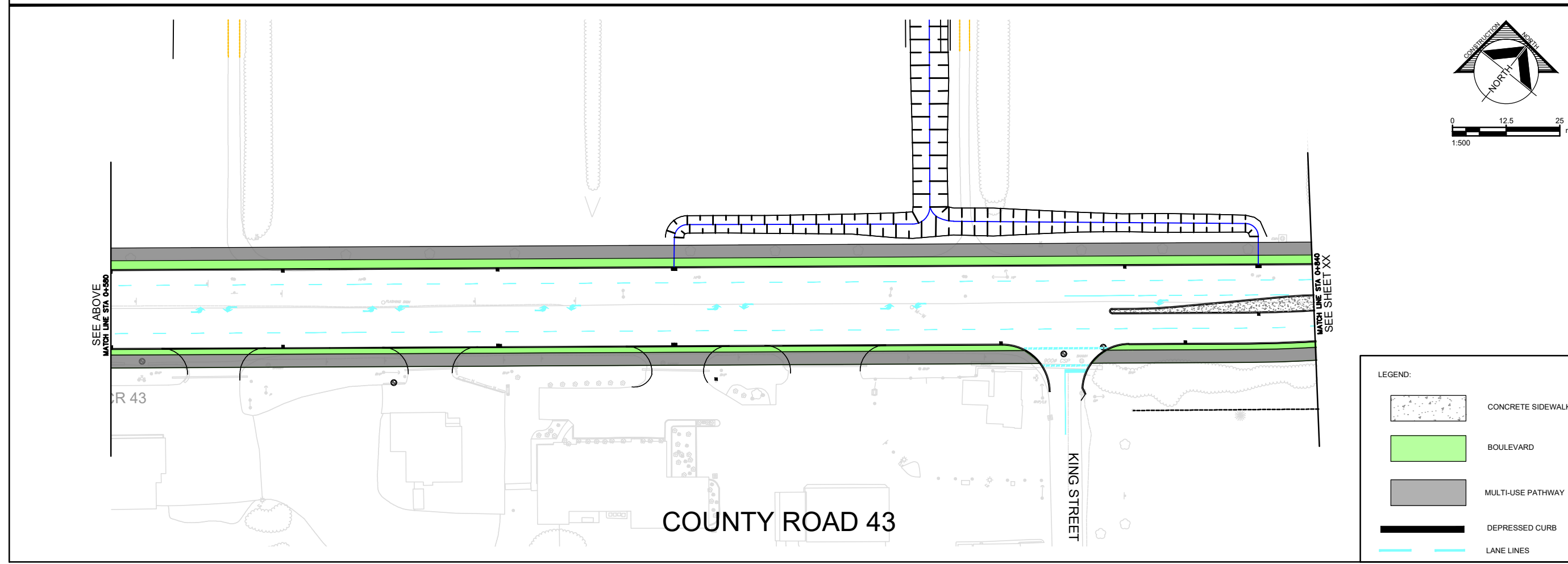
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**LEGEND:**

	CONCRETE SIDEWALK
	BOULEVARD
	MULTI-USE PATHWAY
	DEPRESSED CURB
	LANE LINES

**ISSUE/REVISION**

I/R	DATE	DESCRIPTION



**PROJECT NUMBER**  
 60526242

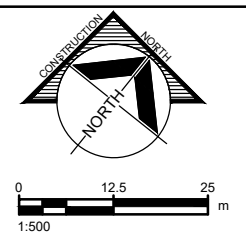
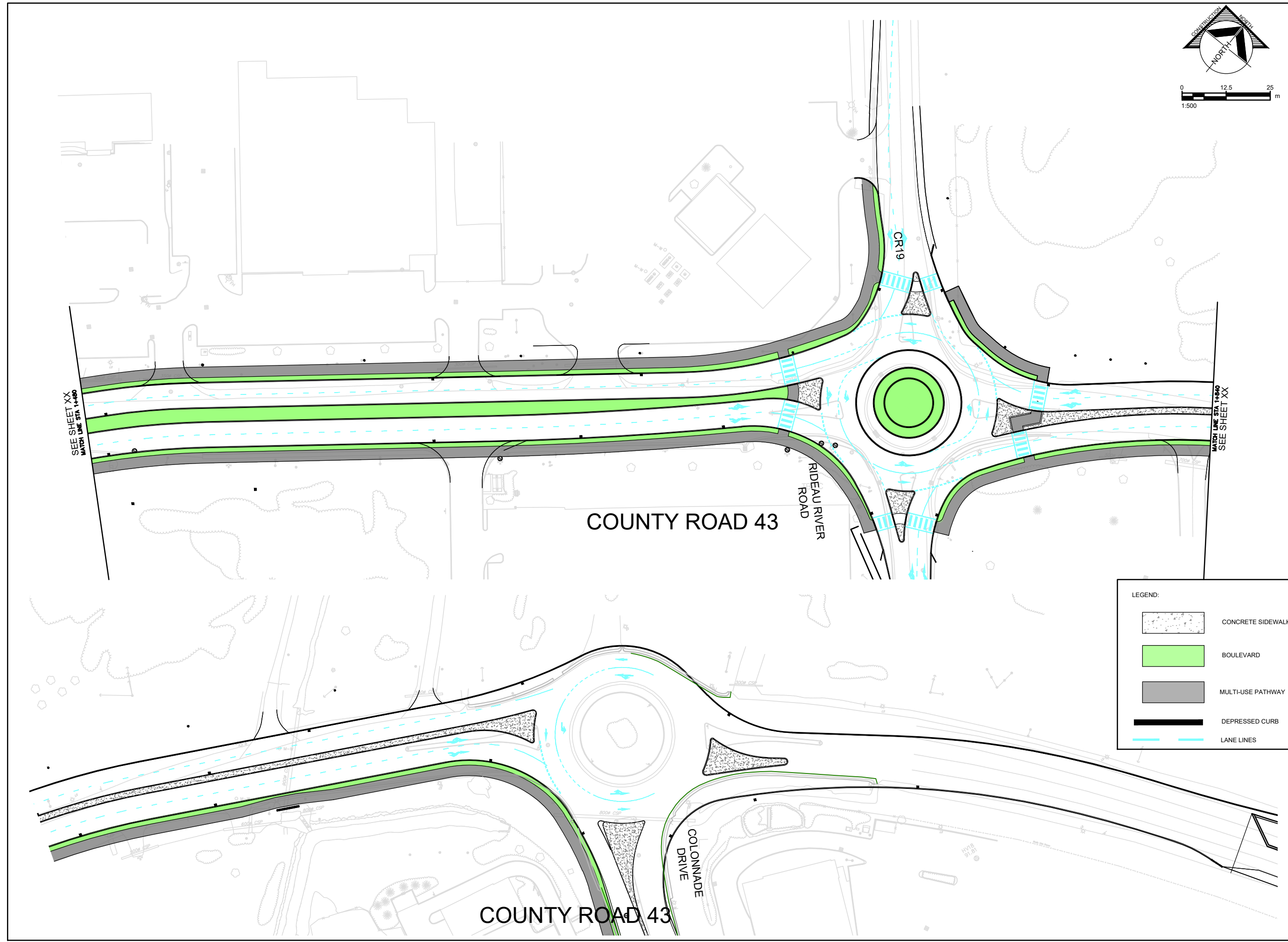
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 COUNTY ROAD 43  
 GEOMETRY  
 STA. 0+220 to STA. 0+840

**SHEET NUMBER**  
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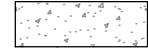






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**LEGEND:**

-  CONCRETE SIDEWALK
-  BOULEVARD
-  MULTI-USE PATHWAY
-  DEPRESSED CURB
-  LANE LINES

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**ISSUE/REVISION**

I/R	DATE	DESCRIPTION



**PROJECT NUMBER**  
 60526242

**SHEET TITLE**  
 COUNTY ROAD 43  
 GEOMETRY  
 STA. 1+840 to STA. 2+180

**SHEET NUMBER**  
 4

COUNTY ROAD 43

COUNTY ROAD 43

COLONNADE  
 DRIVE

RIDEAU RIVER  
 ROAD

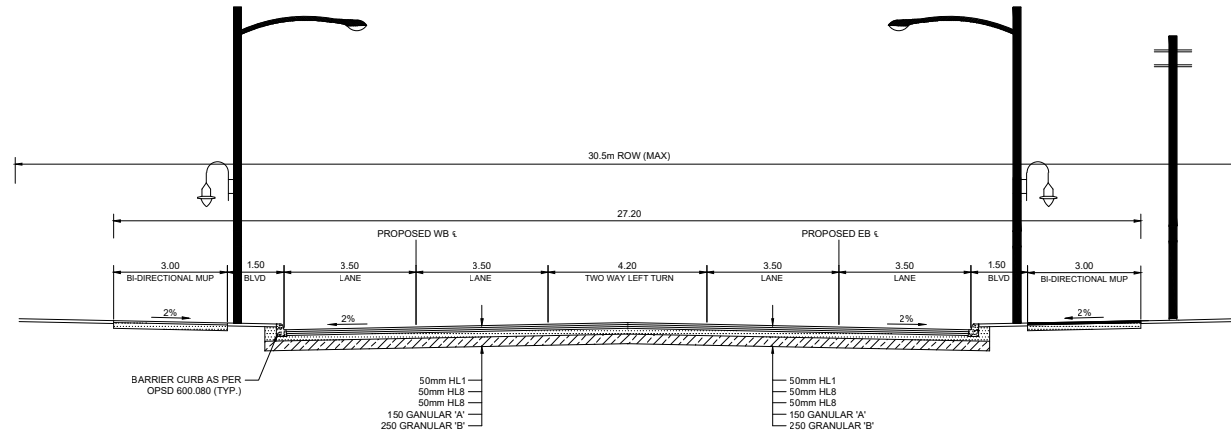
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SEE SHEET XX  
 MATCH LINE STA 1+480

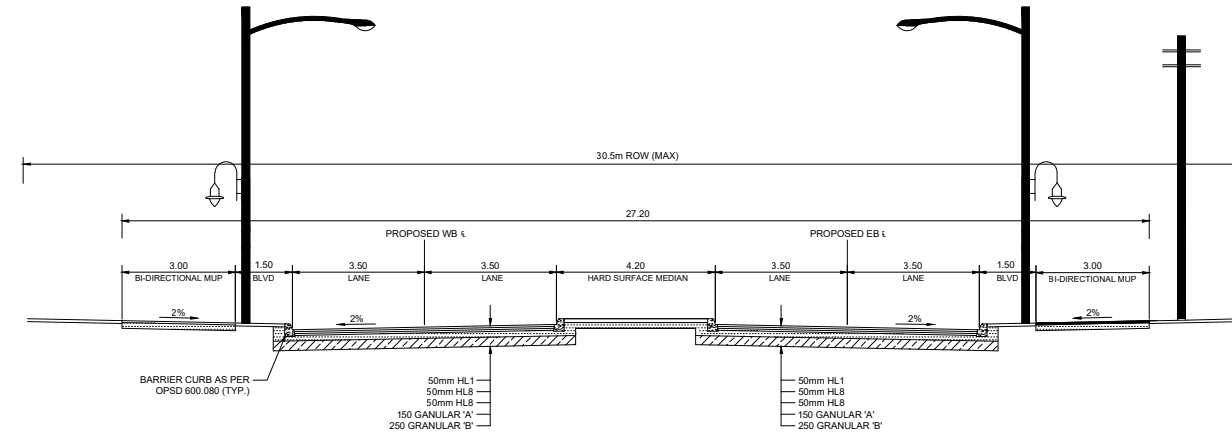
MATCH LINE STA 1+840  
 SEE SHEET XX

- **Typical Cross-Section**

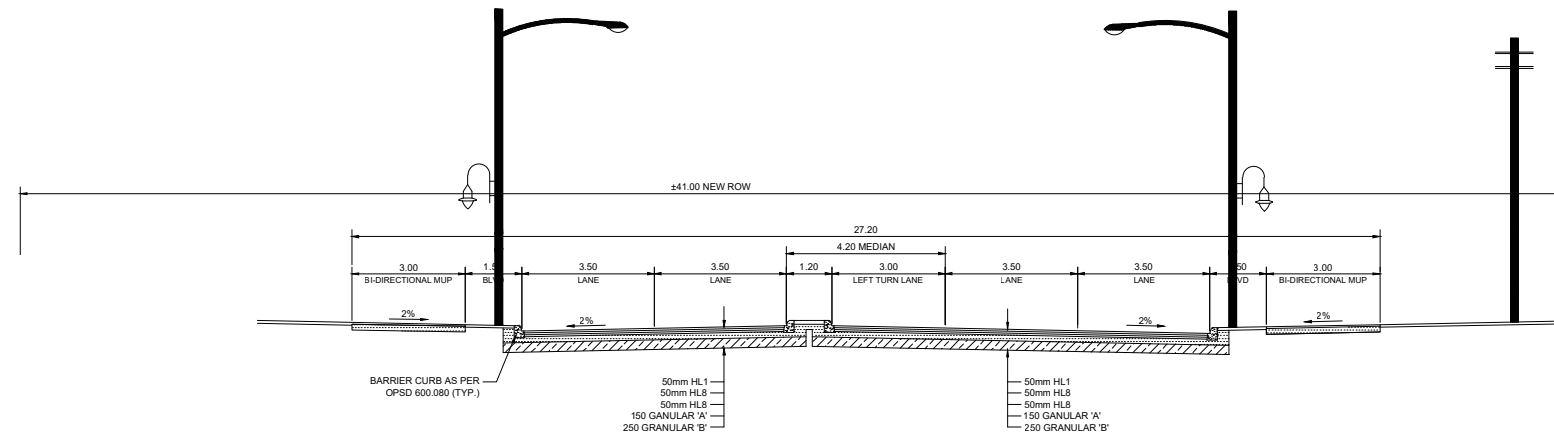
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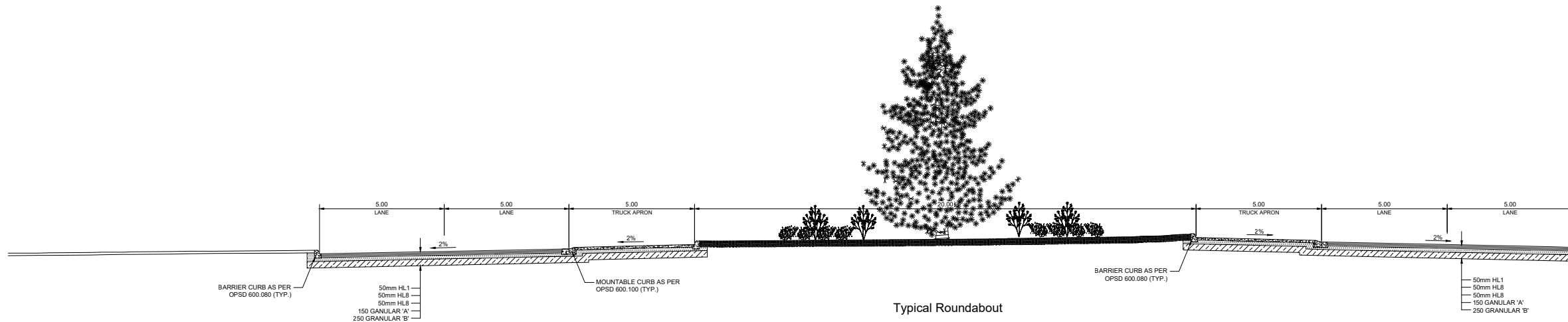
Two Way Left Turn Lane Cross-Section



Cross-section with 4.20m Median and Multi Use Pathway (MUP)



Left Turn Lane Cross-Section at High School



Typical Roundabout

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**NOTES**

**REGISTRATION**

**ISSUE/REVISION**

I/R	DATE	DESCRIPTION



**PROJECT NUMBER**  
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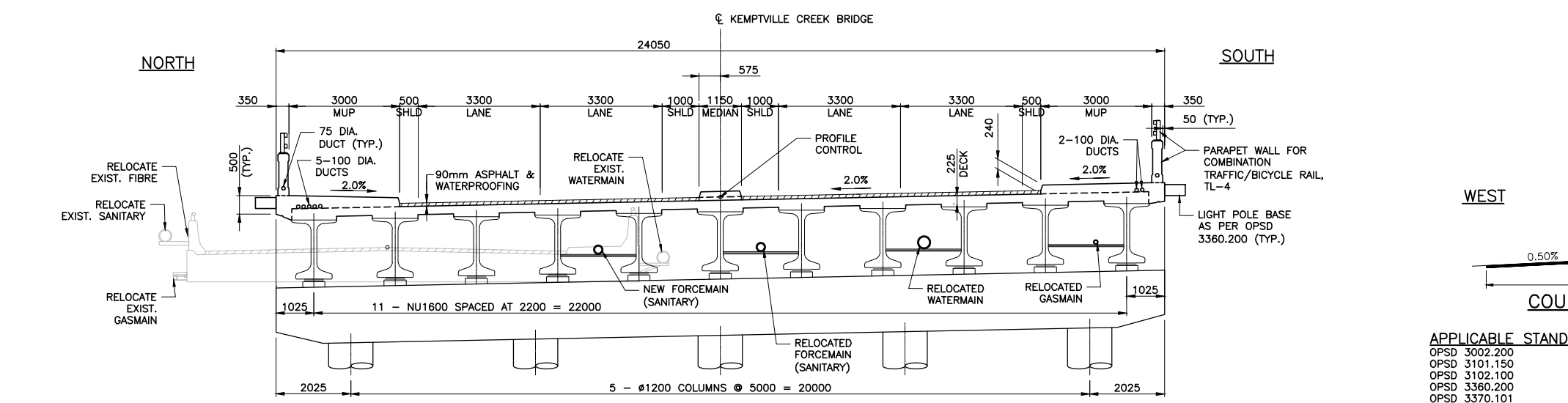
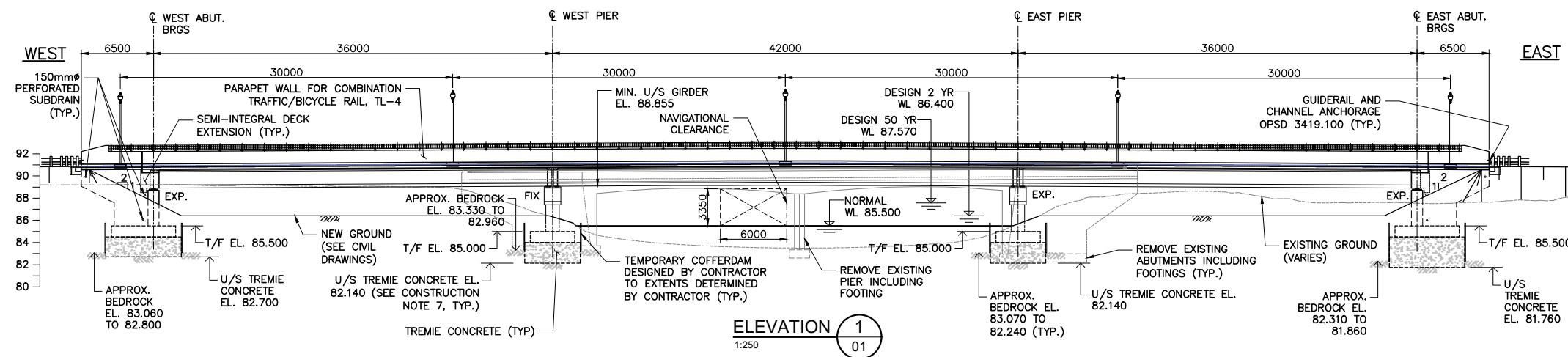
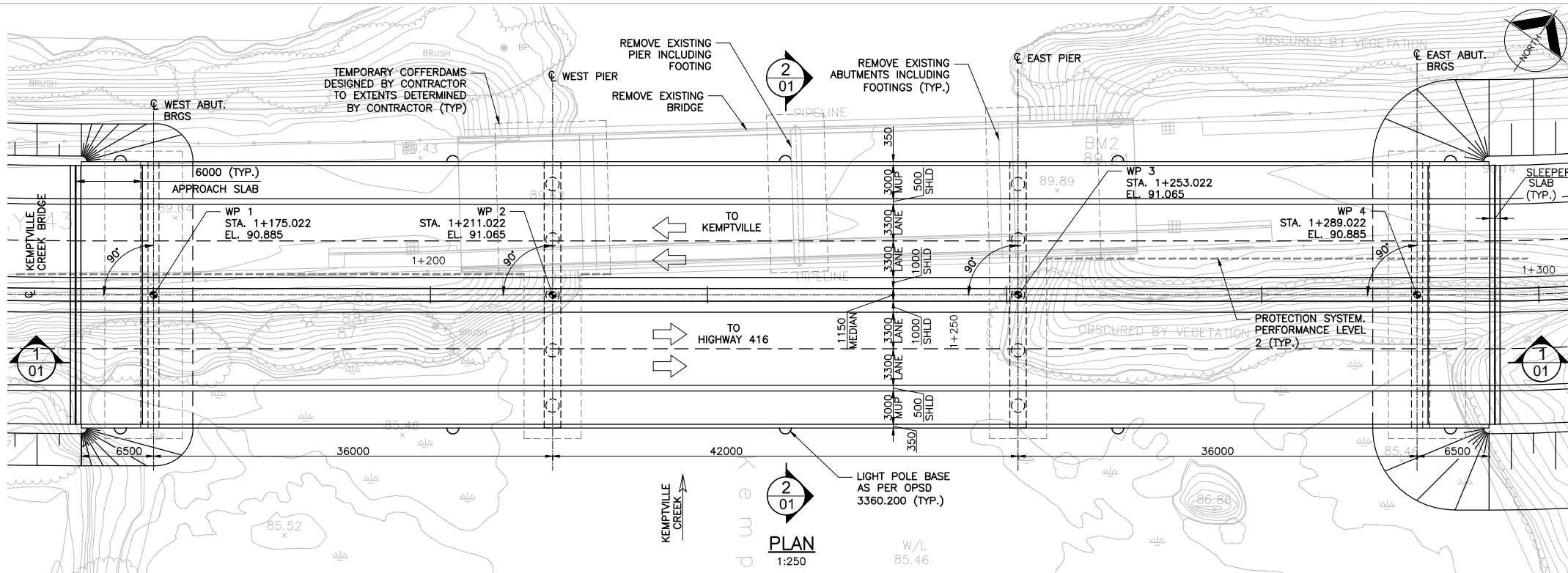
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 COUNTY ROAD 43  
 TYPICAL CROSS-SECTION

**SHEET NUMBER**  
 T1

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- **Bridge General Arrangement Plan**

ANSI D 864mm x 559mm  
 Project Management Initials: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Check: \_\_\_\_\_  
 Approved: \_\_\_\_\_  
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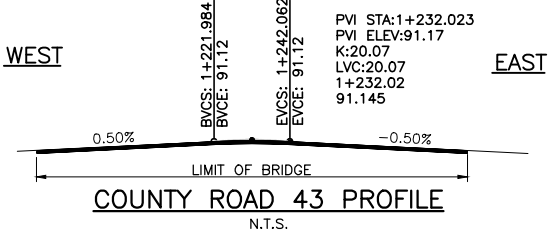
**GENERAL NOTES**

- CLASS OF CONCRETE**
- FOOTING/MASS CONCRETE 30 MPa
  - REMAINDER UNLESS OTHERWISE NOTED 30 MPa
  - CLASS OF CONCRETE FOR PRECAST PRE-STRESSED GIRDERS IS GIVEN ON PRE-STRESSED GIRDER DRAWINGS.
- CLEAR COVER TO REINFORCING STEEL**
- FOOTINGS 100 ± 25mm
  - DECK TOP 70 ± 20mm
  - BOTTOM 40 ± 10mm
  - REMAINDER UNLESS OTHERWISE NOTED 70 ± 20mm

- REINFORCING STEEL**
- REINFORCING STEEL SHALL BE GRADE 400W.
  - UNLESS SHOWN OTHERWISE, TENSION LAP SPLICES SHALL BE CLASS B.
  - BAR MARKS WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS.
  - STAINLESS REINFORCING STEEL SHALL BE TYPE 316LN, DUPLEX 2205 OR XM-28 AND HAVE A MINIMUM YIELD STRENGTH OF 500 MPa, UNLESS OTHERWISE SPECIFIED.
  - GLASS FIBRE REINFORCED POLYMER REINFORCING BARS SHALL BE GRADE I, GRADE II OR GRADE III AS SPECIFIED IN THE CONTRACT DRAWINGS. THE NOMINAL DIAMETER, TENSILE MODULUS OF ELASTICITY AND GUARANTEED MINIMUM TENSILE STRENGTH SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS.
  - BAR MARKS WITH THE PREFIX 'GI' DENOTE GRADE I GLASS FIBRE REINFORCED POLYMER BARS.
  - BAR MARKS WITH THE PREFIX 'GII' DENOTE GRADE II GLASS FIBRE REINFORCED POLYMER BARS.
  - BAR MARKS WITH THE PREFIX 'GIII' DENOTE GRADE III GLASS FIBRE REINFORCED POLYMER BARS.
  - BAR HOOKS SHALL HAVE STANDARD HOOK DIMENSIONS USING MINIMUM BEND DIAMETERS. WHILE STIRRUPS AND TIES SHALL HAVE MINIMUM HOOK DIMENSIONS. ALL HOOKS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL STANDARD DRAWING SS12-1, UNLESS INDICATED OTHERWISE.
- CONSTRUCTION NOTES**
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING BRIDGE, DIMENSIONS, PROPOSED WORK AND DETAILS AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING WITH THE WORK.
  - THE CONTRACTOR SHALL ESTABLISH THE BEARING SEAT ELEVATIONS BY DEDUCTING THE ACTUAL BEARING THICKNESSES FROM THE TOP OF BEARING ELEVATIONS. IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN WITH THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE REINFORCING STEEL TO SUIT.
  - NO BACKFILL SHALL BE PLACED UNTIL THE DECK CONCRETE HAS REACHED 75% OF ITS SPECIFIED STRENGTH.
  - BACKFILL SHALL BE PLACED SIMULTANEOUSLY BEHIND BOTH ABUTMENTS KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BE GREATER THAN 0.5m.
  - CONCRETE BARRIER/PARAPET WALLS ON RETAINING/WING WALLS SHALL NOT BE CAST UNTIL THE RETAINING/WING WALL BACKFILL HAS BEEN COMPLETED.
  - THE CONTRACTOR SHALL PROVIDE DEBRIS CONTAINMENT MEASURES TO ENSURE NO DEBRIS ENTERS THE WATERCOURSE.
  - PIER TREMIE CONCRETE THICKNESS IS BASED ON A MAXIMUM WATER ELEVATION OF 85.75m. IF WATER ELEVATION IS ABOVE 85.75m, CONTRACTOR SHALL DESIGN AN INCREASED THICKNESS OF TREMIE CONCRETE PLUG BY EXCAVATING DEEPER. UNDERSIDE OF FOOTING ELEVATION SHALL NOT BE CHANGED.

**LIST OF DRAWINGS:**

- GENERAL ARRANGEMENT
- BOREHOLE LOCATIONS AND SOIL STRATA
- CONSTRUCTION STAGING
- EXCAVATION
- FOUNDATION LAYOUT & FOOTING REINFORCEMENT
- ABUTMENT DETAILS
- WINGWALLS
- PIER DETAILS I
- PIER DETAILS II
- NU GIRDER
- NU GIRDER DETAILS AND BEARING
- DECK DETAILS
- DECK REINFORCEMENT I
- DECK REINFORCEMENT II
- PARAPET WALL FOR COMBINATION TRAFFIC/BICYCLE RAIL, TL-4
- RAILING ON PARAPET FOR COMBINATION TRAFFIC/BICYCLE RAIL, TL-4
- 6000mm APPROACH SLAB
- EXPANSION JOINT TYPE "C" AND SLEEPER SLAB
- STRIP SEAL EXPANSION JOINT - TYPE "C" DETAILS
- SEQUENCE OF EXPANSION JOINT INSTALLATION
- STRUCTURAL STANDARDS
- ELECTRICAL EMBEDDED WORK



- APPLICABLE STANDARD DRAWINGS**
- OPSD 3002.200 FOUNDATION PILES; STEEL SHEET PILE ANCHORAGE
  - OPSD 3101.150 WALLS, ABUTMENT, BACKFILL, MINIMUM GRANULAR REQUIREMENT
  - OPSD 3102.100 WALLS, ABUTMENT, BACKFILL, DRAIN
  - OPSD 3360.200 DECK LIGHT POLE BASES STRUCTURES WITH PARAPET WALLS
  - OPSD 3370.101 DECK, WATERPROOFING HOT APPLIED ASPHALT MEMBRANE AT ACTIVE CRACKS GREATER THAN 2mm WIDE AND CONSTRUCTION JOINTS
  - OPSD 3419.100 BARRIERS AND RAILINGS, STEEL GUIDE RAIL AND CHANNEL ANCHORAGES
  - OPSD 3941.200 FIGURES IN CONCRETE, SITE NUMBER AND DATE, LAYOUT
  - OPSD 3950.100 JOINTS, CONCRETE EXPANSION AND CONSTRUCTION, ON STRUCTURE
- DRAWING NOT TO BE SCALED  
 100mm ON ORIGINAL DRAWING



**PROJECT**  
 COUNTY ROAD 43  
 WIDENING FROM  
 COUNTY ROAD 44 TO  
 COLONNADE DRIVE,  
 KEMPTVILLE

**CLIENT**  
 UNITED COUNTIES OF  
 LEEDS AND GRENVILLE

**CONSULTANT**  
 AECOM  
 302-1150 MORRISON DRIVE  
 OTTAWA, ON K2H 8S9  
 613.820.8282 TEL 613.820.8338 FAX  
 WWW.AECOM.COM

**LEGEND**

ABUT.	DENOTES ABUTMENT
ADD.	DENOTES ADDITIONAL
APPROX.	DENOTES APPROXIMATE
BOT.	DENOTES BOTTOM
B.F.	DENOTES BACK FACE
BRG.	DENOTES BEARING
C.J.	DENOTES CONSTRUCTION JOINT
DIA.	DENOTES DIAMETER
E.	DENOTES EAST
E.F.	DENOTES EACH FACE
EL.	DENOTES ELEVATION
E.W.	DENOTES EACH WAY
EXIST.	DENOTES EXISTING
F.F.	DENOTES FRONT FACE
HOR.	DENOTES HORIZONTAL
HWL	DENOTES HIGH WATER LEVEL
I.F.	DENOTES INSIDE FACE
MIN.	DENOTES MINIMUM
N.T.S.	DENOTES NOT TO SCALE
O.F.	DENOTES OUTSIDE FACE
SHLD	DENOTES SHOULDER
STA	DENOTES STATION
T/F	DENOTES TOP OF FOOTING
T/P	DENOTES TOP OF PAVEMENT
THK.	DENOTES THICKNESS
TYP.	DENOTES TYPICAL
U/S	DENOTES UNDERSIDE
VERT.	DENOTES VERTICAL
W.	DENOTES WEST
WL	DENOTES WATER LEVEL
W.P.	DENOTES WORKING POINT

**ISSUE/REVISION**

IR	DATE	DESCRIPTION
3	MAR. 16, 2021	ISSUED FOR PERMIT
2	FEB. 12, 2021	ISSUED FOR INTERNAL REVIEW
1	AUG. 21, 2020	ISSUED FOR CLIENT REVIEW



**PROJECT NUMBER**  
 60526242

**SHEET TITLE**  
 KEMPTVILLE CREEK BRIDGE  
 GENERAL ARRANGEMENT

**SHEET NUMBER**  
 01 of 22

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