



## • Environmental Impact Assessment Registration

**Name of Proponent:**

Kent Building Supplies, a division of J.D. Irving

**Address of Proponent:**

P.O. Box 1200  
300 Union Street  
Saint John, NB E2L 4G7

**Chief Executive Officer:**

J.S. Valcour, General Manager, Kent Building Supplies, J.D. Irving Limited  
Tel: 506.632.4106

**Principal Contact Person for Purposes of the EIA:**

Rick Davis (Kent Building Supplies), Project Manager  
Tel: 506.648.3611.

Charles Goguen (Consultant).  
Project Manager  
Tel: 506.452.9000

**Property Ownership:**

City of Fredericton

**Environmental Impact Assessment Registration**  
Pursuant to Section 5 (2) of the Environmental Impact Assessment Regulation 87-83 Clean  
Environment Act

**1.0 The Proponent:**

**(i) Name of Proponent:**

Kent Building Supplies, a Division of J.D. Irving, Limited

**(ii) Address of Proponent:**

P.O. Box 1200,  
300 Union Street,  
Saint John, NB, E2L 4G7

**(iii) Chief Executive Officer:**

**Name:** J.S. Valcour  
**Official Title:** General Manager, Kent Building Supplies, J.D. Irving, Limited  
**Telephone No:** 506.632.4106

**(iv) Principal Contact Person for purposes of Environmental Impact Assessment:**

**Name:** Rick Davis (Kent Building Supplies)  
**Official Title:** Project Manager  
**Telephone No:** 506.648.3611

**Name:** Charles Goguen (exp Services Inc.)  
**Official Title:** Project Manager  
**Telephone No:** 506.452.9000

**(v) Property Ownership:**

**City of Fredericton**

## **2. The Undertaking**

### **(i) Name of the Undertaking:**

Bishop Drive – Buildout of four lane roadway cross section.

### **(ii) Project Overview:**

The proposed work involves the widening of the existing Bishop Drive to the four lane cross section required to handle traffic volumes as part of the City of Fredericton Uptown Network Project which includes connectivity from Smythe to Bishop Drive via a round-about addition on Route 8. The widening will include the addition of catch basins that will collect the runoff and divert it to the existing storm main that conveys it to the previously constructed attenuation facility (located at the intersection of Arnold Drive and Bishop Drive). The existing pond was sized to collect and attenuate the additional roadway runoff associated with this widening. The roadway widening will involve a fill of approximately 1.2 m of which the toe of slope will fall within the existing municipal right-of-way (ROW).

Under a previous project (EIA Certificate of Determination File Number 4561-3-951) the roadway near the corner of Arnold Drive and Bishop was widened and the storm sewer was installed. The extent of this work is shown on the attached Drawing 2-1 entitled “Wetland Impact Zone” as Phase 1.

It was identified at that time that the full buildout of the roadway would be required once traffic volumes warranted the addition of lanes and the additional impacted area is shown in Phase 2 on the same plan. At that time, it was deemed necessary for compensation to be provided for the Phase 1 work as a result of the no net loss policy, the proponent also provided additional compensation for the area required for Phase 2 work in anticipation of the Phase 2 work.

### **(iii) Purpose/Rationale/Need for the Undertaking:**

For years the City has identified a need for a third connection from the downtown core to the southern reaches of the City. The existing Regent Street and Hanwell Road connections are functioning beyond the desired levels of service, which has been worsening as more people are travelling these networks. The City is moving forward with a project for a third connection at Smythe Street with the installation of a roundabout at Route 8 in order to get traffic to Bishop Drive. With the addition of this connection, predictive models have identified the need for completion of the roadway cross section between the Smythe Street extension and Arnold Drive.

**(iv) Project Location:**

The proposed project is located on Bishop Drive in Fredericton, NB, County of York (PIDs 75331413, 74331421, 75331439). The project is located near the Smythe Street water tower and runs along Bishop Drive to the intersection of Arnold Drive.

**(v) Siting Considerations:**

The location of the intersection is constrained by existing infrastructure on the north side of the roadway and the roadway cross section is to fit within the right of way. The City have reduced the footprint by removing the sidewalk on the south side of the road to minimize the amount of wetland impacted. The land required for the work falls within the existing right of way, and the total land compensated for under the previous EIA.

**(vi) Physical Components and Dimensions of the Project:**

The Bishop Drive four lane buildout spans three PID properties (75331413, 74331421, 75331439) that are currently owned by the City of Fredericton, with no additional land required.

The total area of impacted wetland and buffer for both phases of the work is 0.791 hectares with the work for 0.288 hectares already having been completed. The balance of 0.503 hectares is required for the second phase of work (current phase). All of the impacted area falls within the Provincially Significant and Regulated Wetland Map 30 m buffers.

The widening of roadway is 670 m long with varying widths between 0 m where it ties to existing points, to 12.7 m at its widest (at the Route 8 and Bishop Drive intersection). It should be noted that the sidewalk has been removed on the South side of Bishop Drive to reduce the footprint of the project which presents a saving of approximately 3.5 m width for the length of the roadway. Catch basins are proposed to collect and convey runoff to the existing attenuation facility near the intersection of Bishop Drive and Arnold Drive, which was previously designed to collect the proposed roadway runoff and reduce the impacts from the increased impervious surface area.

**(vii) Construction Details:**

It is anticipated that construction will commence in August 2014 and will take approximately 8 weeks to complete. A typical 5 day work week with 7 am to 7 pm hours of construction is anticipated.

Prior to commencing the work, the contractor will be responsible for the installation and maintenance of various environmental protection measures as outlined in the Environmental Management Manual (NBDOT, Fourth Edition, January 2010).

Site access is available from either end of Bishop Drive, although it is anticipated that the majority of the truck traffic arriving will be containing granular materials and will access Bishop Drive from Arnold Drive, via the Route 8.

As there is no merchantable timber located within the proposed construction, clearing will most likely be completed through the use of a mulching head on an excavator. A dozer and excavator will then grub the land and load it into trucks. Any salvageable topsoil will be kept and grubbing will be sent to an appropriate dump site.

The placement of roadway structure materials will then be placed using dump trucks / trailers, dozer, excavator, loader and roller compactor. The subgrade material is specified to be pitrun that will be hauled from an approved pit depending on the contractor. The crushed rock subbase and base granulars will likely be supplied by one of the two local approved quarries and will be placed using the above equipment.

The installation of new catch basins and associated pipework to connect to the existing storm sewer system will likely commence during the subgrade placement and will be completed using an excavator. Street and traffic lighting with the associated conduit will be installed using an excavator.

The concrete islands and curbing will be installed using slip form equipment, with the delivery of concrete via concrete trucks.

Paving will then commence using pavement spreaders, roller compactors and dump trucks / trailers.

The final stages will involve placement of topsoil and hydroseed / sod. This will likely be completed through the use of excavator and dozer to spread the topsoil and a hydroseed sprayer to finish the surface.

The largest potential source of pollutants is sediment in runoff during the

construction period. As mentioned above, preventative environmental measures will be implemented and maintained during the construction period and some will remain until the grassed areas have stabilized. The other source of potential pollutants is fluids from the equipment used. The City of Fredericton requires the contractor to have a spill response plan and spill kit on site at all times. The appropriate authorities and rehabilitative measures would be followed at the contractor's expense in the event of a spill. Noise pollution is not a concern as the construction is to be completed in a commercial area.

#### **Operation and Maintenance Details:**

The estimated life span for the proposed work is 50 years. There are no operational concerns or issues associated with the roadway widening. Basic roadway maintenance will be completed such as plowing, street cleaning, pipe flushing and mowing.

#### **(viii) Future Modifications, Extensions, or Abandonment:**

A future widening of Bishop Drive to four lanes for the remaining portion of Bishop Drive to the Northwest will occur as the demand triggers the need. The future widening currently falls outside the 30 m buffer zones.

#### **(ix) Project Related Documents**

EIA Certificate of Determination 4561-3-951  
Preliminary Construction Drawings.

### **3. Description of the Existing Environment**

#### **(i) Physical and Natural Features:**

The project is located on the outer limits of the Regent Bog. Pictures in appendix show the edge of the existing roadway where the widening is needed. The Nature Trust of New Brunswick's ESA Summary Report states the following:

*"This small ombrotrophic bog is divided into two parts by a small stream flowing east. The northern part is open in the centre with a mixed surface vegetation and a treed (2-5m Black Spruce) margin. The southern part is moderately treed in the centre by tall (2-6m) Black Spruce and lesser amounts of Tamarack; the margin is heavily treed with the same two species in similar proportions. Some of the Black Spruce at the centre of the bog are over 150 years old. A good example of a bog formed from a small lake – it is small enough that the stages of evolution are apparent. Lady's slipper and Pitcher Plants are abundant, and other flora are typical of northern bogs. The bog is home to a rare non-biting horsefly*

*(Haematopota rara), while the edges provide suitable habitat for several interesting species of butterflies, including the only known NB location of Henry's Elfin."*

Given the time of year, and the need for geotechnical investigation before the ground thaws, we will work to provide additional information about the specific footprint where the proposed work is located once the snow and ice has receded.

(ii) Cultural Features:

An exhaustive evaluation of cultural features has not yet been done, considering the timing of the application and the need for geotechnical investigation, this information will be provided at a later date.

(iii) Existing and Historic Land Uses:

An exhaustive evaluation of existing and historic land uses has not yet been done, considering the timing of the application and the need for geotechnical investigation, this information will be provided at a later date.

#### **4. Summary of Environmental Impacts**

The environmental impacts can be broken into two separate phases, those during construction and those for the constructed product (operational impacts).

For the construction phase, environmental concerns will be much like any other road building project. Heavy equipment will be used which will be the source of exhaust fumes, dust, and noise. There is a potential for unforeseen accidental issues during construction such as hydraulic or fuel leaks. Contractors will be required to adhere to maintenance schedules and inspections for vehicles and equipment. Storing of any hydrocarbons on site within the PSW will not be allowed, fuelling will be done at dedicated fuelling stations. In the event of a spill, appropriately sized spill kits will be on site. The construction period will last approximately 6 to 8 weeks.

The operational impacts include the additional runoff associated with the impervious surface. Stormwater will be collected in catch basins and sent to the existing attenuation pond near the Arnold / Bishop Drive intersection which was sized to include runoff from these proposed works. The existing water quality unit is designed to reduce the amount of silts and suspended solids in the runoff, and also has a feature that would intercept hydrocarbons in the event of a fuel leak on the roadway surface.

The impacts on species at risk will be evaluated once the snow cover clears. Given the time of year, it is beneficial to proceed with geotechnical investigation as soon as possible. The information gathered from the investigation is required to fully understand the soil substrate and to finalize the design requirements.

Although the project involves infilling of a portion of the wetland, the proponent has adhered the no net loss principle and has provided compensation for the affected area.

## **5. Summary of Proposed Mitigation**

- An Environmental Protection Plan (EPP) will be developed by the contractor to address specific construction activities such as refueling, dust control, etc.
- The Contractor will be required to install sediment control measures and will be required to follow a sediment control plan.
- As indicated previously, a stormwater management plan was previously developed under Phase 1 of this project. The impacts of these proposed work has been accounted for.
- Leak and Spill prevention plans will be addressed in the EPP, the Contractor will be required to have fuelling stations outside of the PSW and will be required to follow strict inspection and maintenance on equipment.
- Contingency plans will be in place and will include cleanup protocol in the event of a spill.
- Detailed construction traffic plans will be developed with the Consultant and will be included in tender packages.
- The Consultant will be required to provide full time inspection during construction to monitor construction activities and compliance to specifications. This will include adherence to EPP.

As stated previously, a more detailed investigation of species at risk will be done once the snow clears. If the results reveal that other specific mitigation measure are required, we will include them at that time.

## **6. Public Involvement**

The proponent will adhere to the minimum requirements for public involvement as follows: Elected officials will be notified along with other key stakeholder groups; written notification will be provided to residents and landowners; the registration document will be placed on the government website; and the proponent will organize an open house for public to attend and become familiar with the project.

## **7. Approval of the Undertaking**

List the main permits, licenses, approvals, and other forms of authorization required for the undertaking, together with the names of the authorities responsible for issuing them (*e.g.*, federal



government department, provincial government department, municipal council, etc.)

NBDELG - EIA Assessment Registration  
NBDELG - Watercourse Alteration Permit

**8. Funding**

Not Applicable

**Date of Submission:**

2014/Apr/11

 For

**9. Signature**

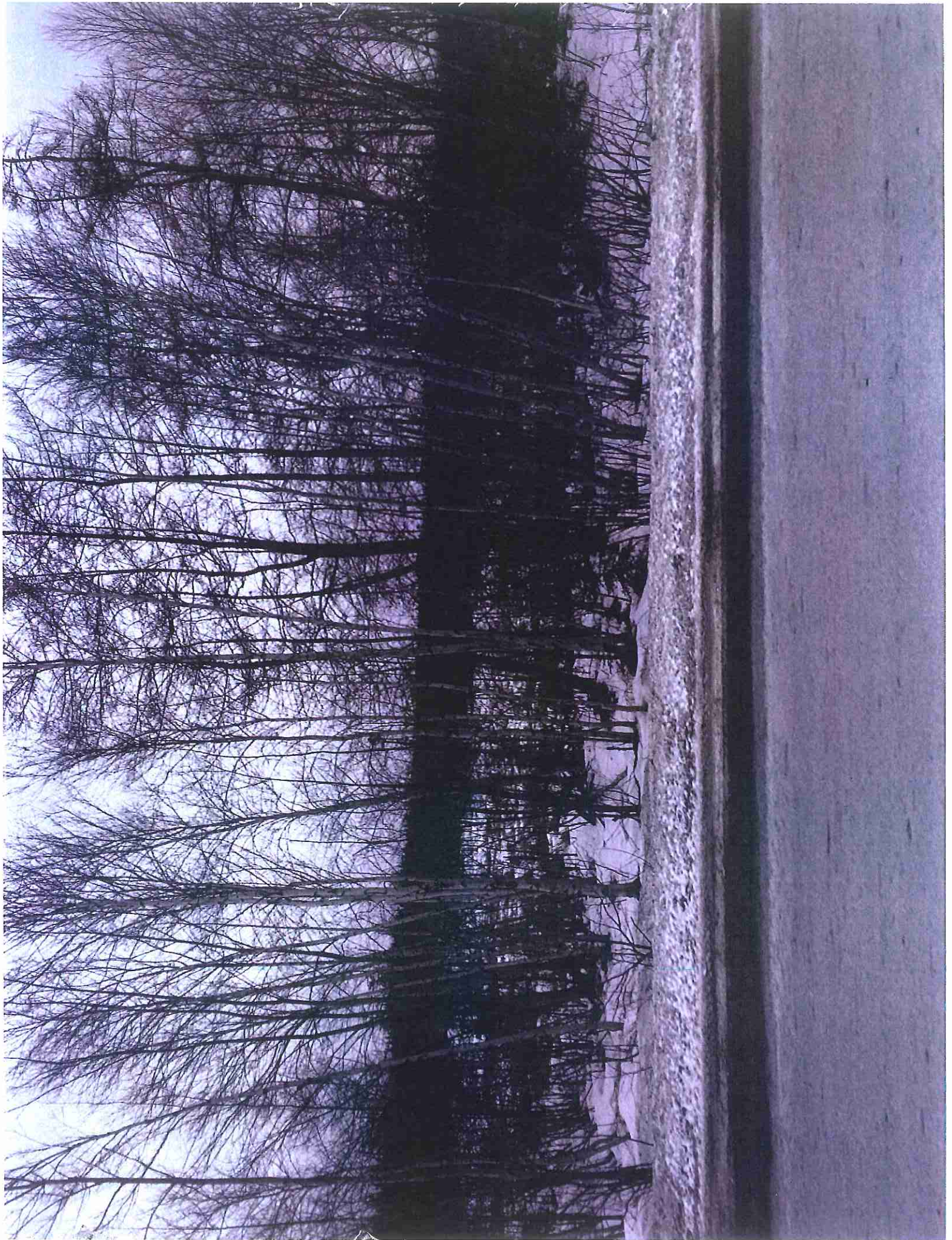
2014/Apr/14  
Date

J.S. Valcour.

Signature of Chief Executive Officer













No.	Revision	Ckd. By	Date

FOR INFORMATION ONLY

Const. North	
Drawn By:	STWD
Dwg. Standards	
Ckd. By:	
Designed By:	CGG
Date Printed	
Dwg. Design	
Ckd. By:	

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Project Title

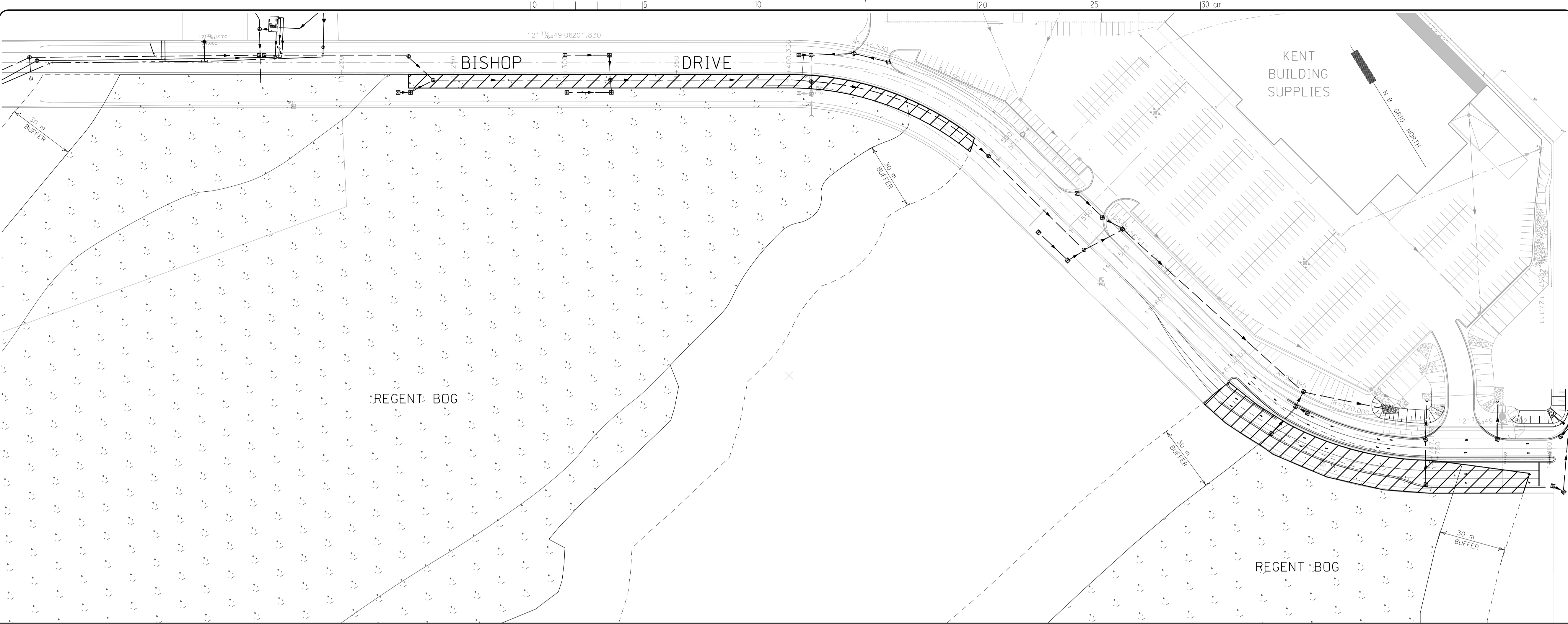
**BISHOP DRIVE IMPROVEMENTS T14-XX**

Dwg. Title

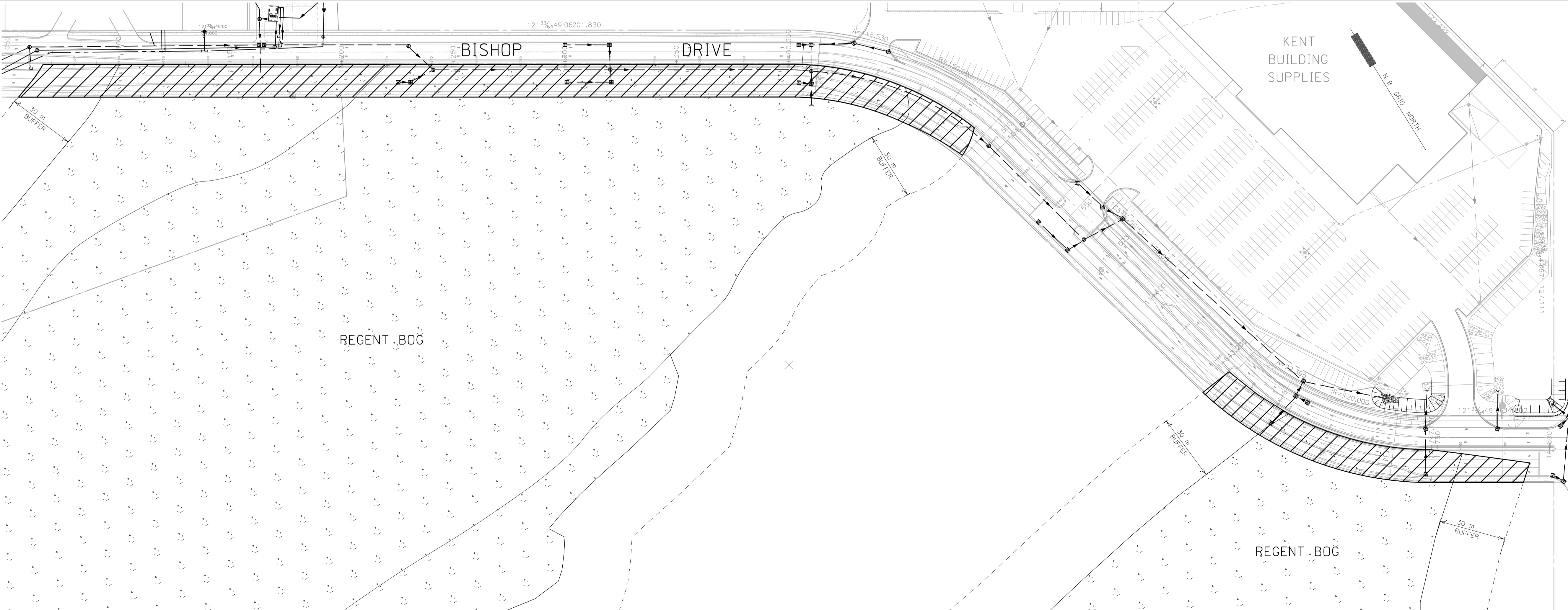
**PROPOSED SCOPE OF WORK**

Project No.	FRE-00216920-A0	
Dwg. No.	<b>FIGURE-1</b>	Rev. No. 0
Scale	1:1000 This drawing is not to be scaled	

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PHASE 1



PHASE 2

**LEGEND**

- REGENT BOC
- IMPACT ZONE
- STORM SEWER MAIN

No.	Revision	Ckd. By	Date

FOR INFORMATION ONLY

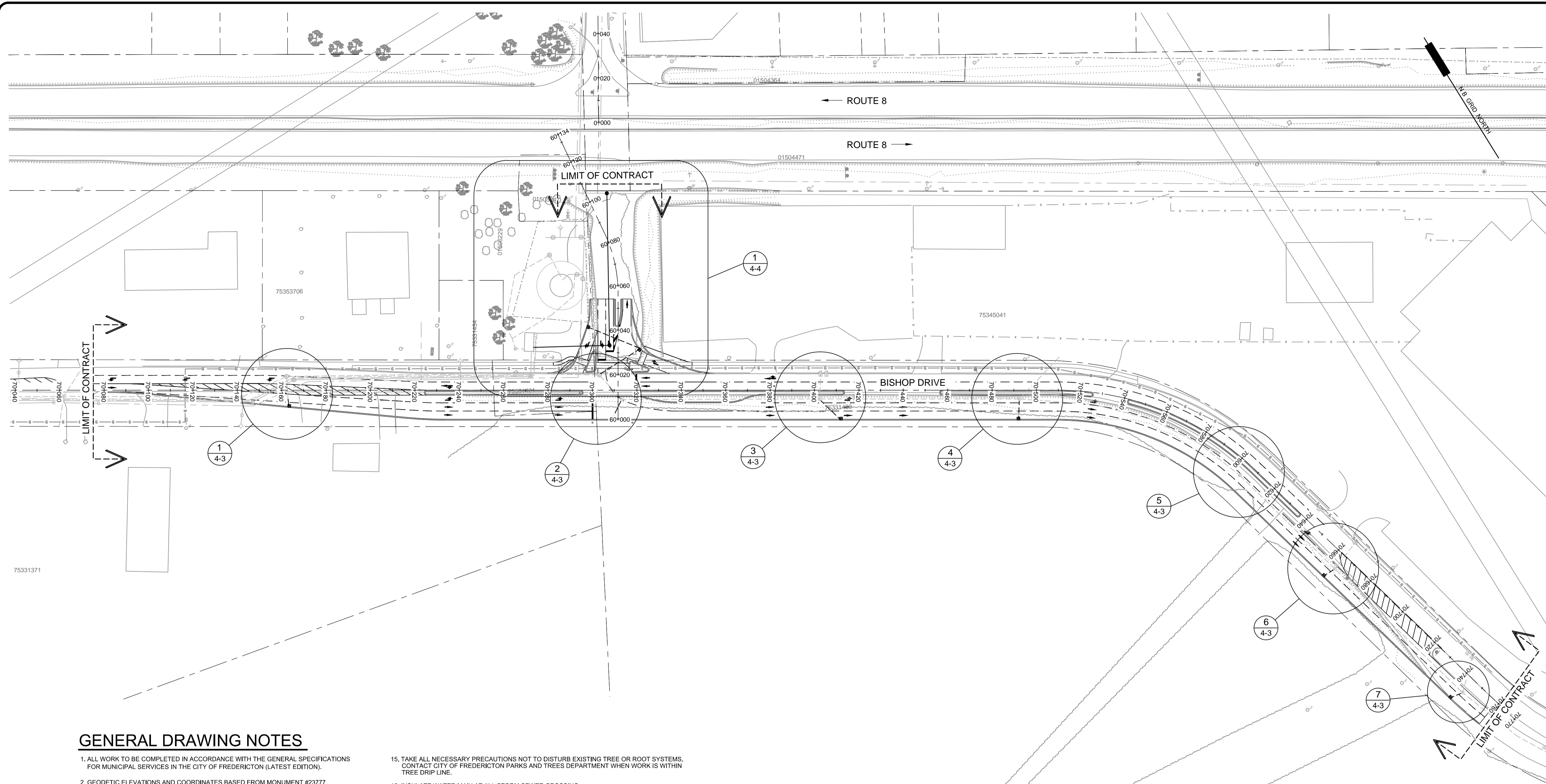
Const. North	
Drawn By:	PD
Dwg. Standards Ckd. By:	
Designed By:	RNS
Date Printed	
Dwg. Design Ckd. By:	

**ADI** ADI International Inc.  
 Design-Build, Turn-Key Packages  
 and Project Management  
 1133 REGENT STREET, SUITE 300  
 FREDERICTON, NEW BRUNSWICK, CANADA

Project Title	
BISHOP DRIVE WIDENING AND SERVICING	
Dwg. Title	
WETLAND IMPACT ZONE	
Project No.	5059-2.2
Dwg. No.	2-1
Rev. No.	0
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Offices located in:  
 CHARLOTTETOWN, MONCTON, SAINT JOHN, TRURO, H  
 PORT HAWKESBURY, ST. JOHN'S, FREDERICTON AND





### GENERAL DRAWING NOTES

1. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE GENERAL SPECIFICATIONS FOR MUNICIPAL SERVICES IN THE CITY OF FREDERICTON (LATEST EDITION).
2. GEODETIC ELEVATIONS AND COORDINATES BASED FROM MONUMENT #23777
3. GROUT ABANDONED WATER PIPE ENDS WITH BRICK AND CEMENTITIOUS MORTAR. MAKE WATERTIGHT.
4. ALL VALVES, FRAMES, COVERS, MANHOLE AND CATCH BASIN GRATES REMOVED FROM EXISTING STRUCTURES AND THAT ARE IN RE-USEABLE CONDITION, ARE TO BE DELIVERED TO THE CITY OF FREDERICTON'S ST. MARYS DEPOT.
5. VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND CONDUIT LINES AND MUNICIPAL SERVICES AND PROVIDE ADEQUATE PROTECTION AND SUPPORT OF SAME WHEN EXCAVATING UNDER THESE LINES. LOCATIONS OF EXISTING UG SERVICES ARE APPROXIMATE IN LOCATION AND BASED ON INFORMATION PROVIDED BY THE CITY OF FREDERICTON JANUARY 2013. ALL SERVICES ARE TO BE TRACED AT THE CONTRACTOR'S EXPENSE PRIOR TO THE COMMENCEMENT OF WORK.
6. INDIVIDUAL GAS SERVICES TO HOUSES ARE NOT SHOWN. GAS SERVICE CROSSING WILL BE CONSIDERED INCIDENTAL. CONTACT ENBRIDGE GAS NEW BRUNSWICK FOR GAS MAIN AND SERVICE LATERAL LOCATIONS PRIOR TO CONSTRUCTION AT 1-800-994-2762.
7. ELEVATION, SECTION AND DETAIL IDENTIFICATION:
 

1 4-30	- ELEVATION, SECTION OR DETAIL NUMBER
	- DRAWING ON WHICH ELEVATION, SECTION OR DETAIL IS LOCATED
8. PROPERTY LINES SHOWN ARE APPROXIMATE. BUILDING OUTLINES AND SIDE STREETS ARE REFERENCED FROM AERIAL PHOTOGRAPHY AND ARE FOR INFORMATION ONLY.
9. REINSTATEMENT OF ANY BROKEN OR DAMAGED SIDEWALK OR CURBING DUE TO CONSTRUCTION WORK SHALL BE CONSIDERED INCIDENTAL, UNLESS OTHERWISE NOTED.
10. THRUST BLOCK ALL PLUGS, CAPS, BENDS AND TEES ON WATER MAIN.
11. BLOW OFF ASSEMBLIES TO BE INSTALLED ON BOTH SIDE OF GATE VALVES AND BUTTERFLY VALVES.
12. DEPTH OF COVER ON ALL WATER AND SANITARY MAINS TO BE 1.8m MINIMUM UNLESS OTHERWISE NOTED. ADD INSULATION WHEN MINIMUM DEPTH IS NOT ACHIEVED.
13. ALL WATER MAINS ARE TO BE DUCTILE IRON CLASS 52, UNLESS NOTED OTHERWISE.
14. ALL NEW SANITARY MAINS ARE TO BE PVC DR35, UNLESS NOTED OTHERWISE.
15. TAKE ALL NECESSARY PRECAUTIONS NOT TO DISTURB EXISTING TREE OR ROOT SYSTEMS. CONTACT CITY OF FREDERICTON PARKS AND TREES DEPARTMENT WHEN WORK IS WITHIN TREE DRIP LINE.
16. INSULATE WATER MAIN AT ALL STORM SEWER CROSSING.
17. UTILITY POLES ARE TO BE SUPPORTED OR RESTRAINED WHEN EXCAVATION IS WITHIN 4m. COORDINATE WITH LOCAL UTILITY COMPANY.
18. WHERE REQUIRED SHWAB / DISINFECT NEW MATERIAL ON LIVE SIDE OF VALVE OR CAP AS PER SECTION 4.7 Q AWWA C651.
19. REINSTATE ALL SHRUBS AND VEGETATION, CONSIDERED INCIDENTAL.
20. CITY OF FREDERICTON TO REMOVE ALL EXISTING TRAFFIC POLES AND SIGNAGE WITHIN WORK AREA.
21. CITY OF FREDERICTON REFERS TO CITY OF FREDERICTON ENGINEERING AND OPERATIONS DEPARTMENT.
22. WHEN ENCOUNTERED, CONNECTION TO EXISTING SERVICES ARE TO BE MADE WITH SUITABLE ADAPTER COUPLINGS. ALL CONNECTIONS ARE TO BE MADE WATERTIGHT, UNLESS NOTED OTHERWISE OR DIRECTED BY THE CONSULTANT.
23. ONLY CITY OF FREDERICTON FORCES ARE PERMITTED TO OPERATE GATE VALVES AND HYDRANTS. CONTACT CITY OF FREDERICTON 48 HOURS IN ADVANCE TO REQUEST MANIPULATION OF GATE VALVES.
24. ADJUSTABLE FRAME AND COVERS TO BE USED ON SANITARY AND STORM MANHOLES AND GATE VALVE CHAMBERS. CATCH BASINS OR STORM MANHOLES IN CURB LINE TO HAVE SQUARE FRAME AND GRATE AND 600mm DEEP SUMP.
25. CONTRACTOR TO MAINTAIN SANITARY IN SERVICE AT ALL TIMES. AVERAGE SANITARY FLOWS ARE ESTIMATED AT  $Q_{avg} = 6 \text{ L/sec}$  WITH POSSIBLE  $Q_{peak} = 21 \text{ L/sec}$ . PROVIDE AND MAINTAIN CONTINUOUS BY-PASS PIPING AND/OR PUMPING AS REQUIRED.
26. CONTRACTOR TO MAINTAIN STORM IN SERVICE. PEAK STORM FLOWS ARE ESTIMATED AT:  $Q_{10} = 470 \text{ L/sec}$ . PROVIDE AND MAINTAIN CONTINUOUS BY-PASS PIPING AND/OR PUMPING AS REQUIRED.
27. ANY DAMAGE TO EXISTING MAINS NOT DESIGNATED FOR REMOVAL OR ABANDONMENT IS TO BE REPAIRED IMMEDIATELY AT CONTRACTORS EXPENSE.
28. ALL EXISTING STRUCTURES ON SMYTHE STREET BETWEEN 0+130 TO 0+188 AND PROSPECT STREET BETWEEN 10+125 TO 10+210 ARE TO BE REMOVED AND DISPOSED OF OFF SITE. ALL ASSOCIATED PIPING IF NOT REMOVED IS TO BE FILLED WITH FLOWABLE FILL OR AS DIRECTED BY FIELD CONSULTANT.
29. TEMPORARY WATER IS TO BE SUPPLIED TO THE DAILY GLEANER BY PROVIDING A 25mm  $\phi$  TAP AND SERVICE FROM THE EXISTING 350  $\phi$  DI WATER MAIN TO FEED THE EXISTING HYDRANT LOCATED ON THE DAILY GLEANER PROPERTY. COORDINATE WITH CITY OF FREDERICTON WATER AND SEWER DEPARTMENT.
30. VERIFY EXISTING PIPE SIZES, MATERIALS, AND INVERTS PRIOR TO ORDERING OR INSTALLING NEW MAINS.

No.	Revision	Ckd. By	Date

### PRELIMINARY

Date Printed	Dwg. Design Ckd. By:
Const. North	
Drawn By: STWD	
Dwg. Standards Ckd. By:	
Designed By: CGG	

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- INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

Project Title

## BISHOP DRIVE IMPROVEMENTS T14-XX

Dwg. Title

## OVERALL SITE PLAN

Project No. <b>FRE-00216920-A0</b>	
Dwg. No. <b>2-8</b>	Rev. No. <b>0</b>
Scale <b>AS SHOWN</b> <small>This drawing is not to be scaled</small>	