

Tender # TLC09-24

AMENDMENT NO. 1

Owner: Town of Labrador City

Project Name: Willow Drive Street Reconstruction, Phase 1

Project Number: 003-225

Date Issued: April 18, 2024

1. This Amendment shall form an integral part of the specification to be read in conjunction therewith. This Amendment shall take precedence over all forms of the aforementioned specification with which it may prove to be at variance or may otherwise be qualified in writing by authorized personnel.

2. The General Conditions and all documents issued with this specification shall apply to govern all phases of the work covered by this Amendment.

3. The purpose of this Amendment is to inform bidders of clarifications to the contract documents.

To advise Contractors of the following changes:

1. Tender Closing Extension Time and Date

.1 The Tender Closing Date is extended to Friday, April 26, 2024 @2:30 PM, NL Time.

2. Schedule of Quantities and Prices

.1 Remove Schedule of Quantities and Prices and replace with Schedule of Quantities and Prices, Amendment No. 1.

3. Section 01000 – Project Specific Specification

1. Section 02897 – Filter Fabrics (Geotextile)

.1 PART 2 – PRODUCTS

Article 2.1.8 Acceptable Products: Terrafix 360R or equivalent.

2. Section 02899 - Geogrid

.1 PART 2 – PRODUCTS

Article 2.11.22.4 Acceptable Products:

Tensar Tri Ax TX Type 2 Geogrid, or equivalent

4. **Drawing C3 – Willow Drive Storm Sewer – Plan/Profile, STA. 0+480 TO 0+780**

- .1 Remove Drawing C3, RC and replace with Drawing C3, RD, Amendment No. 1.

5. **Drawing C4 – Oak Avenue Storm Sewer – Plan/Profile, STA. 1+010 TO 1+140**

- .1 Remove Drawing C4, RC and replace with Drawing C4, RD, Amendment No. 1.

Bidders are advised to acknowledge receipt of this Amendment as per the Instructions to Bidders.

Nova Consultants Inc.
37 Hallett Crescent
St. Johns, NL, A1B 4C4
Tel: 709-753-2260
Fax: 709-753-1514
admin@ncinl.ca

END

SCHEDULE OF QUANTITIES AND PRICES
APPENDIX A

| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|---------|-------------|------|----------|-------|-------|
|---------|-------------|------|----------|-------|-------|

The quantities set out in this schedule are estimated quantities only and are not to be taken as final quantities by the Contractor. The unit prices bid shall include all labour, plant, materials, overhead, duties, and profit and all other obligations and liabilities under the contract. Do not include taxes in unit or lump sum prices, taxes due to be added on the last page of this schedule as indicated on the bottom. Totals shall be determined by multiplying the quantity by the tendered unit price.

DIVISION 1

01010 Mobilization & Demobilization

(not greater than 10% of item a. "sub-total" on last page) L.S. Unit _____

01500 Temporary Facilities

1. Owner Site Office L.S. Unit _____

01570 Traffic Regulations

1. Flag Persons Wages Hour 600.0 _____

2. Traffic Control L.S. Unit _____

01582 Sign & Signpost Installation

1. Signs on Telespar Tubing Each 4 _____

01710 Reinstatement and Cleaning

1. Reinstall Street Lights on New Bases Each 4 _____

2. Hydraulic Seeding & Mulching m² 593.0 _____

3. Supply & Placing Topsoil m² 593.0 _____

4. Driveway Reinstatement/Patching m² 62.1 _____

DIVISION 2

02070 Sitework, Demolition & Removal of Structures

1. Removal of Curb m 339.4 _____

2. Removal of Combined Curb & Sidewalk m² 472.7 _____

Carry Over _____

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| | | | | Carry Over | |
| | 3. Removal Reinforced Concrete Walk/Driveway | m ² | 105.9 | | |
| | 4. Removal of Asbestos Cement Pipe | m | 175 | | |
| | 5. Removal of Maintenance Hole Frames & Covers | Each | 1.0 | | |
| | 6. Removal of Maintenance Holes/Catch Basins including Frames & Covers | Each | 9.0 | | |
| | 7. Removal of Signs | Each | 4.0 | | |
| | 8. Removal of Street Light and Concrete Base | Each | 4.0 | | |
| 02223 | <u>Excavation, Trenching & Backfilling</u> | | | | |
| | 1. Main Trench Excavation | | | | |
| | 1. Rock | m ³ | 31.1 | | |
| | 2. Common | m ³ | 622.5 | | |
| | 2. Granular Pipe Bedding | | | | |
| | 1. Type 1 | m ³ | 424.8 | | |
| | 2. Type 2 | m ³ | 16.2 | | |
| | 3. Rock Underbedding | m ³ | 72.0 | | |
| | 4. Supply & Placement of Marking Tape | | | | |
| | 1. Plastic Tape | m | 356.0 | | |
| 02224 | <u>Roadway Excavation, Embankment & Compaction</u> | | | | |
| | 1. Mass Excavation & Backfill | | | | |
| | 1. Rock | m ³ | 62.6 | | |
| | 2. Common | m ³ | 3129.7 | | |
| | | | | Carry Over | |

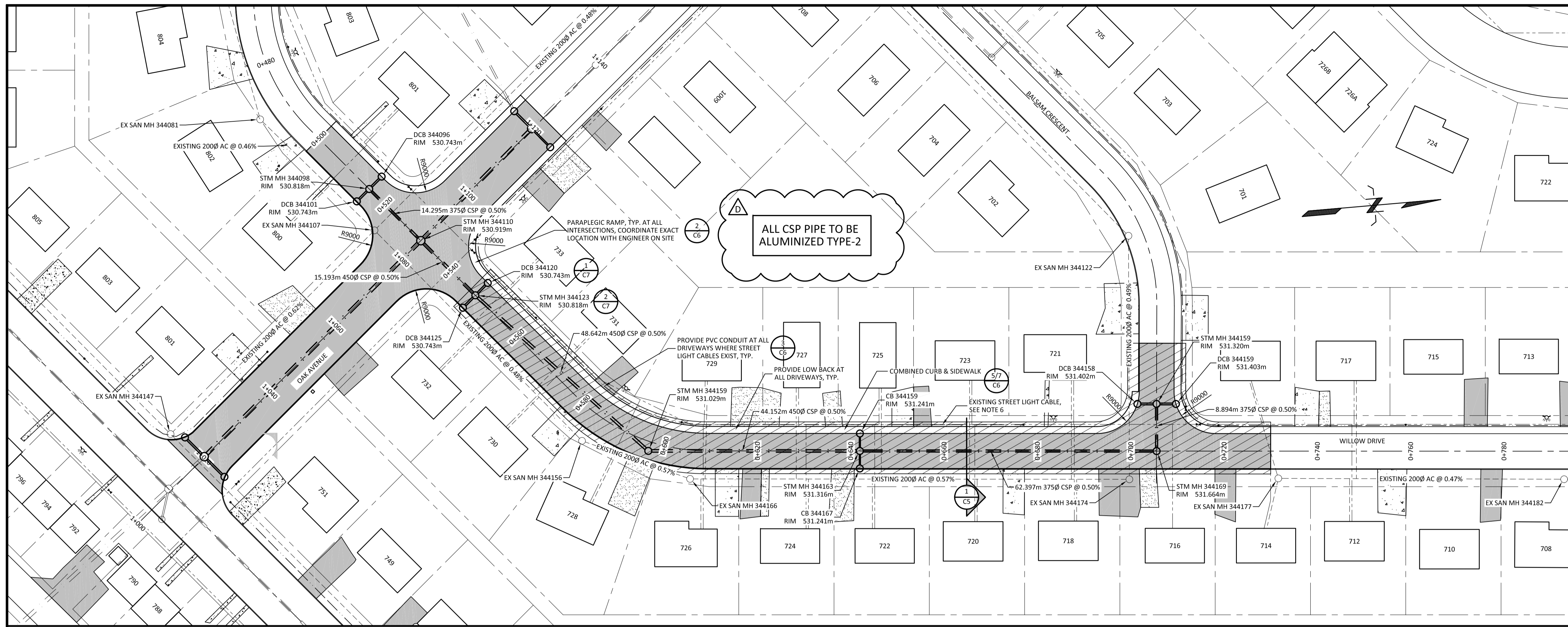
| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|--------------|---|----------------|----------|------------|-------|
| | | | | Carry Over | |
| | 2. Imported Backfill | | | | |
| | 1. Rock | m ³ | 1380.0 | | |
| | 2. Common | m ³ | 690.0 | | |
| 02233 | <u>Selected Granular Base and Sub Base Materials</u> | | | | |
| | 1. Class 'A' Granular Base | m ³ | 341.0 | | |
| | 2. Class 'B' Granular Sub-Base | m ³ | 511.5 | | |
| 02528 | <u>Concrete Walk, Curb and Gutter</u> | | | | |
| | 1. Supply & Place Granular Base Material | m ³ | 113.9 | | |
| | 2. Combined Curb and Sidewalk, 1,500mm wide, thickness varies | m | 236.9 | | |
| | 3. Driveway Ramps with Curb, 1,500mm wide, 150mm thick | m | 51.5 | | |
| | 4. Curb | m | 356.1 | | |
| | 5. Reinforced Concrete Walk/Driveway, 125mm thick | m ² | 105.9 | | |
| 02552 | <u>Hot Mix Asphaltic Concrete Paving</u> | | | | |
| | 1. Asphaltic Concrete | | | | |
| | 1. Base Course | tonne | 319.0 | | |
| | 2. Surface Course | tonne | 319.0 | | |
| 02574 | <u>Reshaping & Patching Asphalt Pavement</u> | | | | |
| | 1. Removal of Asphalt Pavement | m ² | 3170.0 | | |
| | | | | Carry Over | |

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| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|--------------|--|----------------|----------|------------|-------|
| | | | | Carry Over | |
| 02601 | <u>Maintenance Holes, Catch Basins, Ditch Inlets & Valve Chambers</u> | | | | |
| | 1. Supply & Placement of Pre-Cast Maintenance Holes, 1500mm Diameter (including cover) | | | | |
| | 1. 2.0m or less | Each | 3 | | |
| | 2. Supply & Placement of Pre-Cast Maintenance Holes, 1200mm Diameter (including cover) | | | | |
| | 1. 2.0m or less | Each | 6 | | |
| | 3. Supply and Placement of 1200mm Diameter Pre-Cast Catch Basins (including cover) | Each | 4 | | |
| | 4. Supply and Placement of 1200mm Diameter Pre-Cast Double Catch Basins (including cover) | Each | 8 | | |
| | 5. Supply, Install & Adjustment of Maintenance Hole Frames and Covers | Each | 1 | | |
| 02702 | <u>Pipe Sewer Construction</u> | | | | |
| | 1. Supply & Placement of Storm Sewer | | | | |
| | 1. 600mm CSP Aluminized Type-2, 2.0mm | m | 100.0 | | |
| | 2. 450mm CSP Aluminized Type-2, 2.0mm | m | 112.0 | | |
| | 3. 375mm CSP Aluminized Type-2, 1.6mm | m | 95.0 | | |
| | 4. 300mm CSP Aluminized Type-2, 1.6mm | m | 49.0 | | |
| | 2. CCTV Camera Inspection Services | m | 307.0 | | |
| | 3. Locate & Connect to Existing | Each | 3 | | |
| 02713 | <u>Water Mains</u> | | | | |
| | 1. Adjust Existing Valve Boxes to Grade | Each | 5 | | |
| 02897 | <u>Filter Fabrics (Geotextile)</u> | | | | |
| | 1. Supply & Install Non-Woven Filter Fabric | m ² | 5700.0 | | |
| | | | | Carry Over | |

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| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|---------------|---|----------------|----------|------------|-------|
| | | | | Carry Over | _____ |
| <u>02899</u> | <u>Geogrid</u> | | | | |
| | 1. Supply & Install Triaxial Geogrid | m ² | 3800.0 | _____ | _____ |
| <u>265619</u> | <u>Roadway Lighting</u> | | | | |
| | 1. Supply & Install 38mm PVC Conduit | m | 58.4 | _____ | _____ |
| | 2. Supply & Install Street Light Cable | m | 180.0 | _____ | _____ |
| | 3. Supply & Install Concrete Bases | Each | 4 | _____ | _____ |
| | 4. Locate & Connect to Power Cable | Each | 7 | _____ | _____ |
| | a. Sub-Total | | | | _____ |
| | b. H.S.T. 15% of Sub-Total | | | | _____ |
| | c. Grand Total (Carry Forward to Page 1 of Tender Form) | | | | _____ |



NOTES:

- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS AS PUBLISHED BY THE PROVINCE OF NEWFOUNDLAND AND LABRADOR.
- ALL COORDINATES REFER TO THE NAD83 3" MTM ZONE 6 DATUM.
- CONTRACTOR TO ENSURE LOWBACKS OF CURB AND DRIVEWAY RAMPS ARE ALIGNED WITH EDGES OF EXISTING DRIVEWAYS AT ALL LOCATIONS.
- CATCH BASIN AND MANHOLE FRAMES AND COVERS TO BE SET 20mm BELOW FINISHED ASPHALT GRADE. REFER TO STRUCTURE TABLE FOR DETAILS. COORDINATES GIVEN FOR STRUCTURES ARE CENTER OF BASE ALIGNED AT THE FACE OF CURB, CONTRACTOR IS RESPONSIBLE TO ADJUST AS REQUIRED IN THE FIELD SUCH THAT SLAB TOP OPENING/FRAME AND COVER ALIGNS AS DETAILED WITH NEW CURB.
- STREET LIGHT CABLE SHOWN IS SHALLOW BURY AND IS TO BE REMOVED ONLY IN AREA OF SUB-EXCAVATION AND AT DRIVEWAYS. CUTTING AND REMOVAL OF EXISTING CABLE SHALL BE CONSIDERED INCIDENTAL TO THE WORK. CONTRACTOR TO EXERCISE CAUTION WHEN DIGGING IN THE VICINITY OF THE CABLE AND PROTECT ENDS FOR SPICING. THE CONTRACTOR SHALL SUPPLY AND INSTALL 38mm PVC CONDUIT IN SAND AS PER DETAIL 3/C6 OR 4/C6. INSTALL NEW WIRE IN NEW CONDUIT AND COMPLETE WATER TIGHT SPLICES ON EITHER END OF THE CONDUIT OR AT LIMITS OF WORK. AT ALL OTHER LOCATIONS THE CONTRACTOR IS TO MAKE GOOD ANY DAMAGES AT NO COST TO THE OWNER.
- EXACT LIMITS OF REMOVALS MAY BE ADJUSTED IN THE FIELD.
- DISPOSE OF ALL MATERIAL AT THE LABRADOR WEST REGIONAL LANDFILL UNLESS DIRECTED OTHERWISE BY THE OWNER'S REPRESENTATIVE.
- CONTRACTOR TO CONFIRM ALL FIELD INFORMATION (INVERTS, INSIDE & OUTSIDE PIPE DIAMETERS) PRIOR TO ORDERING STRUCTURES.

LEGEND:

- ROCK/Common Import
- ASPHALT SURFACE
- CONCRETE SURFACE
- GRANULAR SURFACE
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING STREET LIGHT
- EXISTING TRAFFIC SIGN
- EXISTING HYDRO POLE WITH GUY WIRE
- EXISTING CATCH BASIN
- EXISTING MANHOLE
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING SANITARY SEWER
- EXISTING STREET LIGHT CABLE
- EXISTING VALVE
- EXISTING HYDRANT

| | | |
|-----|------------------------------|----------|
| D | ISSUED FOR AMENDMENT #1 | 19/04/24 |
| C | ISSUED FOR TENDER | 08/04/24 |
| B | ISSUED FOR REVIEW & APPROVAL | 13/03/24 |
| No. | ISSUES/REVISIONS | DD/MM/YY |

CONSULTANT

NOVA CONSULTANTS INC.
 37 HALLETT CRESCENT
 ST. JOHN'S, NL A1B 4C4
 TEL: 709 753 2260
 INFO@NCINL.CA

ST. JOHN'S LABRADOR CITY

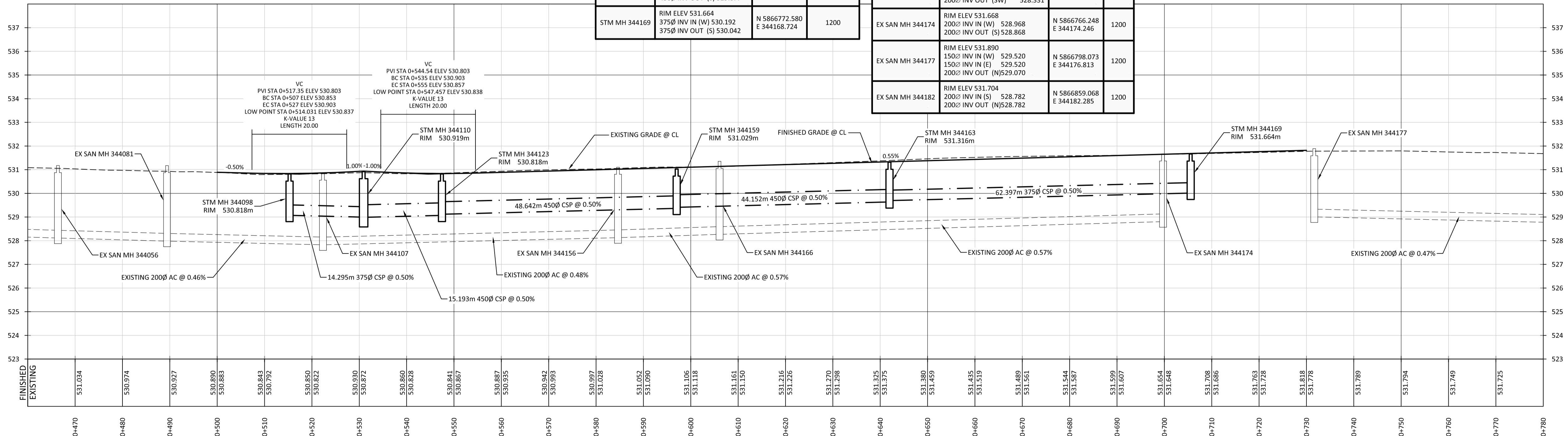
| Structure | Structure Details | Location | Structure Ø |
|---------------|---|-------------------------------|-------------|
| DCB 344125 | RIM ELEV 530.743 300Ø INV OUT (NW) 529.332 | N 5866627.140 E 344125.268 | 1200 |
| DCB 344158 | RIM ELEV 531.402 300Ø INV OUT (N) 530.471 | N 5866769.355 E 344158.313 | 1200 |
| DCB 344159 | RIM ELEV 531.403 300Ø INV OUT (S) 530.472 | N 5866777.577 E 344159.029 | 1200 |
| STM MH 344098 | RIM ELEV 530.818 300Ø INV IN (NW) 529.327 300Ø INV IN (SE) 529.327 375Ø INV OUT (N) 529.105 | N 5866609.323 E 344098.206 | 1200 |
| STM MH 344110 | RIM ELEV 530.919 375Ø INV IN (SW) 529.031 600Ø INV IN (SE) 528.931 450Ø INV IN (NE) 529.031 600Ø INV OUT (SE) 528.881 | N 5866619.379 E 344110.188 | 1500 |

| Structure | Structure Details | Location | Structure Ø |
|------------|---|-------------------------------|-------------|
| CB 344159 | RIM ELEV 531.241 200Ø INV OUT (E) 529.902 | N 5866709.551 E 344159.466 | 1200 |
| CB 344167 | RIM ELEV 531.241 200Ø INV OUT (W) 529.902 | N 5866708.900 E 344166.938 | 1200 |
| DCB 344096 | RIM ELEV 530.743 300Ø INV OUT (SE) 529.402 | N 5866612.195 E 344095.795 | 1200 |
| DCB 344101 | RIM ELEV 530.743 300Ø INV OUT (NW) 529.402 | N 5866606.450 E 344100.617 | 1200 |
| DCB 344120 | RIM ELEV 530.743 300Ø INV OUT (SE) 529.332 | N 5866632.885 E 344120.446 | 1200 |

| Structure | Structure Details | Location | Structure Ø |
|---------------|---|-------------------------------|-------------|
| STM MH 344123 | RIM ELEV 530.818 450Ø INV IN (NE) 529.157 300Ø INV IN (SE) 529.257 300Ø INV IN (NW) 529.257 450Ø INV OUT (SW) 529.107 | N 5866630.012 E 344122.857 | 1200 |
| STM MH 344159 | RIM ELEV 531.320 300Ø INV IN (N) 530.389 300Ø INV IN (S) 529.257 375Ø INV OUT (E) 530.239 | N 5866773.447 E 344158.669 | 1200 |
| STM MH 344159 | RIM ELEV 531.029 450Ø INV IN (N) 529.453 450Ø INV OUT (SW) 529.403 | N 5866664.048 E 344159.265 | 1200 |
| STM MH 344163 | RIM ELEV 531.316 375Ø INV IN (N) 529.727 200Ø INV IN (E) 529.827 200Ø INV IN (W) 529.827 450Ø INV OUT (S) 529.677 | N 5866709.225 E 344163.202 | 1200 |
| STM MH 344169 | RIM ELEV 531.664 375Ø INV IN (W) 530.192 375Ø INV OUT (S) 530.042 | N 5866772.580 E 344168.724 | 1200 |

| Manhole | Manhole Details | Location | MH Ø |
|------------------|---|-------------------------------|------|
| EX SAN MH 344081 | RIM ELEV 531.175 200Ø INV IN (W) 528.045 200Ø INV OUT (NE) 528.045 | N 5866587.330 E 344081.330 | 1200 |
| EX SAN MH 344107 | RIM ELEV 530.859 200Ø INV IN (NW) 527.889 200Ø INV IN (SW) 527.889 200Ø INV IN (NE) 527.889 200Ø INV OUT (SE) 527.889 | N 5866609.681 E 344107.126 | 1200 |
| EX SAN MH 344122 | RIM ELEV 530.085 200Ø INV IN (SW) 529.037 200Ø INV OUT (E) 529.222 | N 5866770.565 E 344122.261 | 1200 |
| EX SAN MH 344156 | RIM ELEV 531.105 200Ø INV IN (NE) 528.191 200Ø INV OUT (SW) 528.191 | N 5866650.094 E 344155.888 | 1200 |
| EX SAN MH 344166 | RIM ELEV 531.354 200Ø INV IN (N) 528.331 200Ø INV OUT (SW) 528.331 | N 5866672.456 E 344166.016 | 1200 |
| EX SAN MH 344174 | RIM ELEV 531.668 200Ø INV IN (W) 528.968 200Ø INV OUT (S) 528.868 | N 5866766.248 E 344174.246 | 1200 |
| EX SAN MH 344177 | RIM ELEV 531.894 150Ø INV IN (W) 529.520 150Ø INV IN (E) 529.520 200Ø INV OUT (N) 529.070 | N 5866798.073 E 344176.813 | 1200 |
| EX SAN MH 344182 | RIM ELEV 531.704 200Ø INV IN (S) 528.782 200Ø INV OUT (N) 528.782 | N 5866859.068 E 344182.285 | 1200 |

ALL CATCH BASIN LEADS TO BE 300Ø CSP @ 2.0% UNLESS NOTED



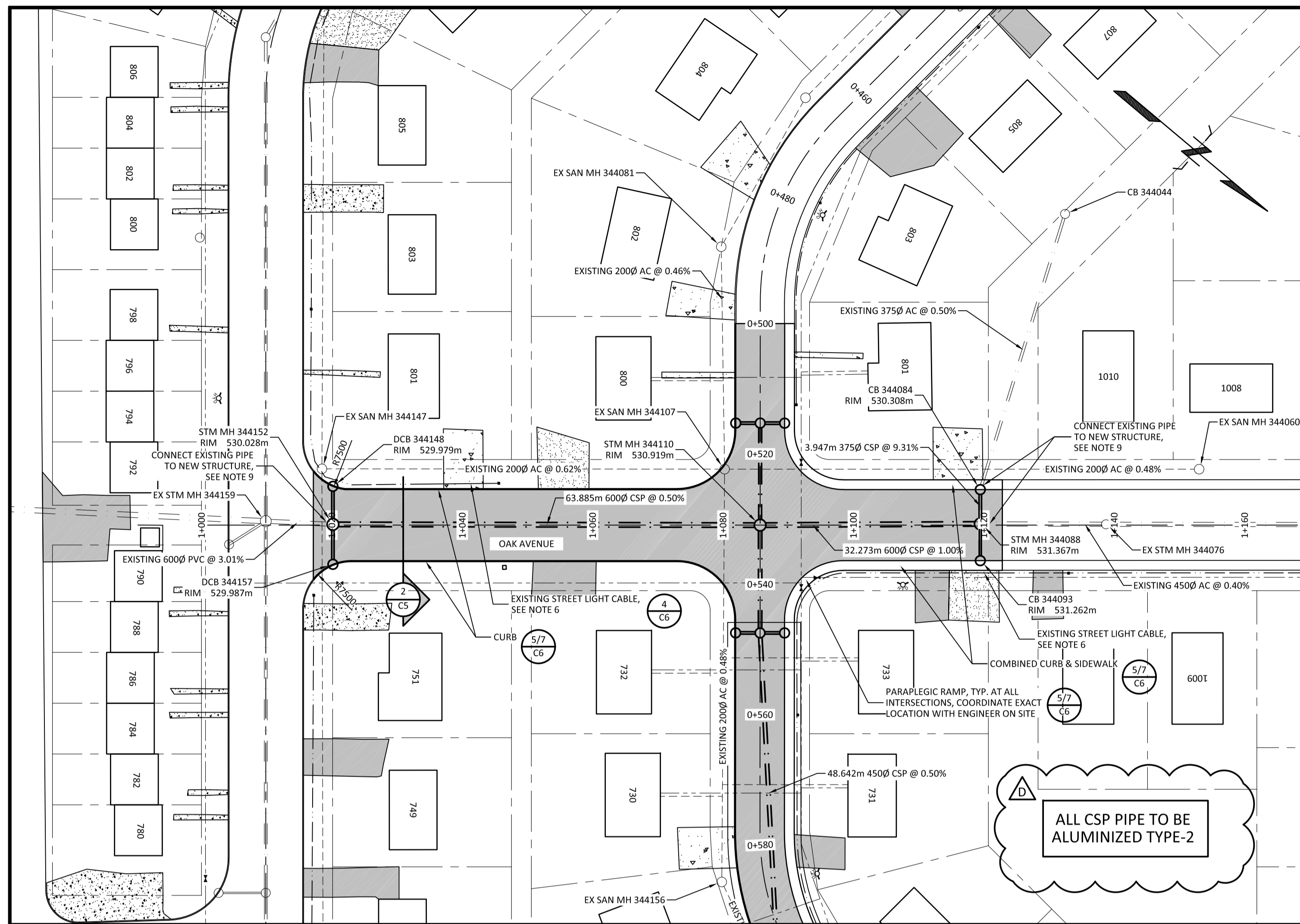
SHEET SIZE A1 (24" x 34", 594mm x 841mm)

NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER CLASS "A"
 This Permit Allows
NOVA CONSULTANTS INC.
 To practice Professional Engineering in Newfoundland and Labrador.
 Permit No. as issued by PEGNL D0014
 which is valid for the year 2024.

LABRADOR CITY

| | | | | | | | | | | | | | | | | | | |
|--|----------------------------|------------|-----|---|----------------------|---|---|----------------------------|---|--|-------|----|---------|-----|----------|--------|----------|--|
| <table border="1"> <tr> <td>A</td> <td>DETAIL NO.</td> <td>A</td> </tr> <tr> <td>B</td> <td>LOCATION DRAWING NO.</td> <td>B</td> </tr> <tr> <td>C</td> <td>DRAWING NO. WHERE DETAILED</td> <td>C</td> </tr> </table> | A | DETAIL NO. | A | B | LOCATION DRAWING NO. | B | C | DRAWING NO. WHERE DETAILED | C | <table border="1"> <tr> <td>DRAWN</td> <td>RH</td> <td>CHECKED</td> <td>SAB</td> </tr> <tr> <td>DESIGNED</td> <td>RH/SAB</td> <td>APPROVED</td> <td></td> </tr> </table> | DRAWN | RH | CHECKED | SAB | DESIGNED | RH/SAB | APPROVED | |
| A | DETAIL NO. | A | | | | | | | | | | | | | | | | |
| B | LOCATION DRAWING NO. | B | | | | | | | | | | | | | | | | |
| C | DRAWING NO. WHERE DETAILED | C | | | | | | | | | | | | | | | | |
| DRAWN | RH | CHECKED | SAB | | | | | | | | | | | | | | | |
| DESIGNED | RH/SAB | APPROVED | | | | | | | | | | | | | | | | |
| PROJECT TITLE WILLOW DRIVE STREET RECONSTRUCTION PHASE 1 LABRADOR CITY, NL | | | | | | | | | | | | | | | | | | |
| DRAWING TITLE WILLOW DRIVE STORM SEWER PLAN/PROFILE STA. 0+480 TO 0+780 | | | | | | | | | | | | | | | | | | |
| SCALE H 1:500 V 1:100 | DRAWING NO. C3 | | | | | | | | | | | | | | | | | |
| PROJECT NO. NCI NO. 003-225 TOLC NO. TLCO9-24 | REVISION NO. D | | | | | | | | | | | | | | | | | |
| DATE FEBRUARY 2024 | | | | | | | | | | | | | | | | | | |



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- LEGEND:**
- ROCK/Common Import
 - ASPHALT SURFACE
 - CONCRETE SURFACE
 - GRANULAR SURFACE
 - APPROXIMATE PROPERTY BOUNDARY
 - EXISTING FENCE
 - EXISTING STREET LIGHT
 - EXISTING TRAFFIC SIGN
 - EXISTING HYDRO POLE WITH GUY WIRE
 - EXISTING CATCH BASIN
 - EXISTING MANHOLE
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 - EXISTING WATER MAIN
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 - EXISTING VALVE
 - EXISTING HYDRANT
- | | | |
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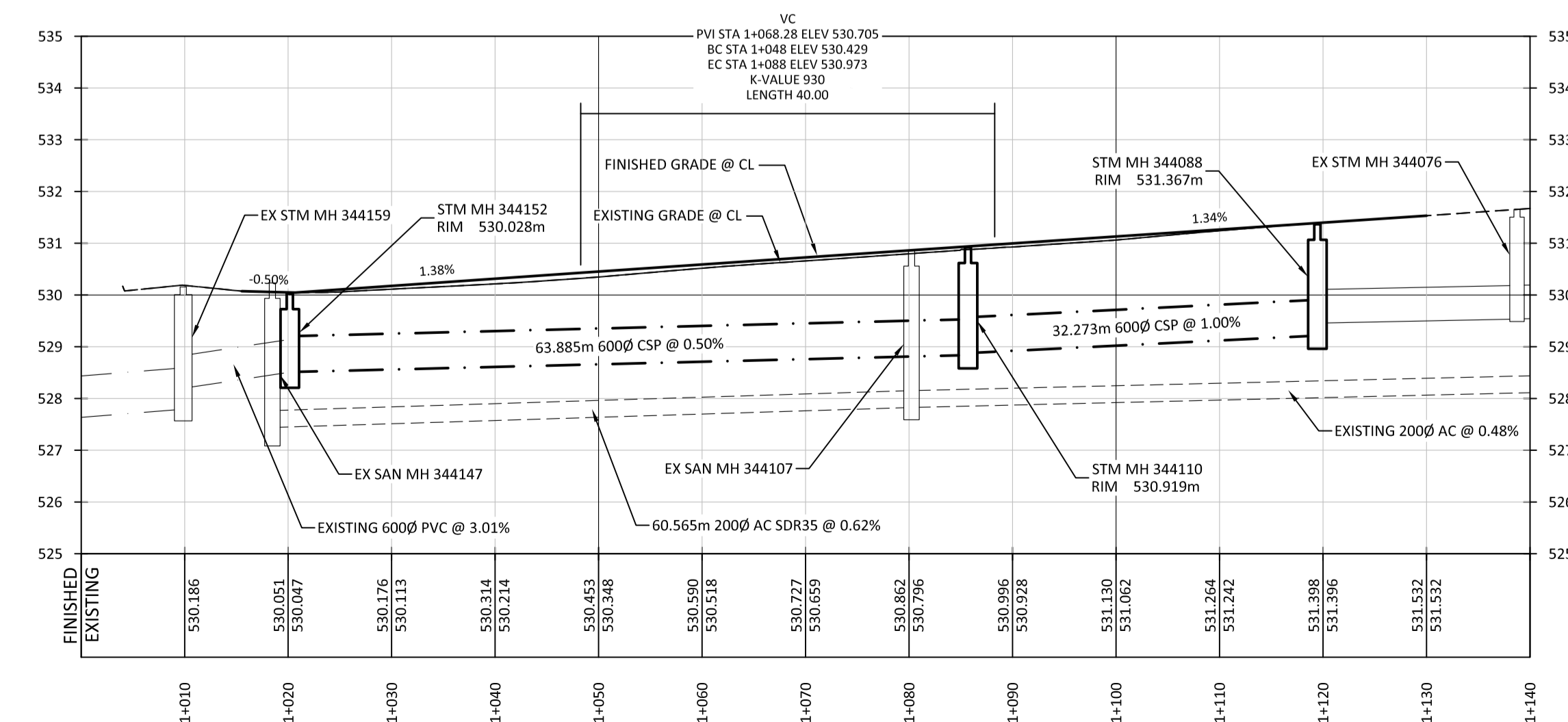
ALL CSP PIPE TO BE ALUMINIZED TYPE-2

| Structure | Structure Details | Location | Structure Ø |
|------------------|--|-------------------------------|-------------|
| EX STM MH 344159 | RIM ELEV 530.157 4500 INV IN (NE) 527.955 3000 INV IN (E) 528.348 4000 INV IN (SW) 527.950 6000 INV IN (NW) 528.215 7500 INV OUT (SE) 527.817 | N 5866560.938 E 344158.510 | 1500 |
| STM MH 344088 | RIM ELEV 531.367 4500 INV IN (NW) 529.559 3750 INV IN (SW) 529.411 3000 INV IN (NE) 529.411 6000 INV OUT (SE) 529.261 | N 5866645.109 E 344088.322 | 1500 |
| STM MH 344110 | RIM ELEV 530.919 3750 INV IN (SW) 529.031 6000 INV IN (NW) 528.931 4500 INV IN (NE) 529.031 6000 INV OUT (SE) 528.881 | N 5866619.379 E 344110.188 | 1500 |
| STM MH 344152 | RIM ELEV 530.028 3000 INV IN (NE) 528.671 6000 INV IN (NW) 528.561 3000 INV IN (SW) 528.672 6000 INV OUT (SE) 528.507 | N 5866569.133 E 344152.259 | 1500 |

| Structure | Structure Details | Location | Structure Ø |
|------------------|--|--|-------------|
| CB 344084 | RIM ELEV 530.308 3750 INV IN (SW) 529.625 3750 INV OUT (NE) 529.775 | N 5866641.724 E 344084.294 | 1200 |
| CB 344093 | RIM ELEV 531.262 3000 INV OUT (SW) 529.523 3000 INV IN (SW) 527.889 2000 INV IN (NE) 527.889 2000 INV OUT (SE) 527.889 | N 5866648.736 E 344092.639 N 5866609.681 E 344107.126 | 1200 |
| DCB 344148 | RIM ELEV 529.979 3000 INV OUT (NE) 528.772 N 5866565.383 E 344147.796 | | 1200 |
| DCB 344157 | RIM ELEV 529.987 3000 INV OUT (SW) 528.775 N 5866573.075 E 344156.950 | | 1200 |
| EX STM MH 344076 | RIM ELEV 531.654 4500 INV IN (NW) 529.637 N 5866659.916 E 344075.965 | | 1200 |

| Manhole | Manhole Details | Location | MH Ø |
|------------------|---|-------------------------------|------|
| EX SAN MH 344060 | RIM ELEV 529.101 2000 INV OUT (SE) 528.238 | N 5866665.409 E 344060.301 | 1200 |
| EX SAN MH 344107 | RIM ELEV 530.859 2000 INV IN (NW) 527.889 2000 INV IN (SW) 527.889 2000 INV IN (NE) 527.889 2000 INV OUT (SE) 527.889 | N 5866609.681 E 344107.126 | 1200 |
| EX SAN MH 344147 | RIM ELEV 530.233 2000 INV IN (SW) 527.443 2000 INV IN (NW) 527.503 2000 INV OUT (NE) 527.383 | N 5866562.363 E 344146.820 | 1200 |

ALL CATCH BASIN LEADS TO BE 3000 CSP @ 2.0% UNLESS NOTED



CONSULTANT

NOVA CONSULTANTS INC.
37 HALLETT DREAGENT
ST. JOHN'S, NL, A1B 4C4
TEL: 709 753 2260
INFO@NCINL.CA

CONSULTING ENGINEERS ST. JOHN'S LABRADOR CITY



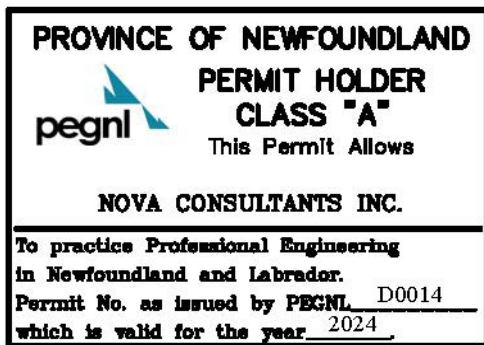
PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
CLASS "A"
This Permit Allows
NOVA CONSULTANTS INC.
To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by PEGNL D0014
which is valid for the year 2024.

REGISTERED PROFESSIONAL ENGINEER
pegnl
APR 8, 2024
DATE

| | | | | | | | | | | | | | | | | | | |
|---|-------------------------------------|--------------|-----|---|----------------------|---|---|----------------------------|--|--|-------|----|---------|-----|----------|--------|----------|--|
| <table border="1"> <tr> <td>A</td> <td>DETAIL NO.</td> <td>A</td> </tr> <tr> <td>B</td> <td>LOCATION DRAWING NO.</td> <td>B</td> </tr> <tr> <td>C</td> <td>DRAWING NO. WHERE DETAILED</td> <td></td> </tr> </table> | A | DETAIL NO. | A | B | LOCATION DRAWING NO. | B | C | DRAWING NO. WHERE DETAILED | | <table border="1"> <tr> <td>DRAWN</td> <td>RH</td> <td>CHECKED</td> <td>SAB</td> </tr> <tr> <td>DESIGNED</td> <td>RH/SAB</td> <td>APPROVED</td> <td></td> </tr> </table> | DRAWN | RH | CHECKED | SAB | DESIGNED | RH/SAB | APPROVED | |
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| DRAWN | RH | CHECKED | SAB | | | | | | | | | | | | | | | |
| DESIGNED | RH/SAB | APPROVED | | | | | | | | | | | | | | | | |
| PROJECT TITLE | | | | | | | | | | | | | | | | | | |
| WILLOW DRIVE STREET RECONSTRUCTION PHASE 1 | | | | | | | | | | | | | | | | | | |
| LABRADOR CITY, NL | | | | | | | | | | | | | | | | | | |
| DRAWING TITLE | | | | | | | | | | | | | | | | | | |
| OAK AVENUE STORM SEWER PLAN/PROFILE STA. 1+010 TO 1+140 | | | | | | | | | | | | | | | | | | |
| SCALE | H 1:500 V 1:100 | DRAWING NO. | C4 | | | | | | | | | | | | | | | |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TL09-24 | REVISION NO. | D | | | | | | | | | | | | | | | |
| DATE | FEBRUARY 2024 | | | | | | | | | | | | | | | | | |

NOT FOR CONSTRUCTION

TOWN OF LABRADOR CITY
WILLOW DRIVE
STREET RECONSTRUCTION, PHASE 1



“ISSUED FOR TENDER”

Prepared For: Town of Labrador City
P. O. Box 280
317 Hudson Drive
Labrador City, NL A2V 2K6

Prepared By: Nova Consultants Inc.
37 Hallett Crescent
St. John's, NL
A1B 4C4

Date: February 2024

TOLC Project No.: TLC09-24
NCI Project No.: 003-225

NOTICE TO BIDDERS

THESE PROJECT DOCUMENTS HAVE BEEN PREPARED FOR USE WITH AND REQUIRE BEING READ IN CONJUNCTION WITH THE “**Municipal Water, Sewer and Roads Master Construction Specifications**”, LATEST REVISION, AS PUBLISHED BY TRANSPORTATION AND INFRASTRUCTURE, PROVINCE OF NEWFOUNDLAND AND LABRADOR, THIS PUBLICATION IS AVAILABLE ON THE DEPARTMENT’S WEB SITE UNDER *PUBLICATIONS* AT THE FOLLOWING LINK:

<http://www.gov.nl.ca/ti/mi/mwsr>

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INSTRUCTIONS TO BIDDERS

**UNIT PRICE CONTRACT
INDEX
INSTRUCTION TO BIDDERS**

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3. Tender Surety and Bonding
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9. Opening of Tenders
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INSTRUCTION TO BIDDERS

1. TENDERS

(a) Project Tendering Information:

Tender for: **Town of Labrador City
Willow Drive
Street Reconstruction, Phase 1
Labrador City, NL**

Addressed to: **Town Clerk
Town Council of Labrador City
c/o Nova Consultants Inc.
37 Hallett Cres.
St. John's, NL A1B 4C4
Email: admin@ncinl.ca**

- (b) Tenders must be received electronically at the above email address on or before the exact closing time and date indicated in the advertisement. TENDERS RECEIVED AFTER THAT TIME WILL NOT BE CONSIDERED.
- (c) The Form of Agreement is included in the contract documents at the time of tendering for the purpose of information to bidders and shall not be completed at the time of tendering.
- (d) Before submitting a tender, tenderers shall carefully examine the contract documents and the site of the proposed work and fully inform themselves of the existing conditions and limitations. No subsequent allowance under the contract documents will be considered for any bidder who had failed to become familiar with all aspects of the work.
- (e) The Owner will not defray any expenses incurred by the tenderers in the preparation and submission of their tenders.

2. TENDER DOCUMENTS

- (a) The tender documents consist of the Instructions to Bidders, Tender Form, Agreement, Drawings, Specifications, and any amendments to the contract documents issued during the tender period.
- (b) Every interpretation of or addition to the contract documents to be considered a valid part of the contract documents will be issued in the form of a written amendment.
- (c) No amendments will be issued less than five (5) calendar days prior to the closing date of the tender.

- (d) Tenderers shall promptly notify the Engineer of any error, inconsistency or omission discovered during the review of the contract document. If a Bidder is unsure of the meaning or intent of the contract documents the Bidder shall request clarification from the Engineer.
- (e) All inquiries related to the contract documents shall be directed to the Engineer via email: admin@ncinl.ca. It is the responsibility of the Bidder to confirm the query is successfully delivered to the Engineer.

3. TENDER SURETY AND BONDING

(a) Bidding Security

Every tenderer shall submit with his tender an electronic bid bond issued by an approved Surety Company licensed to do business in the Province of Newfoundland and Labrador and made out in favour of the Owner.

The bid bond shall be at least ten percent (10%) of the tendered amount. An approved certified cheque may be substituted in lieu of the bid bond on contracts under \$250,000 only. The bid security will be returned upon receipt of the Performance and Labour and Materials Bonds.

The terms of the bid security will be invoked and the amount retained by the Owner if the bidder fails to enter into an agreement when notified of the award of the work within the tender validity period; or fails to provide the Performance and Labour and Materials Bonds in the amount and within the period specified.

(b) Performance Bond

A Performance Bond will be required in the amount of fifty percent (50%) of the contract price. The Performance Security is to be received not later than two (2) weeks after the award of the contract by the letter of intent and prior to the formal execution of the agreement. No work is to be undertaken until the Performance Security has been received.

For contracts under \$250,000 only, in lieu of the Performance Bond, the Owner may accept at their sole discretion an approved certified cheque for ten percent (10%) of the tendered amount. The cheque will be retained until satisfactory completion of the work including the guarantee period, after which this amount will be returned to the contractor together with the accrued interest thereon.

(c) Labour and Materials Payment Bond

A Labour and Materials Payment Bond will be required in the amount of fifty percent (50%) of the contract price. The Labour and Materials Payment Bond is to be received not later than two (2) weeks after the award of the contract by the letter of intent and prior to the execution of the formal agreement. No work is to be undertaken until the Labour and

Materials security has been received.

For contracts under \$250,000 only, in lieu of the Labour and Materials Bond, the Owner may accept at his sole discretion an approved certified cheque of ten percent (10%) of the tendered amount. The cheque will be retained until substantial completion of the work as defined by the Mechanics Lien Act and upon receipt of a completed and approved Statutory Declaration Form. This security, if in the form of a cheque, will be returned to the Contractor together with the accrued interest thereon.

- (d) E-Bonds
 - (i) Contractors shall provide Bid Bonds, Performance Bonds as well as Labour and Material Payment Bonds in either paper or electronic format (E-Bonds).
 - (ii) In accordance with the recommendations of the Surety Association of Canada, the E-Bonds shall be digitally verifiable through a third party digital certification service provider that can maintain integrity of E-Bond content and provide secure access to the E-Bond such as Mobile Bonds, Xenex Enterprises or Trisura Guarantee Insurance Company.
 - (iii) E-Bonds are to be emailed to admin@ncinl.ca in advance of the specified closing date and time. The subject line must include NCI Project No.: 003-225 – Bid Bond – Bidder’s Name.

4. COMPLETION OF TENDER FORM

- (a) The Tender Form is to be completed in its entirety and submitted electronically via EMAIL to the following address: admin@ncinl.ca with “NCI Project No.: 003-225 – Tender – Bidder’s Name” in the subject line. The Bid will be received as a password protected document prior to 2:30pm Newfoundland local time on the date stated in the tender call. The password shall be received electronically via EMAIL to the following address: admin@ncinl.ca with “NCI Project No.: 003-225 – Tender Password – Bidder’s Name” in the subject line between the time period of 2:30pm and 3:00pm Newfoundland local time on the date stated in the tender call.
- (b) All information required on the Tender Form shall be legible.
- (c) Sign the Tender Form in the space provided as indicated:

In the case of a Sole Proprietorship, the Sole Proprietor will sign where indicated in the presence of a witness who will sign where indicated. Insert the words “Sole Proprietor” next to the signature.

In the case of a Partnership, all partners will sign where indicated in the presence of a witness who will sign where indicated. Insert the word “Partner” next to signatures.

In the case of a Limited Company, authorized signing officers in the presence of a witness who will also sign where indicated, and the corporate seal will be affixed as indicated.

- (d) Spaces or Appendices will be provided with the Tender Form if required for a list of subcontractors, use of bid depository, contractor's experience, and list of equipment. All such spaces and appendices must be completed in their entirety legibly.
- (e) Failure to acknowledge receipt of addenda shall be considered an incomplete tender.

5. TENDER FORM (number of working days)

A Working day is defined as 10 Working Hours.

6. UNACCEPTABLE TENDERS

- (a) Tenders not submitted electronically on the Tender Form provided will not be considered.
- (b) Hard copies or Facsimile tenders will not be accepted.
- (c) Tenders received after the tender closing time will not be considered.
- (d) Incomplete tenders will be rejected.
- (e) Tenders not accompanied by an approved security in the correct amount will be rejected.
- (f) Tenders containing qualification or additional clauses to the Tender Form will be rejected.
- (g) Incorrectly prepared tenders may be rejected.
- (h) For unit prices in a Stipulated Price Contract and under a Unit Price Contract, bidders are required to enter a unit price for each and every item bid; this includes lump sum bid items. If any unit price or lump sum price as a unit is omitted by the bidder then the bid shall be considered incomplete and automatically rejected.

7. AMENDMENTS TO TENDER

The Tender Form with the latest time/date of receipt prior to the stated tender closing will be considered the submitted tender.

8. WITHDRAWAL OF TENDERS

Bids may be withdrawn without penalty by email request if received prior to the time fixed for the opening.

9. OPENING OF TENDERS

Bids received by the Submission Deadline will be opened publicly at the offices of the Consultant immediately after the Submission Deadline. All Bids received at the time of the public opening will be evaluated after the public opening. Interested parties may attend the public opening in person.

10. SUBSTITUTION OF MATERIALS

- (a) Tenders shall be based upon using the materials or products as specified without substitution. Where two or more brand names are specified the choice shall be left to the contractor. Where only one brand name is stated there shall be no substitution, unless an approved equal is approved by the Engineer/Architect as per 9.(b).
- (b) Where the Specifications include the "or approved equal" clause, substitutions may be proposed provided that:
 - 1. the request for a substitution is made in writing at least seven calendar (7) days prior to the tender close date;
 - 2. the request shall clearly define and describe the product for which the substitution is requested;
 - 3. the substituted article is equivalent to the specified article with regards to design, function, appearance, durability, operation and quality.

Approval of the substitution by the Engineer shall be in the form of an amendment to the Specifications issued at least five (5) calendar days prior to the tender closing date to all of those contractors listed as having received a copy of the Contract Documents.

11. ACCEPTANCE OF TENDER

- (a) The Owner will not necessarily accept the lowest or any tender.
- (b) Upon written acceptance of the tender within the tender validity period, the Tender Form becomes part of the contract documents and the successful tenderer becomes the contractor. The contractor will be required to execute a formal agreement with the Owner within sixty (60) days of the date of the letter of intent.

- (c) The Contractor shall, within 14 days of receipt of the letter of intent, submit to the Owner a breakdown of the bid to the satisfaction of the Owner.

12. SAFETY TRAINING AND SUPERVISION

- (a) Contractors shall ensure that work covered under these documents conforms, where required, to the following procedures and regulations set out by the Occupational Health and Safety Branch of Digital Government and service NL or the Explosives Regulatory Division of Natural Resources Canada:
 - i. Transportation of Dangerous Goods
 - ii. Power Line Hazards - Navigation of Overhead Wires
 - iii. General Blasting
 - iv. Confined Spaces Entry
 - v. Traffic Control Person and Highway Design and Construction's Traffic Control Manual
 - vi. Fall Protection.
 - vii. CAN/CSA Z 797 Scaffolding
 - viii. Workplace Hazardous Materials Information System
 - ix. Working with Small Tools/Shop Equipment
 - x. First Aid and CPR
 - xi. Safety Committee
 - xii. Emergency Response Plan Registration Number
 - xiii. CSA Z275.2-92 Occupational Safety Code for Diving Operations
 - xiv. Other applicable health or safety procedures or regulations.
- (b) Contractors shall complete the "Safety Training and Supervision Certificate" before construction commences and supply proof of pertinent health and safety training of workers and supervisors.
- (c) On projects where blasting is to be done, the contractor shall file an Emergency Response Assistance Plan with the Explosives Division of Energy, Mines and Resources Canada.

13. PERIOD OF WORK

- (a) Notwithstanding any other provision contained in these contract documents the Contractor shall not be permitted to work during the winter months between November 15 and April 15 of the following year unless otherwise approved or directed by the Engineer.
- (b) Unless otherwise specified or approved by the Engineer, the contractor shall be mobilized and on the work site within 14 calendar days after receipt of the letter of intent.
- (c) No work is to commence before the date of the formal agreement.

TENDER FORM



LABRADORCITY

TENDER FORM UNIT PRICE CONTRACT

Tender for: Town of Labrador City
Willow Drive
Street Reconstruction, Phase 1
Labrador City, NL

To: Town Clerk
Town Council of Labrador City
c/o Nova Consultants Inc.
37 Hallett Crescent
St. John's, NL A1B 4C4
admin@ncinl.ca

Gentlemen,

1. Having carefully examined the site of the proposed work and all conditions affecting such, as well as the Contract Documents including the Specifications, all Drawings listed in the Specifications, all Addenda, and the Instructions to Bidders for this project.

WE, THE UNDERSIGNED, hereby offer to furnish all necessary labour, materials, superintendence, plant, tools and equipment, and everything else required to perform expeditiously and complete in a satisfactory manner the work for the sum of

(\$ _____) in lawful money of Canada which includes all prime costs, allowances and Government sales or excise taxes, including HST, in force at this date, except as otherwise provided in the tendering documents.

2. The Work will be substantially performed within 90 working days from the date of notification of award of Contract.
3. WE ENCLOSE HEREWITH if required by the Instructions to Bidders
 - (a) A Bid Bond in an acceptable form and correct amount issued by a company licensed to carry on such a business in the Province of Newfoundland or
 - (b) a certified cheque in the correct amount.

In the event of this tender being accepted within the time stated in Section 4 below and our failure to enter into a contract in the form hereinafter mentioned for the amount of our tender the said security may at the option of the Owner be forfeited. The forfeiting of the security does not limit the right of action of the Owner against us for our failure or refusal to enter into a contract.

4. IF NOTIFIED IN WRITING BY THE OWNER OF THE ACCEPTANCE OF THIS TENDER WITHIN 90 DAYS OF THE TENDER CLOSING DATE SUBJECT TO SUCH OTHER PERIOD AS MAY BE SPECIFIED IN THE TENDERING DOCUMENTS, WE WILL:--
 - (a) execute the Standard Form of Construction Contract;
 - (b) if specified, furnish the security for the proper completion of the work, the said security, if in the form of bonds, to be issued on an acceptable form;
 - (c) complete substantially all the work included in the contract within the time and under conditions specified.
5. WE understand that Performance Bond, Labour and Materials Bond and Insurance as required by the Contract Documents must be provided and in force prior to the commencement of any work and satisfactory proof of such be provided to the Owner.
6. WE declare that the rates and prices variously set forth in the Schedule of Quantities and Prices (Appendix A) have been correctly computed for the purposes of this Tender and that they include and cover all contingencies and provisional sums and all duties, taxes, and handling charges and all transportation and all other charges.
7. WE confirm that the sums herein tendered include all sales taxes, royalties, custom duties, foreign exchange charges, transportation, travelling costs, all overhead and profit, all co-ordination fees, insurance premiums, and all other charges.
8. WE understand and agree to list the names of sub-contractors and suppliers whose bids have been used in the preparation of this tender price in Appendix "B". The list will be subject to the approval of the Owner.

WE agree to authorize the Owner to release the names of subcontractors used in our tender where such information is requested from the Owner.

WE reserve to us the right to substitute other sub-contractors for any trades in the event of any sub-contractor becoming bankrupt after the date hereof. Any such substitution shall be subject to the approval of the Owner and contingent upon satisfactory evidence of bankruptcy.

9. WE understand and agree that the Owner may order changes to the work in the form of additions or deletions in accordance with the General Conditions, Supplementary General Conditions and the intent of the Contract Documents.
10. WE hereby acknowledge receipt of the following addenda:
Amendment No.
Amendment No.
11. In order for a Tender to be valid, it must be signed by duly authorized officials as indicated in the Instructions to Bidders.

SIGNATURE OF TENDERER

Firm Name: _____

Address: _____

Postal Code: _____ E-Mail _____

Ph # _____ Fax # _____

Corporate Seal

Signing Officer

Signing Officer

Witnessed by

APPENDIX "A"
TENDER PRICE TABLE

Schedule of Quantities and Prices

| No. | Tender Item Description | Unit | Quantity | Unit Price | Amount |
|--|---|------|----------|------------|--------|
| | Refer to attached Schedule of Quantities and Prices | | | | |
| SUB TOTAL TENDER AMOUNT | | | | | |
| HARMONIZED SALES TAX (HST) | | | | | |
| TOTAL TENDER AMOUNT (Transfer Total Tender Amount to Section 1 on page 1 of the Tender Form) | | | | | |

Notes:

1. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
2. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

SCHEDULE OF QUANTITIES AND PRICES
APPENDIX A

| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|---------|-------------|------|----------|-------|-------|
|---------|-------------|------|----------|-------|-------|

The quantities set out in this schedule are estimated quantities only and are not to be taken as final quantities by the Contractor. The unit prices bid shall include all labour, plant, materials, overhead, duties, and profit and all other obligations and liabilities under the contract. Do not include taxes in unit or lump sum prices, taxes due to be added on the last page of this schedule as indicated on the bottom. Totals shall be determined by multiplying the quantity by the tendered unit price.

DIVISION 1

01010 Mobilization & Demobilization

(not greater than 10% of item a. "sub-total" on last page) L.S. Unit _____

01500 Temporary Facilities

1. Owner Site Office L.S. Unit _____

01570 Traffic Regulations

1. Flag Persons Wages Hour 600.0 _____

2. Traffic Control L.S. Unit _____

01582 Sign & Signpost Installation

1. Signs on Telespar Tubing Each 4 _____

01710 Reinstatement and Cleaning

1. Reinstall Street Lights on New Bases Each 4 _____

2. Hydraulic Seeding & Mulching m² 593.0 _____

3. Supply & Placing Topsoil m² 593.0 _____

4. Driveway Reinstatement/Patching m² 62.1 _____

DIVISION 2

02070 Sitework, Demolition & Removal of Structures

1. Removal of Curb m 339.4 _____

2. Removal of Combined Curb & Sidewalk m² 472.7 _____

Carry Over _____

SCHEDULE OF QUANTITIES AND PRICES
APPENDIX A

| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|--------------|---|----------------|----------|------------|-------|
| | | | | Carry Over | |
| 3. | Removal Reinforced Concrete Walk/Driveway | m ² | 105.9 | | |
| 4. | Removal of Asbestos Cement Pipe | m | 175 | | |
| 5. | Removal of Maintenance Hole Frames & Covers | Each | 1.0 | | |
| 6. | Removal of Maintenance Holes/Catch Basins including Frames & Covers | Each | 9.0 | | |
| 7. | Removal of Signs | Each | 4.0 | | |
| 8. | Removal of Street Light and Concrete Base | Each | 4.0 | | |
| 02223 | <u>Excavation, Trenching & Backfilling</u> | | | | |
| 1. | Main Trench Excavation | | | | |
| 1. | Rock | m ³ | 31.1 | | |
| 2. | Common | m ³ | 622.5 | | |
| 2. | Granular Pipe Bedding | | | | |
| 1. | Type 1 | m ³ | 424.8 | | |
| 2. | Type 2 | m ³ | 16.2 | | |
| 3. | Rock Underbedding | m ³ | 72.0 | | |
| 4. | Supply & Placement of Marking Tape | | | | |
| 1. | Plastic Tape | m | 356.0 | | |
| 02224 | <u>Roadway Excavation, Embankment & Compaction</u> | | | | |
| 1. | Mass Excavation & Backfill | | | | |
| 1. | Rock | m ³ | 62.6 | | |
| 2. | Common | m ³ | 3129.7 | | |
| | | | | Carry Over | |

SCHEDULE OF QUANTITIES AND PRICES
APPENDIX A

| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|--------------|---|----------------|----------|------------|-------|
| | | | | Carry Over | |
| | 2. Imported Backfill | | | | |
| | 1. Rock | m ³ | 1380.0 | | |
| | 2. Common | m ³ | 690.0 | | |
| 02233 | <u>Selected Granular Base and Sub Base Materials</u> | | | | |
| | 1. Class 'A' Granular Base | m ³ | 341.0 | | |
| | 2. Class 'B' Granular Sub-Base | m ³ | 511.5 | | |
| 02528 | <u>Concrete Walk, Curb and Gutter</u> | | | | |
| | 1. Supply & Place Granular Base Material | m ³ | 113.9 | | |
| | 2. Combined Curb and Sidewalk, 1,500mm wide, thickness varies | m | 236.9 | | |
| | 3. Driveway Ramps with Curb, 1,500mm wide, 150mm thick | m | 51.5 | | |
| | 4. Curb | m | 356.1 | | |
| | 5. Reinforced Concrete Walk/Driveway, 125mm thick | m ² | 105.9 | | |
| 02552 | <u>Hot Mix Asphaltic Concrete Paving</u> | | | | |
| | 1. Asphaltic Concrete | | | | |
| | 1. Base Course | tonne | 319.0 | | |
| | 2. Surface Course | tonne | 319.0 | | |
| 02574 | <u>Reshaping & Patching Asphalt Pavement</u> | | | | |
| | 1. Removal of Asphalt Pavement | m ² | 3170.0 | | |
| | | | | Carry Over | |

SCHEDULE OF QUANTITIES AND PRICES
APPENDIX A

| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|--------------|--|----------------|----------|------------|-------|
| | | | | Carry Over | |
| 02601 | <u>Maintenance Holes, Catch Basins, Ditch Inlets & Valve Chambers</u> | | | | |
| | 1. Supply & Placement of Pre-Cast Maintenance Holes, 1500mm Diameter (including cover) | | | | |
| | 1. 2.0m or less | Each | 3 | | |
| | 2. Supply & Placement of Pre-Cast Maintenance Holes, 1200mm Diameter (including cover) | | | | |
| | 1. 2.0m or less | Each | 6 | | |
| | 3. Supply and Placement of 1200mm Diameter Pre-Cast Catch Basins (including cover) | Each | 4 | | |
| | 4. Supply and Placement of 1200mm Diameter Pre-Cast Double Catch Basins (including cover) | Each | 8 | | |
| | 5. Supply, Install & Adjustment of Maintenance Hole Frames and Covers | Each | 1 | | |
| 02702 | <u>Pipe Sewer Construction</u> | | | | |
| | 1. Supply & Placement of Storm Sewer | | | | |
| | 1. 600mm CSP, 2.0mm | m | 100.0 | | |
| | 2. 450mm CSP, 2.0mm | m | 112.0 | | |
| | 3. 375mm CSP, 1.6mm | m | 95.0 | | |
| | 4. 300mm CSP, 1.6mm | m | 49.0 | | |
| | 2. CCTV Camera Inspection Services | m | 307.0 | | |
| | 3. Locate & Connect to Existing | Each | 3 | | |
| 02713 | <u>Water Mains</u> | | | | |
| | 1. Adjust Existing Valve Boxes to Grade | Each | 5 | | |
| 02897 | <u>Filter Fabrics (Geotextile)</u> | | | | |
| | 1. Supply & Install Non-Woven Filter Fabric | m ² | 5700.0 | | |
| | | | | Carry Over | |

SCHEDULE OF QUANTITIES AND PRICES
APPENDIX A

| SECTION | DESCRIPTION | UNIT | QUANTITY | PRICE | TOTAL |
|---------------|---|----------------|----------|------------|-------|
| | | | | Carry Over | _____ |
| <u>02899</u> | <u>Geogrid</u> | | | | |
| | 1. Supply & Install Triaxial Geogrid | m ² | 3800.0 | _____ | _____ |
| <u>265619</u> | <u>Roadway Lighting</u> | | | | |
| | 1. Supply & Install 38mm PVC Conduit | m | 58.4 | _____ | _____ |
| | 2. Supply & Install Street Light Cable | m | 180.0 | _____ | _____ |
| | 3. Supply & Install Concrete Bases | Each | 4 | _____ | _____ |
| | 4. Locate & Connect to Power Cable | Each | 7 | _____ | _____ |
| | a. Sub-Total | | | | _____ |
| | b. H.S.T. 15% of Sub-Total | | | | _____ |
| | c. Grand Total (Carry Forward to Page 1 of Tender Form) | | | | _____ |

APPENDIX "B"

List of Sub-Contractors

The list of sub-contractors and/or manufacturers and/or suppliers that shall be employed on this project for each part of the work identified in the table below must be completed by the bidder. The use of these sub-contractors and/or manufacturers and/or suppliers is subject to the approval of the Owner. If the work identified below is to be done by own forces indicate by filling in "own forces" in the "Company Name" column. "By own forces" will be acceptable only if approved by the owner in writing prior to tender close. Requests for approval of "By own forces" must be submitted 14 days before tender close.

This appendix was completed and submitted by:

Name _____

Address _____

Date, _____, and is an integral part of the Tender Form for Project

And shall be submitted as part of the Form of Tender.

| <i>Information in this column to be supplied by owner</i> | | <i>Information in this column to be supplied by bidder</i> | |
|---|---|--|----------------|
| Work | Category: Sub-contractor or Manufacturer or Supplier | Company Name | Address |
| | | | |
| | | | |
| | | | |
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| | | | |
| | | | |
| | | | |
| | | | |

For each category identified in the table above work experience references may be required by the owner.

AGREEMENT BETWEEN OWNER AND CONTRACTOR

AGREEMENT BETWEEN OWNER AND CONTRACTOR
for use when a unit price forms
the basis of payment and to be used only
with the General Conditions of the Contract.

THIS AGREEMENT made in duplicate the _____ day of _____
in the year Two thousand and _____

BY AND BETWEEN

hereinafter called the "Owner"

AND

hereinafter called the "Contractor"

WITNESSETH: that the Owner and Contractor undertake and agree as follows:

ARTICLE A-1 THE WORK

The Contractor shall:

- (a) perform all the Work required by the Contract Documents for
_____ (insert here the title of the
Work and the Project) which have been signed in duplicate by both the parties.
- (b) do and fulfill everything indicated by this Agreement, and
- (c) commence the Work by the _____ day of _____ 20 ____
and substantially perform the Work of this Contract as certified by the
Engineer/Architect by the _____ day of _____ 20 ____
- (d) The "Engineer/Architect" is the person designated as such from time to time by
the Owner.

ARTICLE A-2 CONTRACT DOCUMENTS

The following is an exact list of the Contract Documents referred to in Article A-1:

Insert here, attaching additional pages if required, a list identifying all Contract Documents including: Drawings, giving drawing number, title, date, revision date or mark, and Specifications, giving a list of contents with section numbers and titles, number of pages, and date or revision marks if any. Clearly identify any modifications to the Contract Documents.

ARTICLE A-3 CONTRACT PRICE

The Owner shall pay to the contractor in lawful money of Canada for the performance of the contract, the amounts determined for each of the items of work completed at the unit price stated in the unit price table, subject to the adjustments provided herein and in the General conditions of the contract. The quantities contained in the unit price table are approximate only, and the final payment shall be made for the actual quantities that are incorporated in or made necessary by the work covered by the Contract.

The Contract Price is _____
_____ Dollars,

(\$ _____) in Canadian funds, which price shall be subject to adjustments as may be required in accordance with the General Conditions of the Contract.

ARTICLE A-4 PAYMENT

- (a) Subject to applicable legislation and, in accordance with prescribed regulations and in accordance with the provisions of the General Conditions of the Contract, the owner shall:
 - (1) make monthly payments to the Contractor on account of the Contract Price. The amounts of such payments shall be as certified by the Engineer/Architect; and
 - (2) upon Substantial Performance of the work as certified by the Engineer/Architect pay to the Contractor any unpaid balance of holdback monies then due; and
 - (3) upon Total Performance of the Work as certified by the Engineer/Architect pay to the Contractor any unpaid balance of the Contract Price then due.
- (b) If the Owner fails to make payments to the Contractor as they become due under the terms of this Contract or in any award by a court, interest at the rate and in the manner specified in GC 21-Certificates and Payments, shall become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

ARTICLE A-5 ADDRESSES FOR NOTICES

All communications in writing between the parties or between them and the Engineer/Architect shall be deemed to have been received by the addressee if delivered to the individual or to a member of the firm or to an officer of the Corporation for whom they are intended or if sent by post or by telegram addressed as follows:

The Owner at _____
street and number and postal box number if applicable

post office or district, province, postal code

The Contractor at _____
street and number and postal box number if applicable

post office or district, province, postal code

The Engineer/Architect at _____
street and number and postal box number if applicable

post office or district, province, postal code

ARTICLE A-6 SUCCESSION

The General Conditions of the Contract hereto annexed, and all other aforesaid Contract Documents, are all to be read into and form part of this Agreement and the whole shall constitute the Contract between the parties and subject to law and the provisions of the Contract Documents shall ensure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors and assigns.

IN WITNESS WHEREOF the parties hereto have executed this Agreement under their respective corporate seals and by the hands of their proper officers thereunto duly authorized.

SIGNED, SEALED AND DELIVERED
in the presence of:

OWNER

CONTRACTOR

name

name

signed

signed

name and title

name and title

signed

signed

name and title

name and title

N.B. Where any legal jurisdiction, local practice or client requirement calls for proof of authority to execute this document, proof of such authority in the form of a certified copy of a resolution naming the person or persons in question as authorized to sign the Agreement for and on behalf of the Corporation or Partnership, should be attached.

GENERAL CONDITIONS

GENERAL CONDITIONS
OF
UNIT PRICE CONTRACT

GENERAL CONDITIONS OF CONTRACT

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| 3 | 3 | Additional Instructions and Schedule of Work |
| 4 | 3 | Documents Provided |
| 5 | 3 | Documents on the Site |
| 6 | 3 | Ownership of Documents and Models |
| 7 | 3 | Owner's Decisions |
| 8 | 4 | Delay |
| 9 | 4 | Owner's Right to do Work |
| 10 | 4 | Owner's Right to stop Work or Terminate Contract |
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| 12 | 6 | Other Contractors |
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GENERAL CONDITIONS OF CONTRACT

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| 36 | 18 | Use of Premises |
| 37 | 18 | Cleanup and Final Cleaning of Work |
| 38 | 18 | Cutting and Remedial Work |
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| 44 | 20 | Materials and Substitutions |
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| 46 | 21 | Time of Essence |
| 47 | 21 | Assessment and Damages for Late Completion |
| 48 | 21 | Certificate of Recognition for Contracts |

GENERAL CONDITIONS OF CONTRACT

GC1 DEFINITIONS

1.1 Amendment

Modifications to the Open Call for Bids Documents identifying any required additions, deletions, clarifications or corrections.

1.2 Contract Documents

The Contract Documents consist of the instruction to Bidders, executed Agreement, General Conditions of Contract, Supplementary General Conditions of Contract, Specifications, Drawings and such other documents as are listed in Article A-2 of the Agreement, including all amendments thereto incorporated before their execution and subsequent amendments thereto made pursuant to the provisions of the contract or agreed upon between the parties. The Successful Bidder's tender, and any addenda to the Specification issued during the bidding period shall also form part of the Contract Documents.

1.3 Contractor

The Contractor means the person, firm or corporation identified as such in the Agreement. The term Contractor means the Contractor or the Contractor's authorized representative as designated by the Contractor to the Owner in writing.

1.4 Materials and Equipment

The term Materials and Equipment means all materials, machinery, equipment and fixtures forming the completed work as required by the Contract Documents but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work and normally referred to as construction machinery and equipment.

1.5 Other Contractor

The term Other Contractor means any person, firm or corporation employed by or having a separate contract directly or indirectly with the Owner for work other than that required by the Contract Documents.

1.6 Owner

The Owner is the person or entity identified as such in the Agreement. The term Owner means the Owner or the Owner's authorized representatives as designated by the Owner to the Contractor in writing.

The Owner's Representative for the purposes of administering this construction Contract shall be the designated representative of the Owner, or their consultant.

1.7 Products

The term Products means all material, machinery, equipment and fixtures forming the completed work as required by the Contract Documents but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work and normally referred to as construction machinery and equipment.

1.8 Project

The term Project is the total construction of which the work performed under the Contract Documents may be the whole or a part.

1.9 Subcontractor

A Subcontractor is a person, firm or corporation having a direct contract with the Contractor to perform a part or parts of the Work included in the Contract, or to supply products worked to a special design according to the Contract Documents, but does not include one who merely supplies products not so worked.

1.10 Substantial Performance

A Contract shall be deemed to be substantially performed

- a) when the work or a substantial part thereof is ready for use or is being used for the purpose intended; and
- b) when the work to be done under the contract is capable of completion or correction at a cost of not more than:
 - (i) three per centum of the first two hundred and fifty thousand dollars (\$250,000) of the contract price,
 - (ii) two per centum of the next two hundred and fifty thousand dollars (\$250,000) of the contract price, and
 - (iii) one per centum of the balance of the contract price.

1.11 Time

- a) The Contract Time is the time stated in Article A-1(c) of the Agreement for Substantial Performance of the Work.
- b) The date of Substantial Performance of the Work is the date certified by the Owner.
- c) The term day, as used in the Contract Documents, shall mean the calendar day.
- d) The term working day means any day observed by the construction industry in the area of the place of building.

1.12 Total Performance

Total Performance shall mean when the Work has been performed to the requirements of the Contract Documents and is so certified by the Owner.

1.13 Work

Work includes the whole of the works, materials, matters and things required to be done, furnished and performed by the Contractor under the Contract.

GC 2 DOCUMENTS

2.1 The Contract Documents shall be signed in duplicate by the Owner and the Contractor.

2.2 Words which have well known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

2.3 In the event of conflicts between Contract Documents the following shall apply:

- a) Documents of later date shall govern.

- b) Figured dimensions shown on the Drawings shall govern even though they may differ from scaled dimensions.
- c) Drawings of larger scale shall govern over those of smaller scale of the same date.
- d) Specifications shall govern over Drawings.
- e) The General Conditions of Contract shall govern over Specifications.
- f) Supplementary General Conditions shall govern over the General Conditions of the Contract.

GC 3 ADDITIONAL INSTRUCTIONS AND SCHEDULE OF WORK

- 3.1 During the progress of the Work the Owner shall furnish to the Contractor such additional instructions as may be necessary to supplement the Contract Documents. All such instructions shall be consistent with the intent of the Contract documents.
- 3.2 Additional instructions may include minor changes to the Work which affect neither the Contract Price nor the Contract Time.
- 3.3 Additional instructions may be in the form of drawings, samples, models or written instructions.
- 3.4 Additional instructions will be issued by the Owner with reasonable promptness and in accordance with any schedule agreed upon.
- 3.5 The contractor shall, within thirty (30) days of the signing of this contract provide the Owner with a schedule of work.

GC 4 DOCUMENTS PROVIDED

- 4.1 The Contractor will be provided, without charge, a reasonable number of Contract Documents or parts thereof as are reasonably necessary for the performance of the Work.

GC 5 DOCUMENTS ON THE SITE

- 5.1 The Contractor shall keep one copy of all current Contract Documents and shop drawings on the site, in good order and available to the Owner and/or their representatives. This requirement shall not be deemed to include the executed Contract Documents.

GC6 OWNERSHIP OF DOCUMENTS AND MODELS

- 6.1 All Contract documents and copies thereof, and all models are and shall remain the property of the Owner and are not to be used on other work.
- 6.2 Such documents are not to be copied or revised in any manner without the written authorization of the Owner.
- 6.3 Models furnished by the Contractor or the Owner are the property of the Owner.

GC 7 OWNER'S DECISIONS

- 7.1 The Owner, in the first instance, shall decide on questions arising under the Contract Documents and interpret the requirements therein. Such decisions shall be given in writing.
- 7.2 The Contractor shall notify the Owner in writing within five (5) days of receipt of a decision of the Owner referred to in 7.1 should he hold that a decision by the Owner is in error and/or at variance with the contract Documents. Unless the Contractor fulfills this requirement subsequent claims by the Contractor for extra compensation, arising out of the decision, will not be accepted.
- 7.3 If the question of error and/or variance is not resolved immediately, and the Owner decides that the

disputed work shall be carried out, the Contractor shall act according to the Owner's written decision.

Any question of change in Contract Price and/or extension of Contract Time due to such error and/or variance shall be decided as provided in GC 16 - Settlement of Disputes.

GC 8 DELAY

- 8.1 If it can be clearly shown that the Contractor is delayed in the performance of the work by any act or fault of the Owner or other Contractor, then the contract time shall be extended for such reasonable time as the Owner may decide in consultation with the Contractor. The Contractor shall be reimbursed for any costs incurred by the Contractor as a result of such a delay occasioned by the act or fault, provided that it can be clearly shown that the Contractor's forces cannot work efficiently elsewhere on the project and that the incurred cost is limited to that which could not reasonably have been avoided.
- 8.2 If the Contractor is delayed in the performance of the Work by a Stop Work Order issued by any court or other public authority, and providing that such order was not issued as the result of any act or fault of the Contractor or of any one employed by the Contractor directly or indirectly, then the Contract Time shall be extended for such reasonable time as the Owner may decide, in consultation with the Contractor, and the Contractor shall be reimbursed for any on-site costs incurred by the Contractor as the result of such delay.
- 8.3 If the Contractor is delayed in the performance of the Work by civil disorders, labour disputes, strikes, lock-outs (including lock-outs decreed or recommended for its members by a recognized Contractor's Association, of which the Contractor is a member) fire, unusual delay by common carriers or unavoidable casualties or, without limit to any of the foregoing, by any cause of any kind whatsoever beyond the Contractor's control, then the Contract Time shall be extended for such reasonable time as may be decided by the Owner in consultation with the Owner and the Contractor, but in no case shall the extension of time be less than the time lost as the result of the event causing the delay, unless such shorter extension of time be agreed to by the Contractor.
- 8.4 No extension shall be made for delay unless written notice of claim is given to the Owner within fourteen (14) days of its commencement, providing that in the case of a continuing cause of delay only one notice shall be necessary.

GC 9 OWNER'S RIGHT TO DO WORK

- 9.1 If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of the Contract, the Owner may notify the Contractor in writing that he is in default of the Contractor's contractual obligations and instruct the Contractor to correct the default within five (5) working days of receiving the notice.
- 9.2 If the correction of the default cannot be completed within the five (5) working days specified, the Contractor shall be considered to be in compliance with the Owner's instructions if he:
- a) commences the correction of the default within the specified time, and
 - b) provides the Owner with an acceptable schedule for such correction, and
 - c) completes the correction in accordance with such schedule.
- 9.3 If the Contractor fails to comply with the provisions 9.1 and 9.2 the Owner may, without prejudice to any other right or remedy the Owner may have, correct such default and may deduct the cost thereof from the payment then or thereafter due the Contractor.

GC 10 OWNER'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

- 10.1 If the Contractor should be adjudged bankrupt, or makes a general assignment for the benefit of creditors or if a receiver is appointed on account of the Contractor's insolvency, the Owner may, without prejudice to any other right or remedy the Owner may have, by giving the Contractor written notice, terminate the Contract.
- 10.2 The Owner may notify the Contractor in writing that the Contractor is in default of the Contractor's contractual obligations, if the Contractor.
- a) fails to proceed regularly and diligently with the work; or
 - b) without reasonable cause wholly suspends the carrying out of the work before the completion thereof, or
 - c) refuses or fails to supply sufficient properly skilled workmen or proper workmanship, products or construction machinery and equipment for the scheduled performance of the work within five (5) working days of receiving written notice from the Owner, except in those cases provided in GC 8 - Delay; or
 - d) fails to make payments due to the Contractor's Subcontractors, suppliers or workers; or
 - e) persistently disregards laws or ordinances, or the Owner's instructions; or
 - f) Otherwise violates the provisions of the Contract to a substantial degree.
- Such written notice by the Owner shall instruct the Contractor to correct the default within five (5) working days from the receipt of the written notice.
- 10.3 If the correction of the default cannot be completed within the five (5) working days specified, the Contractor shall be considered to be in compliance with the Owner's instructions if the Contractor:
- a) commences the correction of the default within the specified time,
 - b) provides the Owner with an acceptance schedule for such correction, and
 - c) completes the correction in accordance with such schedule.
- 10.4 If the Contractor fails to correct the default within the time specified or subsequently agreed upon, the Owner may, without prejudice to any other right or remedy the Owner may have, stop the work or terminate the Contract.
- 10.5 If the Owner terminates the Contract under the conditions set out above, the Owner is entitled to:
- a) take possession of the premises and products and utilize the temporary buildings, plants, tools, construction machinery and equipment, goods, materials, intended for, delivered to and placed on or adjacent to the work and may complete the work by whatever method the Owner may deem expedient but without undue delay or expense;
 - b) withhold any further payments to the Contractor until the work is finished.
 - c) upon Total Performance of the Work, charge the Contractor the amount by which the full cost of finishing the work including compensation to the Owner for the Owner's services and a reasonable allowance to cover the cost of any corrections required by GC 31 - Warranty, exceeds the unpaid balance of the Contract Price; or if such cost of finishing the work is less than the unpaid balance of the Contract Price, pay the Contractor the difference.
 - d) on expiry of the warranty period, charge the Contractor the amount by which the cost of corrections under GC 31 - Warranty exceeds the allowance provided for such corrections, or if the cost of such corrections is less than the allowance, pay the Contractor the difference.

GC 11 CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

- 11.1 If the Owner should be adjudged bankrupt, or makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of the Owner's insolvency, the Contractor may, without prejudices to any other right or remedy the Contractor may have, by giving the Owner written notice, terminate the Contract.
- 11.2 If the work should be stopped or otherwise delayed for a period of thirty days or more under an order of any court, or other public authority, and providing that such order was not issued as the result of any act or fault of the Contractor or of any one directly or indirectly employed by the Contractor, the Contractor may, without prejudice to any other right or remedy the Contractor may have, by giving the Owner fifteen (15) days written notice, terminate the Contract.
- 11.3 The Contractor may notify the Owner in writing that the Owner is in default of the Owner's contractual obligations if:
- a) the Owner fails to issue a certificate in accordance with GC 21 -- Certificates and Payments;
 - b) The Owner fails to pay to the Contractor when due any amount certified by the Owner and verified by the audit of the Owner.
- Such written notice shall advise the Owner that if such default is not corrected within fifteen (15) days from the receipt of the written notice the Contractor may, without prejudice to any other right or remedy the Contractor may have, stop the work and/ or terminate the contract.
- 11.4 If the Contractor terminates the Contract under the conditions set out above, he shall be entitled to be paid for all work performed and for any loss sustained upon products and plant supplied with reasonable overhead, profit and damages.

GC 12 OTHER CONTRACTORS

- 12.1 The Owner reserves the right to let separate contracts in connection with the project of which the Work is part.
- 12.2 The Owner shall co-ordinate the work and insurance coverages of Other Contractors as it affects the Work of this Contract.
- 12.3 The Contractor shall coordinate the Contractor's work with that of Other Contractors and connect as specified or shown in the Contract Documents. Any change in the costs incurred by the Contractor in the planning and performance of such work which was not shown or included in the Contract documents as of the date of signing the Contract, shall be evaluated as provided under GC 19 - Valuation and Certification of Changes in the Work.
- 12.4 The Contractor shall report to the Owner any apparent deficiencies in other Contractor's work which would affect the Work of this Contract immediately they come to his attention and shall confirm such report in writing. Failure by the Contractor to so report shall invalidate any claims against the Owner by reason of the deficiencies of Other Contractor's work except as to those of which he was not reasonably aware.

GC 13 ASSIGNMENT

- 13.1 The Contractor shall not assign the contract or any part thereof or any benefit or interest therein or thereunder with/out the written consent of the Owner.

GC 14 SUBCONTRACTORS

- 14.1 The Contractor agrees to preserve and protect the rights of the Owner under the Contract with respect to any work to be performed under subcontract. The Contractor shall:

- a) require the Contractor's Subcontractors to perform their work in accordance with and subject to the terms and conditions of the Contract Documents, and
- b) be fully responsible to the Owner for acts and omissions of the Contractor's Subcontractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Contractor.

The Contractor therefore agrees that he will incorporate all the terms and conditions of the Contract Documents into all Subcontract Agreements the Contractor enters into with his Subcontractors.

- 14.2 The Contractor shall employ those Subcontractors proposed by the Contractor in writing and accepted by the Owner prior to the signing of the Contract for such portions of the work as may be designated in the bidding requirements.
- 14.3 The Owner may, for reasonable cause, object to the use of a proposed Subcontractor and require the Contractor to employ another.
- 14.4 In the event that the Owner requires a change from any proposed Subcontractor the Contract Price shall be adjusted by the difference in cost occasioned by such required change.
- 14.5 The Contractor shall not be required to employ as a Subcontractor any person or firm to whom he may reasonably object.
- 14.6 The Owner may, upon reasonable request and at the Owner's discretion, provide to a subcontractor information as to the percentage of the Subcontractor's work which has been certified for payment.
- 14.7 Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the Owner.

GC 15 EMERGENCIES

- 15.1 The Owner has authority in an emergency to stop the progress of the work whenever in the Owner's opinion such stoppage maybe necessary to ensure the safety of life, or the work, or neighbouring property. This includes authority to make changes in the work, and to order, assess and award the cost of such work, extra to the Contract or otherwise, as may in the Owner's opinion be necessary. The Owner shall, within two (2) working days, confirm in writing any such instructions. In such a case if work has been performed under direct order of the Owner, the Contractor shall keep the Contractor's right to claim the value of such work.
- 15.2 Should the work be stopped by civil pickets, or other disorder, neither the Owner nor the Contractor shall have claim for change in the price of the Contract.

GC 16 SETTLEMENT OF DISPUTES AND CLAIMS

- 16.1 In the case of any dispute or claim arising between the Owner and the Contractor as to their respective rights and obligations under the Contract, either party hereto may give the other written notification of such dispute or claim. The notification of dispute or claim shall be made within fourteen (14) days of the dispute or cause of action arising. If the dispute or claim cannot be resolved to the satisfaction of both parties, either party may refer the matter to such judicial tribunal as the circumstances require.
- 16.2 Legal proceedings shall not take place until after the performance or the substantial performance of the disputed work except:
 - a) when the dispute concerns a certificate for payment.
 - b) where either party can show that the matter in dispute requires immediate consideration while evidence is available.

- c) in the case of legal proceedings, where the action may become prescribed by reason of delay.

GC 17 INDEMNIFICATION

- 17.1 Except as provided in 17.2, the Contractor shall be liable for, and shall indemnify and hold harmless the Owner against all claims, demands, losses, costs, damages, actions, suits or proceedings, whatsoever arising under any statute or Common Law:
 - a) in respect of personal injury to or the death of any person whomsoever arising out of or in the course of or caused by the carrying out of the Work; and
 - b) in respect of any injury or damage whatsoever to any property, real or personal or any chattel real, insofar as such injury or damage arises out of or in the course of or by reason of the carrying out of the Work.
- 17.2 The Contractor shall not be liable under 17.1 if the injury, death, loss or damage is due to any act or neglect of the Owner.

GC 18 CHANGES IN THE WORK

- 18.1 The Owner may make changes by altering, adding to, or deducting from the Work, with the amount due under the Contract and the Contract Time being adjusted accordingly.
- 18.2 Except as provided in GC 15 - Emergencies, no change shall be made without a written order from the Owner and no claim for an addition or deduction from the amount due under the contract or change in the Contract Time shall be valid unless so ordered and at the same time valued or agreed to be valued as provided in GC 19 - Valuation and Certification of Changes in the Work.

GC 19 VALUATION AND CERTIFICATION OF CHANGES IN THE WORK

- 19.1 The value of any change shall be determined in one or more of the following methods:
 - a) by unit prices as provided in Article A-3 of the Agreement
 - b) by unit prices subsequently agreed upon
 - c) by cost and a fixed or percentage fee.

In the case of changes in the work valued as outlined in 19.1 (a), where Unit Prices are provided in the Contract for Work to be done, those Unit Prices shall be used in determining the value of the change. If any Unit Price is not provided in the Contract for the Work, a Unit Price shall be subsequently agreed upon or an alternate method of determining the value of the Work shall be used.

In the case of changes in the Work valued as outlined in GC 19.1 (b), the Contractor shall submit an itemized estimate for all materials and labour to complete the extra work.

Subject to the provision of GC 19.2, when work is performed by the Contractor's own forces the Contractor's markup for overhead shall be ten (10) percent and the Contractor's profit ten (10) percent of the agreed or actual cost of the change. When work is performed by one of the Contractor's Subcontractors, the Subcontractor's markup for overhead shall be ten (10) percent of the agreed or actual cost of the change plus five (5) percent for profit. The Contractor's markup for overhead and profit shall be ten (10) percent of the Subcontractor's total price.

- 19.2 Notwithstanding the provisions of 19.1, in case of changes in the work, (a) where unit prices are provided in the Contract for work to be done those unit prices shall be used in determining the value of any change and (b) the amount charged for equipment rentals shall be that provided in the

Contract and no additional amount shall be paid as markup for overhead or profit for the Contractor or Subcontractor.

- 19.3 Notwithstanding the provisions of GC 19.1, in case of purchase of left over product or materials, the Contractor's profit shall be ten (10) percent of the cost as supported by invoices or vouchers, or agreed upon price. No markup for overhead shall be added. This applies to material or product that are supplied only and not installed on site.
- 19.4 When a change in the work is proposed or required the Contractor shall present to the Owner for approval the Contractor's claim for any change in the Contract Price and/or change in the Contract Time. The Owner shall be satisfied as to the correctness of such claim and, when approved shall issue a written order to the Contractor to proceed with the change. The value of work performed in the change shall be included for payment with the regular certificate for payment.
- 19.5 In the case of changes in the Work to be paid for under GC 19.1, the form of presentation of costs and methods of measurement shall be agreed to by the Owner and Contractor before proceeding with the change. The Contractor shall keep accurate records, as agreed upon, of quantities or costs and present an account of the cost of the change in the Work, together with vouchers where applicable.
- 19.6 If the method of valuation, measurement and the change in Contract Price and/or change in Contract Time cannot be promptly agreed upon, and the change is required to be proceeded with then the Owner shall determine the method of valuation, measurement and the change in Contract Price and/or Contract Time subject to final determination in the manner set out in GC 16 - Settlement of Disputes and Claims. In this case the Owner shall issue a written authorization for the change setting out the method of valuation and if by lump sum the Owner's valuation of the change in Contract Price and/or Contract Time.
- 19.7 In the case of a dispute in the valuation of a change authorized in the Work pending final determination of such value, the Owner shall certify the value of work performed and include the amount with the regular certificates for payment.
- 19.8 It is intended in all matters referred to above that both the Owner and Contractor shall act promptly.
- 19.9 Credits will be based on the net cost of material and labour or the net difference in unit price quantities.

GC 20 APPLICATION FOR PAYMENT

- 20.1 Applications for payment on account as provided for in Article A-4 may be made monthly as the Work progresses.
- 20.2 Application for payment shall be made monthly on a date to be agreed between the Owner and the Contractor and the amount claimed shall be for the value, proportionate to the amount of the Contract, of work performed and products delivered to the site at that date.
- 20.3 The Contractor shall submit to the Owner, before the first application for payment, a schedule of values of the various parts of the Work, aggregating the total amount of the Contract Price and divided so as to facilitate evaluation of applications for payment.
- 20.4 The revised schedule, if required, shall be made out in such form, and supported by such evidence as to its correctness, as the Owner may reasonably direct, and when approved by the Owner shall be used as the basis for application for payment.
- 20.5 When making application for payment, the Contractor shall submit a statement based upon this schedule. Claims for products delivered to the site but not yet incorporated into the Work shall be supported by such evidence as the Owner may reasonably require to establish the value and delivery of the products.
- 20.6 Applications for release of holdback monies following the Substantial Performance of the Work and

the application for final payment shall be made at the time and in the manner set forth in GC 21 Certificates and Payments.

GC 21 CERTIFICATES AND PAYMENTS

- 21.1 The Owner shall, within ten (10) days of receipt of an application for payment from the Contractor submitted in accordance with GC 20 - Application for Payment, issue a certificate for payment in the amount applied for or such other amount as he shall determine to be properly due. If the Owner amends the application the Owner shall promptly notify the Contractor in writing, giving the Owner's reasons for the amendment.
- 21.2 The Owner shall within twenty-one (21) days of the issuance of a certificate for payment by the Owner, make payment to the Contractor on account, in accordance with the provisions of the Agreement.
- 21.3 If payment is not made within sixty (60) days of issuance of a certificate for payment by the Owner the Owner will be liable for interest on the amount owing at the rate of 2% per annum from the sixty-first (61st) day to the date of payment.
- 21.4 Notwithstanding any other provisions of this Contract:
- a) If on account of climatic or other conditions reasonably beyond the control of the Contractor there are items of work that cannot be performed, the payment in full for that which has been performed as certified by the Owner shall not be withheld or delayed by the Owner on account thereof, but the Owner may withhold from the Contract Price until the remaining work is finished an amount sufficient to cover the cost to the Owner of performing such remaining work and to adequately protect the Owner from claims.
 - b) The holdbacks will be released on the following conditions:
 - i) a copy of the contract between the Subcontractor and the Contractor, or some other suitable Document satisfactory to the Owner, must be presented to the Owner,
 - ii) the Subcontract is completed without deficiencies;
 - iii) the warranty for the Subcontract will not start until Substantial Performance of the General Contract;
 - iv) the Contractor provides an approved statutory declaration that all monies have been paid to the Subcontractors;
 - v) the Owner will, at that time, release the total amount specified on the Sub-contractor's Contract.
- 21.5 Notwithstanding the provisions of 21.4 (b) and notwithstanding the wording of such certificate the Contractor shall ensure that such work is protected pending the Total Performance of the Contract and be responsible for the change. The value of work performed in the change shall be included for payment with the regular certificate for payment.
- 21.6 The Owner shall, within ten (10) days of receipt of an application from the Contractor for a Certificate of Substantial Performance, make an inspection and assessment of the work to verify the validity of the application. The Owner shall within seven (7) days of the Owner's inspection notify the Contractor of the Owner's approval or disapproval of the application. When the Owner finds the Work to be Substantially Performed the Owner shall issue such a certificate. The date of this certificate shall be the date of Substantial Performance of the Contract. Immediately following the issuance of the Certificate of Substantial Performance, the Owner, in consultation with the Contractor shall establish a reasonable date for the Total Performance of the Contract.
- 21.7 Following the issuance of the Certificate of Substantial Performance and upon receipt from the Contractor of all documentation called for in the Contract Documents the Owner shall issue a

certificate for payment of holdback monies. The release of holdback monies authorized by this certificate shall become due and payable on the day following the expiration of the Statutory Limitation Period stipulated in the Mechanics' Lien Act applicable to the place of building, providing that no lien or privilege claims against the Work exist and the Contractor has submitted to the Owner a sworn statement that all accounts for labour, subcontracts, products, construction machinery and equipment and any other indebtedness which may have been incurred by the Contractor in the Substantial Performance of the Work and for which the Owner might in any way be held responsible have been paid in full except holdback monies properly retained.

- 21.8 The Owner shall, within ten (10) days of receipt of an application from the Contractor for payment upon Total Performance of the Contract, make an inspection and assessment of the work to verify the validity of the application. The Owner shall within seven (7) days of the Owner's inspection notify the Contractor of the Owner's approval or disapproval of the application. When the Owner finds the Work to be totally performed to the Owner's satisfaction he shall issue a Certificate of Total Performance and certify for payment the remaining monies due to the Contractor under the Contract less any holdback monies which are required to be retained. The date of this certificate shall be the date of Total Performance of the Contract. The Owner shall, within thirty (30) days of issuance of such certificate, make payment to the Contractor in accordance with the provisions of Article A-4 of the Agreement.
- 21.9 The release of any remaining holdback monies shall become due and payable on the day following the expiration of the Statutory Limitation Period stipulated in the Mechanics' Lien Act applicable to the place of building or where such legislation does not exist or apply in accordance with such other legislation, regulations governing privileges, industry practice or such other provisions which may be agreed to between the parties, provided that no claims against the Work exist and the Contractor has submitted to the Owner a sworn statement that all accounts for labour, subcontracts, products, construction machinery and equipment and any other indebtedness which may have been incurred by the Contractor in the Total Performance of the Work and for which the Owner might in any way be held responsible, have been paid in full except holdback monies properly retained.
- 21.10 No certificate for payment, or any payment made thereunder, nor any partial or entire use of occupancy of the Work by the Owner shall constitute an acceptance of any work or products not in accordance with the Contract Documents.
- 21.11 The issuance of the Certificate of Total Performance shall constitute a waiver of all claims by the Owner against the Contractor except those previously made in writing and still unsettled, if any, and those arising from the provisions of GC 31 - Warranty, or those arising from negligence on the part of the Contractor.

The acceptance of the Certificate of Total Performance or of the payment due thereunder shall constitute a waiver of all claims by the Contractor against the Owner except those made in writing prior to the Contractor's application for payment upon Total Performance of the Contract and still unsettled, if any.

- 21.12 The holdback to be used by the Owner when issuing certificate of payment will be ten (10) percent of the value of the work completed at the date of the Contractor's claim.
- 21.13 Notwithstanding the provisions of 21.3 or any other provision of this Contract, the Owner may:
- a) in the event of a claim by the Owner against the Contractor for damages arising out of the performance or non-performance of the Contract, withhold payment of any amount equal to the alleged damages until the liability for damages is established and no amount of interest will be paid on amounts held under this clause;
 - c) set-off amounts owing by the Contractor to the Owner,
 - c) following the issuance of the Certificate of Substantial Performance, withhold payment of an amount equal to twice the cost, as estimated by the Owner, of remedying deficiencies until the issuance of a Certificate of Total Performance and no amount of interest will be paid on amounts held under this clause.

GC 22 TAXES AND DUTIES

- 22.1 The Contractor shall pay all government sales taxes, customs duties and excise taxes with respect to the Contract.

Contractors are advised that the Owner is not exempt from the Harmonized Sale Tax (HST). The Owner will pay the HST to the Contractor with each regular progress billing.

- 22.2 Any increase or decrease in costs to the Contractor due to changes in such taxes and duties after the date of the Agreement and up to the agreed date of completion shall increase or decrease the Contract Price accordingly. The Contractor is to co-operate with the Owner and permit access to books and records in order to establish the amount of such taxes involved.
- 22.3 The Contractor shall maintain full records of his estimates of and actual cost to him of the work together with all proper tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto, shall make them available to audit and inspection by the Owner, the Auditor General for Newfoundland and Labrador or by persons acting on their behalf, shall allow them to make copies thereof and to take extracts therefrom, and shall furnish them with any information which they may require from time to time in connection with such records.

GC 23 LAWS, NOTICES, PERMITS AND FEES

- 23.1 The laws of the place of building shall govern the work.
- 23.2 The Contractor shall obtain all permits, licenses and certificates and pay all fees required for the performance of the Work which are in force at the date of tender submission (but this shall not include the obtaining of permanent easements or rights of servitude).
- 23.3 The Contractor shall give all required notices and comply with all laws, ordinances, rules, regulations, codes and order of all authorities having jurisdiction relating to the Work, to the preservation of the public health and construction safety which are or become in force during the performance of the Work.
- 23.4 The Contractor shall not be responsible for verifying that the Contract Documents are in compliance with the applicable laws, ordinances, rules, regulations and codes relating to the Work. If the Contract Documents are at variance therewith, or changes which require modification to the Contract Documents are made to any of the laws, ordinances, rules, regulations and codes by the authorities having jurisdiction subsequent to the date of tender submission, any resulting change in the cost shall constitute a corresponding change in the Contract Price. The Contractor shall notify the Owner in writing requesting direction immediately any such variance or change is observed by the Contractor.
- 23.5 If the Contractor fails to notify the Owner in writing and obtain the Owner's direction as required in GC 23.4 and performs any work knowing it to be contrary to any laws, ordinances, rules, regulations, codes and orders of any authority having jurisdiction, the Contractor shall be responsible for and shall correct any violations thereof and shall bear all costs, expense and damages, attributable to the Contractor's failure to comply with the Provisions of such laws, ordinances, rules, regulations, codes and orders.
- 23.6 The Contractor may be required to carry the cost of a municipal permit related to performance of the Work. If a municipal permit is requested, the Contractor shall advise the Owner of the request and where directed by the Owner, shall pay for and obtain a permit related to the conduct of the Work and the Owner will issue a change order to allow for payment of the cost of obtaining the permit. Nothing in this clause relieves the Contractor of its obligation to make such filings and to submit such documents and notices with respect to the Work on behalf of the Owner as are otherwise required by the municipality. All other permits are to remain the responsibility of the Contractor.

GC 24 PATENT FEES

- 24.1 The Contractor shall pay all royalties and patent licence fees required for the performance of the contract and such royalties or fees shall be deemed to have been included in the contract price. The Contractor shall hold the Owner harmless from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the Contractor's performance of the Contract which are attributable to an infringement or an alleged infringement of any patent or invention by the Contractor or anyone for whose acts he may be liable.
- 24.2 The Owner shall hold the Contractor harmless against all claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of the Contractor's performance of the Contract which are attributable to an infringement or an alleged infringement of any patent or invention in executing anything for the purpose of the Contract, the model, plan or design of which was supplied to the Contractor by the Owner.

GC 25 WORKPLACE NL

- 25.1 Prior to commencing the Work and prior to receiving payment on Substantial and Total Performance of the Work, the Contractor shall provide evidence of compliance with all requirements of the Province of the place of building with respect to workmen's compensation including payments due thereunder.
- 25.2 At anytime during the term of Contract, when requested by the Owner, the Contractor shall provide such evidence of compliance by the Contractor and any or all of his Contractor's Subcontractors.
- 25.3 Non incorporated companies i.e.: partnerships, sole proprietorships, and independent operators must provide coverage for any employees and personal coverage for the principal(s).

GC 26 LIABILITY INSURANCE

26.1 Comprehensive General Liability Insurance

- a) Without restricting the generality of GC 17 - Indemnification, the Contractor shall provide and maintain, either by way of a separate policy or by an endorsement to his existing policy, Commercial Liability Insurance acceptable to the Owner and subject to limits set out in detail in the Certificate of Insurance inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof.
- b) The insurance shall include as an additional insured Her Majesty the Queen in Right of Newfoundland and Labrador. Such insurance must have the approval of the Owner and be to the limits, form and amounts specified. The Contractor will not permit any Subcontractor to commence work on this Project until the same insurance requirements have been complied with by the Subcontractor.
- c) The insurance shall also include as Unnamed Insureds the architectural and engineering consultants of the Owner with respect to work performed by the Contractor, but excluding professional liabilities associated with such architectural and engineering consultants.
- d) The insurance shall preclude subrogation claims by the Insurer against anyone insured thereunder.
- e) The Comprehensive General Liability Insurance will not be limited to, but shall include coverage for:
- 1) premises and operations liability
 - 2) products or completed operations liability
 - 3) blanket contractual liability
 - 4) broad form property damage
 - 5) cross liability
 - 6) elevator and hoist liability

- 7) contingent employer's liability
- 8) personal injury liability
- 9) liability with respect to non-owned licenced vehicles
- 10) shoring, blasting, excavating, underpinning, demolition, pile driving and caisson work, work below ground surface, tunneling and grading as applicable.

26.2 Automobile Liability Insurance

The Contractor shall provide and maintain liability insurance in respect of (i) owned licenced vehicles, (ii) leased vehicles, subject to limits set out in detail in this Contract.

26.3 Aircraft and or Watercraft Liability Insurance

The Contractor shall provide and maintain liability insurance with respect to owned and non-owned aircraft and watercraft, as may be applicable, subject to limits set out in this Contract. Such insurance shall be in the names of the Contractor, Her Majesty the Queen in Right of Newfoundland and Labrador, and the Owner as defined in 26.1(b) and (c) where they have an insurable interest in the use and operation of such aircraft or watercraft.

26.4 Airport Contractor Liability Insurance

The Contractor shall provide and maintain liability insurance with respect to work completed on the tarmac side of an airport and/or inside an airport and the area outside an airport if this is not provided within the contractor's Commercial General Liability Insurance.

26.5 Environmental Impairment Liability Insurance

The Contractor shall provide and maintain liability insurance with respect to environmental contamination/remediation at a work site.

26.6 Completed operations shall be maintained continuously until twelve (12) months from the date the Owner issues a Certificate of Substantial Performance.

26.7 All insurance policies shall contain an endorsement requiring notification of Her Majesty and the Named Insured, in writing, thirty (30) days prior to cancellation of any policy or material change, except in the event of non-payment where policy conditions dealing with termination will apply.

GC 27 PROPERTY INSURANCE

27.1 The Contractor shall provide and maintain property insurance, acceptable to the Owner, insuring the full value of the Work in the amount of the contract price and the full value as stated of products for incorporation into the Work. The insurance shall include as additional insured Her Majesty the Queen in Right of Newfoundland and Labrador.

27.2 Such coverage shall be provided for by **either** Broad Form Builders' Risks Policy or an Installation Floater **or** Piers, Wharves, and Docks Rider.

27.3 The policies shall insure on a Broad Form basis direct loss or damage subject to any exclusions specified in the Contract. Such coverage shall apply to:

- a) all products, labour and supplies of any nature whatsoever, the property of the Insureds or of others for which the Insureds may have assumed responsibility, to be used in or pertaining to the site preparations, demolition of existing structures, erections and/ or fabrication and/ or reconstruction and/ or repair of the insured project, while on the site or in transit, subject to the property specified.
- b) the installation, testing and any subsequent use of machinery and equipment including boilers, pressure vessels or vessels under vacuum.
- c) damage to the Work caused by an accident to and/or the explosion of any boiler(s) or

pressure vessel(s) forming part of the work.

- d) damage to Work caused by earthquake or flooding.

Such coverage shall exclude construction machinery, equipment, temporary structural and other temporary facilities, tools, and supplies used in the construction of the work and which are not expendable under the Contract.

- 27.4 Policies provided shall contain an endorsement requiring notification of Her Majesty and the Named Insured, in writing, thirty (30) days prior to cancellation of any policy or material change of coverage except in the event of non-payment where policy conditions dealing with termination will apply.
- 27.5 All such insurance shall be maintained continuously until the date the Owner issues a Certificate of Substantial Performance. All such insurance shall provide for the Owner to take occupancy of the work or any part thereof during the terms of this insurance. Any increase in the cost of this insurance arising out of such occupancy shall be at the Owner's expense.
- 27.6 The policies shall provide that, in the event of a loss, payment for damage to the Work shall be made to the Owner and the Contractor as their respective interests may appear. The Contractor shall act on behalf of the Owner and the Contractor for the purpose of adjusting the amount of such loss with the Insurers. On the determination of the extent of the loss, the Contractor shall immediately proceed to restore the Work and shall be entitled to receive from the Owner (in addition to any sum due under the Contract) the amount at which the Owner's interest in the restoration work has been appraised, such amount to be paid as the work of the restoration proceeds and in accordance with the Owner's certificates for payment. Damage shall not affect the rights and obligations of either party under the Contract except that the Contractor shall be entitled to such reasonable extension of time for Substantial and Total Performance of the Work as the Owner may decide.
- 27.7 The Contractor shall be responsible for any deductible amounts under the policies and for providing such additional insurance as may be required to protect the insureds against loss on items excluded from the policies. Contractors are also advised that the Bid Documents contain a Certificate of Insurance indicating type and limit of liability insurance required for this project. The successful bidder will be required prior to commencement of work, to have the Certificate of Insurance completed by the Contractor's insurance company and delivered to the Owner not later than 30 days after the award of the contract.

GC 28 PROTECTION OF WORK AND PROPERTY

- 28.1 The Contractor shall protect the property adjacent to the Project site from damage as the result of his operations under the Contract.
- 28.2 The Contractor shall protect the Work and the Owner's property from damage and shall be responsible for any damage which may arise as the result of the Contractor's operations under the Contract except damage which occurs as the result of :
 - a) errors in the Contract Documents, and/or
 - b) acts or omissions by the Owner, his agents, employees or Other Contractors.
- 28.3 Should any damage occur to the Work and/or Owner's property for which the Contractor is responsible the Contractor shall make good such damage at his own expense or pay all costs incurred by others in making good such damage.
- 28.4 Should any damage occur to the Work and/or Owner's property for which the Contractor is not responsible for as provided in GC 17, indemnification, the Contractor shall make good such damage to the Work, and, if the Owner so directs to the Owner's property, and the Contract Price and Contract Time shall be adjusted in accordance with GC 18 - Changes in the Work.
- 28.5 The Contractor shall be completely responsible for the safety of the work as it applies to protection of

the public and property and the construction of the work. All applicable codes and standards for the area and location of the Work shall apply to the project.

28.6 Any person not following the stipulated safety regulations shall be dismissed

GC 29 DAMAGES AND MUTUAL RESPONSIBILITY

29.1 If either party to this Contract should suffer damage in any manner because of any wrongful act or neglect of the other party or anyone employed by him then he shall be reimbursed by the other party for such damages. The party reimbursing the other party shall be subrogated to the rights of the other party in respect of such wrongful act or neglect if it be that of a third party.

29.2 Claims under this GC shall be made in writing to the party liable within reasonable time after the first observance of such damage and not later than the time limits stipulated in GC 21 - Certificates and Payments, and may be adjusted by agreement or in the manner set out in GC 16 - Settlement of Disputes and Claims.

29.3 If the Contractor has caused damage to any Other Contractor on the work, the Contractor agrees upon due notice to settle with such Other Contractor by agreement or arbitration, if the Other Contractor will so settle. If such Other Contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor and may require the Contractor to defend the action at the Contractor's expense. If any final order or judgement against the Owner arises therefrom the Contractor shall pay or satisfy it and pay all costs incurred by the Owner.

29.4 If the Contractor becomes liable to pay or satisfy any final order, judgement or award against the Owner then the Contractor, upon undertaking to indemnify the Owner against any and all liability for costs, shall have the right to appeal in the name of the Owner such final order or judgement to any and all courts of competent jurisdiction.

GC 30 BONDS

30.1 The Owner shall have the right during the period stated in the tender documents for acceptance of the tender to require the Contractor to provide and maintain in good standing until the fulfillment of the Contract, bonds covering the faithful performance of the Contract including the requirements of the Warranty provided for in GC 31 - Warranty, and the payment of all obligations arising under the Contract.

30.2 All such bonds shall be issued by a duly incorporated surety company approved by the Owner and authorized to transact a business or surety-ship in the Province of Newfoundland.

30.3 If bonds are called for in the tender documents or supplementary general conditions or instructions to bidders, the costs attributable to providing such bonds shall be included in the tender price.

30.4 Should the Owner require the provision of a bond or bonds by the Contractor other than those provided for under GC 30.3, the Contract Price shall be increased by all costs attributable to providing such bonds.

30.5 The Contractor shall promptly provide the Owner with any bonds that are required.

GC 31 WARRANTY

31.1 Without restricting any warranty or guarantee implied or stipulated by law the Contractor shall at the Contractor's own expense rectify and make good any defect or fault however caused appearing within a period of one year from the date of Substantial Performance of the Work provided that the Contractor shall not be responsible for any defect or fault resulting from the design of the work.

31.2 The Contractor shall correct and/or pay for any damage to other work resulting from any corrections

required under the conditions of 31.1.

- 31.3 Neither the Owner's final certificate nor payment thereunder shall relieve the Contractor from the Contractor's responsibility hereunder.
- 31.4 The Owner shall give the Contractor written notice of observed defects promptly.
- 31.5 In any case where the Contractor states that they are not responsible for a defect or fault because such a defect or fault is the result from a design of the work by the Owner, the onus to establish the defect or fault in the design of the work shall be on the Contractor.
- 31.6 The Contractor shall, subject to the procedures for Settlement of Disputes contained in GC 16 – Settlement of Disputes and Claims, abide by the direction and decisions of the Owner made pursuant to the General Conditions and in particular GC 7 – Owner's Decisions regarding the correction by the Contractor of any defect or fault in the work discovered during the warranty period referenced in GC 31.1 hereof.
- 31.7 The Contractor shall submit a schedule, acceptable to the Owner, for the completion of the warranty work in respect of the defect or fault referenced in GC 31.1, within thirty (30) days of the Owner requesting in writing such a schedule from the Contractor.
- 31.8 Where the Contractor rectifies and makes good any defect or fault for which the Contractor is responsible under this Warranty, the Contractor shall warrant the portion of the work that is corrected for a period equal to the original warranty period, from the date that the correction was done.

GC 32 CONTRACTOR'S RESPONSIBILITIES AND CONTROL OF THE WORK

- 32.1 The Contractor shall have complete control of the Work except as provided in GC 15 - Emergencies. He shall effectively direct and supervise the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all parts of the Work under the Contract.
- 32.2 The Contractor shall have the sole responsibility for the design, erection, operation, maintenance and removal of temporary structural and other temporary facilities and the design and execution of construction methods required in their use. The Contractor shall engage and pay for registered professional engineering personnel skilled in the appropriate discipline to perform these functions where required by law or by the Contract Documents and in all cases where such temporary facilities and their method of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results.
- 32.3 Notwithstanding the provisions of paragraphs 32.1 and 32.2 above, or any provisions to the contrary elsewhere in the Contract Documents where such Contract Documents include designs for temporary structural and other temporary facilities and methods shall be deemed to comprise part of the overall design of the Work and the Contractor shall not be held responsible for that part of the design or the specified method of construction. The Contractor shall, however, be responsible for the execution of such design or specified method of construction in the same manner that he is responsible for the execution of the Work.
- 32.4 The Contractor shall carefully examine the Contract Documents and shall promptly report to the Owner any error, inconsistency or omission he may discover. The Contractor shall not be held liable for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents.

GC 33 SUPERINTENDENCE

- 33.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Work site at all times while work is being performed.
- 33.2 The superintendent shall be satisfactory to the Owner and shall not be changed except for good reason and only then after consultation with and agreement by the Owner.

- 33.3 The superintendent shall represent the Contractor at the Work site. Directions given to the Superintendent by the Owner shall be held to have been given to the Contractor. Important directions shall be confirmed to the Contractor in writing, other directions will be so confirmed if requested.

GC 34 LABOUR AND PRODUCTS

- 34.1 Unless otherwise stipulated elsewhere in the Contract Documents, the Contractor shall provide and pay for all labour products, tools, construction equipment and machinery, water, heat, light, power, transportation and other facilities and services necessary for the proper performance of the Work.
- 34.2 All products provided shall be new unless otherwise specified in the Contract Documents. Any products which are not specified shall be of a quality best suited to the purpose required and their use subject to the approval of the Owner.
- 34.3 The Contractor shall at all times maintain good order and discipline among the Contractor's employees engaged on the Work and shall not employ on the Work any unfit person nor anyone not skilled in the task assigned to that person.

GC 35 SUBSURFACE CONDITIONS

- 35.1 The Contractor shall promptly notify the Owner in writing if, in the Contractor's opinion, the subsurface conditions at the Project site differ materially from those indicated in the Contract Documents or as may have been represented to the Contractor by the Owner before the time of tender submission.
- 35.2 After prompt investigation, should the Owner determine that conditions do differ materially, the Owner shall issue appropriate instructions for changes in the Work as provided for in GC 18 - Changes in the Work.

GC 36 USE OF PREMISES

- 36.1 The Contractor shall confine the Contractor's apparatus, the storage of products and the operations of his workmen to limits indicated by laws, ordinances, permits or by directions of the Owner and shall not unreasonably encumber the premises with his products.
- 36.2 The Contractor shall not load or permit to be loaded any part of the Work with a mass that will endanger its safety.
- 36.3 The Contractor shall enforce the Owner's instructions regarding signs, advertisements, fires and smoking.
- 36.4 Unless otherwise provided the Contractor shall, at the Contractor's own expense, and without extra cost to the Owner, make suitable provision to accommodate all traffic either pedestrian or vehicular, over or around, the project upon which work is being performed, in a manner satisfactory to the Owner.
- 36.5 The Contractor shall provide and maintain at the Contractor's own expense such fences, barriers, signs, lights and watchmen as may be necessary to prevent avoidable accidents to residents or to the public generally.

GC 37 CLEANUP AND FINAL CLEANING OF WORK

- 37.1 The Contractor shall maintain the work in a tidy condition and free from the accumulation of waste products and debris, other than that caused by the Owner, other Contractors or their employees.

37.2 When the Work is Substantially Performed the Contractor shall remove all of the Contractor's surplus products, tools, construction machinery and equipment not required for the performance of the remaining work. The Contractor shall also remove any waste products and debris and leave the Work clean and suitable for occupancy by the Owner unless otherwise specified.

37.3 When the Work is totally Performed, the Contractor shall remove all of the Contractor's surplus products, tools, construction machinery and equipment. The Contractor shall also remove any waste products and debris, other than that caused by the Owner, other Contractors or their employees.

GC 38 CUTTING AND REMEDIAL WORK

38.1 The Contractor shall do all cutting and remedial work that may be required to make the several parts of the Work come together properly.

38.2 The Contractor shall co-ordinate the schedule for the Work to ensure that this requirement is kept to a minimum.

38.3 Should the Owner or anyone employed by Owner be responsible for ill-timed work necessitating cutting and/or remedial work shall be valued as provided in GC 19 Valuation and Certification of Changes in the work and added to the Contract Price.

38.4 Cutting and remedial work shall be performed by specialists familiar with the materials affected and shall be performed in a manner to neither damage nor endanger any Work.

GC 39 INSPECTION OF WORK

39.1 The Owner and the Owner's authorized representatives shall have access to the Work for inspection wherever it is in preparation or progress. The Contractor shall co-operate to provide reasonable facilities for such access.

39.2 If special tests, inspections or approvals are required by the Contract Documents, the Owner's instructions or the laws or ordinances of the place of building the Contractor shall give the Owner's timely notice requesting inspection. Inspection by the Owner shall be made promptly. The Contractor shall arrange inspection by other authorities and shall notify the Owner of the date and time.

39.3 If the Contractor covers or permits to be covered any of the Work that is subject to inspection or before any special tests and approvals are completed without the approval of the Owner, the Contractor shall uncover the Work, have the inspection satisfactorily completed and make good the Work at the Contractor's own expense.

39.4 Examination of any questioned work maybe ordered by the Owner. If such work be found in accordance with the Contract the Owner shall pay the cost of examination and replacement, together with the cost of subsequent verification testing. If such Work be found not in accordance with the Contract through the fault of the Contractor, the Contractor shall pay such cost.

39.5 The Contractor shall furnish promptly to the Owner two (2) copies of all certificates and inspection reports relating to the Work.

GC 40 REJECTED WORK

40.1 Defective Work, whether the result of poor workmanship, use of defective products or damage through carelessness or other act or omission of the Contractor, and whether incorporated in the Work or not, which has been rejected by the Owner as failing to conform to the Contract Documents shall be removed promptly from the premises by the Contractor and placed and/or reexecuted promptly in accordance with the Contract Documents at the Contractor's expense.

40.2 Other Contractor's work destroyed or damaged by such removals or replacements shall be made good promptly at the Contractor's expense.

- 40.3 If in the opinion of the Owner it is not expedient to correct defective work not done in accordance with the Contract Documents, the Owner may deduct from the Contract Price the difference in value between the Work as done and that called for by the Contract, the amount of which shall be determined in the first instance by the Owner.

GC 41 SHOP DRAWINGS

- 41.1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are to be provided by the Contractor to illustrate details of a portion of the Work.
- 41.2 The Contractor shall arrange for the preparation of clearly identified shop drawings as called for by the Contract Documents or as the Owner may reasonably request.
- 41.3 Prior to Submission to the Owner the Contractor shall review all shop drawings. By this review the Contractor represents that the Contractor has determined and verified all field measurements, field construction criteria, materials, catalogue numbers and similar data or will do so and that the Contractor has checked and co-ordinated each shop drawing with the requirements of the Work and of the Contract Documents. The Contractor's review of each shop drawing shall be indicated by stamp, date and signature of a responsible person.
- 41.4 The Contractor shall submit shop drawings to the Owner for the Owner's review with reasonable promptness and in orderly sequence so as to cause no delay in the Work or in the Work of Other Contractors. If either the Contractor or the Owner so requests they shall jointly prepare a schedule fixing the dates for submission and return of shop drawings. Shop drawings shall be submitted in electronic format (PDF) or prints as the Owner may direct. At the time of submission the Contractor shall notify the Owner in writing of any deviations in the shop drawings from the requirements of the Contract Documents.
- 41.5 The Owner will review and return shop drawings in accordance with any schedule agreed upon, or otherwise with reasonable promptness so as to cause no delay. The Owner's review shall be for conformity to the design concept and for general arrangement only and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract Documents unless a deviation on the shop drawings has been approved in writing by the Owner.
- 41.6 The Contractor shall make any changes in shop drawings which the Owner may require consistent with the Contract Documents and resubmit unless otherwise directed by the Owner. When resubmitting the Contractor shall notify the Owner in writing of any revisions other than those requested by the Owner.

GC 42 SAMPLES

- 42.1 The Contractor shall submit for the Owner's approval such standard manufacturers' samples as the Owner may reasonably require. Samples shall be labelled as to origin and intended use in the Work and shall conform to the requirements of the Contract Documents.
- 42.2 The Contractor shall provide samples of special products, assemblies, or components when so specified. The cost of such samples not specified shall be authorized as an addition to the Contract Price as provided in GC 18 - Changes in the Work.

GC 43 TESTS AND MIX DESIGNS

- 43.1 The Contractor shall furnish to the Owner test results and mix designs as may be requested. The testing company must first be approved by the Owner.
- 43.2 The cost of tests and mix designs beyond those called for in the Contract Documents or beyond

those required by laws, ordinances, rules and regulations relating to the work and the preservation of public health, shall be authorized as an addition to the Contract Price as provided in GC 18 - Changes in the Work.

GC 44 MATERIALS AND SUBSTITUTIONS

- 44.1 Materials, described and named in the specifications with "or approved equal" clause after the Manufacturer's name, or so described as to establish quality only and substitutions of a similar material may be made after award of the contract provided the Owner's approval is obtained.
- 44.2 Requests for substitutions must be accompanied by sufficient information in the form of shop drawings, manufacturer's literature, samples and other data to permit proper investigation of the substitutes proposed. Also, indicate the increase or decrease in price.
- 44.3 Whenever a substitute is proposed for approval the Contractor shall guarantee that such proposed substitute will not adversely affect the space requirements allocated on the drawings for the material specified, and he shall agree to bear any additional expense incurred due to the Contractor's use of the proposed substitute.
- 44.4 The Owner may accept or reject any or all of the proposed substitutions as the Owner sees fit, and his decision on a question of equality shall be final.

GC 45 LABOUR

- 45.1 In carrying out the Contractor's duties under this contract, the Contractor should comply with all Provincial and Federal legislation respecting labour and the employment of labour, where applicable, including the labour standards code and shall not operate in conflict with the Human Rights legislation. In the employment of labour, preference should be given to persons normally resident in Newfoundland and Labrador.
- 45.2 The Contractor and Subcontractors shall maintain and keep available for inspection by the Owner, a record of the names and addresses of all workers employed on the project.
- 45.3 All work shall be done by workers skilled in their various trades.
- 45.4 There shall be no discrimination in the selection of workers for employment on the project in respect of gender, race, religious views or political affiliation.
- 45.5 The Contractor shall pay fair wages and shall pay rates of wages and allowances to the various classes of labour not less favourable than those prevailing in the area where the work is being performed.

GC 46 TIME OF ESSENCE

- 46.1 Time is of the essence of the Contract.

GC 47 ASSESSMENT AND DAMAGES FOR LATE COMPLETION

- 47.1 For purposes of this General Condition
 - a) The Work shall be deemed to be completed on the date that a Certificate of Substantial Performance referred to in GC21.6 is issued, and
 - b) "Period of Delay" means the number of days commencing on the day fixed by the Articles of Agreement for completion of the Work and ending on the day immediately preceding the day on which the Work is completed but does not include any day in which, in the opinion of the Owner, completion of the Work was delayed for reasons beyond the control of the Contractor.

- 47.2 If the Contractor does not complete the Work by the day fixed for its completion by the Articles of Agreement but completes it thereafter, the Contractor shall pay the Owner an amount equal to the aggregate of
- a) all salaries, wages and travelling expenses incurred by the Owner in respect of persons overseeing the performance of the Work during the period of delay, and
 - b) all other expenses and damages incurred or sustained by the Owner during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 47.3 Substantial Performance of part of the work shall not relieve the Contractor of their liabilities under this clause.

GC 48 CERTIFICATE OF RECOGNITION FOR CONTRACTS

- 48.1 The Contractor shall within 14 days of award of the contract, and prior to commencement of the Work, provide a Letter of Good Standing stating Certificate of Recognition (COR) certified from the Newfoundland and Labrador Construction Association (NLCSA).
- 48.2 At any time during the term of the Contract, when requested by the Owner, the Contractor shall provide such evidence of compliance by any or all of their Subcontractors.

CERTIFICATE OF INSURANCE

CERTIFICATE OF INSURANCE

| DESCRIPTION & LOCATION OF WORK | | | | |
|---|-------------------|--------------------|-------------------|---|
| PROJECT NO: | | AWARD DATE: | | VALUE: |
| INSURER: | | | | |
| INSURER ADDRESS: | | | | |
| BROKER: | | | | |
| BROKER ADDRESS: | | | | |
| INSURED NAME OF CONTRACTOR: | | | | |
| CONTRACTOR ADDRESS: | | | | |
| ADDITIONAL INSURED (Excluding Automobile Liability Policy) ✓ The OWNER: ✓ "Her Majesty the Queen in Right of the Province of NL as represented by the Minister of Transportation & Infrastructure. Dept. of Transportation & Infrastructure, P.O. Box 8700, St. John's, NL., A1B 4J6. ✓ The Occupant/Operator of the Property: ✓ Project Consultants of the OWNER (excluding professional liabilities) | | | | |
| This document certifies that the following policies of insurance and indicated coverage are at present in force subject to the terms, conditions and exclusions as contained therein covering the operations of the insured in connection with the above noted contract made between the named insured and the Owner. | | | | |
| POLICY TYPE | NUMBER | INCEPTION DATE | EXPIRY DATE Y/M/D | LIMITS OF LIABILITY |
| 1.1 COMMERCIAL GENERAL LIABILITY or 1.2 WRAP-UP LIABILITY (Including where indicated) A. BLASTING B. PILE DRIVING OR CAISSON WORK C. REMOVAL OR WEAKENING OF SUPPORT | | | | \$2,000,000 Minimum |
| 2A. BUILDERS' RISK "BROAD FORM" or 2B. INSTALLATION FLOATER "BROAD FORM" or 2C. PIERS, WHARVES, & DOCKS RIDER | | | | 100% Contract Value if Exceeds \$25,000 |
| 3. AUTOMOBILE LIABILITY INSURANCE | | | | \$2,000,000 Minimum |
| 4. AIRCRAFT AND/OR WATERCRAFT WATERCRAFT LIABILITY (IF APPLICABLE) | | | | \$2,000,000 Minimum |
| 5. AIRPORT CONTRACTOR LIABILITY | Not required | | | \$5,000,000.00 Minimum |
| 6. ENVIRONMENTAL IMPAIRMENT LIABILITY | Not required | | | |
| The Insurer agrees to notify the Owner and Her Majesty, as defined above, in writing, thirty (30) days prior to cancellation, termination or material change of any policy. | | | | |
| NAME OF INSURER'S OFFICER or AUTHORIZED REPRESENTATIVE : | SIGNATURE: | | Date: | |
| | | | Tel.: | |
| | | | Email: | |
| Issuance of this certificate shall not limit or restrict the right of the Owner to request at any time duplicate certified copies of said insurance policies. | | | | |

This specification outlines additions to the existing Master Construction Specifications as necessary.

PART 1 - DESCRIPTION OF WORK

- .1 This general scope for this project is to reconstruct Willow Drive from approximately Station 0+495 to Station 0+740, including intersections at Oak Avenue and Balsom Crescent, as well as street improvements on Oak Avenue from Tamarack Drive to approximately 30 meters beyond Willow Drive intersection. Remove existing asphalt, concrete, granulars, subgrade materials, existing storm sewer infrastructure including asbestos cement pipe, street lights and bases, street signs and other materials as required to perform the work. Install new storm sewer infrastructure on Willow Street and Oak Avenue. Place imported materials, geotextile and geogrid as noted on the drawings. Place new granulars, concrete works, asphalt, install existing street lights on new bases with new power cable, install street signs on new poles, and complete all tie ins and reinstatements. Perform other associated work as described in greater details on the drawings.
- .2 Related work includes adjustments to maintenance holes, catch basins, watermain valve boxes and other work as defined on the drawings.
- .3 Provide temporary measures to accommodate vehicular access, pedestrian access, temporary parking and the residents affected by the work.
- .4 Prior to commencement of work, the Contractor shall meet with the Owner and Engineer at which time the Owner shall identify what, if any, priorities exist respecting the areas of work (by street name) for inclusion in the Contractor's Work Schedule.
- .5 The Contractor shall execute the work in accordance with the priorities established by the Owner.

PART 2 - LIST OF DRAWINGS

- | | |
|----|---|
| C1 | Location Plan |
| C2 | Existing/Demolition Plan |
| C3 | Willow Drive Storm Sewer Plan/Profile STA. 0+480 TO 0+780 |

- C4 Oak Avenue Storm Sewer
 Plan/Profile
 STA. 1+010 TO 1+140

- C5 Sections and Details

- C6 Sections and Details

- C7 Sections and Details

PART 3 - SITE ACCESS CONDITIONS AND OR LIMITATIONS

- .1 Contractor shall provide a phased project plan to execute the work in a safe and efficient manner. Residents are to be provided with safe and uninterrupted pedestrian access to their properties. Vehicular access is to be restricted for minimal time periods while the work is being carried out in a staged approach. Identify temporary safe parking areas for residents while access to their driveways is restricted. The phased work plan is to be submitted as a draft to the Consultant and Owner for review. Incorporate any revisions required by the Owner. Provide a minimum of 72 hours notice prior to any interruption in vehicular access to the resident's property and to first responders.

- .2 Contractor shall minimize both the area affected and the duration of the disruption by the work along municipal roadways. Co-ordinate all activities with the Owner's Representative.

- .3 Contractor shall minimize the disturbance to private properties with respect to both the extents and the duration of the disturbance.

- .4 Stage work to minimize disruption to residences affected. Provide temporary parking as required for residents unable to access their driveways.

- .5 Maintain safe pedestrian access to all properties. Co-ordinate interruptions with residents affected by the work and provide safe alternate path of travel as approved by the Owner's Representative.

- .6 Provide construction signage to clearly mark construction activity, temporary path of travel, parking, barricades and lights to delineate the work area. Maintain and adjust regularly to reflect work progress.

- .7 Co-ordinate work activity with first responders and make provision for emergency access.

- .8 All temporary site access and parking measures are to be provided by the Contractor, and are considered incidental to the work. These measures are to be provided at no cost to the Owner.
- .9 Where the Contractor's work is determined by the Owner's Representative to be creating an unnecessary disruption to the public for a greater time period or extent then is required to efficiently execute the work, the Owner's Representative shall give written instructions to the Contractor requesting corrective measures be taken to address the problems and the Contractor shall promptly take the necessary action within the timeframe requested by the Owner.

PART 4 - SPECIFICATIONS

The following are supplementary to the Master Specification:

- .1 Section 01582 – Sign and Sign Post Installation

- .1 PART 2 – MATERIALS

- 2.1 PRODUCTS

- Add Clause 8 as follows:

- .8 Telespar sign posts shall be 50mm galvanized steel tubing with 11mm pre-punched holes at 25mm center on four sides. Refer to drawings for additional information.

- .2 Section 01710 – Reinstatement & Cleaning

- .1 PART 3 - EXECUTION

- 3.2 GENERAL REINSTATEMENT

- Add Clauses .6, .7, and .8 as follows:

- .6 All landscaped surfaces are to be reinstated so as to provide a maximum slope of 1 on 4. Contractor shall be responsible to ensure that all reinstated landscaped surfaces blend to existing landscaped surfaces with minimal interruption in grade.

- .7 All paved surface driveways that are to be reinstated as a result of sidewalk and/or curb work will be reinstated at a minimum distance of 1 (one) meter

from the inner edge of the new sidewalk and/or curb, or as specified by the Engineer. All paved surfaces are to be reinstated so as to provide a minimal interruption in existing grade, unless otherwise directed by Engineer.

- .8 Salvage, store, and protect existing street lights removed from locations as indicated or as directed by the Engineer. Reinstall street lights on new concrete light pole bases.

.3 Section 02070 – Sitework, Demolition & Removal of Structures

.1 PART 3 – EXECUTION

3.2 REMOVAL

Add Clause .3 as follows:

- .3 Remove signs and sign posts as noted. Dispose of sign posts, salvage and store signs for installation of new Telespar posts.

.4 Section 02224 – Roadway Excavation, Embankment and Compaction

.1 PART 2 – PRODUCTS

2.1 MATERIALS

Add Clauses .4 and .5 as follows:

- .4 Imported Common Material shall be well graded, clean Pit Run material, free from organic matter, frozen lumps, weeds, sod, roots, logs, stumps or any other objectional matter and have not more than 10% passing 0.075 mm sieve nor particles larger than 250 mm. Within 300 mm of sub-grade the maximum particle size shall be 150 mm.

- .5 Imported Rock Material shall be hard, durable, thoroughly fragmented, 150 mm minus quarry rock, screened to remove oversize material. Rock screened from a gravel material source pit shall not be acceptable. Material shall be well graded below the 150 mm particle size.

.2 PART 3 - EXECUTION

3.3 EXCAVATING

Add Clause .2.3 as follows:

.2 Stripping:

.3 As directed by the Engineer for specific work areas, strip existing asphalt only to a depth necessary to remove the asphalt. Special care shall be taken to avoid contamination of granular material.

3.6 FINISHING

Add Clauses .7, .8, .9 and .10 as follows:

.7 Disposal site for existing materials removed from the area of work shall be the current Labrador West Regional Landfill in Labrador City unless otherwise requested by the Owner.

.8 Contractor shall be responsible for the leveling of disposed asphalt, concrete and unsuitable material at the disposal site. The leveling shall be completed at regular intervals of no more than five working days.

.9 Make prior arrangements with the Owner for access to the disposal site outside of normal working hours.

.10 Tipping fees for disposal of the material will be waived for this project.

.5 Section 02552 – Hot Mix Asphaltic Concrete Pavement

.1 **Refer to Specification Section 02552 – Hot Mix Asphalt Concrete Pavement – Municipal Water, Sewer and Roads Specification/TI Highway Specifications Book, Specifications Form 31.**

.1 In reference to Article 331.05 – Asphalt binder PG 64-34 is in approved alternative.

.6 Section 02897 – Filter Fabrics (Geotextile)

.1 PART 2 - PRODUCTS

2.1 MATERIALS

Add Clause .8 as follows:

.8 Geotextile shall be non woven. Tensile strength 600 and grab elongation 45-105% to CGSB 148.1-7.3. Tear strength 270N to CGSB 4.2-12.2. Mullen 1710 kPa to CGSB 4.2-11.1. Thickness 1.2mm. Acceptable Product: Terrafix 340 R or equivalent.

.7 Section 02899 – Geogrid

.1 PART 1 - GENERAL

.1 REFERENCES

.1 ASTM International

- .1 ASTM D 1248, Standard Specification for Polyethylene Plastics Extrusion Materials For Wire and Cable.
- .2 ASTM D 4101, Standard Specification for Polypropylene Injection and Extrusion Materials.
- .3 ASTM D 4218, Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds By the Muffle-Furnace Technique.
- .4 ASTM D 5262, Standard Test Method for Evaluating the Unconfined Tension Creep Behaviour of Geosynthetics.
- .5 ASTM D 6637, Standard Test Method for Determining Tensile Properties of Geogrids by the Single or Multi-Rib Tensile Method.

.2 Drexel University - Geosynthetic Research Institute (GRI)

- .1 GRI GG2-87(R2005), Geogrid Junction Strength.

.3 U.S. Environmental Protection Agency (EPA) / Office of Water

- .1 EPA 832/R-92-005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

.2 PRODUCT DATA SUBMITTALS

- .1 Submit in accordance with Section 01340 - Submittal Procedures.

.3 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 During delivery and storage, protect geogrids from direct sunlight, ultraviolet rays, excessive heat, mud, dirt, dust, debris and rodents.

.2 PART 2 - PRODUCTS

2.1 MATERIAL

- .1 Geogrid: open grid polymer having triaxial orientation, free of striations, roughness, pinholes, blisters, undispersed raw materials or any sign of contamination by foreign matter.
 - .1 Roll width: 4m minimum.
 - .2 Roll length: 75m minimum.

- .3 Rib pitch: 33mm longitudinal, 33mm diagonal.
 - .4 Rib shape: Rectangular.
 - .5 Aperture shape:
 - .1 Triangle
 - .6 Polymer: polypropylene: to ASTM D 4101 or high density polyethylene: to ASTM D 1248 with inhibitors added to resist deterioration by ultra-violet and heat exposure.
- 2.2 Structure Integrity:
- .1 Junction Efficiency 935.
 - .2 Isotropic Stiffness Ratio 0.6
 - .3 Radial stiffness at low strain, 200 kN/m @ 0.5% strain.
 - .4 Acceptable Product: Tensar TriAxz TX1305 Geogrid or approved equal.
- .3 **PART 3 - EXECUTION**
- 3.1 EXAMINATION
- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for soil stabilization installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate with Engineer.
 - .2 Inform Owner's Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.
- 3.2 INSTALLATION
- .1 Place geogrid material by unrolling onto graded surface in manner and locations indicated and retain in position in accordance with manufacturer's written recommendations.
 - .2 Place geogrid on sloping surfaces in one continuous length from toe of slope to upper extent of geogrid.
 - .3 Overlap each successive strip of geogrid 600 mm over previously laid strip.
 - .4 Join successive strips of geogrid by tying or pinning as recommended by manufacturer.
 - .5 Protect geogrid from displacement, damage or deterioration before and during placement of overlay soil layers.
 - .6 After installation, cover with overlay layer within 10 days of placement.
 - .7 Replace damaged or deteriorated geogrid to approval of Engineer.

.8 Place and compact soil layers in accordance with Section 02224
Roadway Excavation, Embankment and Compaction.

.4 PROTECTION

.1 Vehicular traffic not permitted directly on geogrid.

.8 Section 265619 – Roadway Lighting

.1 PART 1 – GENERAL

1.1 WORK SCOPE

.1 This Section covers the work relating to the roadway lighting including new concrete bases, new wiring, new conduit, installation of existing streetlights on new bases, tie ins to power source and verification of operation of roadway lighting.

1.2 RELATED REQUIREMENTS

.1 Section 02223 – Excavating, Trenching and Backfilling.

1.3 SUBMITTALS

.1 Submit product data in accordance with Section 01340 – Shop Drawings, Samples and Submission.

.2 PART 2 – PRODUCTS

2.1 Power Cable

.1 8/2 NMWU for direct under ground bury.

.2 Waterproof splice kits to suit.

2.2 Conduit

.1 PVC Conduit. Sizes indicated.

.3 PART 3 – EXECUTION

3.1 INSTALLATION

- .1 Construct bases to accommodate existing light poles using 35 MPa concrete @28 days to Specification Section 03300.
- .2 Place anchor bolts and conduit embedments in concrete bases for installation of wire and mounting of light poles.
- .3 Place concrete bases on approved sub-grade and at locations approved by the Engineer.
- .4 Cable shall be placed shallow bury in routing indicated on the drawings and in accordance with the Canadian Electrical Code and Town of Labrador City standards for street lighting.
- .5 At driveway locations install 38mm conduit and run cable through conduct as detailed.
- .6 Install existing poles true and plumb, complete with davits, and mounting brackets to match existing and/or with manufacturer's instructions. Secure with nuts and washers tightened to specified torque to match existing and/or as recommended by manufacturer.
- .7 At all driveway locations designated to have new curb or curb and sidewalk installed, the Contractor shall remove existing shallow bury cabling for street lights and supply and install a 38mm PVC conduct in a sand bed under the area of driveway to be reinstated, as detailed on the drawings. Install new cable supplied by the Owner in the conduit and complete a watertight connection to existing cable at each end of the conduit.
- .8 Where the Contractor causes damage to the shallow buried cable for the street lights at all other locations other than as described in Item 8 above, the Contractor shall effect repairs by splicing in new cabling using watertight connections at no cost to the Owner.

PART 5 – MEASUREMENT OF PAYMENT FOR ADDITIONAL ITEMS

- .1 Section 02070 – Sitework, Demolition & Removal of Structures**

.1 PART 1 – GENERAL

1.2 MEASUREMENT FOR PAYMENT

Add Clause .6 as follows:

- .6 Removal of existing signs and sign posts including protection and storage of signs for reuse shall be paid for by the appropriate unit price in the Schedule of Quantities and Prices.

.2 Section 02899 – Geogrid

.1 PART 1 – GENERAL

.1 MEASUREMENT FOR PAYMENT

- .1 Payment for supply and installation of geogrid shall be measured in square meters of surface covered by materials. No allowances will be made for seams and overlaps.

.3 Section 265619 – Roadway Lighting

.1 PART 1 – GENERAL

.1 MEASUREMENT FOR PAYMENT

- .1 PVC Conduit will be measured in meters of installed material.
- .2 Street light cable will be measured in meters for the horizontal meters installed.
- .3 Excavation, removal of existing street light cabling, and backfilling shall be paid for under Section 02223 – Excavation, Trenching and Backfilling, Main Trench Excavation. Sand bedding around street light cable shall be paid under Section 02223 – Excavation, Trenching and Backfilling, Granular Pipe Bedding, Type 2.
- .4 Street lights bases complete with embedded conduit, anchor bolts, bedding, excavation and backfilling, including electrical connections and commissioning shall be measured by the units installed.
- .5 Connect to existing power cable will be measured by the unit for all work associated with locating and connecting to existing power cables including preparation of cable ends and splicing with a waterproof splice kit.

- .6 Payment will be made to the maximum of 90% of the value of the associated work until the roadway lighting is fully operational. The remaining 10% retained shall be released following the commissioning of the lighting.

CLIENT



TOWN OF LABRADOR CITY
317 HUDSON DRIVE
LABRADOR CITY, LABRADOR

CONSULTANT



NOVA CONSULTANTS INC.
37 HALLETT CRESCENT
ST. JOHN'S, NL A1B 4G4
TEL: 709 753 2260
INFO@NCINL.CA

CONSULTING
ENGINEERS

ST. JOHN'S LABRADOR CITY

WILLOW DRIVE STREET RECONSTRUCTION PHASE 1

LABRADOR CITY, NL

ISSUED FOR TENDER

NCI PROJECT NO. 003-225
TOLC PROJECT NO. TLC09-24

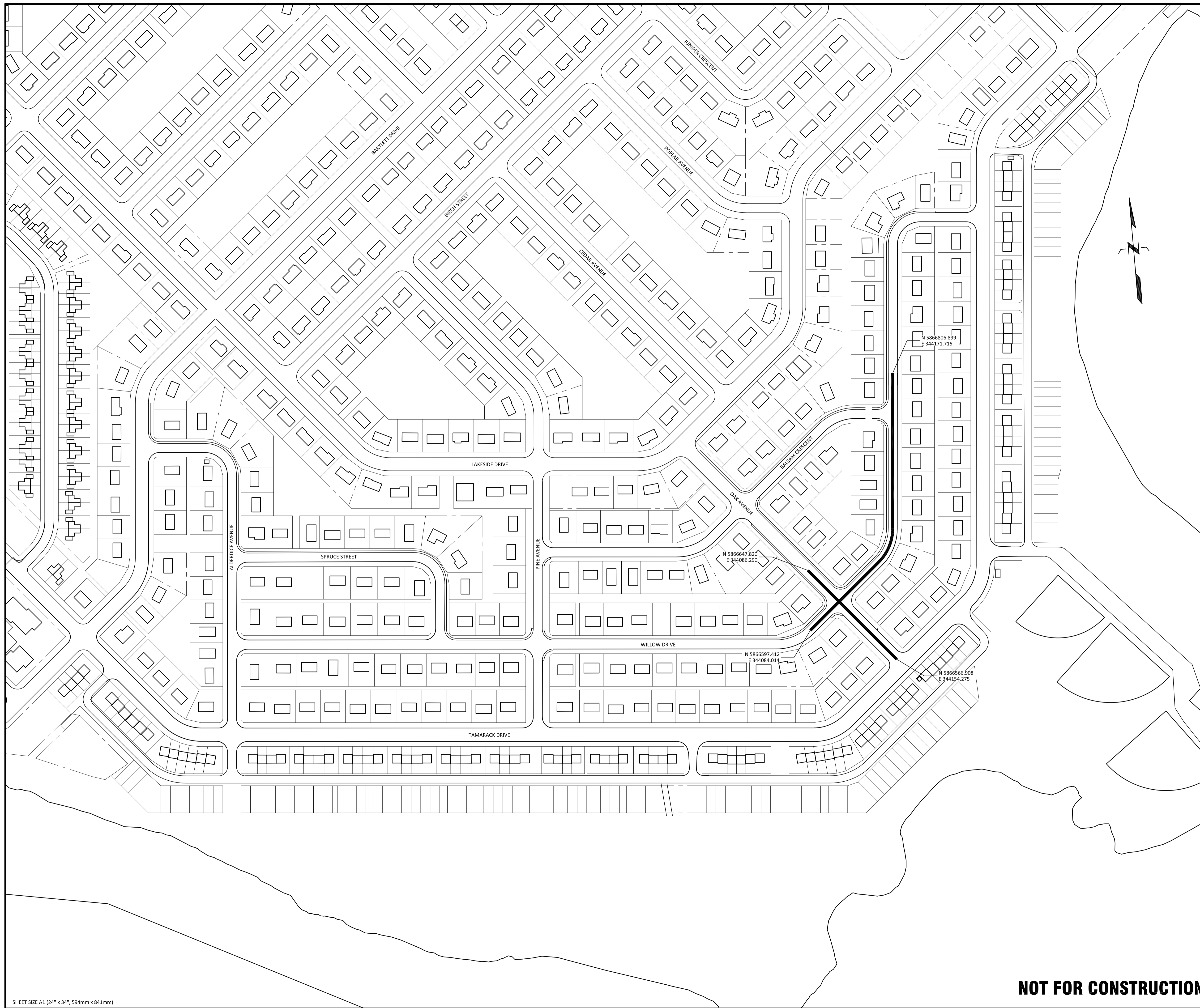
APRIL 2024

LIST OF DRAWINGS

| <u>SHEET</u> | <u>TITLE</u> |
|--------------|---|
| C1 | LOCATION PLAN |
| C2 | EXISTING/DEMOLITION PLAN |
| C3 | WILLOW DRIVE STORM SEWER PLAN/PROFILE STA. 0+480 TO 0+780 |
| C4 | OAK AVENUE STORM SEWER PLAN/PROFILE STA. 1+010 TO 1+140 |
| C5 | SECTIONS AND DETAILS |
| C6 | SECTIONS AND DETAILS |
| C7 | SECTIONS AND DETAILS |



LOCATION PLAN




SHEET SIZE A1 (24" x 34", 594mm x 841mm)

NOT FOR CONSTRUCTION

| | | |
|-----|------------------------------|----------|
| C | ISSUED FOR TENDER | 08/04/24 |
| B | ISSUED FOR REVIEW & APPROVAL | 13/03/24 |
| A | ISSUED FOR REVIEW | 28/02/24 |
| No. | ISSUES/REVISIONS | DD/MM/YY |

CONSULTANT



NOVA CONSULTANTS INC.
 37 HALLETT CRESCENT
 ST. JOHN'S, NL A1B 4C4
 TEL: 709 753 2260
 INFO@NCINL.CA

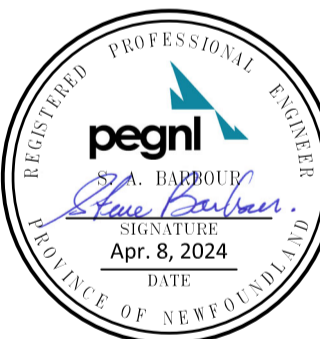
CONSULTING ENGINEERS ST. JOHN'S LABRADOR CITY

CLIENT

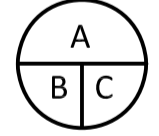


LABRADOR CITY

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER CLASS "A"
 This Permit Allows



NOVA CONSULTANTS INC.
 To practice Professional Engineering in Newfoundland and Labrador:
 Permit No. as issued by PEO NL: D0014
 DATE: Apr. 8, 2024
 which is valid for the year 2024.

| | | | |
|---|---|----------------------------|---|
|  | A | DETAIL NO. | A |
| | B | LOCATION DRAWING NO. | B |
| | C | DRAWING NO. WHERE DETAILED | |

| | | | |
|----------|--------|----------|-----|
| DRAWN | RH | CHECKED | SAB |
| DESIGNED | RH/SAB | APPROVED | |

PROJECT TITLE

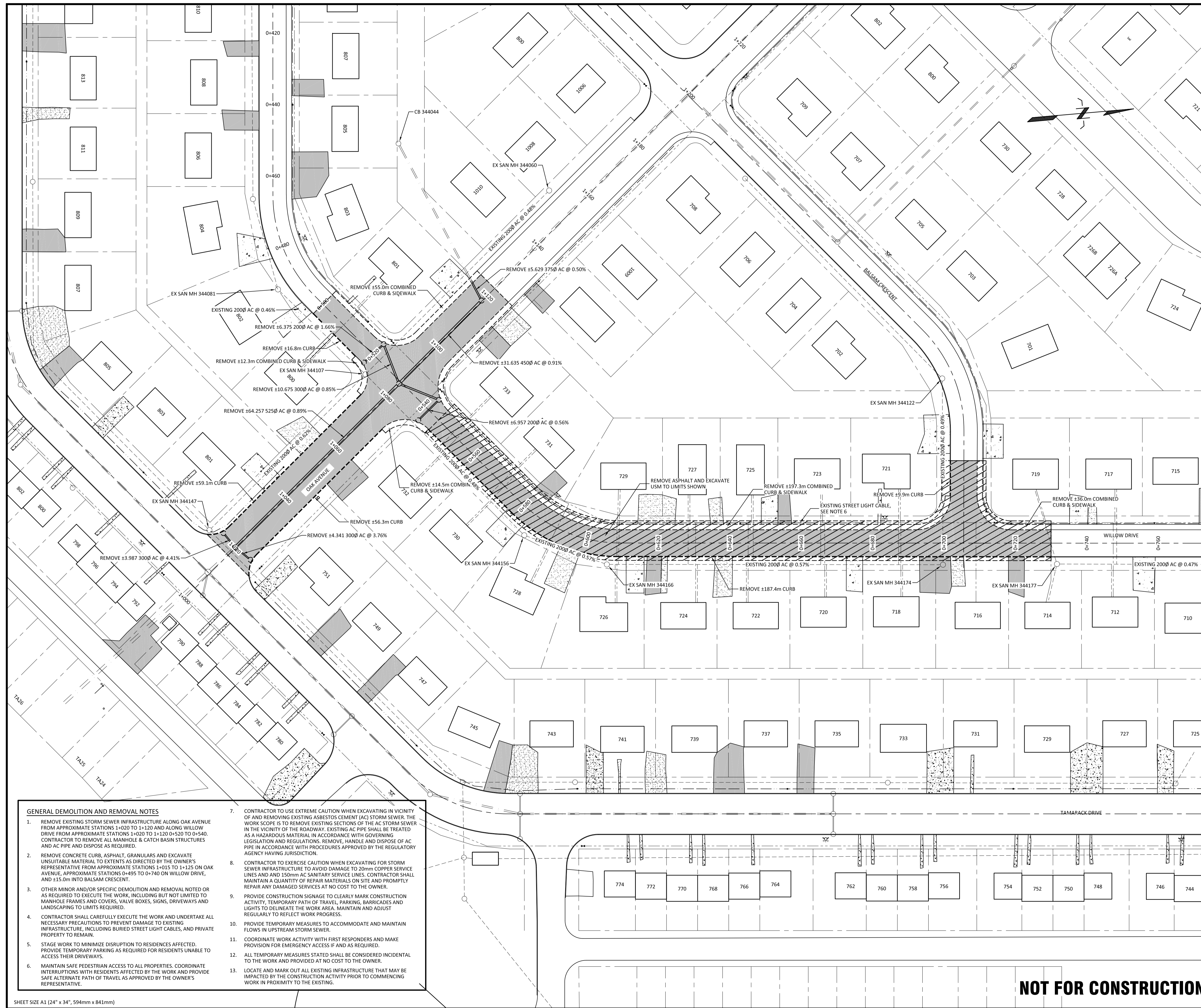
WILLOW DRIVE STREET RECONSTRUCTION PHASE 1

LABRADOR CITY, NL

DRAWING TITLE

LOCATION PLAN

| | | | |
|-------------|--------------------------------------|--------------|----|
| SCALE | 1:1500 | DRAWING NO. | C1 |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TLC09-24 | REVISION NO. | C |
| DATE | FEBRUARY 2024 | | |



- NOTES:**
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS AS PUBLISHED BY THE PROVINCE OF NEWFOUNDLAND AND LABRADOR.
 - ALL COORDINATES REFER TO THE NAD83 3' MTM ZONE 6 DATUM.
 - CONTRACTOR TO ENSURE LOWBACKS OF CURB AND DRIVEWAY RAMPS ARE ALIGNED WITH EDGES OF EXISTING DRIVEWAYS AT ALL LOCATIONS.
 - CATCH BASIN AND MANHOLE FRAMES AND COVERS TO BE SET 20mm BELOW FINISHED ASPHALT GRADE. REFER TO STRUCTURE TABLE FOR DETAILS. COORDINATES GIVEN FOR STRUCTURES ARE CENTER OF BASE ALIGNED AT THE FACE OF CURB, CONTRACTOR IS RESPONSIBLE TO ADJUST AS REQUIRED IN THE FIELD SUCH THAT SLAB TOP OPENING/FRAME AND COVER ALIGNS AS DETAILED WITH NEW CURB.
 - STREET LIGHT CABLE SHOWN IS SHALLOW BURY AND IS TO BE REMOVED ONLY IN AREA OF SUB-EXCAVATION AND AT DRIVEWAYS. CUTTING AND REMOVAL OF EXISTING CABLE SHALL BE CONSIDERED INCIDENTAL TO THE WORK. CONTRACTOR TO EXERCISE CAUTION WHEN DIGGING IN THE VICINITY OF THE CABLE AND PROTECT ENDS FOR SPlicing. THE CONTRACTOR SHALL SUPPLY AND INSTALL 38mm PVC CONDUIT IN SAND AS PER DETAIL 3/C6 OR 4/C6. INSTALL NEW WIRE IN NEW CONDUIT AND COMPLETE WATER TIGHT SPLICES ON EITHER END OF THE CONDUIT OR AT LIMITS OF WORK. AT ALL OTHER LOCATIONS THE CONTRACTOR IS TO MAKE GOOD ANY DAMAGES AT NO COST TO THE OWNER.
 - EXACT LIMITS OF REMOVALS MAY BE ADJUSTED IN THE FIELD.
 - DISPOSE OF ALL MATERIAL AT THE LABRADOR WEST REGIONAL LANDFILL UNLESS DIRECTED OTHERWISE BY THE OWNER'S REPRESENTATIVE.

LEGEND:

| | |
|--|-----------------------------------|
| | ROCK/COMMON IMPORT |
| | ASPHALT SURFACE |
| | CONCRETE SURFACE |
| | GRANULAR SURFACE |
| | APPROXIMATE PROPERTY BOUNDARY |
| | EXISTING FENCE |
| | EXISTING STREET LIGHT |
| | EXISTING TRAFFIC SIGN |
| | EXISTING HYDRO POLE WITH GUY WIRE |
| | EXISTING CATCH BASIN |
| | EXISTING MANHOLE |
| | EXISTING STORM SEWER |
| | EXISTING WATER MAIN |
| | EXISTING SANITARY SEWER |
| | EXISTING STREET LIGHT CABLE |
| | EXISTING VALVE |
| | EXISTING HYDRANT |

| | | |
|-----|------------------------------|----------|
| C | ISSUED FOR TENDER | 08/04/24 |
| B | ISSUED FOR REVIEW & APPROVAL | 13/03/24 |
| A | ISSUED FOR REVIEW | 28/02/24 |
| No. | ISSUES/REVISIONS | DD/MM/YY |

CONSULTANT

NOVA CONSULTANTS INC.
 37 HALLETT DREBENT
 ST. JOHN'S, NL A1B 4C4
 TEL: 709 753 2260
 INFO@NOCNL.CA

CONSULTING ENGINEERS ST. JOHN'S LABRADOR CITY

CLIENT

LABRADOR CITY

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER CLASS "A"
 This Permit Allows
 NOVA CONSULTANTS INC.
 To practice Professional Engineering in Newfoundland and Labrador.
 Permit No. as issued by PEGNL: D0014
 DATE: Apr. 8, 2024
 which is valid for the year 2024.

| | | | |
|---|---|----------------------------|---|
| A | A | DETAIL NO. | A |
| B | B | LOCATION DRAWING NO. | B |
| C | C | DRAWING NO. WHERE DETAILED | |

| | | | |
|----------|--------|----------|-----|
| DRAWN | RH | CHECKED | SAB |
| DESIGNED | RH/SAB | APPROVED | |

PROJECT TITLE

WILLOW DRIVE STREET RECONSTRUCTION
 PHASE 1

LABRADOR CITY, NL

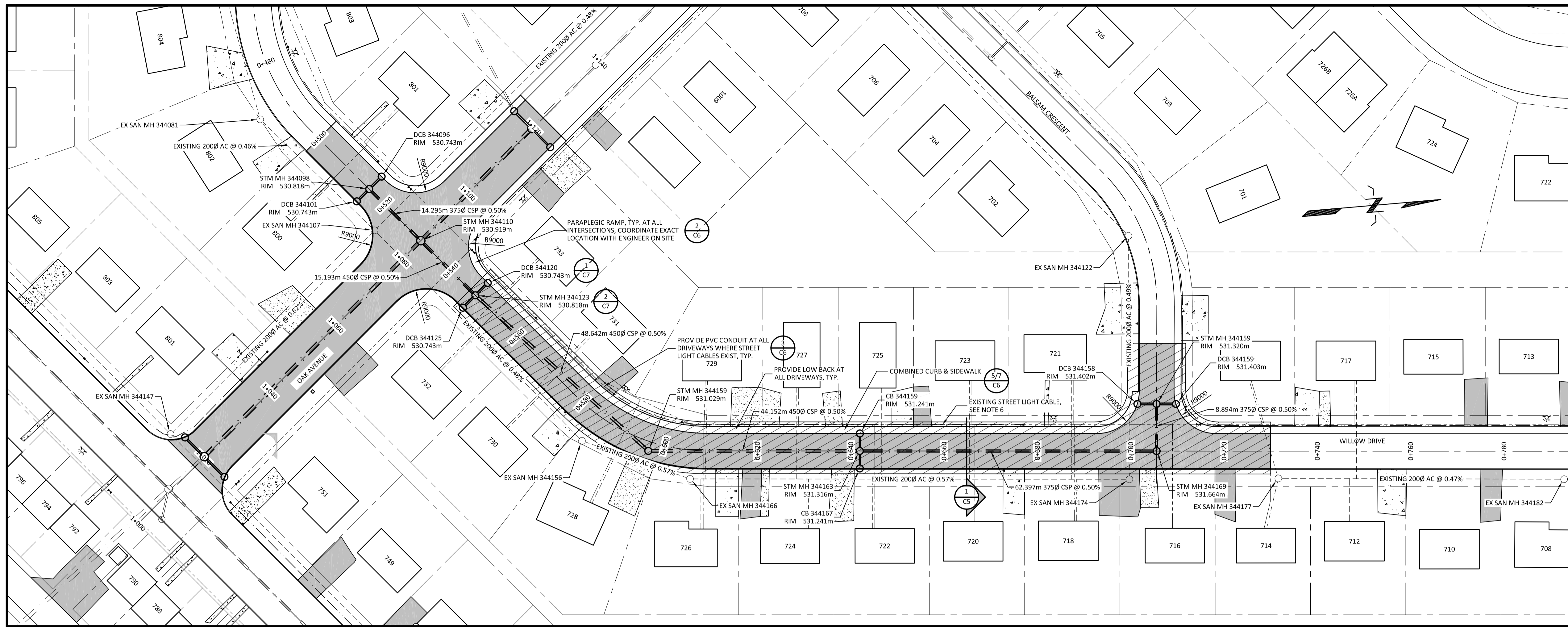
DRAWING TITLE

EXISTING/ DEMOLITION PLAN

| | | | |
|-------------|--------------------------------------|--------------|----|
| SCALE | H 1:500 | DRAWING NO. | C2 |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TLCO9-24 | REVISION NO. | |
| DATE | FEBRUARY 2024 | | |

- GENERAL DEMOLITION AND REMOVAL NOTES**
- REMOVE EXISTING STORM SEWER INFRASTRUCTURE ALONG OAK AVENUE FROM APPROXIMATE STATIONS 1+020 TO 1+120 AND ALONG WILLOW DRIVE FROM APPROXIMATE STATIONS 1+015 TO 1+125 ON OAK AVENUE, APPROXIMATE STATIONS 0+495 TO 0+740 ON WILLOW DRIVE, AND ±15.0m INTO BALSAM CRESCENT.
 - REMOVE CONCRETE CURB, ASPHALT, GRANULARS AND EXCAVATE UNSUITABLE MATERIAL TO EXTENTS AS DIRECTED BY THE OWNER'S REPRESENTATIVE FROM APPROXIMATE STATIONS 1+015 TO 1+125 ON OAK AVENUE, APPROXIMATE STATIONS 0+495 TO 0+740 ON WILLOW DRIVE, AND ±15.0m INTO BALSAM CRESCENT.
 - OTHER MINOR AND/OR SPECIFIC DEMOLITION AND REMOVAL NOTED OR AS REQUIRED TO EXECUTE THE WORK, INCLUDING BUT NOT LIMITED TO MANHOLE FRAMES AND COVERS, VALVE BOXES, SIGNS, DRIVEWAYS AND LANDSCAPING TO LIMITS REQUIRED.
 - CONTRACTOR SHALL CAREFULLY EXECUTE THE WORK AND UNDERTAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO EXISTING INFRASTRUCTURE, INCLUDING BURIED STREET LIGHT CABLES, AND PRIVATE PROPERTY TO REMAIN.
 - STAGE WORK TO MINIMIZE DISRUPTION TO RESIDENCES AFFECTED. PROVIDE TEMPORARY PARKING AS REQUIRED FOR RESIDENTS UNABLE TO ACCESS THEIR DRIVEWAYS.
 - MAINTAIN SAFE PEDESTRIAN ACCESS TO ALL PROPERTIES. COORDINATE INTERRUPTIONS WITH RESIDENTS AFFECTED BY THE WORK AND PROVIDE SAFE ALTERNATE PATH OF TRAVEL AS APPROVED BY THE OWNER'S REPRESENTATIVE.
 - CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING IN VICINITY OF AND REMOVING EXISTING ASBESTOS CEMENT (AC) STORM SEWER. THE WORK SCOPE IS TO REMOVE EXISTING SECTIONS OF THE AC STORM SEWER IN THE VICINITY OF THE ROADWAY. EXISTING AC PIPE SHALL BE TREATED AS A HAZARDOUS MATERIAL IN ACCORDANCE WITH GOVERNING LEGISLATION AND REGULATIONS. REMOVE, HANDLE AND DISPOSE OF AC PIPE IN ACCORDANCE WITH PROCEDURES APPROVED BY THE REGULATORY AGENCY HAVING JURISDICTION.
 - CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING FOR STORM SEWER INFRASTRUCTURE TO AVOID DAMAGE TO 20mm COPPER SERVICE LINES AND 150mm AC SANITARY SERVICE LINES. CONTRACTOR SHALL MAINTAIN A QUANTITY OF REPAIR MATERIALS ON SITE AND PROMPTLY REPAIR ANY DAMAGED SERVICES AT NO COST TO THE OWNER.
 - PROVIDE CONSTRUCTION SIGNAGE TO CLEARLY MARK CONSTRUCTION ACTIVITY, TEMPORARY PATH OF TRAVEL, PARKING, BARRICADES AND LIGHTS TO DELINEATE THE WORK AREA. MAINTAIN AND ADJUST REGULARLY TO REFLECT WORK PROGRESS.
 - PROVIDE TEMPORARY MEASURES TO ACCOMMODATE AND MAINTAIN FLOWS IN UPSTREAM STORM SEWER.
 - COORDINATE WORK ACTIVITY WITH FIRST RESPONDERS AND MAKE PROVISION FOR EMERGENCY ACCESS IF AND AS REQUIRED.
 - ALL TEMPORARY MEASURES STATED SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND PROVIDED AT NO COST TO THE OWNER.
 - LOCATE AND MARK OUT ALL EXISTING INFRASTRUCTURE THAT MAY BE IMPACTED BY THE CONSTRUCTION ACTIVITY PRIOR TO COMMENCING WORK IN PROXIMITY TO THE EXISTING.

NOT FOR CONSTRUCTION



- NOTES:**
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS AS PUBLISHED BY THE PROVINCE OF NEWFOUNDLAND AND LABRADOR.
 - ALL COORDINATES REFER TO THE NAD83 3" MTM ZONE 6 DATUM.
 - CONTRACTOR TO ENSURE LOWBACKS OF CURB AND DRIVEWAY RAMPS ARE ALIGNED WITH EDGES OF EXISTING DRIVEWAYS AT ALL LOCATIONS.
 - CATCH BASIN AND MANHOLE FRAMES AND COVERS TO BE SET 20mm BELOW FINISHED ASPHALT GRADE. REFER TO STRUCTURE TABLE FOR DETAILS. COORDINATES GIVEN FOR STRUCTURES ARE CENTER OF BASE ALIGNED AT THE FACE OF CURB, CONTRACTOR IS RESPONSIBLE TO ADJUST AS REQUIRED IN THE FIELD SUCH THAT SLAB TOP OPENING/FRAME AND COVER ALIGNS AS DETAILED WITH NEW CURB.
 - STREET LIGHT CABLE SHOWN IS SHALLOW BURY AND IS TO BE REMOVED ONLY IN AREA OF SUB-EXCAVATION AND AT DRIVEWAYS. CUTTING AND REMOVAL OF EXISTING CABLE SHALL BE CONSIDERED INCIDENTAL TO THE WORK. CONTRACTOR TO EXERCISE CAUTION WHEN DIGGING IN THE VICINITY OF THE CABLE AND PROTECT ENDS FOR SPlicing. THE CONTRACTOR SHALL SUPPLY AND INSTALL 38mm PVC CONDUIT IN SAND AS PER DETAIL 3/C6 OR 4/C6. INSTALL NEW WIRE IN NEW CONDUIT AND COMPLETE WATER TIGHT SPLICES ON EITHER END OF THE CONDUIT OR AT LIMITS OF WORK. AT ALL OTHER LOCATIONS THE CONTRACTOR IS TO MAKE GOOD ANY DAMAGES AT NO COST TO THE OWNER.
 - EXACT LIMITS OF REMOVALS MAY BE ADJUSTED IN THE FIELD.
 - DISPOSE OF ALL MATERIAL AT THE LABRADOR WEST REGIONAL LANDFILL UNLESS DIRECTED OTHERWISE BY THE OWNER'S REPRESENTATIVE.
 - CONTRACTOR TO CONFIRM ALL FIELD INFORMATION (INVERTS, INSIDE & OUTSIDE PIPE DIAMETERS) PRIOR TO ORDERING STRUCTURES.

- LEGEND:**
- ROCK/Common Import
 - ASPHALT SURFACE
 - CONCRETE SURFACE
 - GRANULAR SURFACE
 - APPROXIMATE PROPERTY BOUNDARY
 - EXISTING FENCE
 - EXISTING STREET LIGHT
 - EXISTING TRAFFIC SIGN
 - EXISTING HYDRO POLE WITH GUY WIRE
 - EXISTING CATCH BASIN
 - EXISTING MANHOLE
 - EXISTING STORM SEWER
 - EXISTING WATER MAIN
 - EXISTING SANITARY SEWER
 - EXISTING STREET LIGHT CABLE
 - EXISTING VALVE
 - EXISTING HYDRANT

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CONSULTING ENGINEERS ST. JOHN'S LABRADOR CITY

CLIENT

LABRADOR CITY

ALL CATCH BASIN LEADS TO BE 300Ø CSP @ 2.0% UNLESS NOTED

STM Structure Table

| Structure | Structure Details | Location | Structure Ø |
|---------------|---|-------------------------------|-------------|
| DCB 344125 | RIM ELEV 530.743 300Ø INV OUT (NW) 529.332 | N 5866627.140 E 344125.268 | 1200 |
| DCB 344158 | RIM ELEV 531.402 300Ø INV OUT (N) 530.471 | N 5866769.355 E 344158.313 | 1200 |
| DCB 344159 | RIM ELEV 531.403 300Ø INV OUT (S) 530.472 | N 5866777.577 E 344159.029 | 1200 |
| STM MH 344098 | RIM ELEV 530.818 300Ø INV IN (NW) 529.327 300Ø INV IN (SE) 529.327 375Ø INV OUT (N) 529.105 | N 5866609.323 E 344098.206 | 1200 |
| STM MH 344110 | RIM ELEV 530.919 375Ø INV IN (SW) 529.031 600Ø INV IN (NW) 528.931 450Ø INV IN (NE) 529.031 600Ø INV OUT (SE) 528.881 | N 5866619.379 E 344110.188 | 1500 |

STM Structure Table

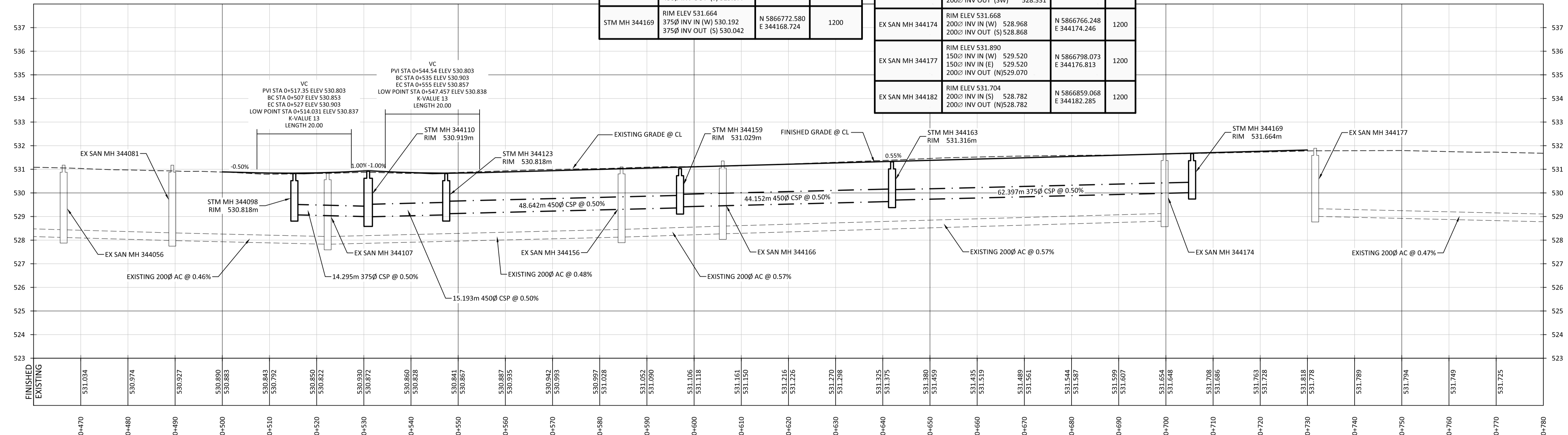
| Structure | Structure Details | Location | Structure Ø |
|------------|---|-------------------------------|-------------|
| CB 344159 | RIM ELEV 531.241 200Ø INV OUT (E) 529.902 | N 5866709.551 E 344159.466 | 1200 |
| CB 344167 | RIM ELEV 531.241 200Ø INV OUT (W) 529.902 | N 5866708.900 E 344166.938 | 1200 |
| DCB 344096 | RIM ELEV 530.743 300Ø INV OUT (SE) 529.402 | N 5866612.195 E 344095.795 | 1200 |
| DCB 344101 | RIM ELEV 530.743 300Ø INV OUT (NW) 529.402 | N 5866606.450 E 344100.617 | 1200 |
| DCB 344120 | RIM ELEV 530.743 300Ø INV OUT (SE) 529.332 | N 5866632.885 E 344120.446 | 1200 |

STM Structure Table

| Structure | Structure Details | Location | Structure Ø |
|---------------|---|-------------------------------|-------------|
| STM MH 344123 | RIM ELEV 530.818 450Ø INV IN (NE) 529.157 300Ø INV IN (SE) 529.257 300Ø INV IN (NW) 529.257 450Ø INV OUT (SW) 529.107 | N 5866630.012 E 344122.857 | 1200 |
| STM MH 344159 | RIM ELEV 531.320 300Ø INV IN (N) 530.389 300Ø INV IN (S) 530.389 375Ø INV OUT (E) 530.239 | N 5866773.447 E 344158.669 | 1200 |
| STM MH 344159 | RIM ELEV 531.029 450Ø INV IN (N) 529.453 450Ø INV OUT (SW) 529.403 | N 5866664.048 E 344159.265 | 1200 |
| STM MH 344163 | RIM ELEV 531.316 375Ø INV IN (N) 529.727 200Ø INV IN (E) 529.827 200Ø INV IN (W) 529.827 450Ø INV OUT (S) 529.677 | N 5866709.225 E 344163.202 | 1200 |
| STM MH 344169 | RIM ELEV 531.664 375Ø INV IN (W) 530.192 375Ø INV OUT (S) 530.042 | N 5866772.580 E 344168.724 | 1200 |

SAN Structure Table

| Manhole | Manhole Details | Location | MH Ø |
|------------------|---|-------------------------------|------|
| EX SAN MH 344081 | RIM ELEV 531.175 200Ø INV IN (W) 528.045 200Ø INV OUT (NE) 528.045 | N 5866587.330 E 344081.330 | 1200 |
| EX SAN MH 344107 | RIM ELEV 530.859 200Ø INV IN (NW) 527.889 200Ø INV IN (SW) 527.889 200Ø INV IN (NE) 527.889 200Ø INV OUT (SE) 527.889 | N 5866609.681 E 344107.126 | 1200 |
| EX SAN MH 344122 | RIM ELEV 530.085 200Ø INV IN (SW) 529.037 200Ø INV OUT (E) 529.222 | N 5866770.565 E 344122.222 | 1200 |
| EX SAN MH 344156 | RIM ELEV 531.105 200Ø INV IN (NE) 528.191 200Ø INV OUT (SW) 528.191 | N 5866650.094 E 344155.888 | 1200 |
| EX SAN MH 344166 | RIM ELEV 531.354 200Ø INV IN (N) 528.331 200Ø INV OUT (SW) 528.331 | N 5866672.456 E 344166.016 | 1200 |
| EX SAN MH 344174 | RIM ELEV 531.668 200Ø INV IN (W) 530.968 200Ø INV OUT (S) 528.868 | N 5866766.248 E 344174.246 | 1200 |
| EX SAN MH 344177 | RIM ELEV 531.894 150Ø INV IN (W) 529.520 150Ø INV IN (E) 529.520 200Ø INV OUT (N) 529.070 | N 5866798.073 E 344176.813 | 1200 |
| EX SAN MH 344182 | RIM ELEV 531.704 200Ø INV IN (S) 528.782 200Ø INV OUT (N) 528.782 | N 5866859.068 E 344182.285 | 1200 |



SHEET SIZE A1 (24" x 34", 594mm x 841mm)

NOT FOR CONSTRUCTION

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pegnl REGISTERED PROFESSIONAL ENGINEER

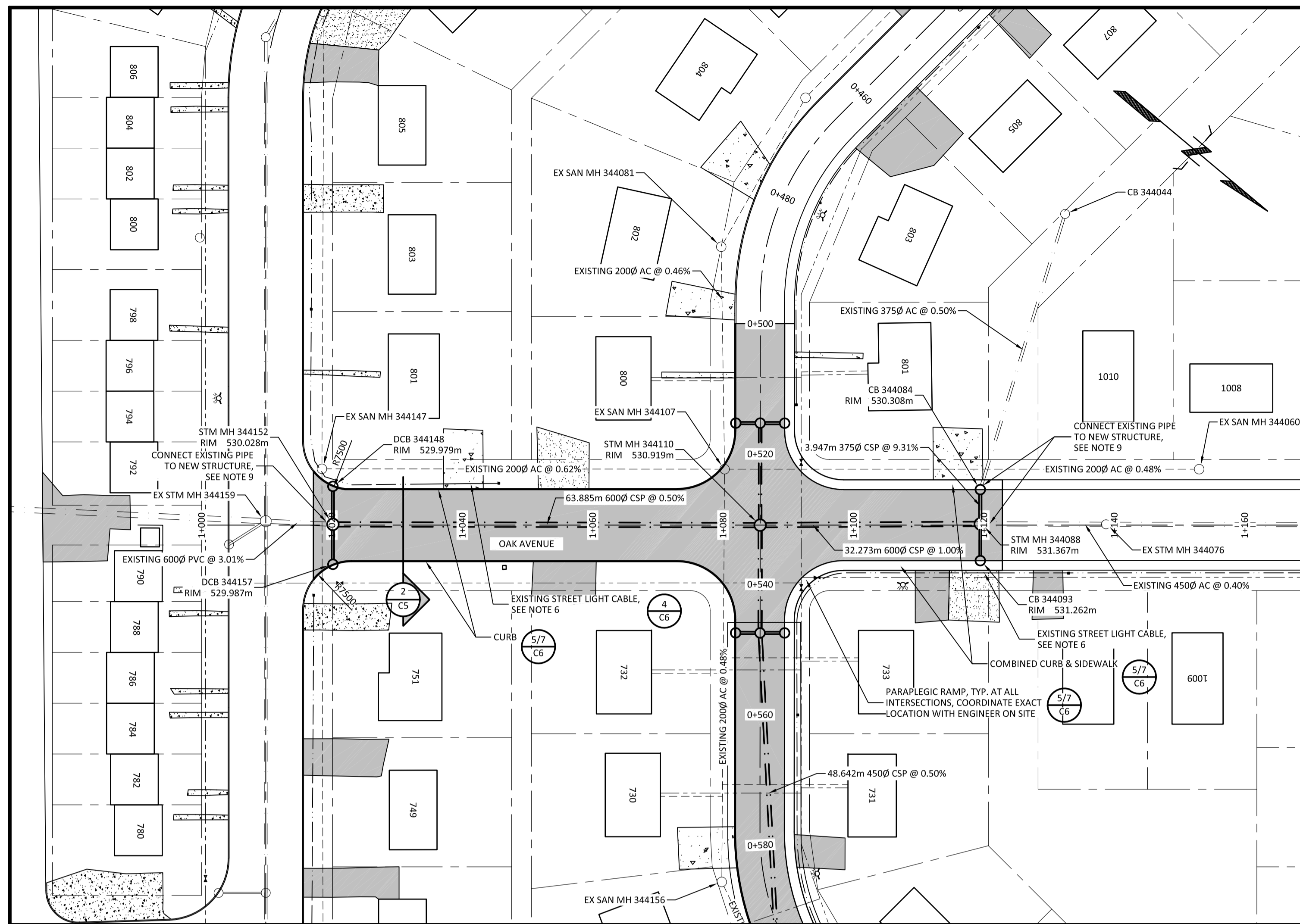
DRAWN RH **CHECKED** SAB

DESIGNED RH/SAB **APPROVED**

PROJECT TITLE
 WILLOW DRIVE STREET RECONSTRUCTION PHASE 1
 LABRADOR CITY, NL

DRAWING TITLE
 WILLOW DRIVE STORM SEWER PLAN/PROFILE STA. 0+480 TO 0+780

SCALE H 1:500 V 1:100
PROJECT NO. NCI NO. 003-225
DATE FEBRUARY 2024
DRAWING NO. C3
REVISION NO. C



- NOTES:**
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
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 - CONTRACTOR TO CONFIRM ALL FIELD INFORMATION (INVERTS, INSIDE & OUTSIDE PIPE DIAMETERS, PIPE MATERIAL) PRIOR TO ORDERING STRUCTURES.

LEGEND:

| | |
|--|-----------------------------------|
| | ROCK/COMMON IMPORT |
| | ASPHALT SURFACE |
| | CONCRETE SURFACE |
| | GRANULAR SURFACE |
| | APPROXIMATE PROPERTY BOUNDARY |
| | EXISTING FENCE |
| | EXISTING STREET LIGHT |
| | EXISTING TRAFFIC SIGN |
| | EXISTING HYDRO POLE WITH GUY WIRE |
| | EXISTING CATCH BASIN |
| | EXISTING MANHOLE |
| | EXISTING STORM SEWER |
| | EXISTING WATER MAIN |
| | EXISTING SANITARY SEWER |
| | EXISTING STREET LIGHT CABLE |
| | EXISTING VALVE |
| | EXISTING HYDRANT |

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|-----|------------------------------|----------|
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| B | ISSUED FOR REVIEW & APPROVAL | 13/03/24 |
| A | ISSUED FOR REVIEW | 28/02/24 |
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CONSULTANT

NOVA CONSULTANTS INC.
 37 HALLETT DREAGENT ST. JOHN'S, NL A1B 4C4
 TEL: 709 753 2260
 INFO@NCINL.CA

CONSULTING ENGINEERS ST. JOHN'S LABRADOR CITY

CLIENT

LABRADOR CITY

STM Structure Table

| Structure | Structure Details | Location | Structure Ø |
|------------------|--|-------------------------------|-------------|
| EX STM MH 344159 | RIM ELEV 530.157 450Ø INV IN (NE) 527.955 300Ø INV IN (E) 528.348 400Ø INV IN (SW) 527.950 600Ø INV IN (NW) 528.215 750Ø INV OUT (SE) 527.817 | N 5866560.938 E 344158.510 | 1500 |
| STM MH 344088 | RIM ELEV 531.367 450Ø INV IN (NW) 529.559 375Ø INV IN (SW) 529.411 300Ø INV IN (NE) 529.411 600Ø INV OUT (SE) 529.261 | N 5866645.109 E 344088.322 | 1500 |
| STM MH 344110 | RIM ELEV 530.919 375Ø INV IN (SW) 529.031 600Ø INV IN (NW) 528.931 450Ø INV IN (NE) 529.031 600Ø INV OUT (SE) 528.881 | N 5866619.379 E 344110.188 | 1500 |
| STM MH 344152 | RIM ELEV 530.028 300Ø INV IN (NE) 528.671 600Ø INV IN (NW) 528.561 300Ø INV IN (SW) 528.672 600Ø INV OUT (SE) 528.507 | N 5866569.133 E 344152.259 | 1500 |

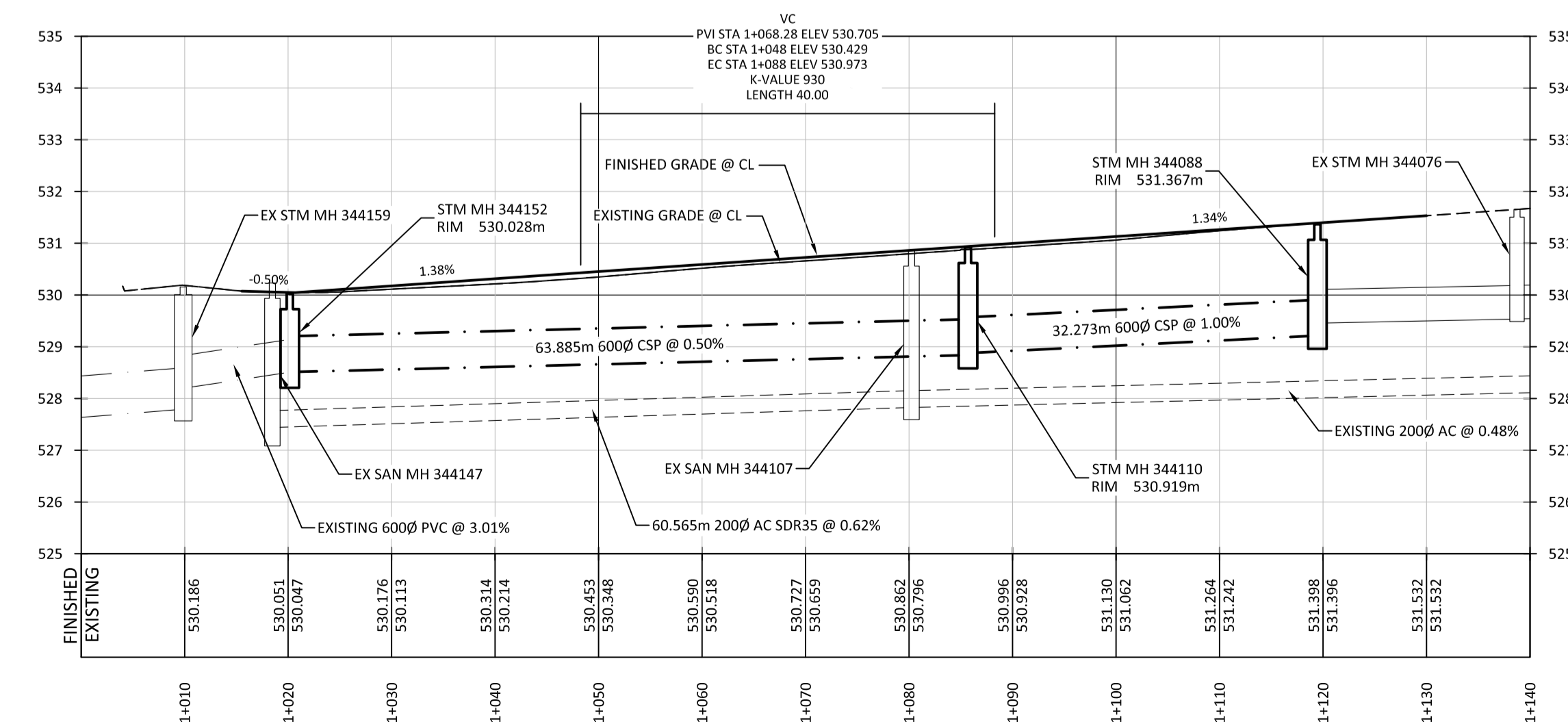
STM Structure Table

| Structure | Structure Details | Location | Structure Ø |
|------------------|---|-------------------------------|-------------|
| CB 344084 | RIM ELEV 530.308 375Ø INV IN (SW) 529.625 375Ø INV OUT (NE) 529.775 | N 5866641.724 E 344084.294 | 1200 |
| CB 344093 | RIM ELEV 531.262 300Ø INV OUT (SW) 529.523 | N 5866648.736 E 344092.639 | 1200 |
| DCB 344148 | RIM ELEV 529.979 300Ø INV OUT (NE) 528.772 | N 5866565.383 E 344147.796 | 1200 |
| DCB 344157 | RIM ELEV 529.987 300Ø INV OUT (SW) 528.775 | N 5866573.075 E 344156.950 | 1200 |
| EX STM MH 344076 | RIM ELEV 531.654 450Ø INV IN (NW) 529.637 | N 5866659.916 E 344075.965 | 1200 |

SAN Structure Table

| Manhole | Manhole Details | Location | MH Ø |
|------------------|---|-------------------------------|------|
| EX SAN MH 344060 | RIM ELEV 529.101 200Ø INV OUT (SE) 528.238 | N 5866665.409 E 344060.301 | 1200 |
| EX SAN MH 344107 | RIM ELEV 530.859 200Ø INV IN (NW) 527.889 200Ø INV IN (SW) 527.889 200Ø INV IN (NE) 527.889 200Ø INV OUT (SE) 527.889 | N 5866609.681 E 344107.126 | 1200 |
| EX SAN MH 344147 | RIM ELEV 530.233 200Ø INV IN (SW) 527.443 200Ø INV IN (NW) 527.503 200Ø INV OUT (NE) 527.383 | N 5866562.363 E 344146.820 | 1200 |

ALL CATCH BASIN LEADS TO BE 300Ø CSP @ 2.0% UNLESS NOTED



NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
CLASS "A"
 This Permit Allows
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 Permit No. as issued by PEGNL D0014
 which is valid for the year 2024.

REGISTERED PROFESSIONAL ENGINEER
 pgnl
 DATE: Apr. 8, 2024

| | | |
|---|------------------------------|---|
| A | A DETAIL NO. | A |
| B | B LOCATION DRAWING NO. | B |
| C | C DRAWING NO. WHERE DETAILED | |

| | | | |
|----------|--------|----------|-----|
| DRAWN | RH | CHECKED | SAB |
| DESIGNED | RH/SAB | APPROVED | |

PROJECT TITLE

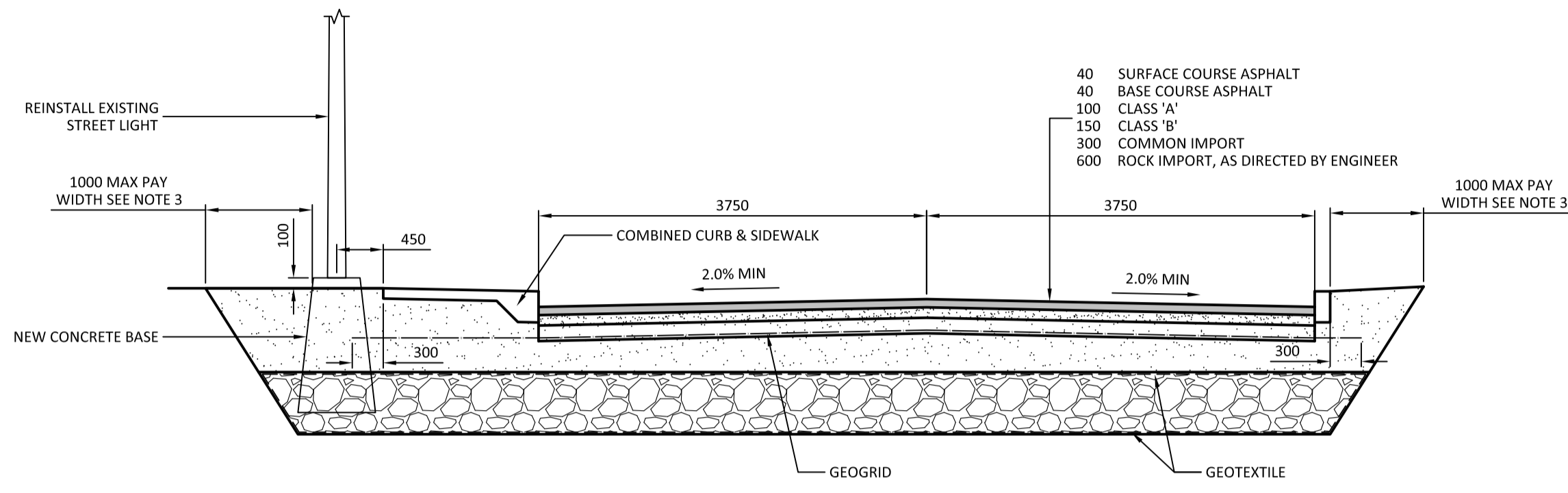
WILLOW DRIVE STREET RECONSTRUCTION
 PHASE 1

LABRADOR CITY, NL

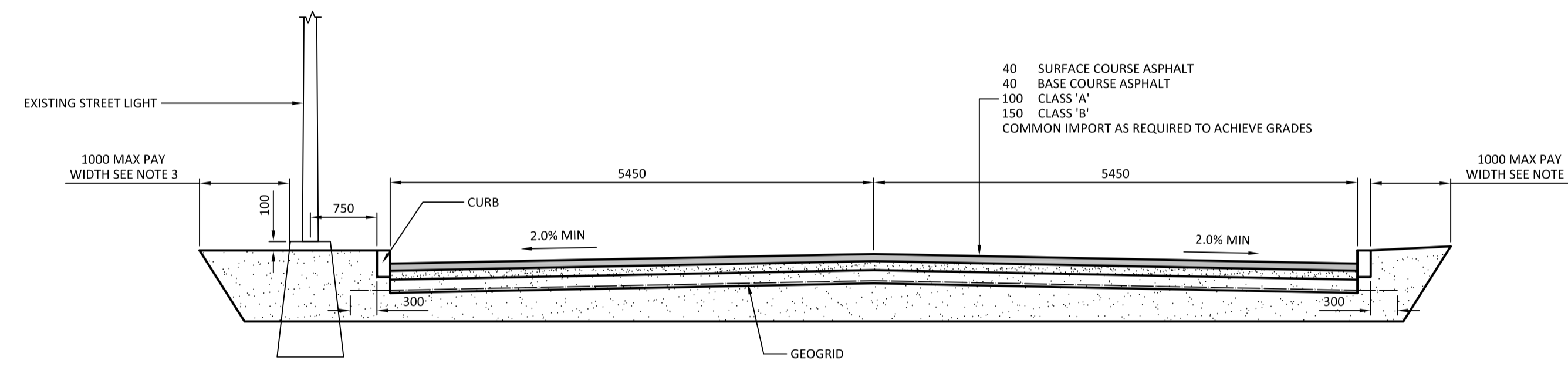
DRAWING TITLE

OAK AVENUE STORM SEWER
 PLAN/PROFILE
 STA. 1+010 TO 1+140

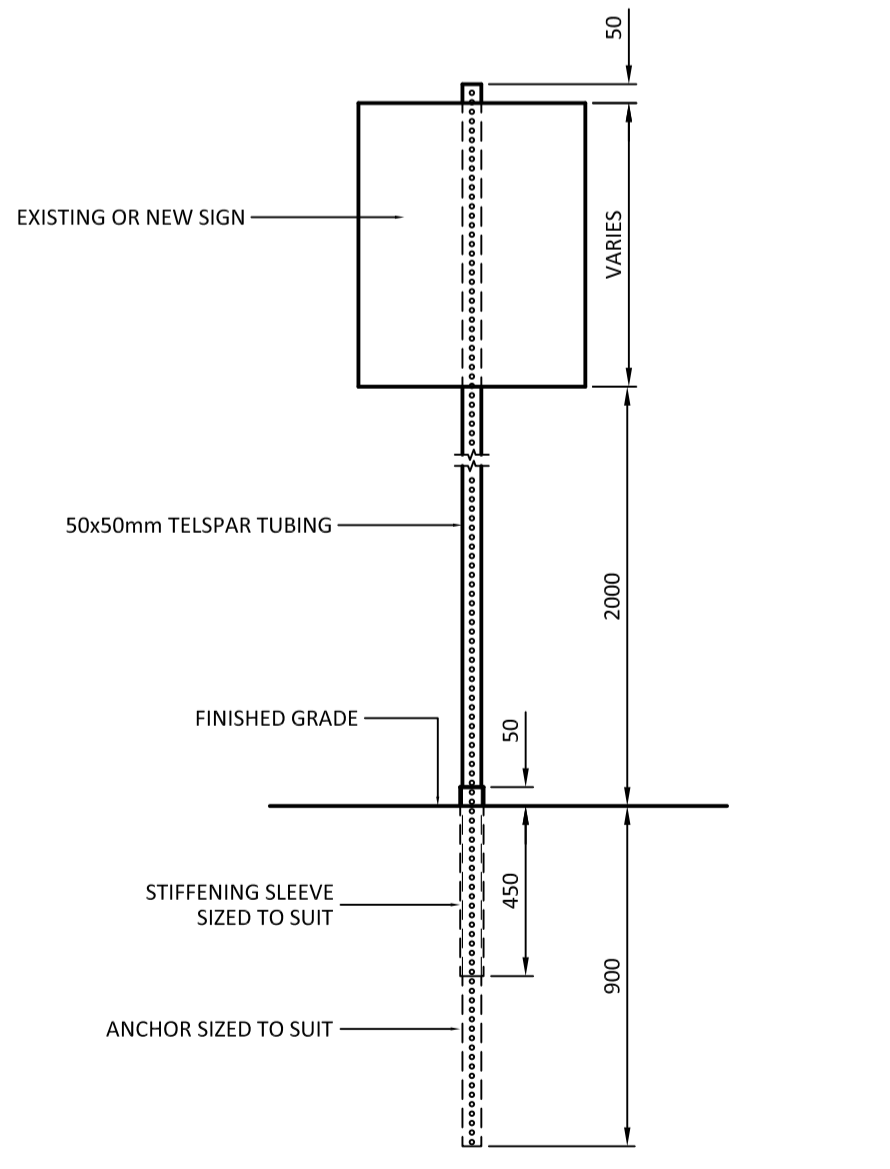
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|-------------|--------------------------------------|--------------|----|
| SCALE | H 1:500 V 1:100 | DRAWING NO. | C4 |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TLCO9-24 | REVISION NO. | |
| DATE | FEBRUARY 2024 | | C |



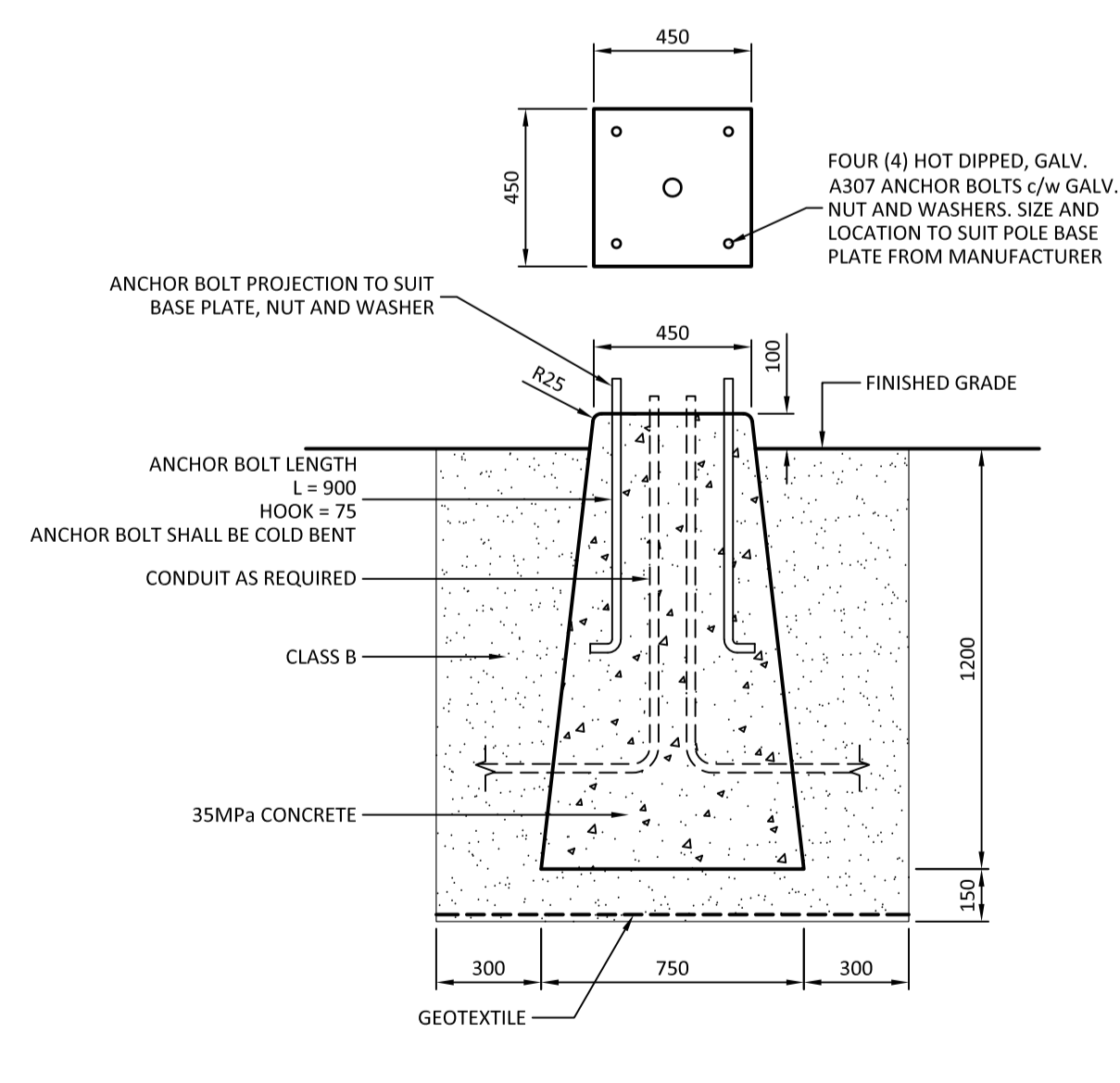
TYPICAL ROAD SECTION -
WILLOW DRIVE
1:50



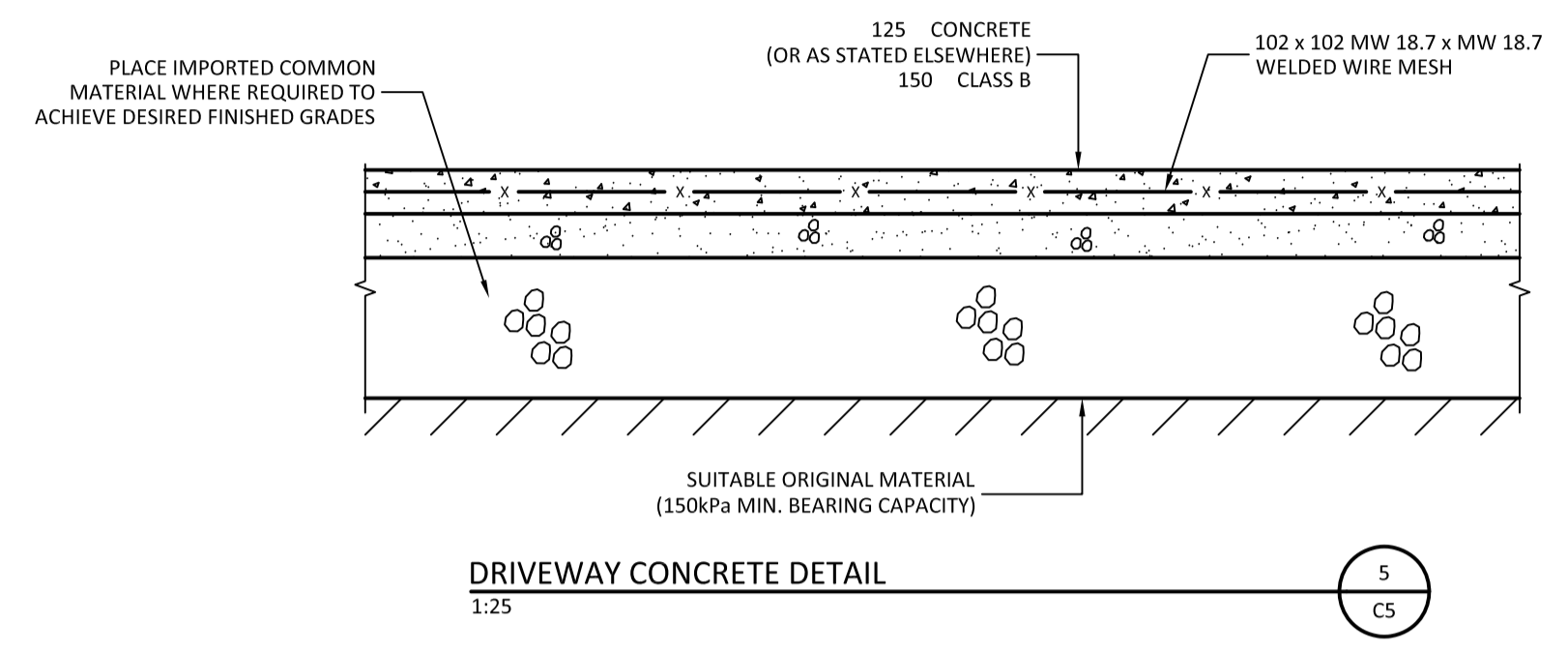
TYPICAL ROAD SECTION -
OAK AVENUE
1:50



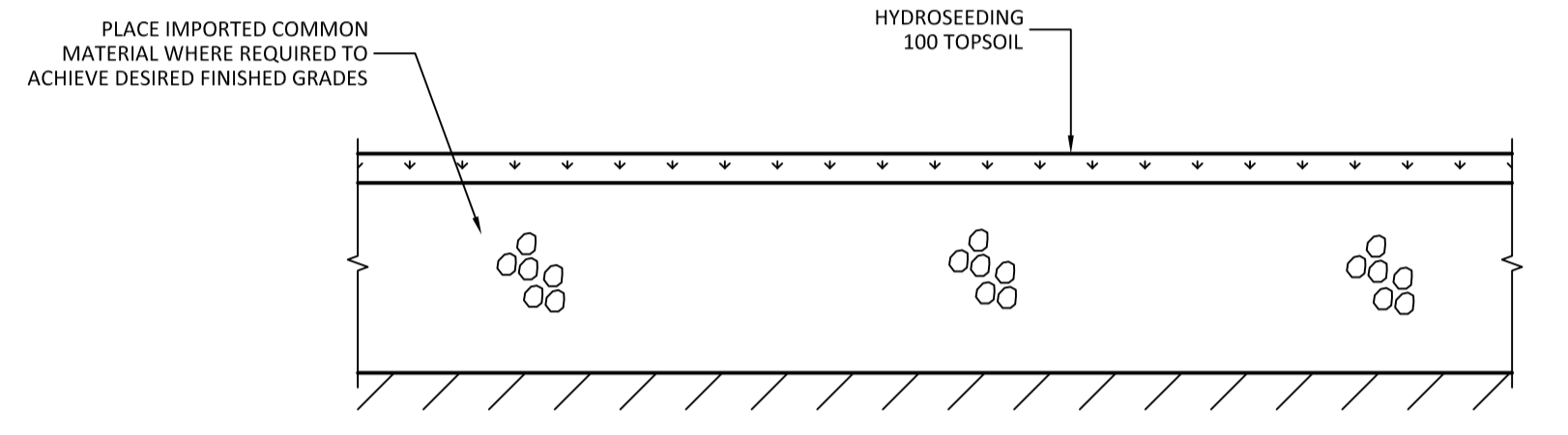
SIGN POST DETAIL
1:20



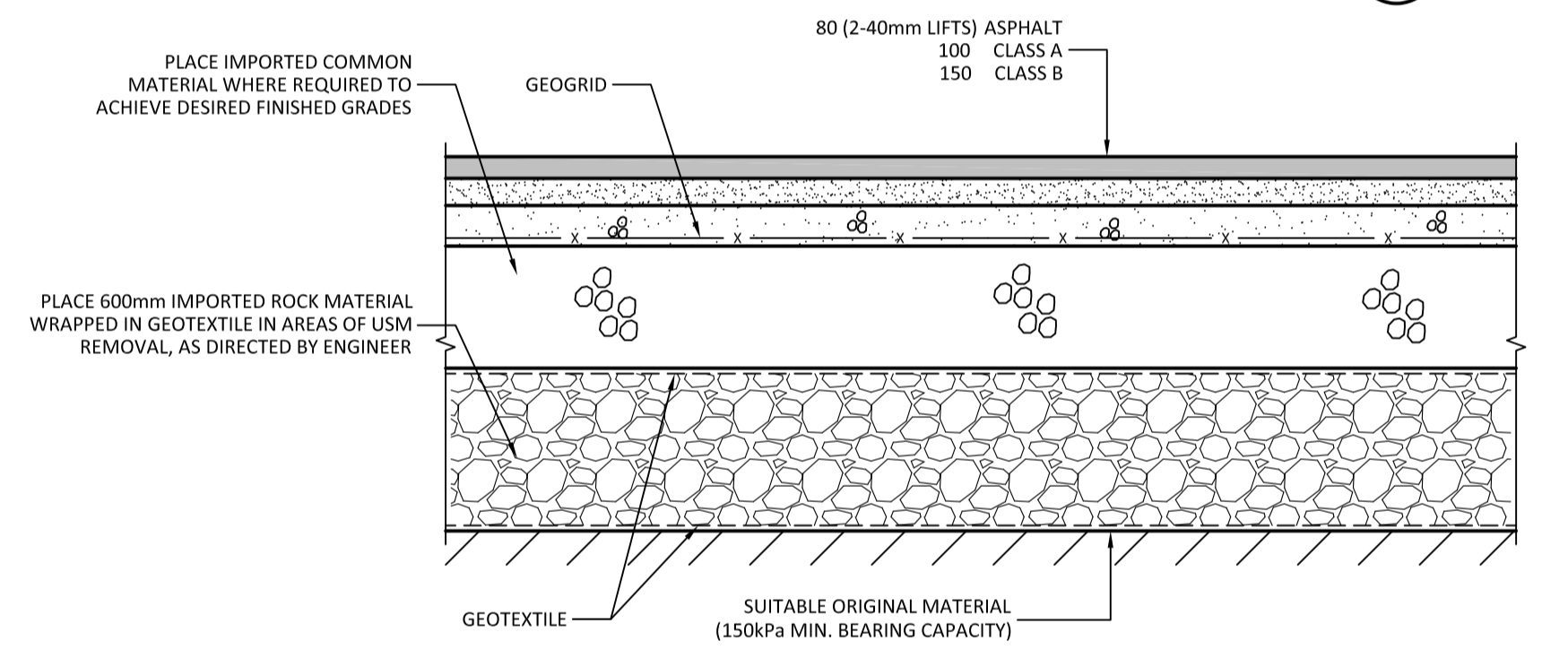
LIGHT POLE BASE DETAIL
1:20



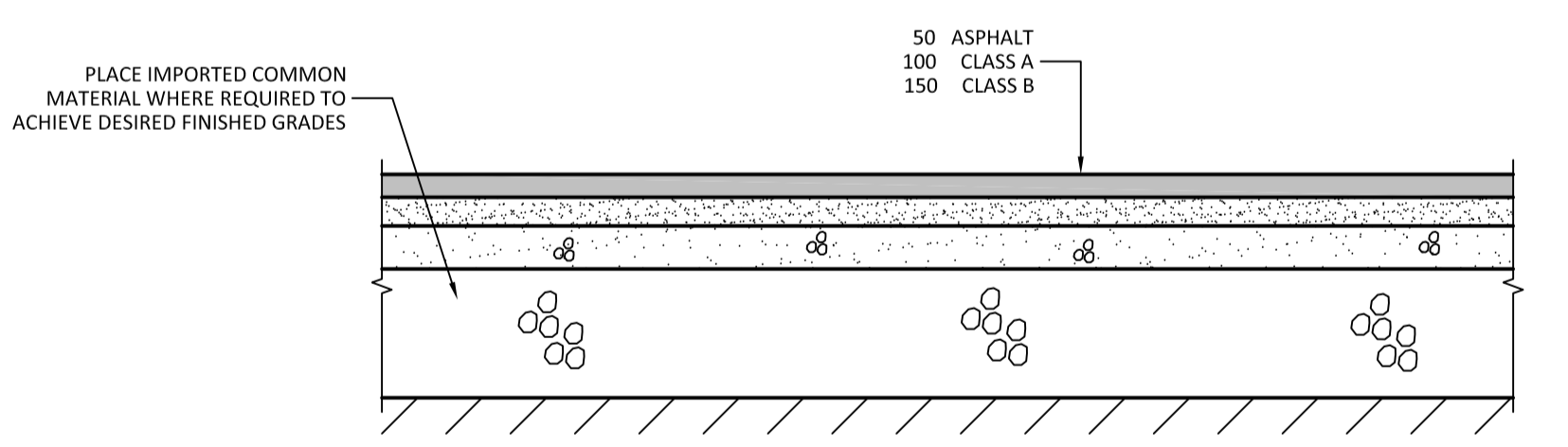
DRIVEWAY CONCRETE DETAIL
1:25



LANDSCAPING DETAIL
N.T.S.



ROADWAY ASPHALT DETAIL @
SUBGRADE IMPROVEMENT LOCATIONS
1:25



DRIVEWAY ASPHALT DETAIL
1:25

- NOTES:
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS AS PUBLISHED BY THE PROVINCE OF NEWFOUNDLAND AND LABRADOR.
 - DISTURBANCE TO DEVELOPED SURFACES BEYOND THE LIMITS OF NEW CURB, COMBINED CURB & SIDEWALK, OR STREET LIGHT BASE TO BE HELD TO A MAX. DIMENSION OF 1000mm. PAYMENT WILL BE BASED ON ACTUAL MEASURED DIMENSIONS BUT NOT EXCEED THE THEORETICAL PAY WIDTH OF 1000mm UNLESS DIRECTED BY THE OWNER'S REPRESENTATIVE. DISTURBANCE TO DEVELOPED SURFACES BEYOND THE THEORETICAL MAX. PAY WIDTHS SHALL BE REPAIRED AT NO COST TO THE OWNER.

ENGINEER SHALL ASSESS FIELD SUBGRADE CONDITIONS AND MAY DIRECT CONTRACTOR TO PLACE ROCK MATERIAL IN SPECIFIC LOCATIONS AS REQUIRED

| | | |
|-----|------------------------------|----------|
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| A | DETAIL NO. | A |
| B | LOCATION DRAWING NO. | B |
| C | DRAWING NO. WHERE DETAILED | C |

| | | | |
|----------|--------|----------|-----|
| DRAWN | RH | CHECKED | SAB |
| DESIGNED | RH/SAB | APPROVED | |

PROJECT TITLE

WILLOW DRIVE STREET RECONSTRUCTION
PHASE 1

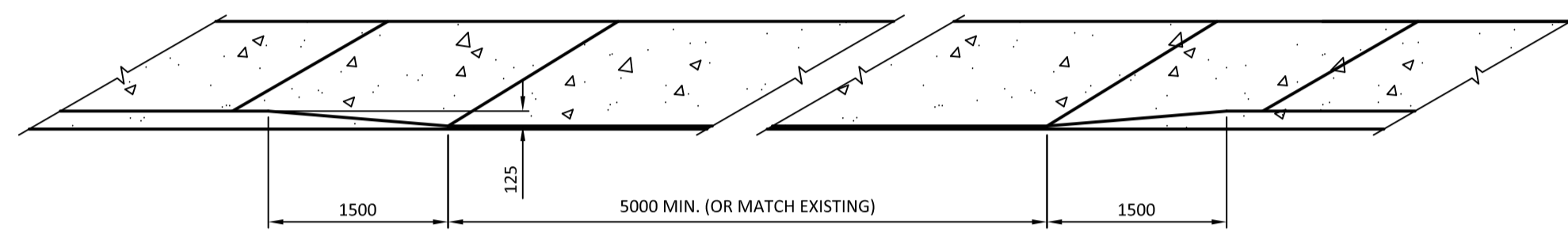
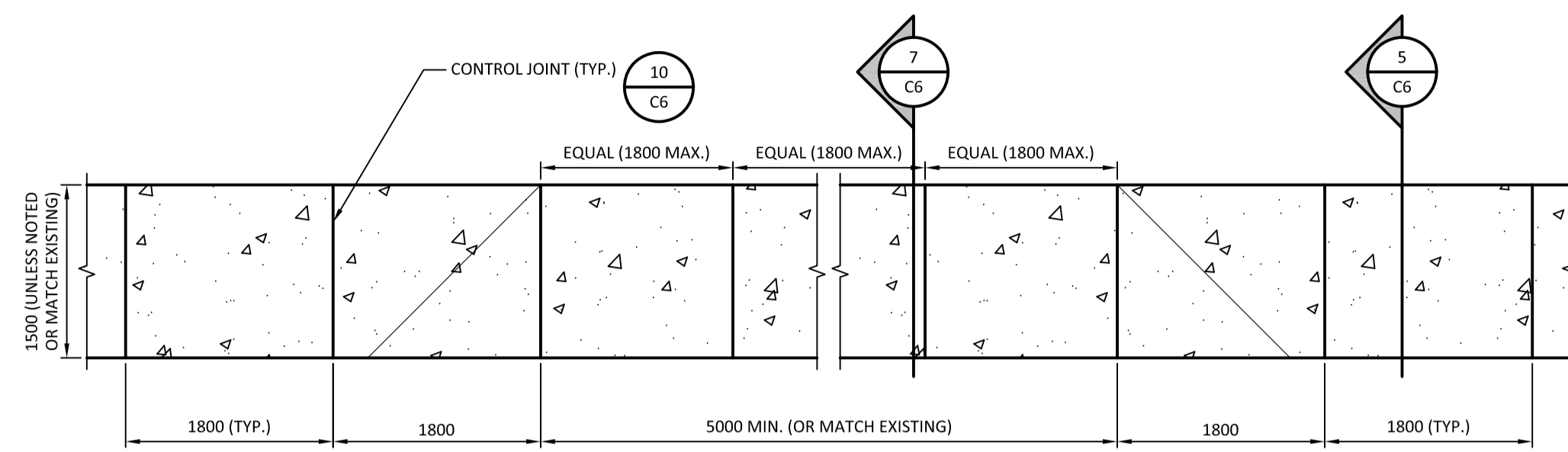
LABRADOR CITY, NL

DRAWING TITLE

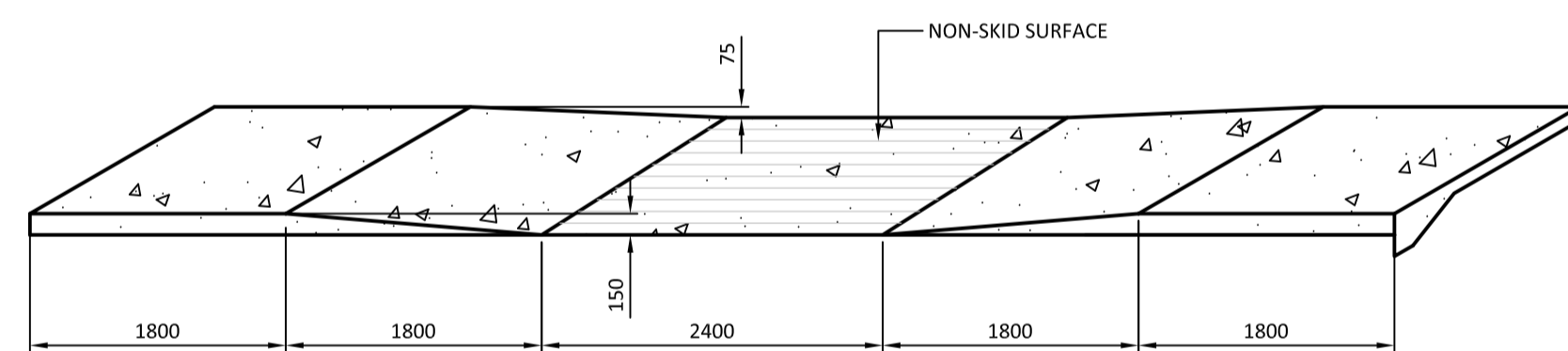
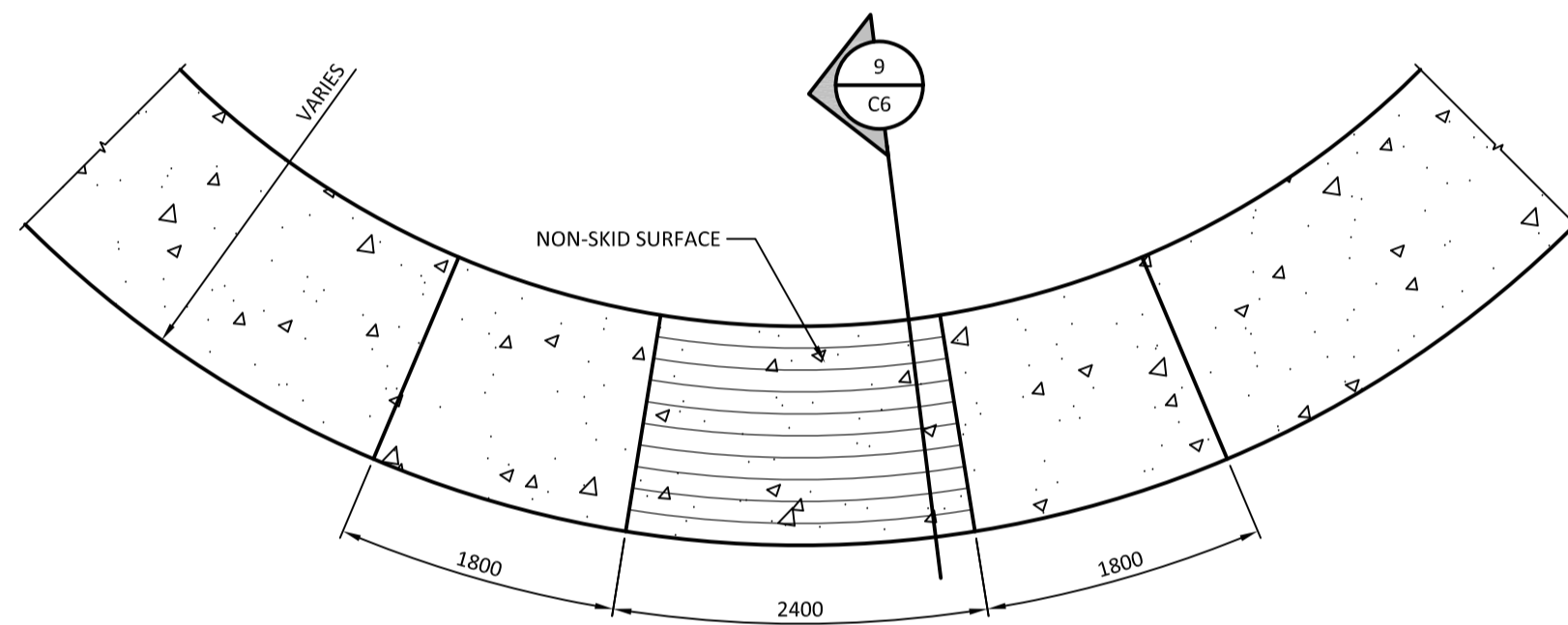
SECTIONS & DETAILS

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|-------------|--------------------------------------|--------------|----|
| SCALE | AS SHOWN | DRAWING NO. | C5 |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TLCO9-24 | REVISION NO. | C |
| DATE | FEBRUARY 2024 | | |

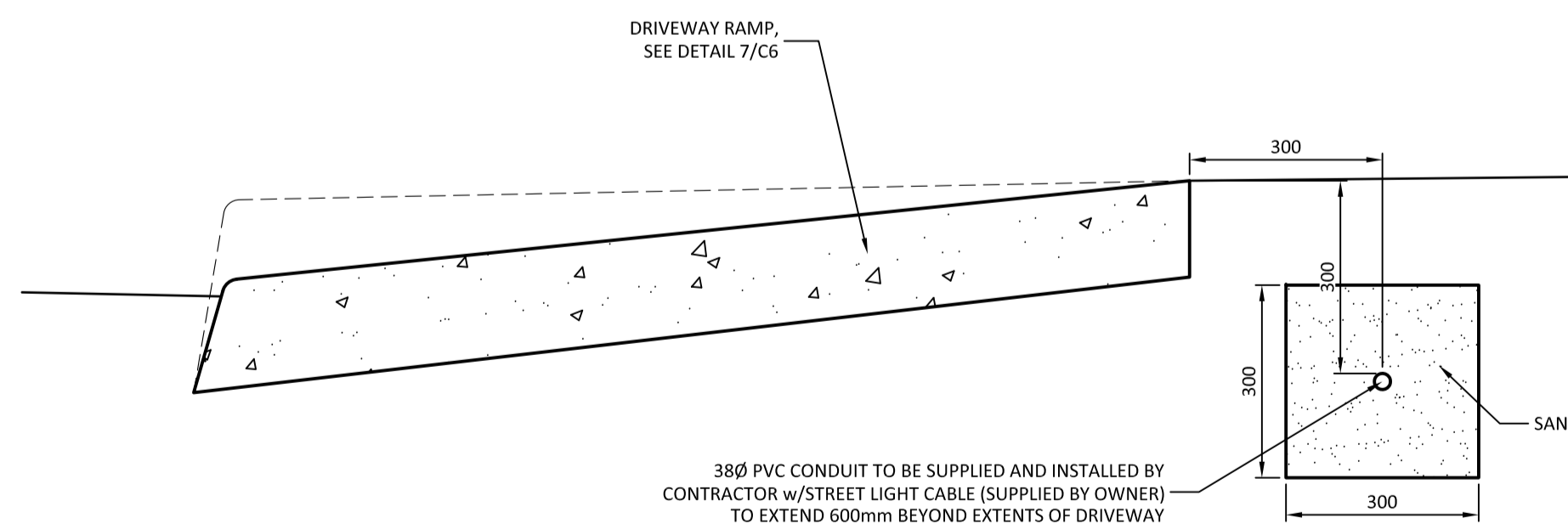
NOT FOR CONSTRUCTION



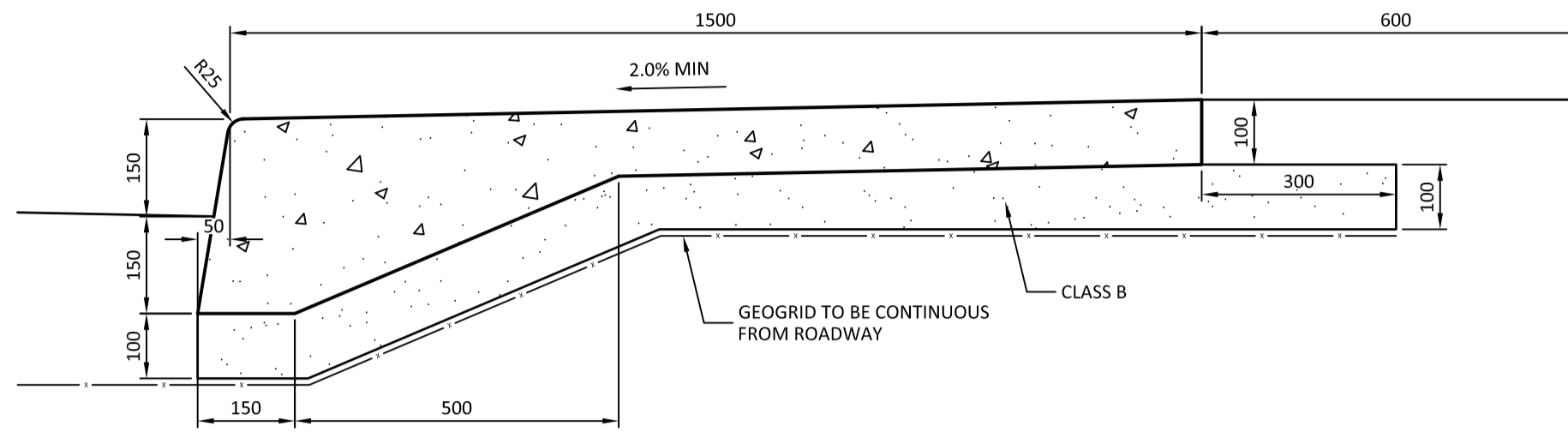
CURB/SIDEWALK AND DRIVEWAY RAMP DETAIL
1:50



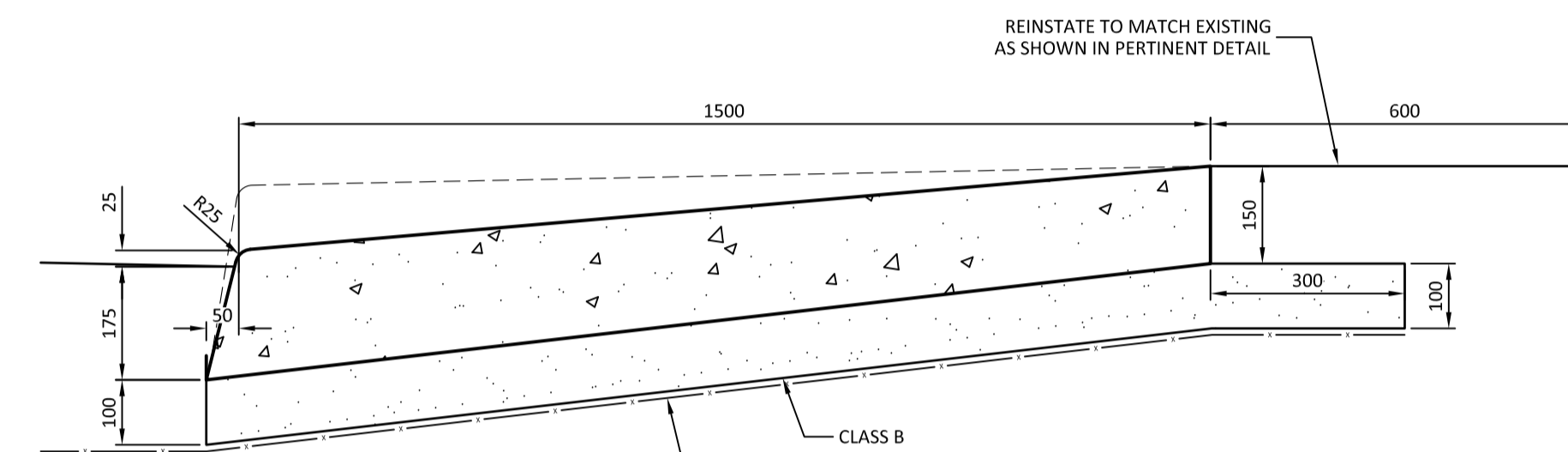
PARAPLEGIC RAMP DETAIL
1:50



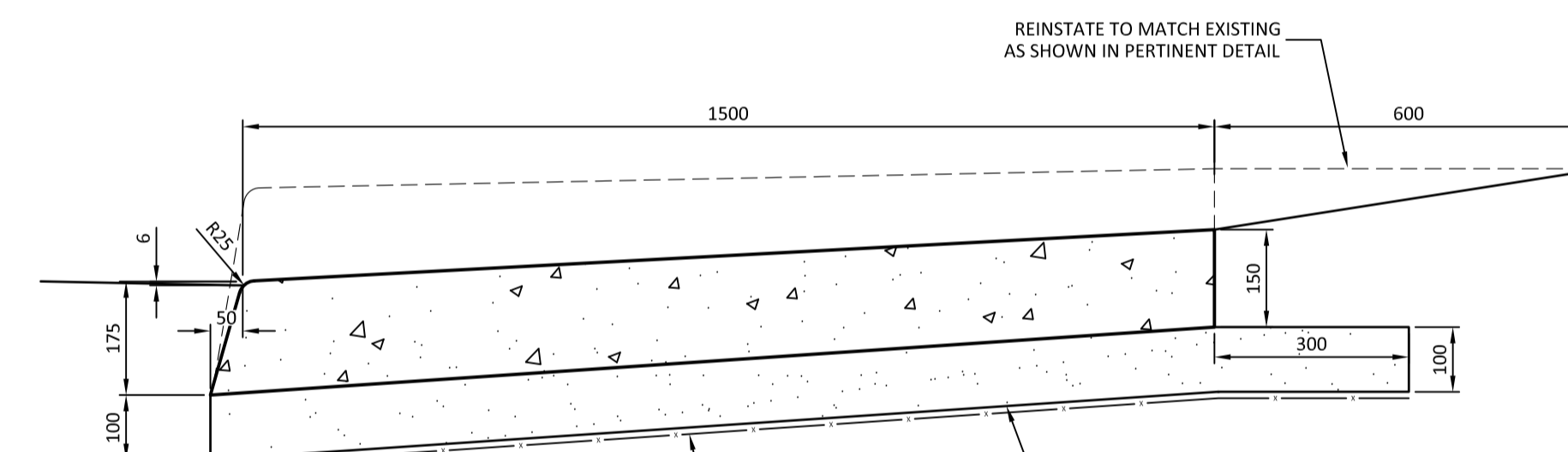
CONDUIT @ DRIVEWAY LOCATION COMBINED CURB AND SIDEWALK
1:10



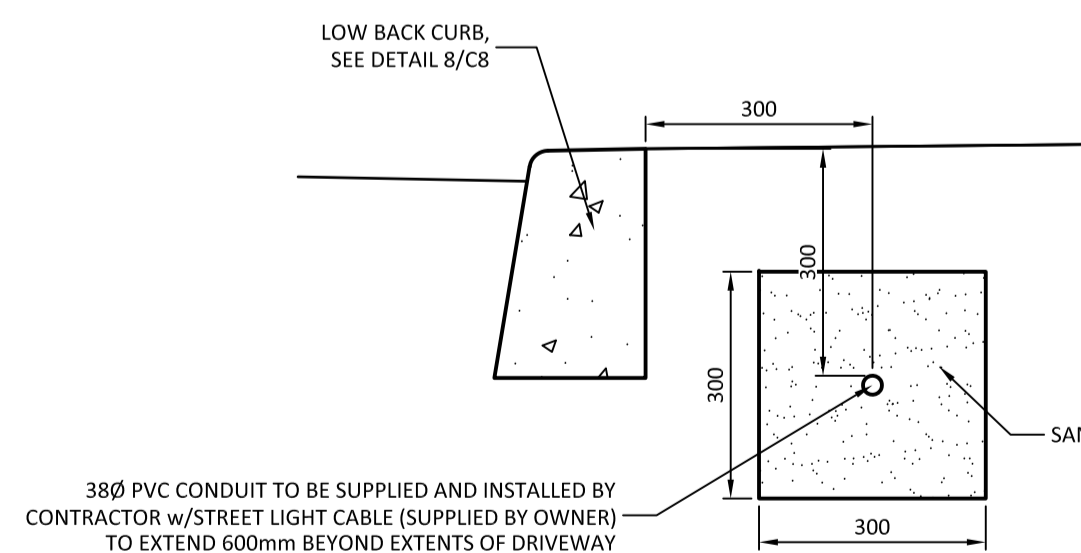
TYPICAL COMBINED CURB AND SIDEWALK DETAIL
1:10



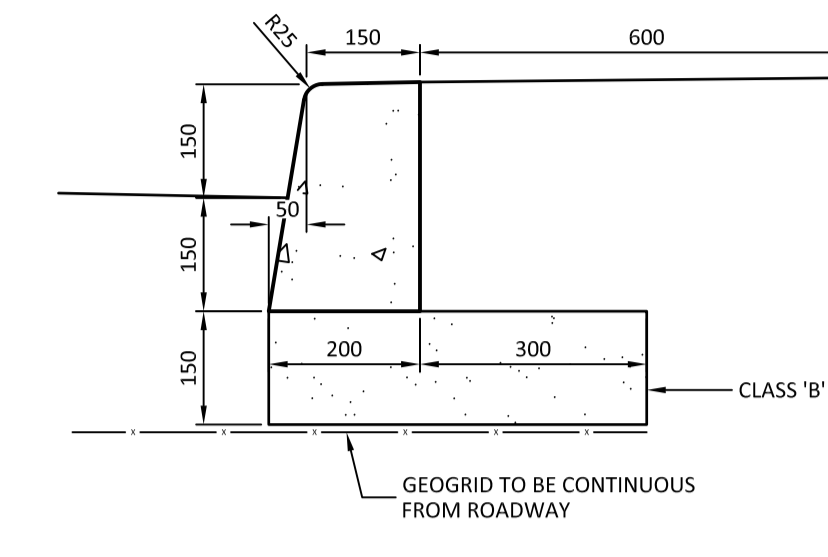
SIDEWALK DETAIL @ DRIVEWAY/ACCESS WAY
1:10



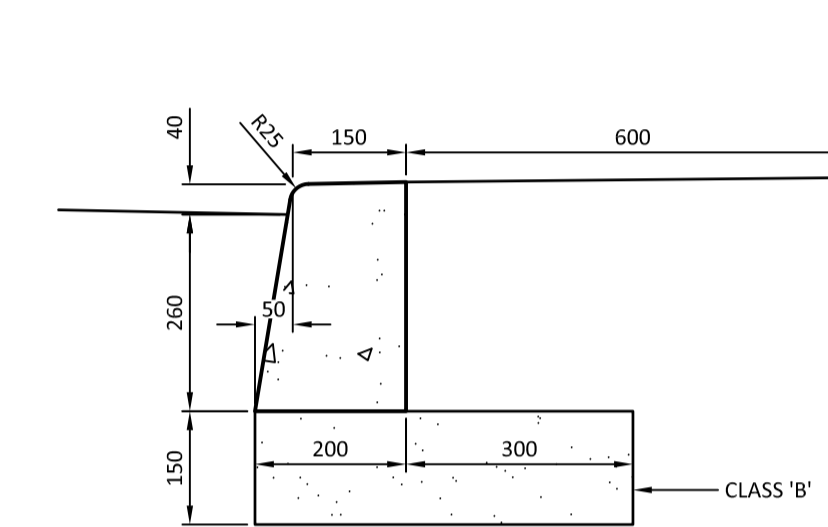
SIDEWALK DETAIL @ PARAPLEGIC RAMP
1:10



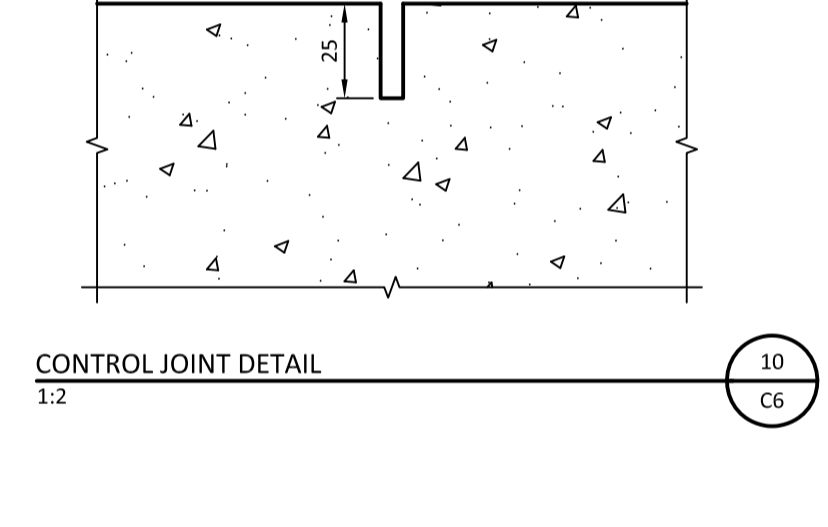
CONDUIT @ DRIVEWAY LOCATION LOW BACK CURB
1:10



TYPICAL CURB DETAIL - STANDARD
1:10



TYPICAL CURB DETAIL - LOWBACK
1:10



CONTROL JOINT DETAIL
1:2

- NOTES:**
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS AS PUBLISHED BY THE PROVINCE OF NEWFOUNDLAND AND LABRADOR.

- CONCRETE WALKWAY/SIDEWALK NOTES:**
- WHERE CONTRACTION JOINTS ARE NEEDED, THE METHOD USED MUST GUARANTEE THAT AT LEAST 1/4 OF THE DEPTH OF CONCRETE IS INTENDED TO CONTROL DRYING SHRINKAGE CRACKING. SUITABLE METHODS ARE THE USE OF THE PREFORMED JOINT MATERIALS OR SAW CUTTING 1/4 THE SLAB THICKNESS WITHIN 6 TO 18 HOURS AFTER THE CONCRETE HAS HARDENED BEFORE DRYING SHRINKAGE CRACKS APPEAR. FOR SLIPFORM CONSTRUCTION, THE JOINTS MAY BE FORMED USING A GUILLOTINE OR WIRE TO CUT THE PLASTIC CONCRETE, OR BY SAW CUTTING THE HARDENED CONCRETE.
 - CONTRACTION JOINTS SHALL BE LOCATED AT 24 TO 30 D MAX. WHERE SIDEWALK WIDTH IS 2.5m OR GREATER, A CONTRACTION JOINT SHOULD ALSO BE FORMED ALONG THE CENTERLINE OF THE WALK. CONTRACTION JOINT SPACING FOR SIDEWALK SHALL BE APPROXIMATELY THE SAME AS THE WIDTH AND NOT MORE THAN 1.5m TIMES THE WIDTH.
 - CONTRACTION JOINTS IN CURB SECTIONS SHOULD EXTEND COMPLETELY THROUGH THE CURB HEIGHT. WHEN SIDEWALK IS ADJACENT TO CURB, MAKE JOINTS OF CURB AND SIDEWALK ALIGN.
 - ISOLATION JOINTS SHOULD BE LOCATED ADJACENT TO EXISTING STRUCTURES, (POLES, WALLS, HYDRANTS, BUILDINGS) ISOLATION JOINTS SHOULD ALSO BE LOCATED BEFORE AND AFTER CURB SECTIONS AND AT INTERSECTIONS.
 - ISOLATION JOINT FILLER SHOULD BE 12.7mm THICK.
 - 150mm o.c. RIBBED NON SKID SURFACE ON PARAPLEGIC RAMP.

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|-----|------------------------------|----------|
| C | ISSUED FOR TENDER | 08/04/24 |
| B | ISSUED FOR REVIEW & APPROVAL | 13/03/24 |
| A | ISSUED FOR REVIEW | 28/02/24 |
| No. | ISSUES/REVISIONS | DD/MM/YY |

CONSULTANT

NOVA CONSULTANTS INC.
37 HALLETT DRECBENT ST. JOHN'S, NL A1B 4C4
TEL: 709 753 2260
INFO@NCINL.CA

CONSULTING ENGINEERS ST. JOHN'S LABRADOR CITY

CLIENT

LABRADOR CITY

PROVINCE OF NEWFOUNDLAND

PERMIT HOLDER CLASS "A"
This Permit Allows
NOVA CONSULTANTS INC.

To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by PEGNL D0014
which is valid for the year 2024.

DATE: Apr. 8, 2024

| | | |
|---|----------------------------|---|
| A | DETAIL NO. | A |
| B | LOCATION DRAWING NO. | B |
| C | DRAWING NO. WHERE DETAILED | |

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|----------|--------|----------|-----|
| DRAWN | RH | CHECKED | SAB |
| DESIGNED | RH/SAB | APPROVED | |

PROJECT TITLE

WILLOW DRIVE STREET RECONSTRUCTION PHASE 1

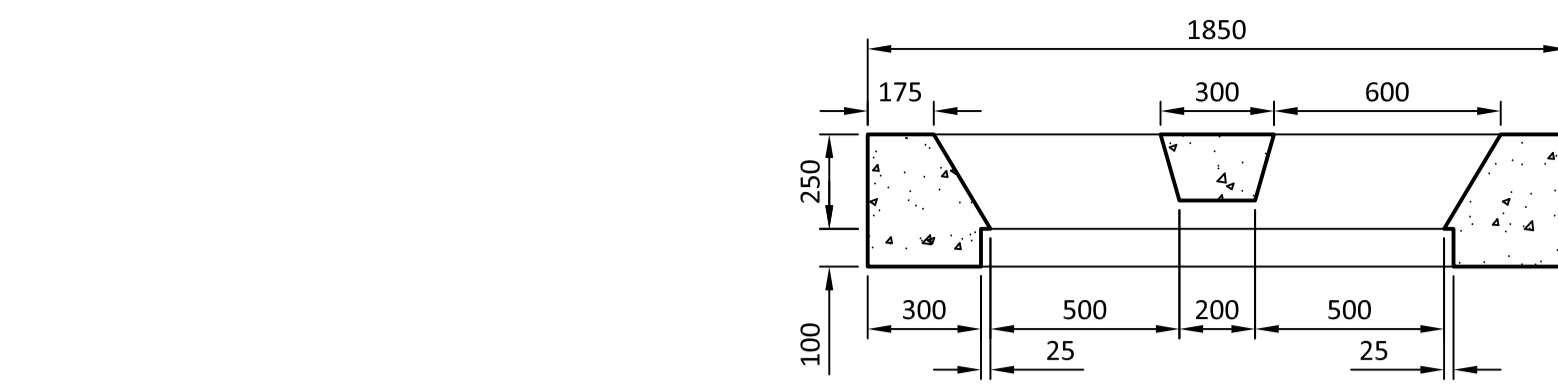
LABRADOR CITY, NL

DRAWING TITLE

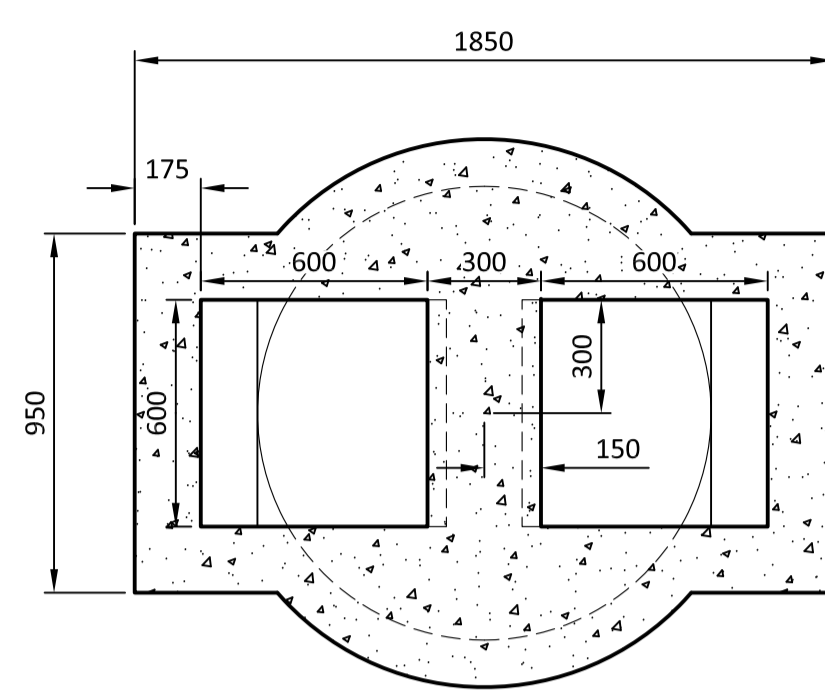
SECTIONS & DETAILS

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|-------------|--------------------------------------|--------------|----|
| SCALE | AS SHOWN | DRAWING NO. | C6 |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TLCO9-24 | REVISION NO. | C |
| DATE | FEBRUARY 2024 | | |

NOT FOR CONSTRUCTION

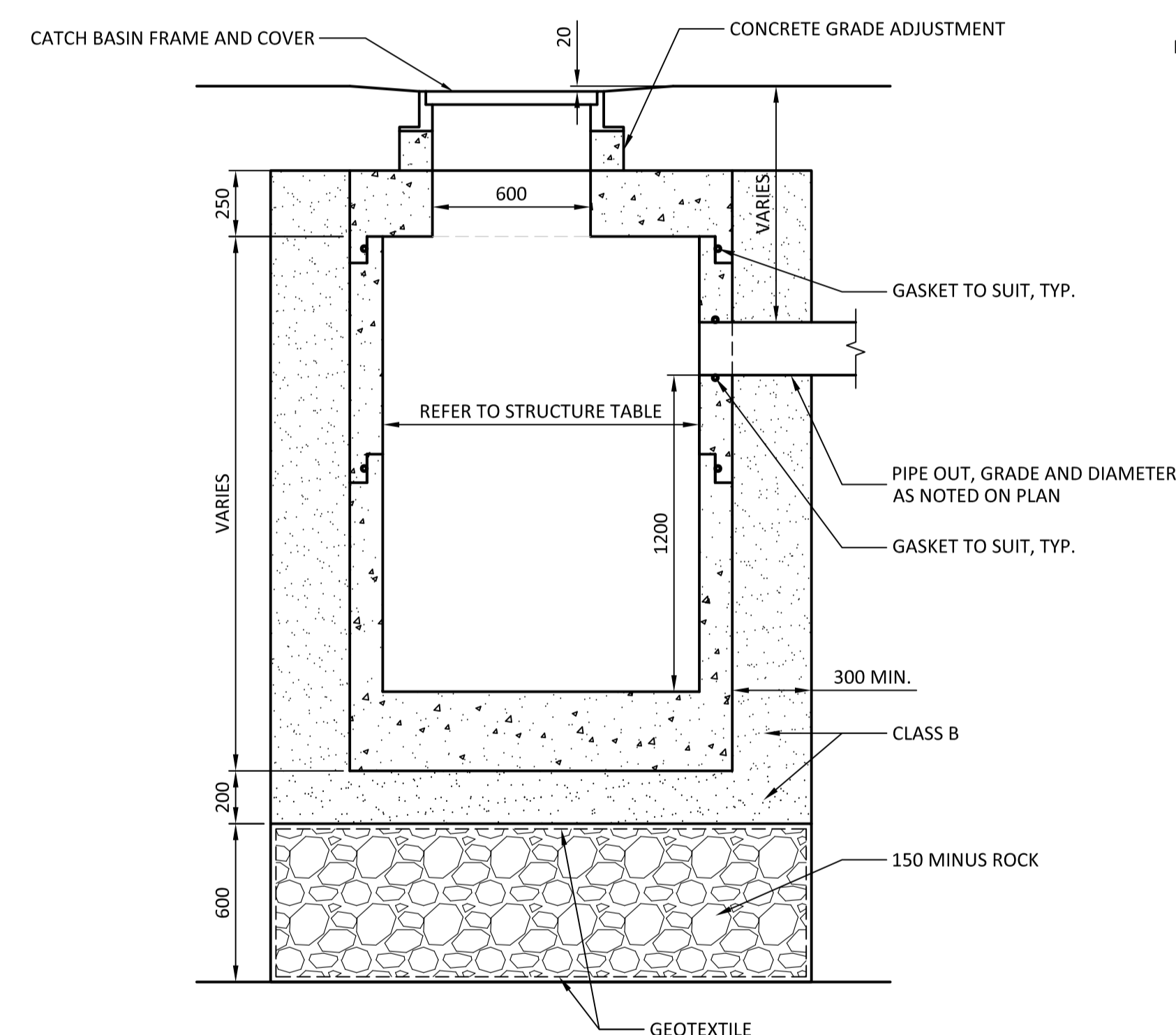


SINGLE CATCH BASIN TOP

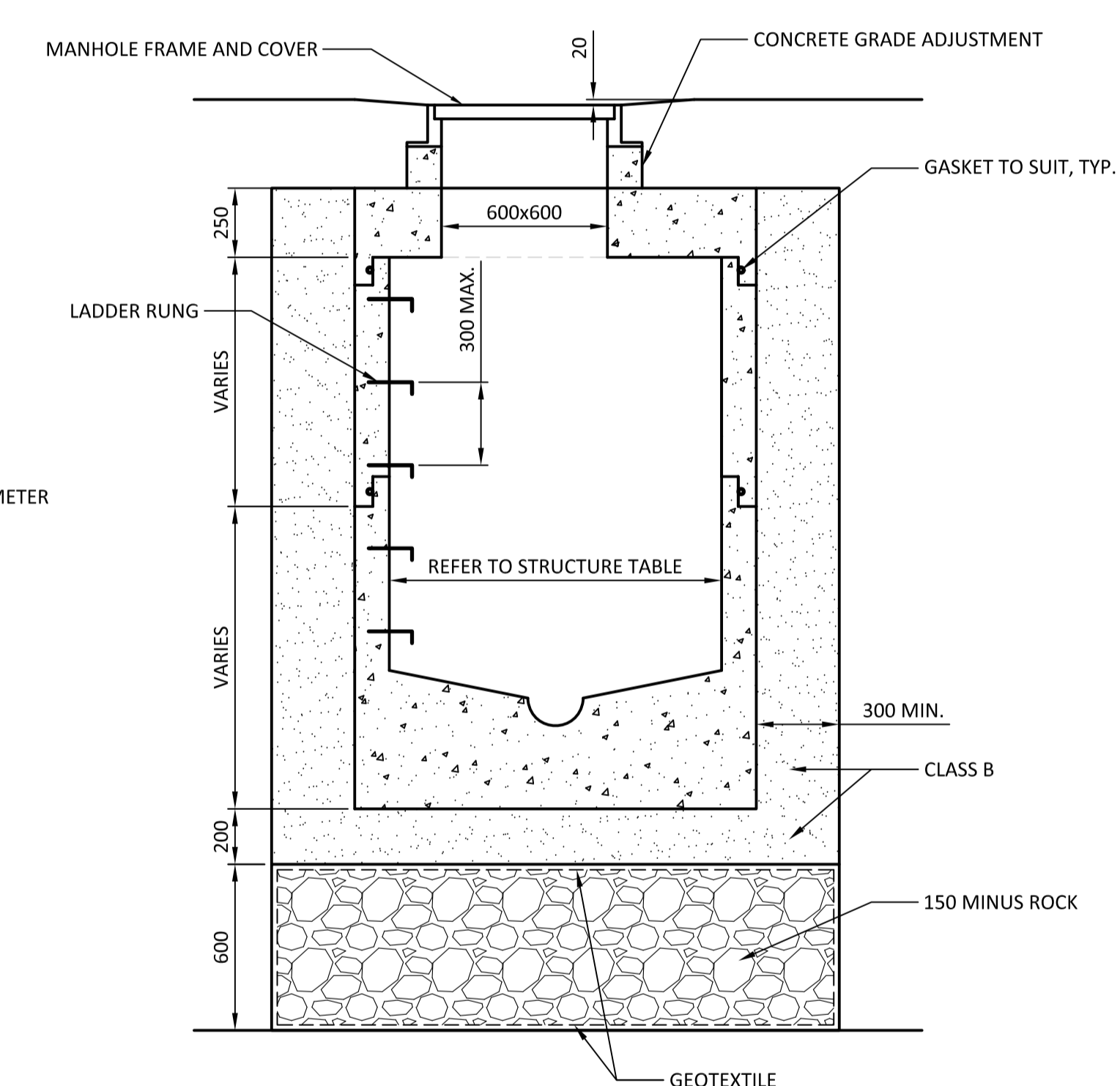
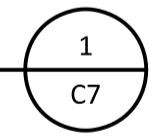


DOUBLE CATCH BASIN TOP

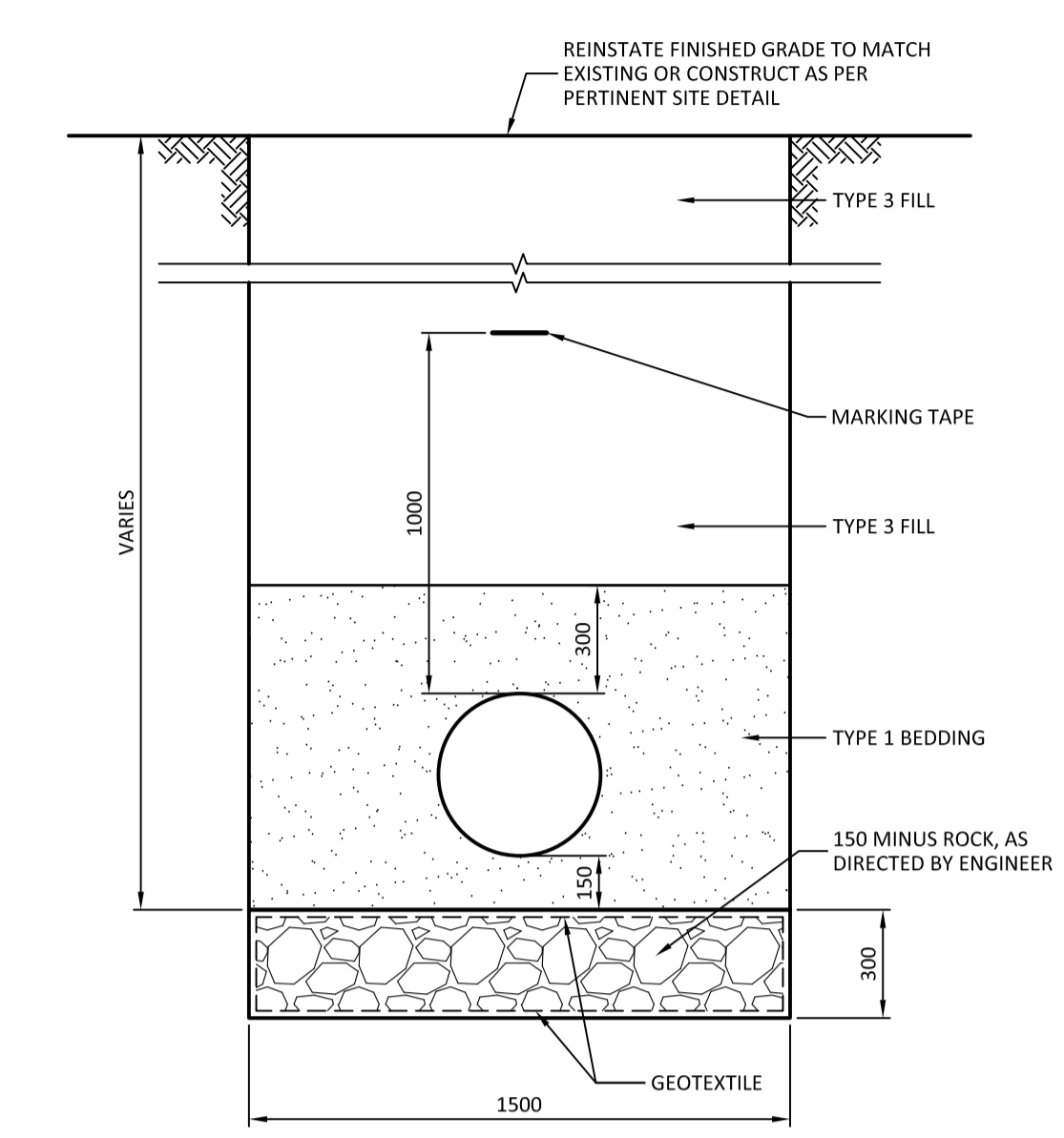
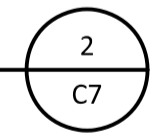
- NOTE:
- REFER TO DMAE MASTER STANDARD DETAILS FOR CATCH BASIN FRAME AND COVER DETAILS.
 - COORDINATES PROVIDED FOR LAYOUT ARE AT THE CENTER OF THE STRUCTURE. CONTRACTOR TO COORDINATE EXACT LOCATION OF CATCH BASINS ON SITE AND COORDINATE DIMENSIONS IN THE FIELD SUCH THAT SLAB TOP OPENINGS/FRAMES & COVERS ARE ALIGNED WITH FACE OF CURB.



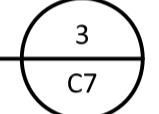
PRECAST CATCH BASIN OR CATCH BASIN/MANHOLE
1:25



PRECAST MANHOLE
N.T.S.



SINGLE PIPE TRENCH DETAIL
N.T.S.



- NOTES:
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE MUNICIPAL WATER, SEWER AND ROADS MASTER CONSTRUCTION SPECIFICATIONS AS PUBLISHED BY THE PROVINCE OF NEWFOUNDLAND AND LABRADOR.
 - DISTURBANCE TO DEVELOPED SURFACES BEYOND THE LIMITS OF NEW CURB, COMBINED CURB & SIDEWALK, OR STREET LIGHT BASE TO BE HELD TO A MAX. DIMENSION OF 1000mm. PAYMENT WILL BE BASED ON ACTUAL MEASURED DIMENSIONS BUT NOT EXCEED THE THEORETICAL PAY WIDTHS OF 1000mm UNLESS DIRECTED BY THE OWNER'S REPRESENTATIVE. DISTURBANCE TO DEVELOPED SURFACES BEYOND THE THEORETICAL MAX. PAY WIDTHS SHALL BE REPAIRED AT NO COST TO THE OWNER.

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|-----|------------------------------|----------|
| C | ISSUED FOR TENDER | 08/04/24 |
| B | ISSUED FOR REVIEW & APPROVAL | 13/03/24 |
| A | ISSUED FOR REVIEW | 28/02/24 |
| No. | ISSUES/REVISIONS | DD/MM/YY |

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37 HALLETT DREBENT
ST. JOHN'S, NL A1B 4C4
TEL: 709 753 2260
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| B | LOCATION DRAWING NO. | B |
| C | DRAWING NO. WHERE DETAILED | |

| | | | |
|----------|--------|----------|-----|
| DRAWN | RH | CHECKED | SAB |
| DESIGNED | RH/SAB | APPROVED | |

PROJECT TITLE

**WILLOW DRIVE STREET RECONSTRUCTION
PHASE 1**

LABRADOR CITY, NL

DRAWING TITLE

SECTIONS & DETAILS

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|-------------|--------------------------------------|--------------|----|
| SCALE | AS SHOWN | DRAWING NO. | C7 |
| PROJECT NO. | NCI NO. 003-225 TOLC NO. TLC09-24 | REVISION NO. | C |
| DATE | FEBRUARY 2024 | | |

NOT FOR CONSTRUCTION