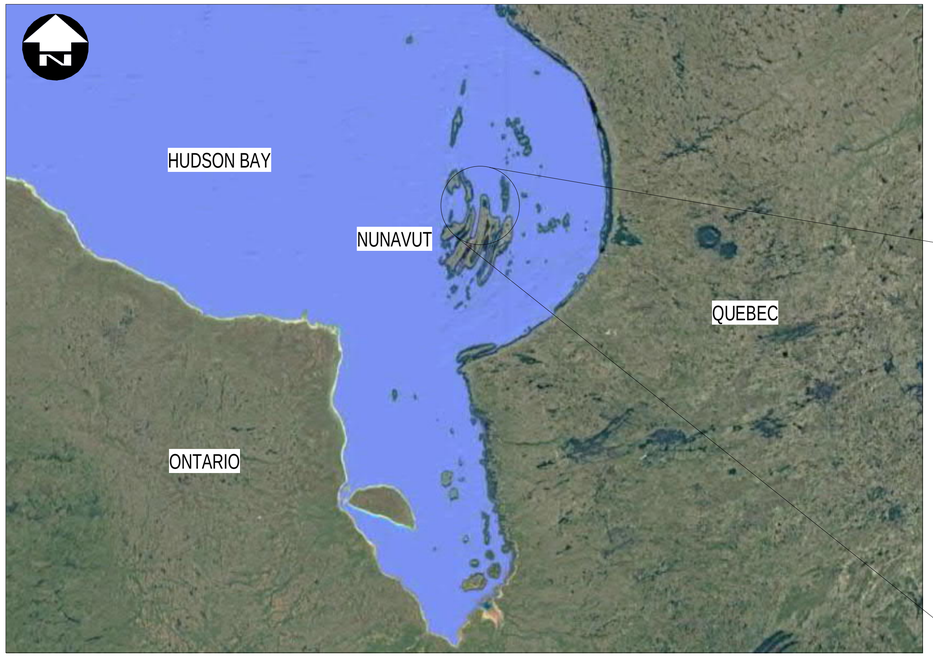



KEY PLAN




Canada

Nunavut

# NEW WATER TREATMENT PLANT

## GOVERNMENT OF NUNAVUT
## PROJECT NO. 15265-00255-05

SANIKILUAQ, NUNAVUT, CANADA

PROJECT NO. 24-8525

ISSUED FOR CONSTRUCTION

REVISION 1 ISSUED FOR CONSTRUCTION 2026-APR-22

DILLON CONSULTING
GOVERNMENT OF NUNAVUT
PROJECT NO. 15265-00255-05
NEW WATER TREATMENT PLANT
APRIL 2026
Project No. 24-8525

PLOT DATE: 2026-04-23 9:28:42 AM FILE NAME: C:\Users\10smzlDC\ACCDocs\Dillon Consulting\Sanikiluaq WTP Detailed Design\Project Files\2. Work\Drawings\00_General\248525-COVER SHEET.rvt

# NEW WATER TREATMENT PLANT

## GOVERNMENT OF NUNAVUT PROJECT NO. 15265-00255-05

SANIKILUAQ, NUNAVUT, CANADA

PROJECT NO. 24-8525

| CIVIL | |
|---|---|
| C-0 | LOCATION PLAN |
| C-1 | EXISTING CONDITIONS, REMOVALS AND SEDIMENT CONTROL PLAN |
| C-2 | SITE PLAN |
| C-3 | GRADING PLAN |
| C-4 | PLAN DETAILS |
| C-5 | SITE SECTIONS |
| C-6 | SITE SECTIONS |
| C-7 | INTAKE PLAN AND PROFILE |
| C-8 | BRINE DISCHARGE PLAN AND PROFILE |
| C-9 | TRUCKED BRINE DISCHARGE PLAN AND PROFILE |
| C-10 | CUT/FILL PLAN |
| C-11 | DOWN STREAM CULVERT REPLACEMENT |
| C-12 | CIVIL DETAILS |
| C-13 | CIVIL DETAILS |
| C-14 | CIVIL DETAILS |

| STRUCTURAL | |
|---|---|
| DWG. | DESCRIPTION |
| S-1 | GENERAL NOTES & TYPICAL DETAILS |
| S-2 | PILE PLAN |
| S-3 | PILE CAPS |
| S-4 | BRACING ELEVATIONS & CONNECTIONS |
| S-5 | PIPE SUPPORT PLAN |
| S-6 | CONCRETE SLAB PLAN |
| S-7 | FLOOR FRAMING PLAN |
| S-8 | ROOF FRAMING PLAN |
| S-9 | ELEVATIONS |
| S-10 | ELEVATIONS |
| S-11 | STRUCTURAL FRAMING DETAILS |
| S-12 | STAIRS |
| S-13 | STAIRS - DETAILS |

| ARCHITECTURAL | |
|---|---|
| DWG. | DESCRIPTION |
| A-1 | SCHEDULES & CODE MATRIX |
| A-2 | FLOOR PLAN |
| A-3 | ROOF PLAN |
| A-4 | BUILDING SECTIONS |
| A-5 | WEST & NORTH ELEVATIONS |
| A-6 | EAST & SOUTH ELEVATIONS |
| A-7 | ARCHITECTURAL DETAILS |
| A-8 | INTERIOR DETAILS & ELEVATIONS |

| PROCESS | |
|---|---|
| PD-0 | PROCESS AND INSTRUMENTATION LEGEND |
| PFD1 | PROCESS FLOW DIAGRAM |
| PD-1 | RAW WATER INAKE |
| PD-2 | RAW WATER SCREENING |
| PD-3 | DISSOLVED AIR FLOTATION (DAF) SYSTEM |
| PD-4 | DISSOLVED AIR FLOTATION (DAF) BUFFER TANK AND ULTRAFILTRATION (UF) FEED PUMPS |
| PD-5 | ULTRAFILTRATION (UF) TRAIN No.1 |
| PD-6 | ULTRAFILTRATION (UF) TRAIN No.2 |
| PD-7 | ULTRAFILTRATION (UF) WASTE PUMPS |
| PD-8 | ULTRAFILTRATION (UF) HOLDING TANK AND REVERSE OSMOSIS (RO) FEED PUMP SYSTEM |
| PD-9 | REVERSE OSMOSIS (RO) TRAIN No.1 |
| PD-10 | REVERSE OSMOSIS (RO) TRAIN No.1 |
| PD-11 | REVERSE OSMOSIS (RO) TRAIN No.1 |
| PD-12 | REVERSE OSMOSIS (RO) TRAIN No.1 |
| PD-13 | REVERSE OSMOSIS (RO) TRAIN No.2 |
| PD-14 | REVERSE OSMOSIS (RO) TRAIN No.2 |
| PD-15 | REVERSE OSMOSIS (RO) TRAIN No.2 |
| PD-16 | REVERSE OSMOSIS (RO) TRAIN No.2 |
| PD-17 | CLEAN IN PLACE (CIP) SYSTEM AND REVERSE OSMOSIS (RO) HOLDING TANK |
| PD-18 | ULTRAVIOLET (UV) DISINFECTION |
| PD-19 | PROCESS WASTE TANK |
| PD-20 | TREATED WATER TANK |
| PD-21 | BRINE TANK |
| PD-22 | TRUCK FILL AND RECIRCULATION PUMPS |
| PD-23 | COAGULANT SYSTEM |
| PD-24 | SODIUM HYPOCHLORITE (CHLORINE) SYSTEM |
| PD-25 | SODA ASH SYSTEM |
| PD-26 | FLUORIDE SYSTEM (FUTURE) |
| PD-27 | POLYMER SYSTEM (FUTURE) |
| PD-28 | SODIUM HYPOCHLORITE (CHLORINE) SYSTEM TRUCK FILL ARMS |

| PROCESS | |
|---|---|
| P-1 | PROCESS LAYOUT AND NOTES |
| P-2 | ENLARGED PLAN I AND SECTIONS |
| P-3 | ENLARGED PLAN II |
| P-4 | PROCESS SECTIONS |
| P-5 | PROCESS SECTIONS |
| P-6 | PROCESS SECTIONS |
| P-7 | PROCESS SECTIONS |
| P-8 | 3D VIEW |
| P-9 | WASTE TANK (TK-610) DETAILS |
| P-10 | TREATED WATER TANK (TK-620) DETAILS |
| P-11 | BRINE TANK (TK-630) DETAILS |
| P-12 | MISCELLANEOUS DETAILS |
| P-13 | MISCELLANEOUS DETAILS |
| P-14 | EXISTING WATER TREATMENT PLANT DECOMMISSIONING PLAN |
| P-15 | EXISTING WATER TREATMENT PLANT DECOMMISSIONING PLAN |

| MECHANICAL | |
|---|---|
| M-1 | PLUMBING LAYOUT |
| M-2 | HEATING LAYOUT |
| M-3 | VENTILATION LAYOUT |
| M-4 | FUEL OIL PIPING LAYOUT & SCHEMATIC |
| M-5 | PLUMBING DETAILS |
| M-6 | PLUMBING SCHEMATIC |
| M-7 | HEATING DETAILS & SCHEMATIC |
| M-8 | VENTILATION DETAILS |
| M-9 | MECHANICAL SCHEDULES I |
| M-10 | MECHANICAL SCHEDULES II |
| M-11 | MECHANICAL SCHEDULES III |

Canada

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| ELECTRICAL | |
|---|---|
| DWG. | DESCRIPTION |
| E-1 | ELECTRICAL SITE PLAN |
| E-2 | SINGLE LINE DIAGRAM |
| E-3 | LIGHTING PLAN |
| E-4 | POWER AND COMMUNICATONS PLAN |
| E-5 | INSTRUMENTATION PLAN |
| E-6 | CABLE TRAY PLAN |
| E-7 | EQUIPMENT SCHEDULE |
| E-8 | PANEL SCHEDULE & LOAD CALCULATION |
| E-9 | NETWORK ARCHITECTURE DIAGRAM |
| E-10 | GENERATOR BUILDING FLOOR PLAN |
| E-11 | INSTRUMENTATION PLAN (TANKS) |
| EL-1 | 120VAC CONTROL PANEL POWER (TYPICAL) |
| EL-2 | 120VAC UPS CONTROL PANEL POWER (TYPICAL) |
| EL-3 | 24 VDC CONTROL PANEL POWER (TYPICAL) |
| EL-4 | TEMPERATURE TRANSMITTER TIT-610 (TYPICAL) |
| EL-5 | PRESSURE INDICATOR TRANSMITTER PIT-120 (TYPICAL) |
| EL-6 | LEVEL INDICATOR TRANSMITTER LIT-210 (TYPICAL) |
| EL-7 | FLOW INDICATOR TRANSMITTER FIT-120 (TYPICAL) |
| EL-8 | LSLL-222 (TYPICAL) |
| EL-9 | AIT-220A (TYPICAL) |
| EL-10 | AIT-520 (TYPICAL) |
| EL-11 | AIT-220B (TYPICAL) |
| EL-12 | SVGA-310 (TYPICAL) |
| EL-13 | TRUCK FILL BYPASS VALVE FVC-764 (TYPICAL) |
| EL-14 | MEMBRANE TRAIN 310 BLOWERS-310 (TYPICAL) |
| EL-15 | RAW WATER PUMP P-110 (TYPICAL) |
| EL-16 | AUTO TRANSFER SWITCH ATS-9990 |
| EL-17 | GENERATOR COMTROL PANEL |
| EL-18 | TRUCK FILL 1 CONTROL PANEL (TYPICAL FOR TRUCK 2) |

2026-APR-22

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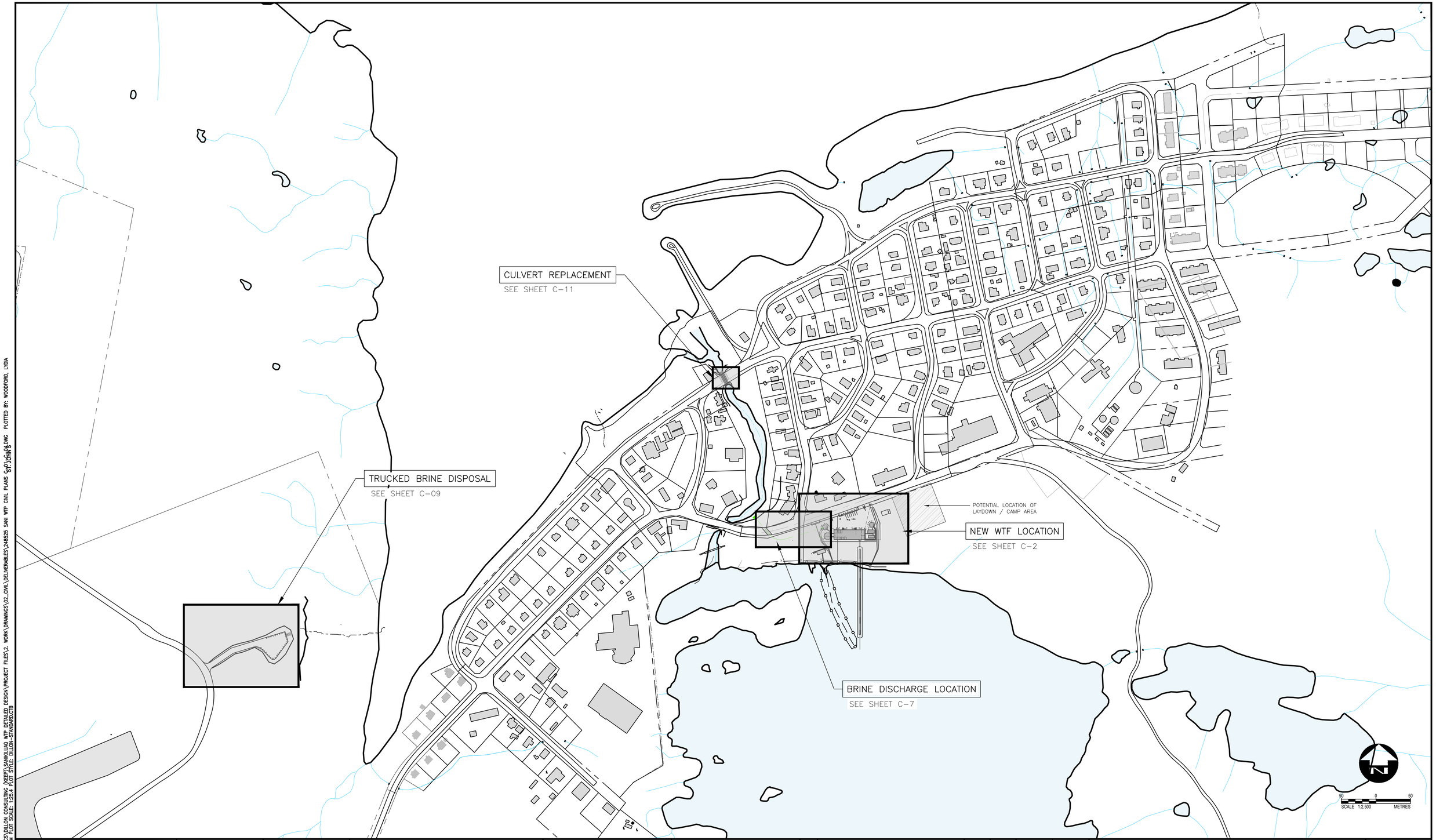
REVISION 1

*ISSUED FOR CONSTRUCTION*

DILLON CONSULTING

GOVERNMENT OF NUNAVUT
PROJECT NO. 15265-00255-05
NEW WATER TREATMENT PLANT

APRIL 2026
Project No. 24-8525




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REGISTERED PROFESSIONAL ENGINEER
S.J. GREELEY
LICENSEE
April 22, 2026
NT/NU

PERMIT TO PRACTICE
DILLON CONSULTING LIMITED
Signature
Date April 22, 2026
PERMIT NUMBER: P 010
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

Canada
Nunavut

DILLON CONSULTING

| No. | ISSUED FOR | DATE | BY |
|---|---|---|---|
| 1 | ISSUED FOR CONSTRUCTION | 2026-APR-15 | SJG |
| 0 | ISSUED FOR TENDER | 2025-Oct-31 | CP |

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| DESIGN LEW | REVIEWED BY SJG |
| DRAWN LEW | CHECKED BY KJ |
| DATE APRIL 2026 | |
| SCALE 1:2500 | |

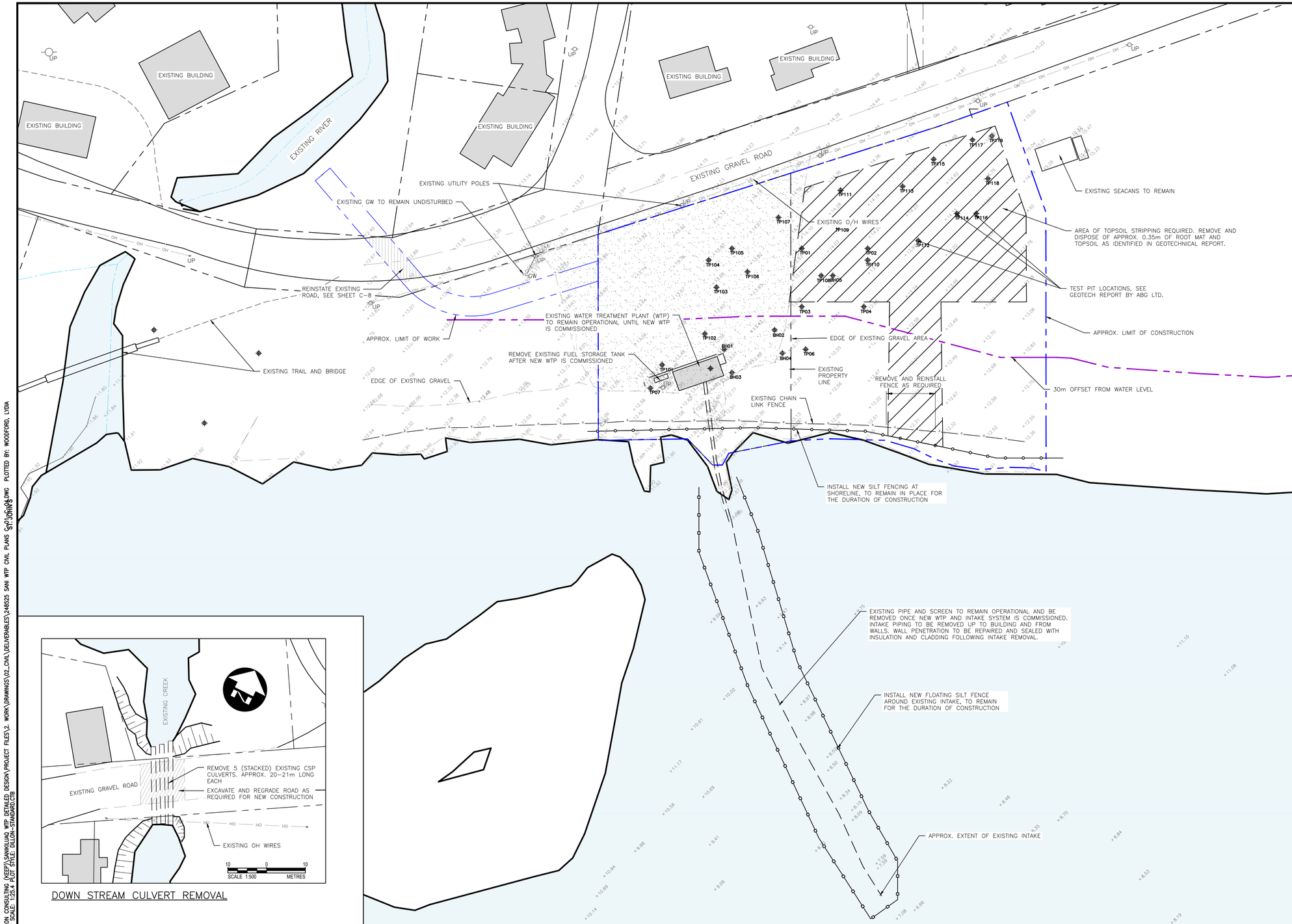
GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-8525

LOCATION PLAN

SHEET NO. C-0

FILENAME: C:\USERS\KSLEW.DC\ACCDOCS\DILLON CONSULTING (KEEP)\SANIKILUAQ WTP DETAILED DESIGN\PROJECT FILES\2. WORK\DRAWINGS\02_CIVIL\DELIVERABLES\24-8525 SANI WTP CIVIL PLANS
PLOT DATE: 2026-04-16 @ 3:03:16 PM PLOT SCALE: 1:25.4 PLOT STYLE: DILLON-STANDARD.CTB
ST. JOHN'S PLOTTED BY: WOODFORD, LYDIA




## GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. ALL SURVEY MONUMENTS DISTURBED BY CONSTRUCTION SHALL BE REINSTATED.
3. CONTRACTOR SHALL PROVIDE ALL TEMPORARY SIGNAGE FOR PEDESTRIAN AND TRAFFIC REROUTING AS REQUIRED.
4. LOCATION OF EXISTING FEATURES, UNDERGROUND INFRASTRUCTURE, STRUCTURES, AND BUILDINGS ARE APPROXIMATE ONLY AND ARE TO BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS.
5. CONTRACTOR TO CONTACT UTILITY COMPANIES REGARDING ANY UNDERGROUND UTILITIES IN THE AREA OF WORKS. CONTRACTOR SHALL USE CAUTION TO LOCATE EXISTING UNDERGROUND POWER AND TELECOMMUNICATIONS LINES. LINES SHALL BE KEPT IN SERVICE WHERE TRENCHING CROSSES UNDERGROUND LINES. CONTRACTOR SHALL SUBMIT SUPPORT AND BRACING DETAILS TO ENGINEER FOR APPROVAL PRIOR TO UNDERMINING POWER AND TELECOMMUNICATION LINES.
6. ALL DEMOLISHED CONCRETE, PIPE, CONTAMINATED SOILS, AND OTHER UNSUITABLE MATERIALS MUST BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR AT AN APPROVED DISPOSAL SITE. CONTRACTOR TO NOTIFY OWNERS ENGINEER OF ANY CONTAMINATED MATERIAL BEFORE EXCAVATING UNSUITABLE MATERIAL OFFSITE.
7. ROCK REMOVAL, IF REQUIRED, SHALL BE CARRIED OUT BY MECHANICAL MEANS ONLY. THE USE OF EXPLOSIVES IS NOT PERMITTED ON SITE.
8. ALL EXISTING AREAS AND INFRASTRUCTURE DISTURBED BY CONTRACTOR'S OPERATIONS WHICH ARE NOT DESIGNATED TO BE RELOCATED OR RECONSTRUCTED SHALL BE REINSTATED TO PRE-CONSTRUCTION CONDITION OR BETTER. THERE SHALL BE NO ADDITIONAL PAYMENT FOR REINSTATEMENT OF SUCH.
9. THE CONTRACTOR SHALL SUBMIT A COMPREHENSIVE CONSTRUCTION AND COMMISSIONING PLAN. AT A MINIMUM, THE PLAN SHALL INCLUDE:
   - CONSTRUCTION PHASING PLANS
   - COMMISSIONING PHASING PLANS
   - TRAFFIC CONTROL PLANS
10. ALL SILT FENCING TO BE INSTALLED AS PER FISHERIES AND OCEANS CANADA STANDARDS.
11. ALL BYPASS ROADS OR TEMPORARY DIVERSIONS MUST RECEIVE APPROVAL FROM MUNICIPALITY BEFORE ANY CONSTRUCTION BEGINS. CONTRACTOR IS REQUIRED TO SUBMIT THE PUBLIC TRAFFIC INTERRUPTION SCHEDULE TO ALL RELEVANT AUTHORITIES HAVING JURISDICTION.
12. EXISTING WATER TREATMENT PLANT TO BE DECOMMISSIONED. REMOVE AND DISPOSE OF ALL TREATMENT EQUIPMENT, FUEL TANK, GENERATOR; REPAIR FAILING FOUNDATION; REINSTATE AS COLD STORAGE.
13. EXISTING PIPE AND SCREEN TO REMAIN OPERATIONAL AND BE REMOVED ONCE NEW WTP AND INTAKE SYSTEM IS COMMISSIONED. INTAKE PIPING TO BE REMOVED UP TO BUILDING AND FROM WALLS. WALL PENETRATION TO BE REPAIRED AND SEALED WITH INSULATION AND CLADDING FOLLOWING INTAKE REMOVAL.

## LEGEND

- EXISTING SPOT ELEVATION
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- LIMIT OF CONSTRUCTION
- EXISTING UTILITY POLE / EXISTING GUY WIRE
- EXISTING OVERHEAD WIRE
- APPROX. 30m OFFSET FROM WATER LEVEL
- EXISTING WATER INTAKE
- AREA OF TOPSOIL STRIPPING
- EXISTING GRAVEL AREA
- EXISTING CHAIN LINK FENCE
- PROPOSED FLOATING BOOM FENCE
- PROPOSED SILT FENCING
- TP103 GEOTECHNICAL TEST PIT LOCATIONS




DOWN STREAM CULVERT REMOVAL

10 0 10
SCALE 1:500 METRES

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REGISTERED PROFESSIONAL ENGINEER — S.J. GREELEY — LICENSEE — April 22, 2026 — NT/NU

PERMIT TO PRACTICE
DILLON CONSULTING LIMITED
Signature
Date April 22, 2026
PERMIT NUMBER: P 010
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

Canada — Nunavut

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|---|---|---|---|
| 1 | ISSUED FOR CONSTRUCTION | 2026-APR-15 | SJG |
| 0 | ISSUED FOR TENDER | 2025-Oct-31 | CP |

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|---|---|
| DESIGN LEW | REVIEWED BY SJG |
| DRAWN LEW | CHECKED BY KJ |
| DATE APRIL 2026 | |
| SCALE 1:500 | |

GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-8525

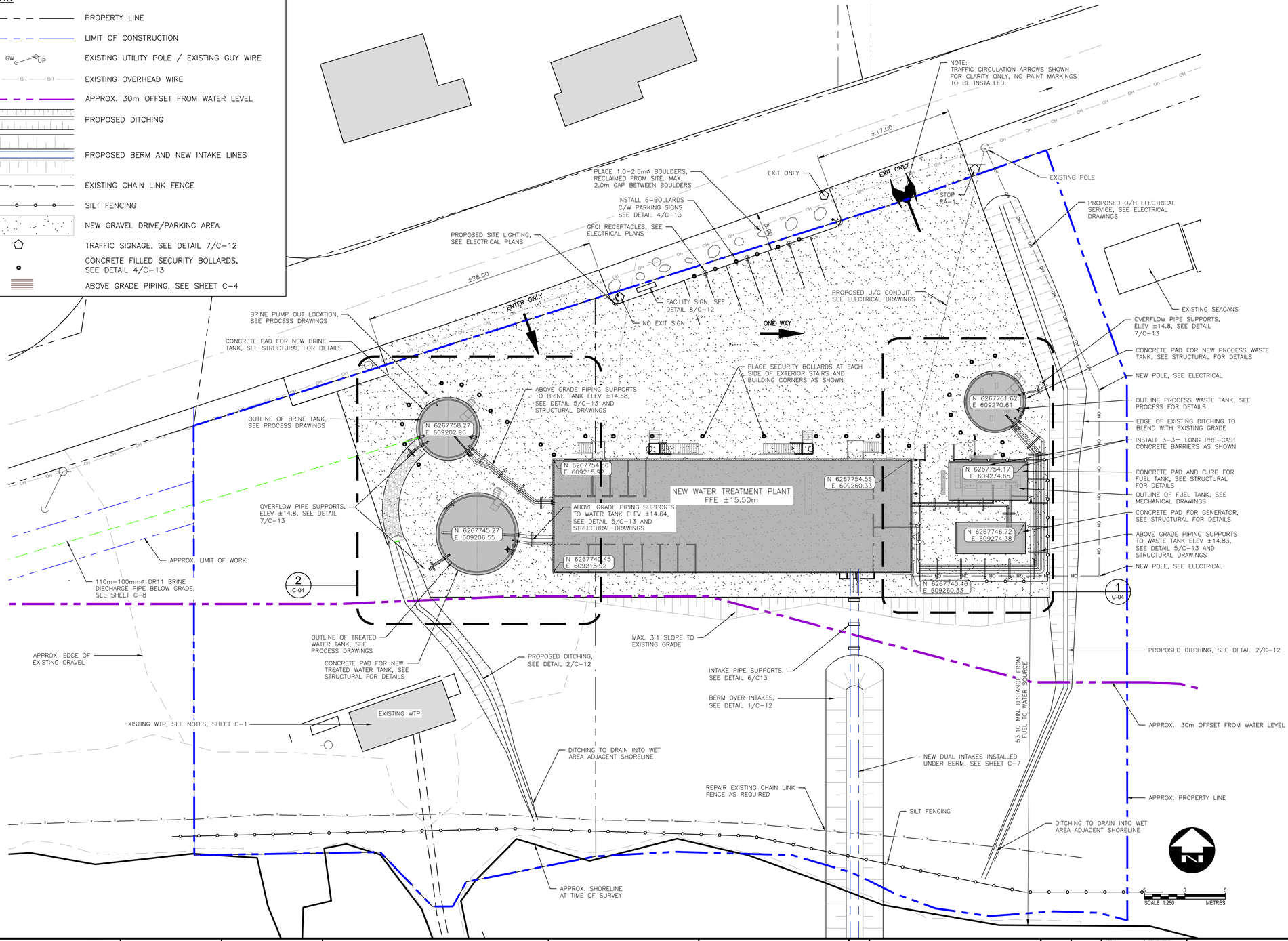
# EXISTING CONDITIONS, REMOVALS AND SEDIMENT CONTROL PLAN

SHEET NO. C-1

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PLOT DATE: 2026-04-10 @ 3:04:13 PM PLOT SCALE: 1:25.4 PLOT STYLE: DILLON-STANDARD.CTB

## LEGEND

- PROPERTY LINE
- LIMIT OF CONSTRUCTION
- EXISTING UTILITY POLE / EXISTING GUY WIRE
- EXISTING OVERHEAD WIRE
- APPROX. 30m OFFSET FROM WATER LEVEL
- PROPOSED DITCHING
- PROPOSED BERM AND NEW INTAKE LINES
- EXISTING CHAIN LINK FENCE
- SILT FENCING
- NEW GRAVEL DRIVE/PARKING AREA
- TRAFFIC SIGNAGE, SEE DETAIL 7/C-12
- CONCRETE FILLED SECURITY BOLLARDS, SEE DETAIL 4/C-13
- ABOVE GRADE PIPING, SEE SHEET C-4




NOTES:

1. ALL MEASUREMENTS PROVIDED IN METERS (m) UNLESS OTHERWISE NOTED.
2. ALL SURVEY MONUMENTS DISTURBED BY CONSTRUCTION SHALL BE REINSTATED.
3. SURVEY
   - PHOTOGRAMMETRY DATA PROVIDED BY DILLON CONSULTING
   - TOPOGRAPHIC AND BATHYMETRIC SURVEY PROVIDED BY SUB-ARTIC GEOMATICS
   - ELEVATIONS SHOWN ON DRAWINGS ARE BASED ON GEODETIC DATA. FOR THE PURPOSE OF THIS CONTRACT 0.00 GEODETIC IS ASSUMED EQUAL TO MEAN SEA LEVEL
   - BENCH MARK:
     N 6267750.985, E 609821.228, ELEV 24.227m
4. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. CONTRACTOR IS RESPONSIBLE FOR QC TESTING. THE CONTRACTOR SHALL PROCURE THE SERVICES OF AN INDEPENDENT MATERIALS TESTING FIRM. TEST RESULTS SHALL BE SUPPLIED TO THE ENGINEER WITHIN 7 DAYS.
6. BACKFILL AND EMBANKMENT FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY (SPD) DIRECTLY UNDER OR WITHIN 3m OF ANY STRUCTURE OR ROADWAY. ALL OTHER BACKFILL AND EMBANKMENT FILL SHALL BE COMPACTED TO 95% SPD. REFERENCE ASTM D6938 FOR STANDARD TEST METHODS FOR IN-PLACE COMPACTION.
7. ALL WORK TO COMPLY WITH LATEST RELEASED EDITION OF THE STANDARD D698 STANDARD TEST METHODS FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT (12,400 FT-LBF/FT3 (600 KN-M/M3) AND ASTM D6938 STANDARD TEST METHODS FOR IN-PLACE DENSITY AND WATER CONTENT OF SOIL AND SOIL-AGGREGATE BY NUCLEAR METHODS (SHALLOW DEPTH)
8. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS, SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS ALSO SUBJECT TO INSPECTION BY THE GOVERNMENT OF NUNAVUT OR ITS REPRESENTATIVE.
9. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND FEDERAL LAWS THAT ARE PERTINENT TO THIS WORK.
10. ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN A MANNER SUITABLE FOR PUBLIC USE AND IN A CONDITION MEETING THE APPROVAL OF THE GN OR ITS REPRESENTATIVE.
11. ALL CONSTRUCTION ACTIVITIES AFFECTING THE MUNICIPALITY'S OPERATIONS SHALL BE APPROVED IN ADVANCE WITH MUNICIPALITY AUTHORITIES.
12. ALL REGULATORY APPROVALS MUST BE IN PLACE BEFORE THE CONTRACTOR IS ALLOWED TO COMMENCE CONSTRUCTION ACTIVITIES.
13. ALL MATERIALS OR EQUIPMENT SHIPPED TO THE SITE SHALL BE DELIVERED TO AN APPROVED SITE ESTABLISHED AT THE PRE-CONSTRUCTION MEETING.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE SHIPMENT, LOADING AND UNLOADING OF ALL MATERIALS TRANSPORTED TO THE SITE.
15. THE CONTRACTOR IS RESPONSIBLE FOR REINSTATING THE SITE FOLLOWING THE COMPLETION OF THE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT THE EXISTING CONDITIONS AND REINSTATE ALL DISTURBED AREAS INCLUDING STAGING AND STORAGE AREAS TO EXISTING CONDITIONS OR BETTER.
16. DEVELOPMENT AND IMPLEMENTATION OF A HEALTH AND SAFETY PLAN IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO FOLLOW ALL APPLICABLE REGULATIONS PRESCRIBED BY LOCAL, TERRITORIAL AND FEDERAL AGENCIES.
17. ALL SITE SIGNAGE TO BE TRANSLATED TO OFFICIAL LANGUAGES OF NU. SIGNAGE TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

TRAFFIC MANAGEMENT:

18. THIS PROJECT INCLUDES CONSTRUCTION ACTIVITIES ON AN ACTIVE ROAD. ALL CONSTRUCTION ACTIVITIES SHALL BE UNDERTAKEN IN A MANNER APPROVED BY THE ENGINEER.
19. THE CONTRACTOR SHALL SUBMIT A TRAFFIC MANAGEMENT PLAN PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
20. CONSTRUCTION MACHINERY AND VEHICLES SHALL COMPLY WITH ALL TRAFFIC REGULATIONS.
21. FULL TIME PUBLIC ACCESS (SINGLE LANE) TO THE MUNICIPALITY AND ITS FACILITIES SHALL BE MAINTAINED AT ALL TIMES.
22. CONTRACTOR SHALL POST A MAXIMUM SPEED LIMIT OF 30 km/h ON ALL TEMPORARY BYPASS ROADS.
23. CONTRACTOR IS TO USE APPROVED BARRICADES OR PYLONS TO DELINEATE OR DIRECT LOCAL TRAFFIC.
24. ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS NOTED OTHERWISE) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES.
25. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE & OFF-SITE ROUTES AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE MAINTAINED IN WORKING ORDER AND MEET THE REQUIREMENTS OF THE GN OR ITS REPRESENTATIVE. ALL COSTS ASSOCIATED TO THE MAINTENANCE OF THE HAUL ROADS SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICES.

EROSION AND SEDIMENT CONTROL (ESC):

26. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO DEVELOP AND SUBMIT AN ESC PLAN TO THE GN OR ITS REPRESENTATIVE FOR APPROVAL DETAILING THE EROSION CONTROL MEASURES FOR EACH PHASE OF THE PROJECT.
27. THE IMPLEMENTATION OF ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETE.
28. THE ESC FACILITIES MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS AND ADJACENT PROPERTIES IS MINIMIZED.
29. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS. (E.G., ADDITIONAL PUMPS, RELOCATION OF SWALES AND SILT FENCES, ETC.)
30. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE SITE SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
31. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
32. CONTRACTOR SHALL ERECT SILT BARRIER FENCES AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
33. SILT FENCES/BARRIERS SHALL BE MANUFACTURED FROM A NON-WOVEN, SLIT FILM GEOTEXTILE MATERIAL, DESIGNED TO REDUCE VELOCITY OF RUNOFF TO POINT THAT SUSPENDED PARTICLES SETTLE OUT DUE TO REDUCTION OF HYDRAULIC ENERGY.
34. SILT BARRIERS SHALL BE PLACED IN A MANNER THAT WILL INTERCEPT RUNOFF AT OR CLOSE TO RIGHT ANGLES TO THE FLOW. IN AREAS WHERE PROBLEM IS SEVERE, ERECT TWO OR MORE SILT BARRIERS PARALLEL TO EACH OTHER UNTIL DEGREE OF CONTROL IS ACHIEVED.
35. SILT BARRIERS SHALL HAVE: A MINIMUM GRAB TENSILE STRENGTH OF 500N, PERMITTIVITY OF 0.05 $s^{-1}$ PER ASTM D4491. ALL SILT BARRIERS TO COMPLY WITH LATEST RELEASED EDITION OF THE STANDARD D4491(STANDARD TEST METHODS FOR WATER PERMEABILITY OF GEOTEXTILES BY PERMITTIVITY)

ENVIRONMENTAL PROTECTION:

36. CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE AND PUMPING AS NECESSARY TO KEEP EXCAVATIONS AND SITE FREE FROM WATER.
37. CONTRACTOR SHALL NOT DISCHARGE WATER CONTAINING SUSPENDED MATERIALS INTO WATERCOURSES.
38. CONTRACTOR SHALL CONTROL DISPOSAL OR RUNOFF WATER CONTAINING SUSPENDED MATERIALS OR OTHER HARMFUL SUBSTANCES IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND MUNICIPAL REQUIREMENTS.
39. CONTRACTOR SHALL NOT USE WATERCOURSE BEDS FOR BORROW MATERIAL.
40. CONTRACTOR SHALL NOT DUMP EXCAVATED FILL, WASTE MATERIAL OR DEBRIS IN OR ADJACENT TO WATERCOURSES.
41. CONTRACTOR IS TO COORDINATE WITH THE GOVERNMENT OF NUNAVUT TO DETERMINE THE PERMITTING REQUIREMENTS FOR WORK ADJACENT TO WATERWAYS, INCLUDING LAYING OF RIPRAP AND NECESSARY REQUIREMENTS.
42. IN THE EVENT THAT SPILLAGE, DEBRIS OR DUST BUILDS UP AS A RESULT OF HAULING, THE CONTRACTOR SHALL BE REQUIRED TO CLEAN AND REMOVE THE MATERIAL IMMEDIATELY.

EXCAVATION BACKFILL NOTES:

43. EXCAVATION SHOULD CONFORM TO THE REQUIREMENTS OF THE OSHA AND WSCC.
44. IT IS RECOMMENDED THAT THE PREPARED FOOTPRINT FOR THE TANK PADS EXTEND AT LEAST 2.0m BEYOND THE OUTSIDE TOE IN ALL DIRECTIONS. ALL ORGANIC ROOTMAT/TOPSOIL SHALL BE REMOVED FROM THE PREPARED FOOTPRINT TO EXPOSE A NATIVE SUBGRADE OF SAND OR GRAVEL. THE NATIVE SUBGRADE SHALL THEN BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL AND PROOF ROLLED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER, PRIOR TO THE PLACEMENT OF ANY NEW FILL MATERIALS.
45. PROOF ROLL SHOULD BE SUPERVISED BY QUALIFIED GEOTECHNICAL PERSONNEL ON A FULL-TIME BASIS. ANY SOFT SPOTS IDENTIFIED SHOULD BE OVER-EXCAVATED AND REPLACED WITH COMPACTED ENGINEERED FILL TO THE SATISFACTION OF THE QUALIFIED GEOTECHNICAL PERSONNEL.
46. ANY WATER THAT ENTERS THE EXCAVATION(S) SHOULD BE GATHERED VIA SWALES/DITCHES HAVING POSITIVE OUTLET OR LED TO ADEQUATELY SIZED SUMPS EQUIPPED WITH PUMPS FOR IMMEDIATE REMOVAL OFFSITE. DISCHARGE OF COLLECTED WATER SHOULD BE CONDUCTED AND CONTROLLED IN A MANNER THAT DOES NOT INDUCE EROSION OR TRANSPORT OF SEDIMENT AND IS IN ACCORDANCE WITH ALL APPLICABLE GOVERNMENT REQUIREMENTS, INCLUDING ANY SITE-SPECIFIC ENVIRONMENTAL CONSIDERATIONS IDENTIFIED BY OTHERS.
47. ALL DRIVEWAY/PARKING AREA FILL MATERIAL SHOULD BE PLACED IN MAXIMUM 300mm THICK LIFTS AND COMPACTED TO 98% OF THE SPMDD WITHIN 300mm OF THE SUBGRADE SURFACE AND 95% OF THE SPMDD BELOW THIS DEPTH. THE TYPE 1/TYPE 2 GRANULAR MATERIALS SHOULD BE COMPACTED TO 100% OF THE SPMDD.

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**GOVERNMENT OF NUNAVUT 15265-00255-05**
**SANIKILUAQ NEW WATER TREATMENT PLANT**

PROJECT NO. 24-8525

**SITE PLAN**

SHEET NO. C-2

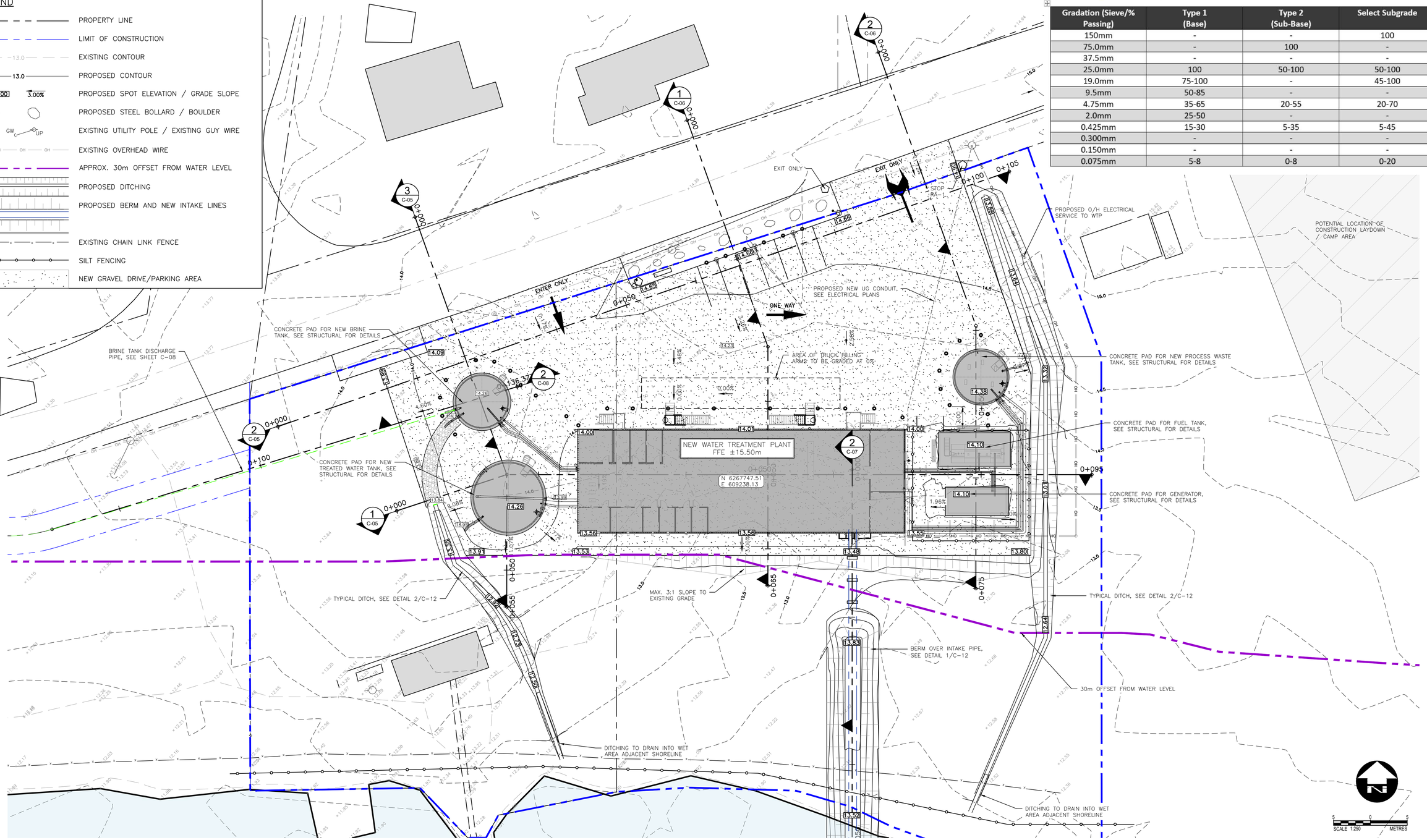
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PLOT DATE: 2026-04-10 @ 3:04:41 PM PLOT SCALE: 1:25.4 PLOT STYLE: DILLON-STANDARD.CTB

LEGEND

- PROPERTY LINE
- LIMIT OF CONSTRUCTION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 14.00 3.00% PROPOSED SPOT ELEVATION / GRADE SLOPE
- PROPOSED STEEL BOLLARD / BOULDER
- GW C UP EXISTING UTILITY POLE / EXISTING GUY WIRE
- OH OH OH EXISTING OVERHEAD WIRE
- APPROX. 30m OFFSET FROM WATER LEVEL
- PROPOSED DITCHING
- PROPOSED BERM AND NEW INTAKE LINES
- EXISTING CHAIN LINK FENCE
- SILT FENCING
- NEW GRAVEL DRIVE/PARKING AREA

**Type 1, Type 2 and Select Subgrade Materials Gradation**

| Gradation (Sieve/% Passing) | Type 1 (Base) | Type 2 (Sub-Base) | Select Subgrade |
|---|---|---|---|
| 150mm | - | - | 100 |
| 75.0mm | - | 100 | - |
| 37.5mm | - | - | - |
| 25.0mm | 100 | 50-100 | 50-100 |
| 19.0mm | 75-100 | - | 45-100 |
| 9.5mm | 50-85 | - | - |
| 4.75mm | 35-65 | 20-55 | 20-70 |
| 2.0mm | 25-50 | - | - |
| 0.425mm | 15-30 | 5-35 | 5-45 |
| 0.300mm | - | - | - |
| 0.150mm | - | - | - |
| 0.075mm | 5-8 | 0-8 | 0-20 |




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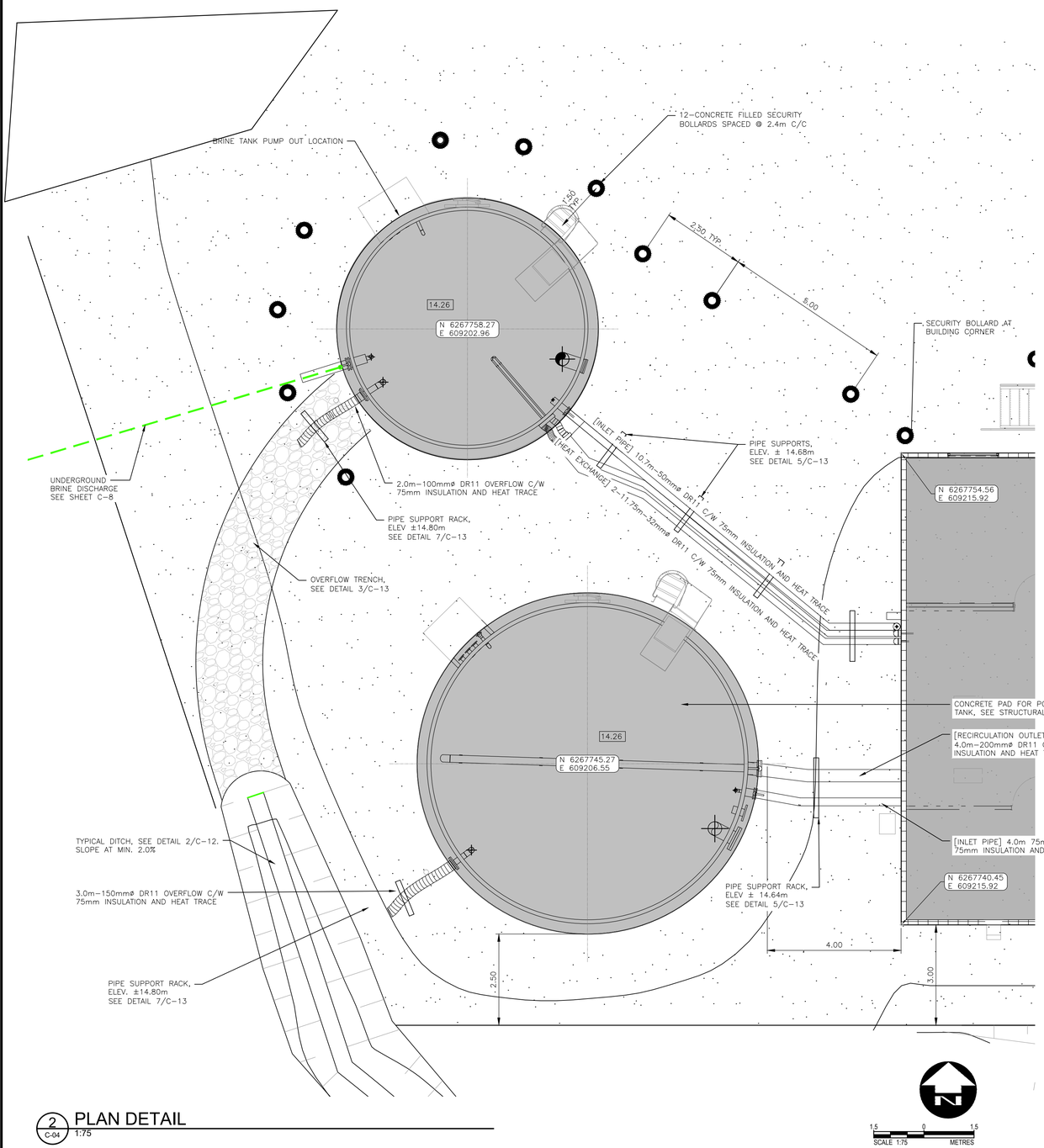
GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-8525

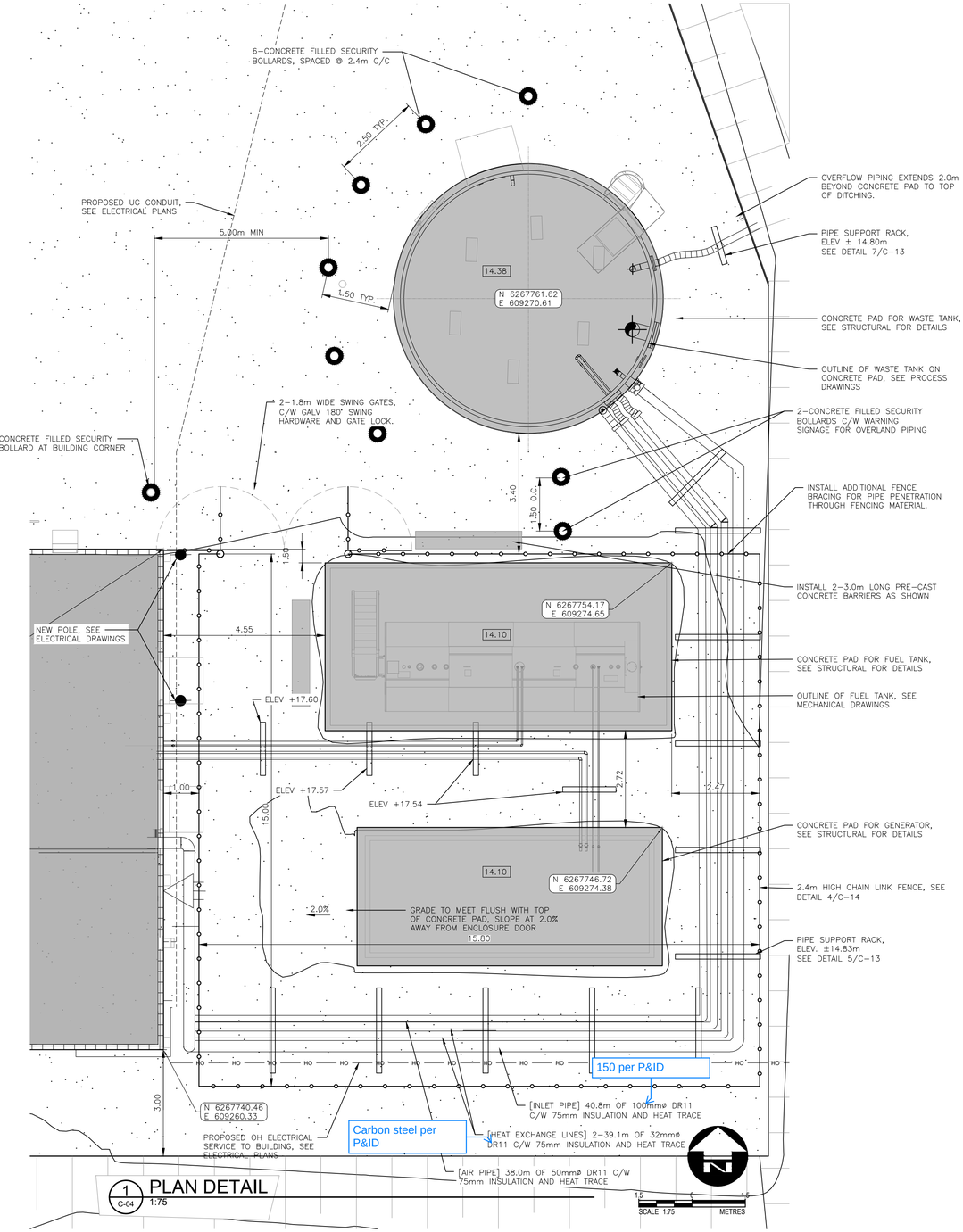
SHEET NO. C-3

# GRADING PLAN


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2 C-04 PLAN DETAIL
1:75




1 C-04 PLAN DETAIL
1:75

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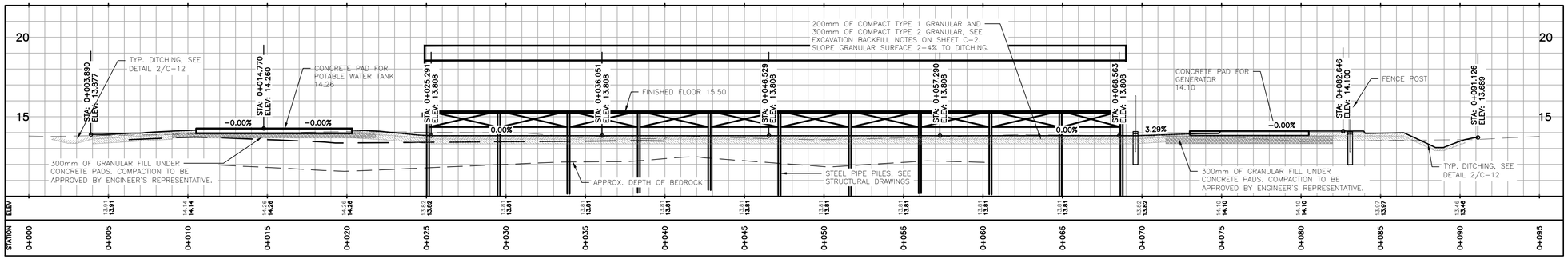
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**GOVERNMENT OF NUNAVUT 15265-00255-05**
**SANIKILUAQ NEW WATER TREATMENT PLANT**

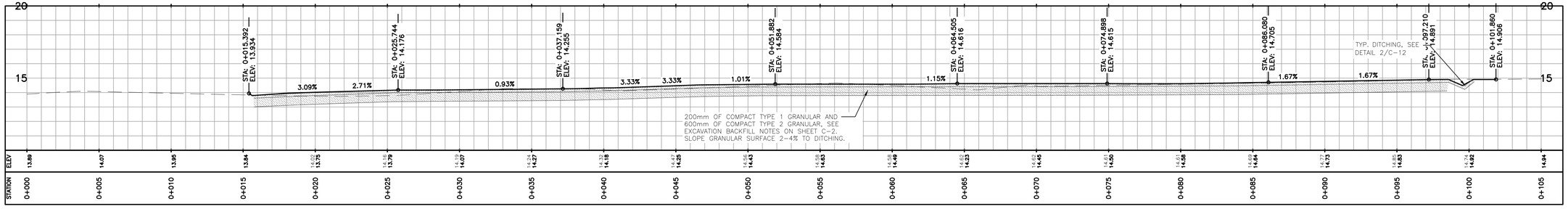
PROJECT NO. 24-8525

**PLAN DETAILS**

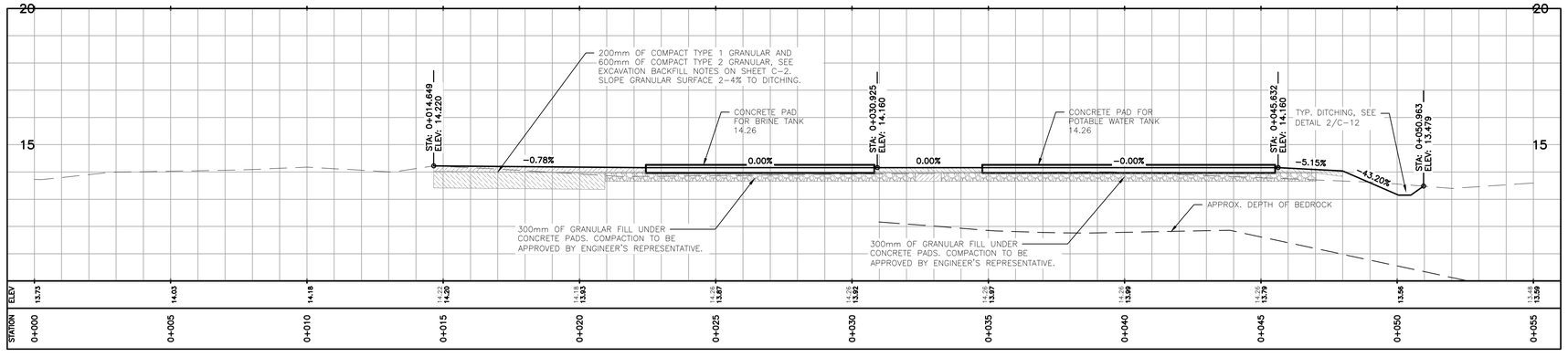
SHEET NO. C-4




1 C-05 SECTION
1:150




2 C-05 SECTION
1:150




3 C-05 SECTION
1:150

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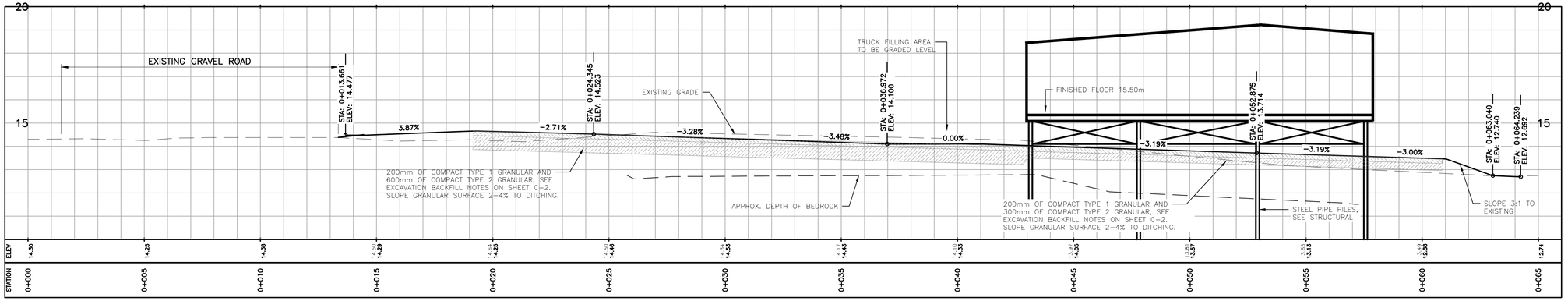
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SANIKILUAQ NEW WATER TREATMENT PLANT

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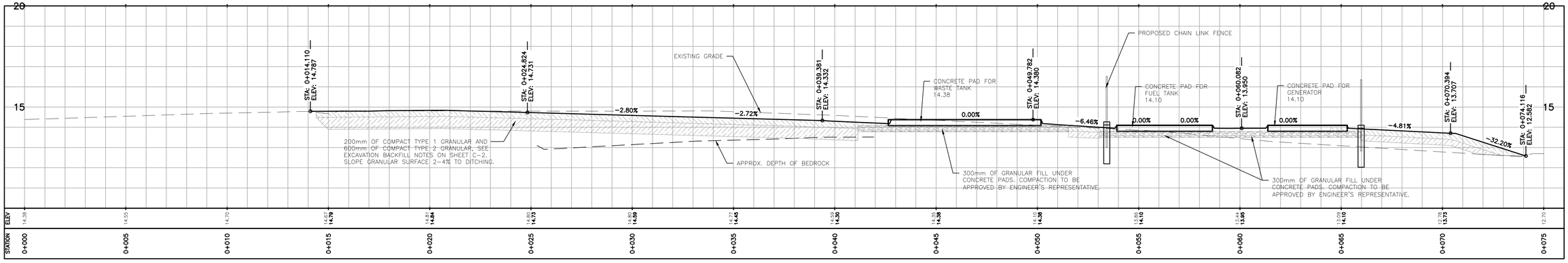
SITE SECTIONS

SHEET NO. C-5

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PLOT DATE: 2026-04-16 @ 2:17:21 PM PLOT SCALE: 1:25.4 PLOT STYLE: DILLON-STANDARD.CTB




1 C-06 SECTION
1:150




2 C-06 SECTION
1:150

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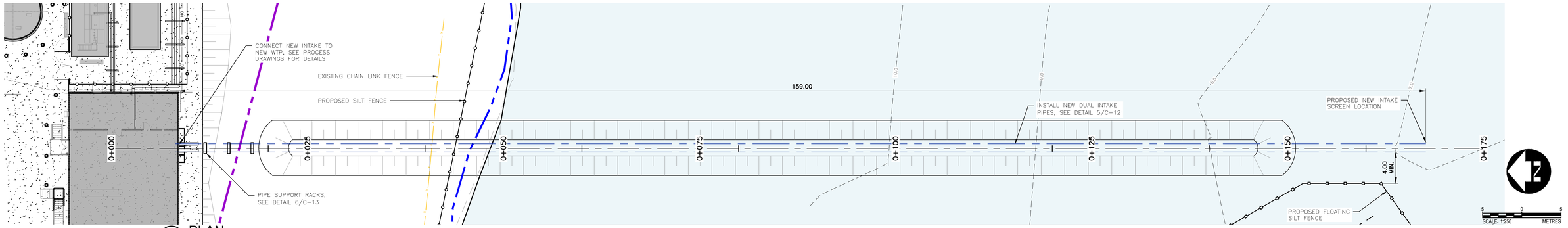
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**GOVERNMENT OF NUNAVUT 15265-00255-05**
**SANIKILUAQ NEW WATER TREATMENT PLANT**

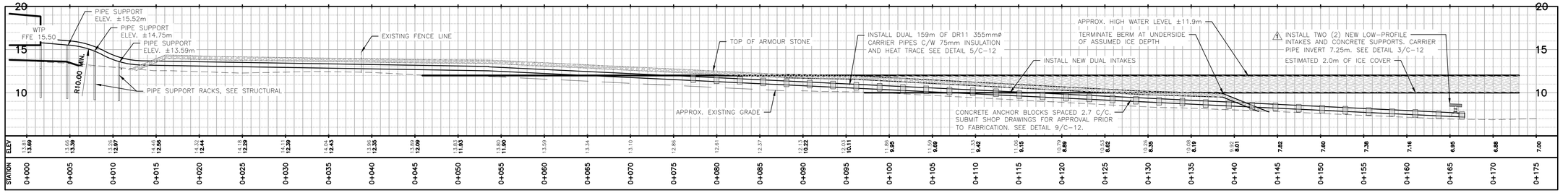
**SITE SECTIONS**

PROJECT NO. 24-8525

SHEET NO. C-6




1 C-07 **PLAN**
1:250




2 C-07 **PROFILE**
1:250

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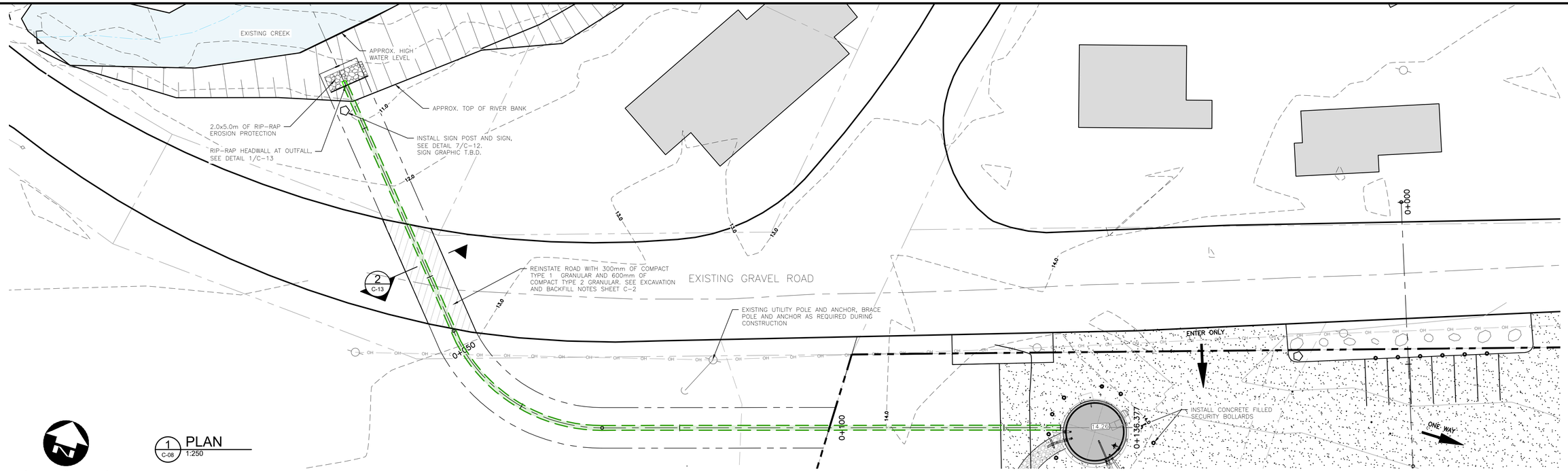
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GOVERNMENT OF NUNAVUT 15265-00255-05
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PROJECT NO. 24-8525

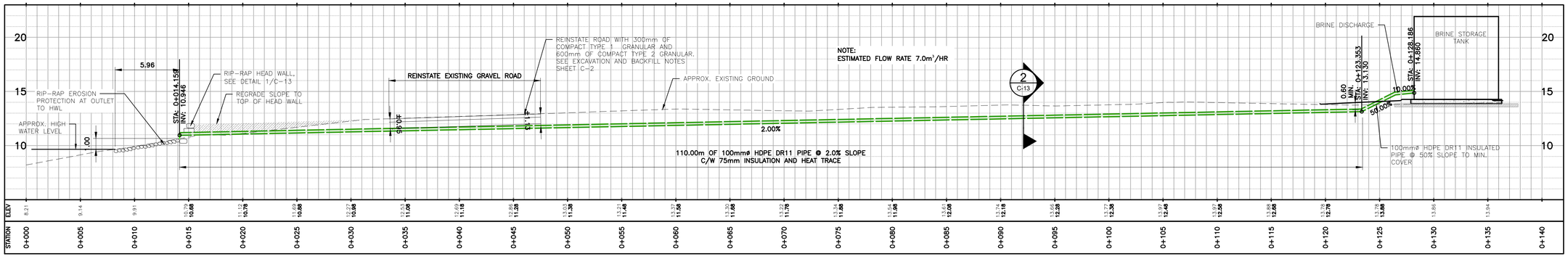
INTAKE PLAN AND PROFILE

SHEET NO. C-7




1 C-08 PLAN 1:250

SCALE 1:250 METRES




2 C-08 PROFILE 1:200

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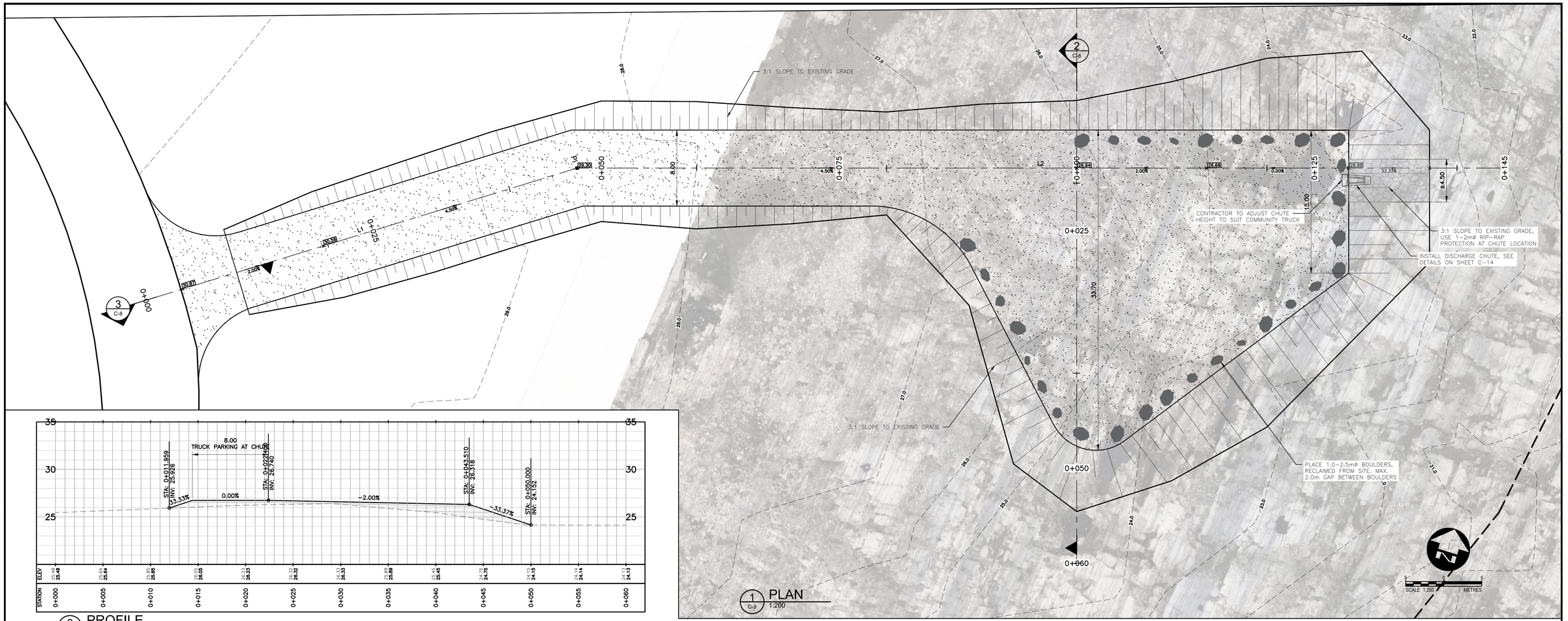
GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

# BRINE DISCHARGE PLAN AND PROFILE

PROJECT NO. 24-8525

SHEET NO. C-8

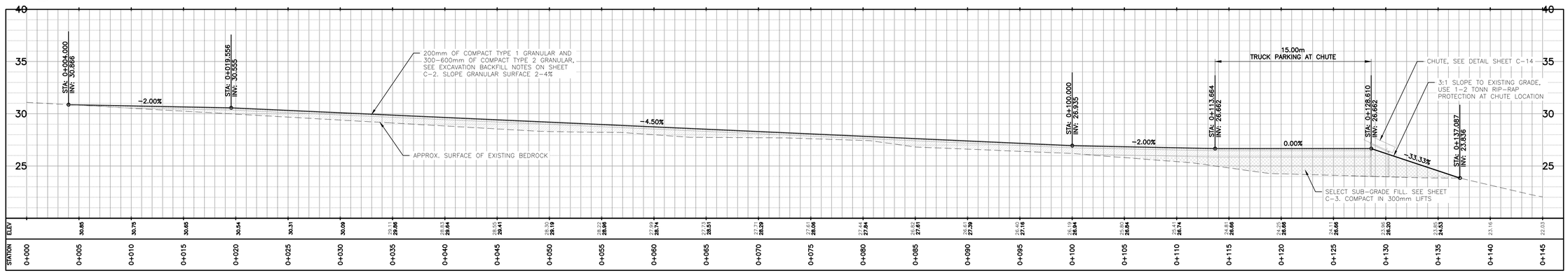
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PLOT DATE: 2026-04-16 @ 2:27:32 PM PLOT SCALE: 1:25.4 PLOT STYLE: DILLON-STANDARD.CTB




1 C-9 PLAN 1:200




2 C-9 PROFILE 1:200




3 C-9 PROFILE 1:200

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GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-8525

# TRUCKED BRINE DISCHARGE PLAN AND PROFILE

SHEET NO. C-9

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2 C-04 PLAN DETAIL
1:75

| ELEVATION LEGEND | |
|---|---|
| ELEVATION RANGE (m) | COLOUR |
| −1.5m TO −1.0m | |
| −1.0m TO −0.5m | |
| −0.5m TO 0.0m | |
| 0.0m TO 0.5m | |
| 0.5m TO 1.0m | |
| 1.0m TO 1.5m | |
| 1.5m TO 2.0m | |
| 2.0m TO 2.5m | |

LEGEND

- −0.01 — CUT/FILL FROM EXISTING CONDITION TO PROPOSED FINISHED GRADE
- PROPERTY LINE
- LIMIT OF CONSTRUCTION
- GW UP — EXISTING UTILITY POLE / EXISTING GUY WIRE
- OH OH OH — EXISTING OVERHEAD WIRE
- APPROX. 30m OFFSET FROM WATER LEVEL
- PROPOSED DITCHING
- PROPOSED BERM AND NEW INTAKE LINES
- EXISTING CHAIN LINK FENCE
- SILT FENCING
- NEW GRAVEL DRIVE/PARKING AREA
- TRAFFIC SIGNAGE, SEE DETAIL 7/C−12
- CONCRETE FILLED SECURITY BOLLARDS, SEE DETAIL 4/C−13
- ABOVE GRADE PIPING, SEE SHEET C−4

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| DATE APRIL 2026 | |
| SCALE 1:250 | |

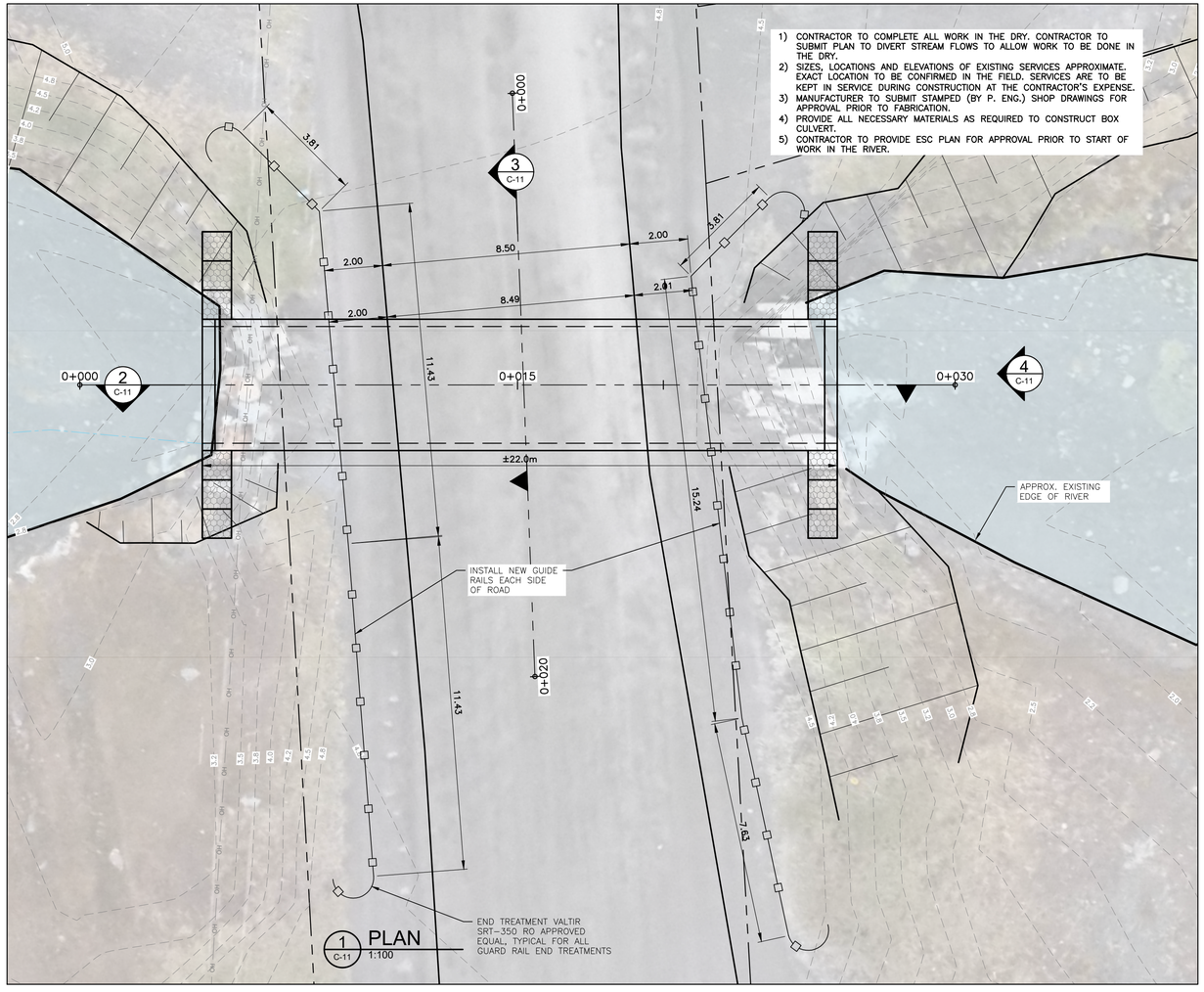
**GOVERNMENT OF NUNAVUT 15265-00255-05**
**SANIKILUAQ NEW WATER TREATMENT PLANT**

PROJECT NO. 24-8525

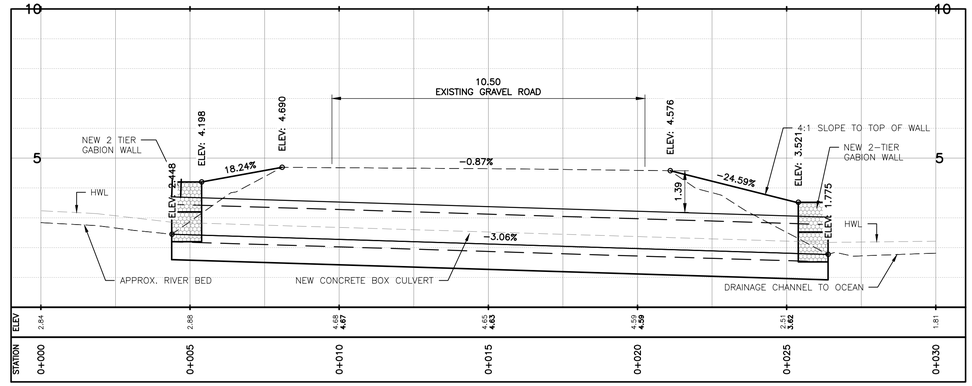
**CUT/FILL PLAN**

SHEET NO. C-10

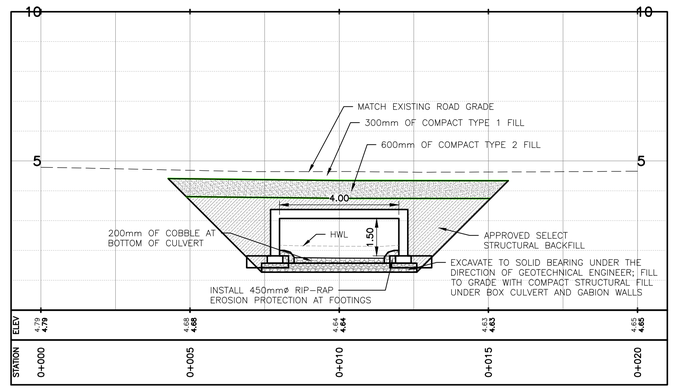
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1 C-11 PLAN 1:100

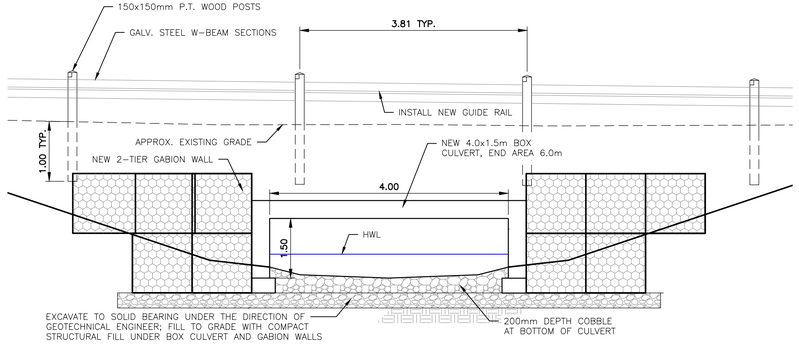



2 C-11 PROFILE 1:100

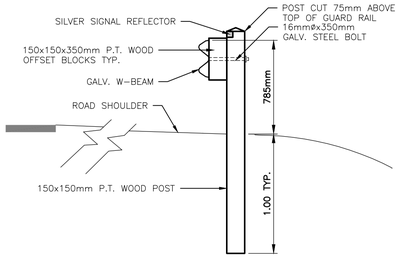



3 C-11 PROFILE 1:100

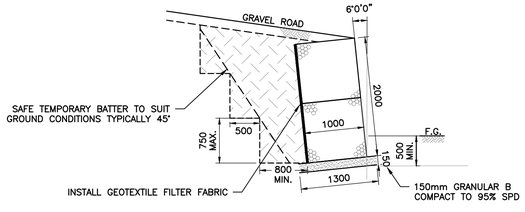
PRECAST BOX CULVERT NOTES:
1. CONCRETE
   a. CLASS: C1
   b. MAXIMUM WATER TO CEMENT RATIO = 0.50
   c. MINIMUM SPECIFIED COMPRESSIVE STRENGTH = 35MPa AT 28 DAYS
   d. AIR CONTENT RANGE = 5-8%
2. FOOTING TO BE PRECAST WITHIN SECTIONS OF BOX CULVERT, FOOTING AND BOX CULVERT TO BE DESIGNED BY MANUFACTURER.
3. ALL EXPOSED CORNERS OF BOX CULVERT TO HAVE 25mm CHAMFER UNLESS NOTED OTHERWISE.
4. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR PRECAST CONCRETE BOX CULVERT AND FOOTINGS, CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE TERRITORY OF NUNAVUT.
5. STRUCTURES TO BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF CAN CSA S6, LIVE LOAD TO BE CL-625 OR ABOVE.
6. UNIT PRICES WITH SUPPLY AND INSTALLATION OF CONCRETE BOX CULVERT SHALL INCLUDE ALL LABOUR, SHIPPING, PLANT AND MATERIALS TO INSTALL NEW CONCRETE BOX CULVERT TO SIZE AS INDICATED. PRICE IS INCLUDING BUT NOT LIMITED TO PROVISION OF ENGINEERED SHOP DRAWINGS, EXCAVATION, BACKFILL, SUPPLY, SHIPPING AND PLACEMENT OF PRECAST CONCRETE BOX CULVERT.




4 C-11 ELEVATION 1:50




6 C-11 GUARD RAIL 1:25




5 C-11 GABION BASKET INSTALLATION 1:50

NOTES:
1. GABIONS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. ALL GABION PANEL INTERSECTIONS ARE TO BE LACED WITH WIRE MATCHING THE GABION MESH
3. INTERNAL BRACING WIRES ARE TO BE PROVIDED TO EXPOSED FACES. WIRE TO MATCH GABION MESH. WIRE TO BE PROVIDED AT 1/3 AND 2/3 GABION HEIGHT FOR 1.0m HIGH GABIONS AND 1/2 HEIGHT FOR 0.5m HIGH GABIONS.
4. GABION INFILL STONE SHALL BE HARD AND DURABLE AND 150mm NOMINAL SIZE BUT NOT LESS THAN 100mm AND NOT GREATER THAN 200mm.
5. GABION INFILL STONE SHALL BE ANGULAR AND PLACED FLAT TO MINIMIZE VOIDS AND PROVIDE A DENSE STABLE MASS. GABION STONE SHALL BE HAND PICKED AFTER PLACING BY MACHINE. STONES TO THE FRONT SHALL BE SELECTED AND HAND PLACED TO PROVIDE A NEAT FINISH.
6. FOR INSTALLATIONS WHERE GROUND WATER SEEPAGE IS ENCOUNTERED FROM RETAINED SOILS OR WHERE THE WALL IS SUBJECT TO FLOODING CONSIDERATION SHOULD BE GIVEN TO THE INCORPORATION OF A GEOTEXTILE FILTER MEMBRANE.
7. GABIONS SHALL BE MADE OF ZINC COATED STEEL WIRE, TRIPPLE TWISTED, FORMING A UNIFORM HEXAGONAL MESH PATTERN OF 80x100 OPENING.
8. GALVANIZED WIRE SHALL BE 2.9Ø FOR GALVANIZED GABIONS AND 2.7Ø P.V.C. COATED GABIONS.
9. GABIONS SHALL BE SUPPLIED FOLDED FLAT TO FACILITATE HANDLING & TRANSPORTATION. THEY SHALL FORM RECTANGULAR BASKETS OF SPECIFIED SIZE WHEN CONSTRUCTED.
10. GABIONS SHALL BE SUPPLIED WITH SECURELY TIED DIAPHRAGMS CONNECTED TO THE BASE WITH MATERIAL OF THE SAME COMPOSITION AS THE GABION, TO FORM INDIVIDUAL CELLS OF 1.0 IN WIDTH.
11. THE EDGES OF THE GABION WITH SECURELY TIED DIAPHRAGM BE MANUFACTURED INTO SECURELY CONNECTED SELVAGES TO PREVENT RAVELING.
12. THE SALVAGE OR PERIMETER WIRE SHALL BE MADE OF 3.8Ø GALVANIZED WIRE FOR GALVANIZED GABIONS & 3.4Ø P.V.C. COATED FOR P.V.C. COATED GABIONS.
13. P.V.C. COATED & GALVANIZED TYING AND CONNECTING SHALL BE SUPPLIED IN THE AMOUNT WIRE 2.2Ø OF NOT LESS THAN 8% OF THE WEIGHT OF THE BASKET.
14. ZINC COATING 0.26kg/m².
15. P.V.C. COATING FOR P.V.C. COATED GABIONS SHALL BE 0.4 THICK.

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REGISTERED PROFESSIONAL ENGINEER — S.J. GREELEY — LICENSEE — April 22, 2026 — NT/NU

PERMIT TO PRACTICE DILLON CONSULTING LIMITED
Signature
Date April 22, 2026
PERMIT NUMBER: P 010
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

Canada — Nunavut

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| 2 | ISSUED FOR CONSTRUCTION | 2026-APR-15 | SJG |
| 1 | ISSUED FOR ADDENDUM | 2025-Dec-12 | SJG |
| 0 | ISSUED FOR TENDER | 2025-Oct-31 | CP |

DESIGN LEW — REVIEWED BY SJG
DRAWN LEW — CHECKED BY SJG
DATE APRIL 2026
SCALE AS SHOWN

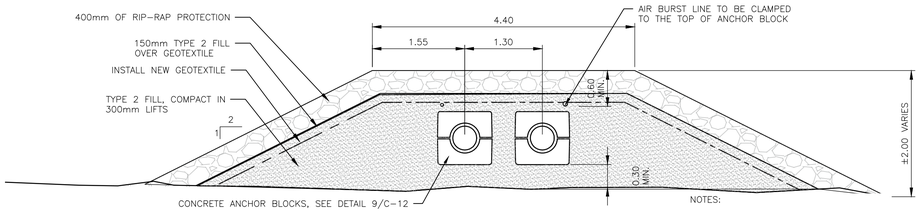
GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

DOWN STREAM CULVERT REPLACEMENT

PROJECT NO. 24-8525

SHEET NO. C-11

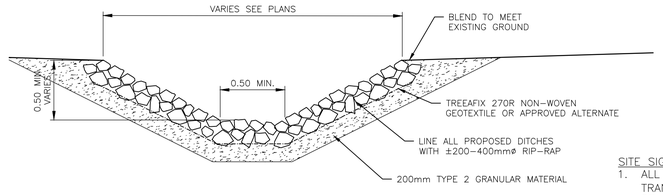
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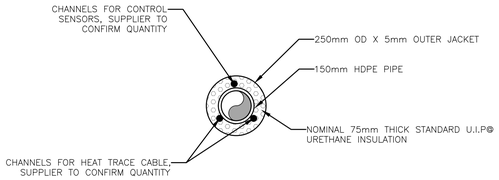

NOTES:

1. INSTALL NEW TYPE 2 GRANULAR, GOETEXTILE, AND RIP RAP AS REQUIRED.
2. CARRIER FOR AIR BURST LINES TO BE ATTACHED WITH UNISTRUT TO TOP OF BALLAST BLOCKS ON NEW INTAKE
3. OVERLAP NEW GEOTEXTILE JOINTS A MINIMUM OF 1.0m

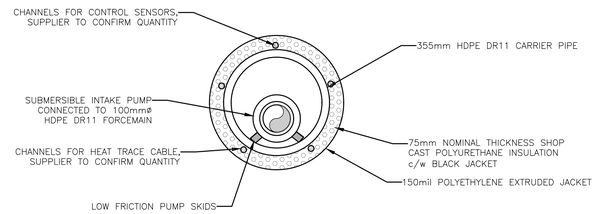
## 1 C-12 INTAKE BERM
1:50



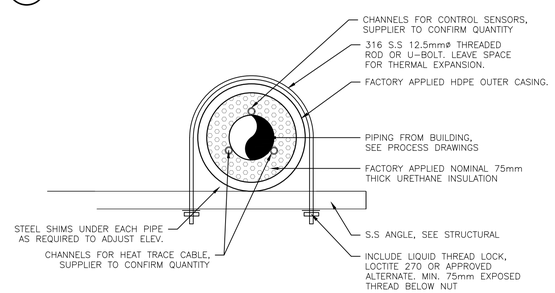

## 2 C-12 TYPICAL DITCH SECTION
1:25




## 4 C-12 HDPE TREATED WATER PIPE TO TRUCKFILL
N.T.S.



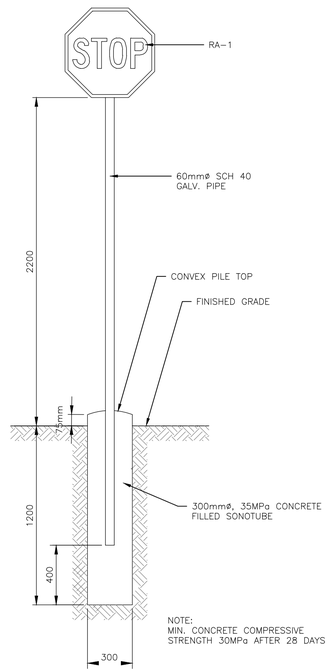

## 5 C-12 INTAKE PIPE
1:10




## 6 C-12 HDPE PIPE FROM PLANT TO TANKS
1:10

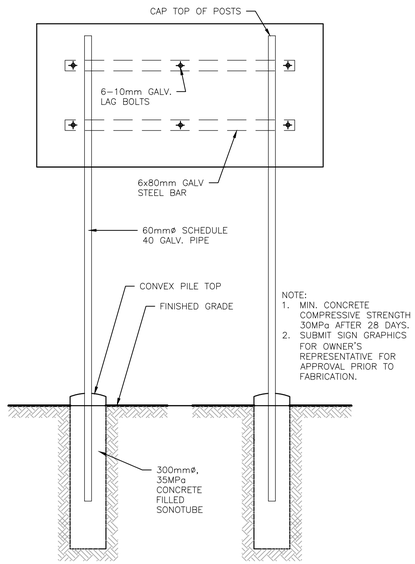
SITE SIGNAGE NOTES:

1. ALL TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH THE TRANSPORTATION ASSOCIATION OF CANADA (TAC) MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA. (MUTCD) LATEST EDITION AND THE GOVERNMENT OF NUNAVUT TRAFFIC CONTROL DEVICE REGULATIONS LATEST EDITION, UNLESS OTHERWISE NOTED.
2. EXACT LOCATION OF NEW TRAFFIC SIGNAGE TO BE DETERMINED IN FIELD, AND SUBJECT TO THE APPROVAL OF THE OWNER'S SITE REPRESENTATIVE.
3. ALL SIGNS TO BE MANUFACTURED BY A 3M CERTIFIED SIGN FABRICATOR. SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL FOR ALL SIGNS.
4. ALL SITE SIGNAGE TO BE TRANSLATED TO ALL OFFICAL LANGUAGES OF NU. SIGNAGE TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO SHIPPING TO SITE.



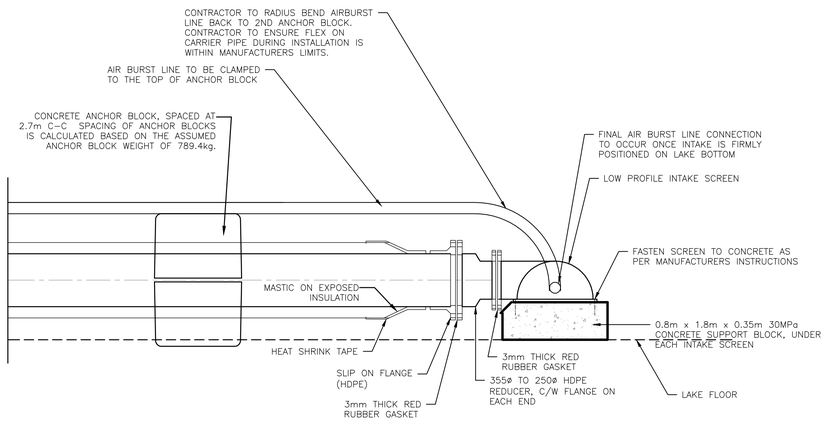

NOTE:
MIN. CONCRETE COMPRESSIVE STRENGTH 30MPa AFTER 28 DAYS

## 7 C-12 SIGN POST INSTALLATION
1:20




NOTE:
1. MIN. CONCRETE COMPRESSIVE STRENGTH 30MPa AFTER 28 DAYS.
2. SUBMIT SIGN GRAPHICS FOR OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO FABRICATION.

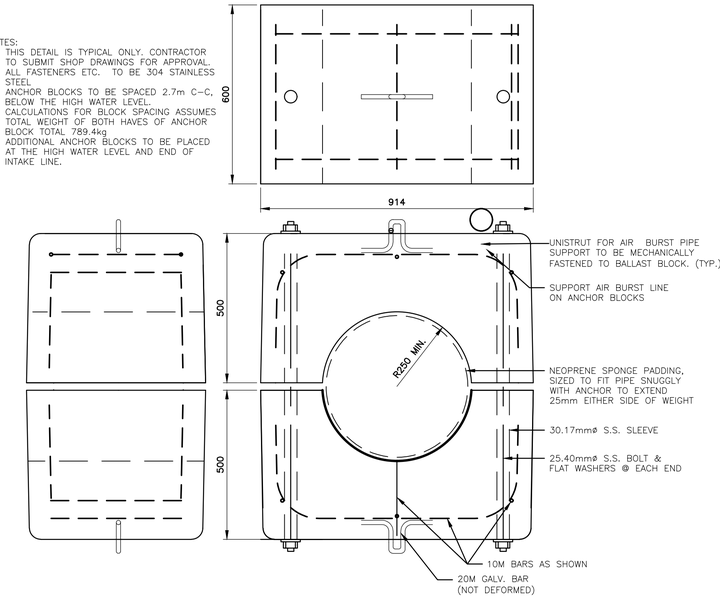
## 8 C-12 SIGN POST INSTALLATION
1:25




## 3 C-12 INTAKE SCREEN
1:20

NOTES:

1. THIS DETAIL IS TYPICAL ONLY. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL.
2. ALL FASTENERS ETC. TO BE 304 STAINLESS STEEL
3. ANCHOR BLOCKS TO BE SPACED 2.7m C-C, BELOW THE HIGH WATER LEVEL. CALCULATIONS FOR BLOCK SPACING ASSUMES TOTAL WEIGHT OF BOTH HAVES OF ANCHOR BLOCK TOTAL 789.4kg
4. ADDITIONAL ANCHOR BLOCKS TO BE PLACED AT THE HIGH WATER LEVEL AND END OF INTAKE LINE.




## 9 C-12 INTAKE ANCHOR BLOCK DETAIL
1:10

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REGISTERED PROFESSIONAL ENGINEER — S.J. GREELEY — LICENSEE — April 22, 2026 — NT/NU

PERMIT TO PRACTICE
DILLON CONSULTING LIMITED
Signature
Date April 22, 2026
PERMIT NUMBER: P 010
NT/NU Association of Professional Engineers and Geoscientists

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DRAWN LEW — CHECKED BY SJG
DATE APRIL 2026
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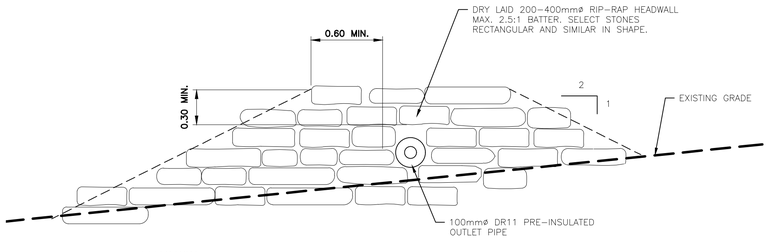
GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

CIVIL DETAILS

PROJECT NO. 24-8525

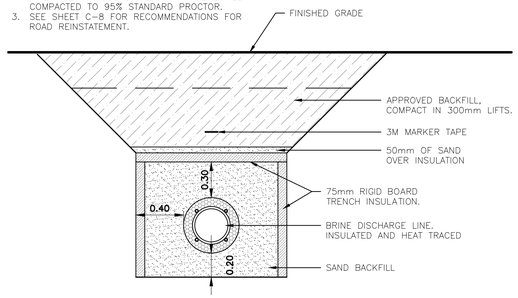
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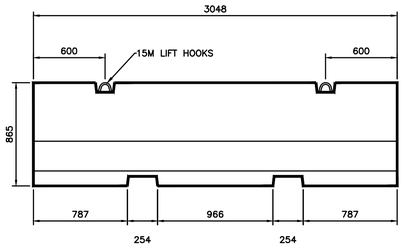



1 C-13 RIP-RAP/HEADWALL DETAIL
1:25

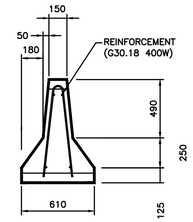
NOTE:
1. PIPES TO BE SPACED 400mm, OR GREATER, FROM TRENCH WALL TO ALLOW COMPACTION
2. TEST PITS TO BE DUG EVERY 15m TO A DEPTH OF 500mm BELOW PIPE INVERT TO CHECK FOR PRESENCE OF SILT. SUB–EXCAVATE AS REQUIRED, TO A DEPTH OF 450mm BELOW PIPE INVERT AND BACKFILL WITH TYPE 2 FILL COMPACTED TO 95% STANDARD PROCTOR.
3. SEE SHEET C–8 FOR RECOMMENDATIONS FOR ROAD REINSTATEMENT.




2 C-13 PIPE TRENCH DETAIL
1:25

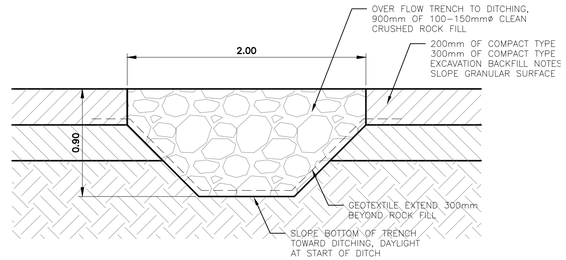



SIDE VIEW

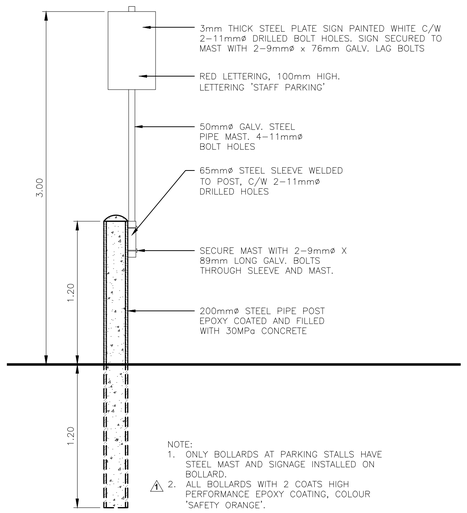



TYP. CROSS SECTION

⚠1 9 C-13 VEHICLE CONCRETE BARRIER
1:25

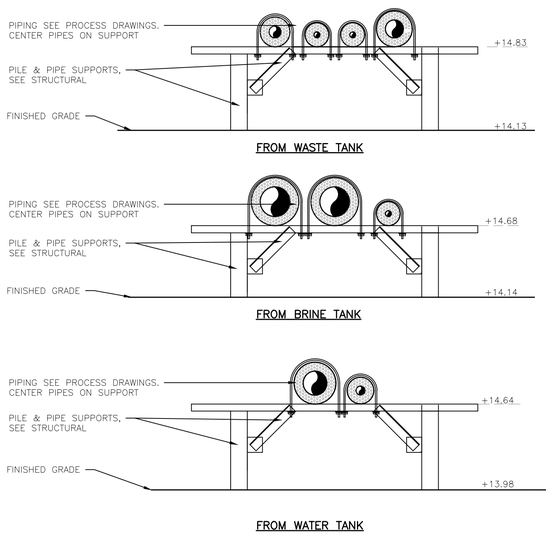



3 C-13 OVERFLOW TRENCH
1:25

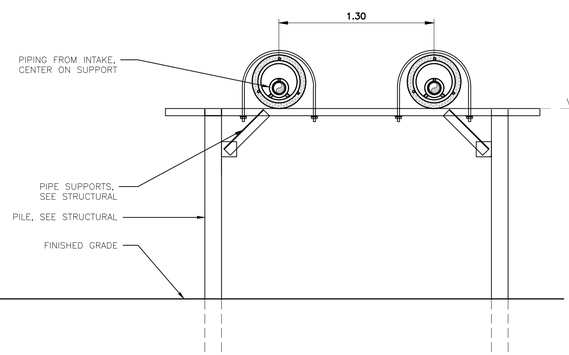



NOTE:
1. ONLY BOLLARDS AT PARKING STALLS HAVE STEEL MAST AND SIGNAGE INSTALLED ON BOLLARD.
⚠1 2. ALL BOLLARDS WITH 2 COATS HIGH PERFORMANCE EPOXY COATING, COLOUR 'SAFETY ORANGE'.

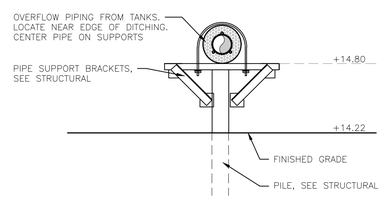
4 C-13 BOLLARD DETAIL
N.T.S.



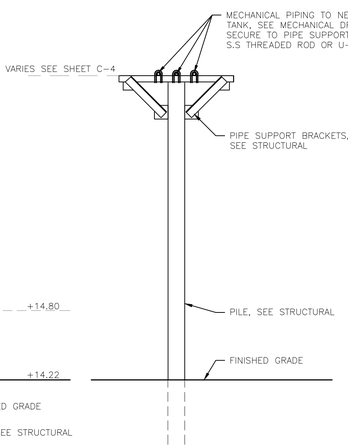

5 C-13 PIPE SUPPORT TO TANKS
1:25




6 C-13 PIPE SUPPORT FOR INTAKE LINES
1:25




7 C-13 PIPE SUPPORT AT OVERFLOWS
1:25




8 C-13 PIPE SUPPORT TO FUEL TANK
1:25

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REGISTERED PROFESSIONAL ENGINEER — S.J. GREELEY — LICENSEE — April 22, 2026 — NT/NU

PERMIT TO PRACTICE
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Signature
Date April 22, 2026
PERMIT NUMBER: P 010
NT/NU Association of Professional Engineers and Geoscientists

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| 0 | ISSUED FOR TENDER | 2025-Oct-31 | CP |

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| DRAWN LEW | CHECKED BY SJG |
| DATE APRIL 2026 | |
| SCALE AS SHOWN | |

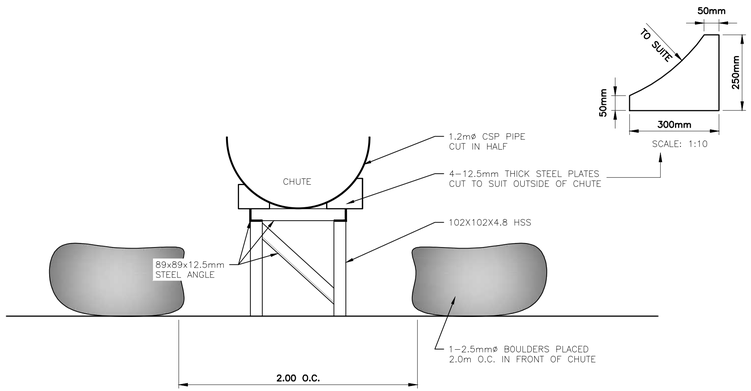
GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-8525

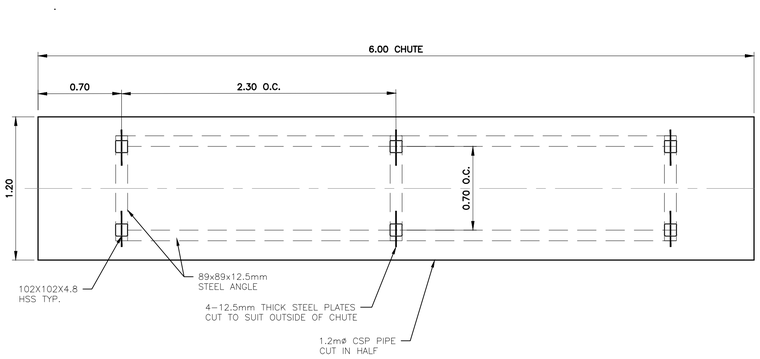
CIVIL DETAILS

SHEET NO. C-13

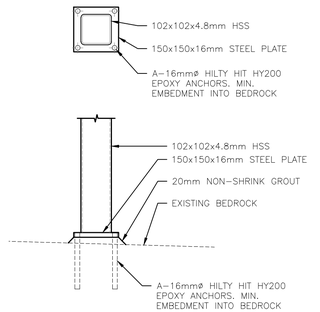
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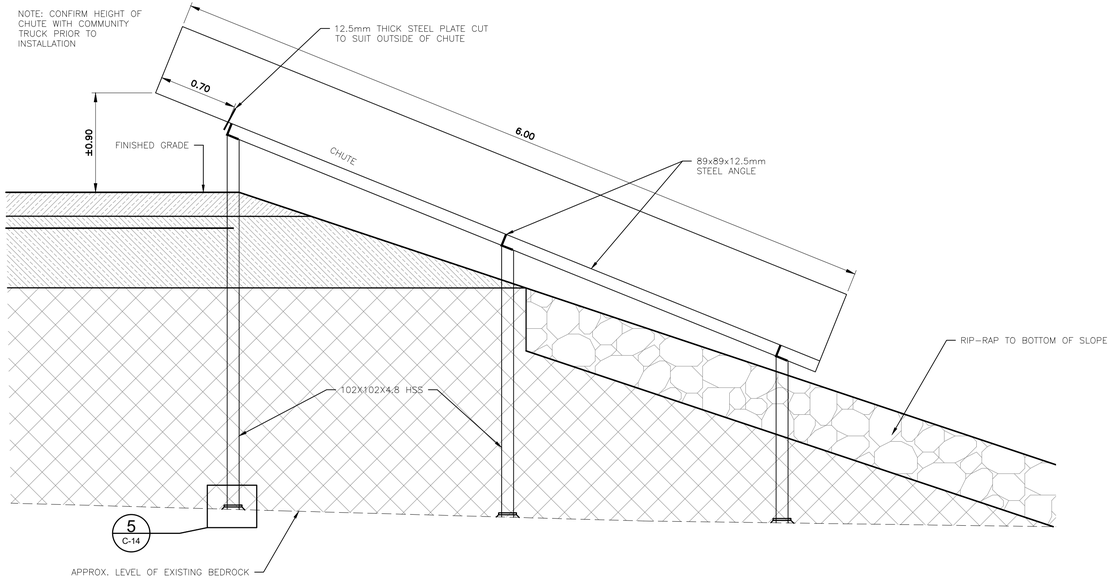

1 C-14 CHUTE ELEVATION
1:25



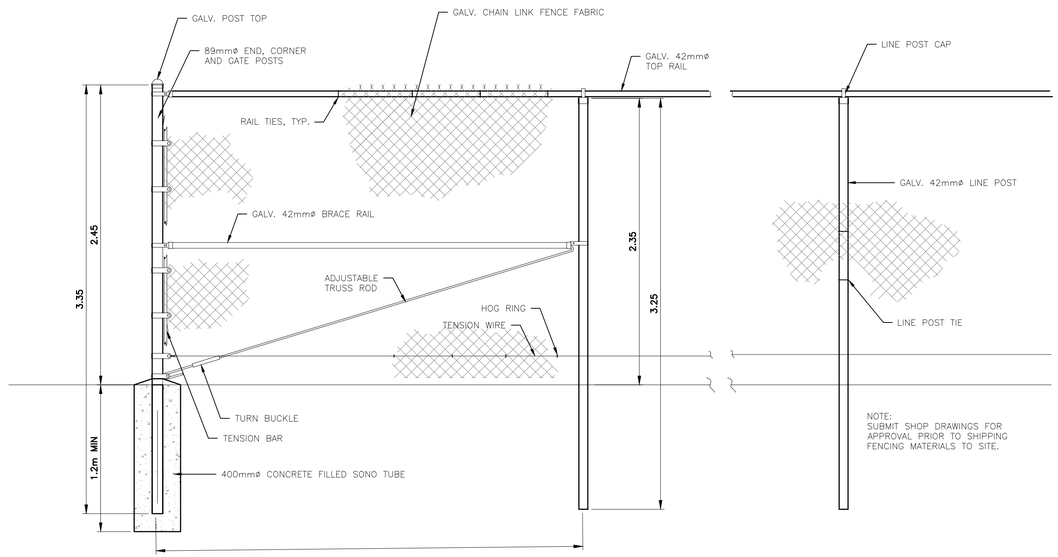

2 C-14 CHUTE PLAN
1:25




5 C-14 CHUTE ANCHORS
1:25




3 C-14 CHUTE SECTION
1:25




4 C-14 TYP. FENCING DETAIL
1:25

**Conditions of Use**

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.

Do not scale dimensions from drawing.

Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

REGISTERED PROFESSIONAL ENGINEER
S.J. GREELEY
LICENSEE
April 22, 2026
NT/NU

PERMIT TO PRACTICE
DILLON CONSULTING LIMITED
Signature
Date April 22, 2026
PERMIT NUMBER: P 010
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

Canada
Nunavut

DILLON CONSULTING

| No. | ISSUED FOR | DATE | BY |
|---|---|---|---|
| 1 | ISSUED FOR CONSTRUCTION | 2026-APR-15 | SJG |
| 0 | ISSUED FOR TENDER | 2025-Oct-31 | CP |

| | |
|---|---|
| DESIGN LEW | REVIEWED BY KJ |
| DRAWN LEW | CHECKED BY SJG |
| DATE APRIL 2026 | |
| SCALE AS SHOWN | |

GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-8525

CIVIL DETAILS

SHEET NO. C-14

FILENAME: C:\USERS\SLEW\DC\ACCDOCS\DILLON CONSULTING (KEEP)\SANIKILUAQ WTP DETAILED DESIGN\PROJECT FILES\2. WORK\DRAWINGS\02_CIVIL\DELIVERABLES\248525 SANI WTP C-12-C-14 CIVIL DETAILS.DWG PLOTTED BY: WOODFORD, LYDIA
PLOT DATE: 2026-04-16 @ 2:51:53 PM PLOT SCALE: 1:25.4 PLOT STYLE: DILLON-STANDARD.CTB
ST. JOHN'S

GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (INCLUDING LATEST AMENDMENTS) AND OTHER LOCAL AUTHORITIES HAVING JURISDICTION.
2. WHERE DOCUMENTS AND STANDARDS ARE REFERENCED IN THE NOTES, THEY SHALL BE THE LATEST EDITIONS, UNLESS OTHERWISE NOTED OR SHOWN.
3. BEFORE PROCEEDING WITH WORK, CHECK ALL THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS AGAINST THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS (WHERE APPLICABLE) AND REPORT DISCREPANCIES TO THE CONSULTANT.
4. SAFEGUARD AND PROTECT ALL EXISTING STRUCTURES, SERVICES AND UTILITIES WHICH MAY BE AFFECTED BY THE WORK OF THIS CONTRACT.
5. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS, SPECIFICATIONS AND PERTINENT DOCUMENTS.
6. DRAWINGS ARE NOT TO BE SCALED.

DESIGN CRITERIA - (POST DISASTER IMPORTANCE):

1. ALL DESIGN AND WORKMANSHIP ON THIS PROJECT SHALL MEET THE REQUIREMENTS OF THE 2020 NATIONAL BUILDING CODE, LATEST EDITION WITH AMENDMENTS.
2. CLIMATIC DATA: SANIKILUAQ, NUNAVUT.
3. SNOW LOAD: Ss = 4.20 KPa Sr = 0.20 KPa
   Is = 1.25 (ULS), 0.9 (SLS)
   WIND: q50 = 0.63 KPa
   Iw = 1.25 (ULS), 0.75 (SLS)
4. SEISMIC: Sa (0.2, $X_C$) = 0.0852
   Sa (0.5, $X_C$) = 0.0553
   Sa (1.0, $X_C$) = 0.0278
   Sa (2.0, $X_C$) = 0.0116
   PGA ($X_C$) = 0.0401
   Ie = 1.5 (ULS)
   SITE CLASS - "C"
   SEISMIC CATEGORY = SC1
5. LOADS:
   ROOF LOAD:
   DEAD LOAD - 0.75 KPa
   SNOW LOAD - 4.45 KPa
   FLOOR LOAD:
   DEAD LOAD - 1.0 KPa
   LIVE LOAD - 4.8 KPa
   EQUIPMENT LOADS
   STAIR LOAD:
   DEAD LOAD - 0.8 KPa
   LIVE LOAD - 4.8 KPa

MATERIALS AND EXECUTION:

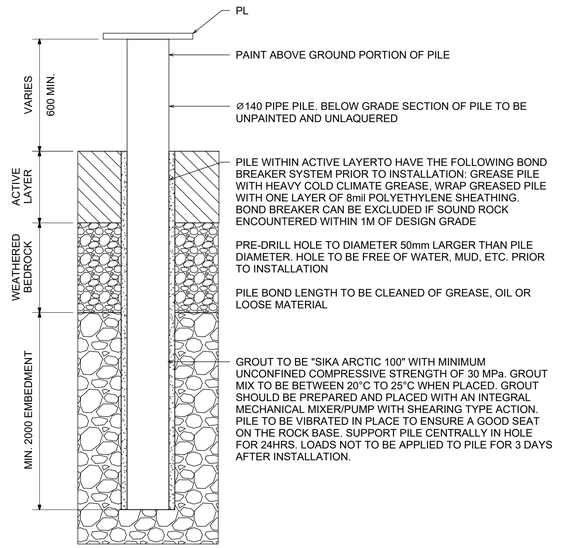
CONCRETE SLABS:
1. CONCRETE SLABS DESIGN BASED ON A SERVICE LIMIT STATE (SLS) BEARING CAPACITY OF 150kPa AND A FACTORED ULTIMATE LIMIT STATE BEARING CAPACITY (ULS) OF 225 KPa BEARING ON ENGINEERED FILL.
2. ALL EXCAVATIONS SHALL BE COMPLETELY DEWATERED DURING CONSTRUCTION. KEEP EXCAVATIONS DEWATERED TO AT LEAST 300mm BELOW LOWEST ELEVATION OF EXCAVATION.
3. CONTINUOUSLY PROTECT THE BOTTOM OF THE EXCAVATION FROM DAMAGE DUE TO FROST AND GROUDWATER PRESSURE.
4. PROOF ROLL EXPOSED SUBGRADE WITH HIGHWAY TYPE ROLLER. SOFT POCKETS ARE TO BE EXCAVATED AND BACKFILLED WITH ENGINEERED FILL COMPACTED TO 100% SPDD.
5. LIFTS OF ENGINEERED FILL SHALL NOT EXCEED 300mm COMPACTED THICKNESS.
6. THE ENGINEERED FILL SHALL PROJECT MINIMUM 3000mm BEYOND THE PERIMETER OF THE SLAB AND SLOPE AT 1H:1V TO EXISTING GRADE.
7. INSPECTION AND TESTING FOR COMPACTION SHALL BE COMPLETED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.

ENGINEERED FILL:
1. PIT RUN GRAVEL SHALL HAVE PLASTICITY INDEX LESS THAN 10% BE FREE OF DELETERIOUS MATERIALS SUCH AS ROOTS, LUMPS, AND BE OF THE FOLLOWING GRADATION:

| SIEVE SIZE (mm) | PERCENT PASSING (%) |
|---|---|
| 25.0 | 100 |
| 19.0 | 75-100 |
| 9.5 | 50-85 |
| 4.75 | 35-65 |
| 2.0 | 25-50 |
| 0.42 | 15-30 |
| 0.075 | 5-10 |

2. ENGINEERED FILL SHALL BE COMPACTED TO 100% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). AS DETERMINED BY ASTM STANDARD D698.

STEEL PIPE PILES:
1. STEEL FOR PIPE PILES SHALL CONFORM TO THE REQUIREMENTS OF ASTM STANDARD A252 GRADE 3 WITH 7.1mm WALL THICKNESS AND MINIMUM STEEL GRADE 310 MPa. USED OR RECLAIMED PIPE WILL NOT BE ACCEPTED.
2. FULL-LENGTH PILES SHALL BE PROVIDED TO ELIMINATE SPLICING DURING INSTALLATION.
3. STEEL FOR CAP PLATES, STIFFENERS, AND BRACES SHALL CONFORM TO CAN/CSA STANDARD G40.21 GRADE 300W.
4. PILES ARE TO BE MINIMUM 140mm (O.D.).
5. ALL PILE CAP PLATES TO BE LEVEL WITHIN 3mm WITHIN THE FOOTPRINT OF THE BUILDING.
6. PILE HOLES TO BE DRILLED TO A DIAMETER AT LEAST 51mm LARGER THAN THE OUTSIDE DIAMETER OF THE PILE.
7. THE FINAL POSITION OF ALL PILES SHALL DEVIATE NO MORE THAN 76mm FROM THE POSITION SHOWN ON THE DRAWINGS AND NOT MORE THAN 2 DEGREES FROM THE ANGLE SHOWN ON THE DRAWINGS.
8. REFER TO TYPICAL PILE DETAIL(S) FOR ADDITIONAL PILE INSTALLATION REQUIREMENTS.
9. ROCK SOCKET PILES:
   1. PILES HAVE BEEN DESIGNED AS ROCK SOCKET PILES. PILES ARE DESIGNED ON THE BASIS OF AN UNFACTORED BOND CAPACITY BETWEEN GROUT AND BEDROCK OF 700 kPa.
   2. MINIMUM PILE EMBEDMENT SHALL BE 2.0m INTO SOUND BEDROCK.
   3. PILE DESIGN BASED ON GEOTECHNICAL INVESTIGATION PREPARED BY ADAPTIVE BASELINE GEOTECHNICAL No. SAN-G2407, JANUARY 24, 2025.




## TYPICAL ROCK SOCKET PILE DETAIL

N.T.S.

STRUCTURAL STEEL:
1. STRUCTURAL STEEL SHALL BE DESIGNED IN ACCORDANCE WITH CSA STANDARD S16.
2. FABRICATION, CONSTRUCTION, ERECTION, TOLERANCES, WELDING, ETC SHALL CONFORM TO THE REQUIREMENTS OF CSA S16.
3. ROLLED STEEL SHAPES SHALL BE NEW MATERIAL CONFORMING TO THE REQUIREMENTS OF CSA STANDARD G40.21, GRADE 350W OR ASTM STANDARD A572/A992, GRADE 50.
4. HOLLOW STRUCTURAL SECTIONS (HSS) SHALL BE NEW MATERIAL CONFORMING TO THE REQUIREMENTS OF CSA STANDARD G40.21, GRADE 350W, CLASS C.
5. PLATES, CHANNELS, AND ANGLES SHALL BE NEW MATERIAL CONFORMING TO THE REQUIREMENTS OF CSA STANDARD G40.21, GRADE 300W.
6. STRUCTURAL STEEL CONNECTIONS TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN NUNAVUT. SUBMIT SEALED SHOP DRAWINGS TO CONSULTANT FOR REVIEW PRIOR TO FABRICATION.

7. WELDING:
   7.1 WELDING OF CARBON STEEL SHALL BE PERFORMED IN ACCORDANCE WITH CSA STANDARD W59 BY A FIRM AND INDIVIDUALS CERTIFIED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA STANDARD W47.1.
   7.2 WELDING ELECTRODES FOR CARBON STEEL SHALL BE E49XX, OR EQUIVALENT, CONFORMING TO THE REQUIREMENTS OF CSA STANDARD W48.

8. GALVANIZING:
   8.1 WHERE NOTED, STRUCTURAL STEEL TO BE HOT-DIP GALVANIZED AND FIELD TOUCHED UP WITH ZINC-RICH PAINT.
   8.2 NUT, BOLT, AND WASHER ASSEMBLIES TO MEET STATED REQUIREMENTS FOR STRENGTH AND HAVE A GALVANIZED FINISH.
   8.3 PROVIDE DRAIN/WEEP HOLES IN ALL CLOSED-SECTION MEMBERS.
   8.4 BRACING, COLUMN SPLICE, MOMENT CONNECTION AND SLIP-CRITICAL CONNECTION MATING SURFACES TO BE WIRE-BRUSHED.
   8.5 IF REQUIRED, BOLT HOLE DIAMETERS SHOWN ON DRAWINGS MAY BE INCREASED BY 2mm FOR THE PURPOSES OF GALVANIZING.

9. GRATING:
   9.1 GRATING SHALL BE NEW TYPE 19-4 25x4.8 SERRATED BAR GRATING. SPAN BEARING BARS IN DIRECTION SHOWN, 1370mm MAXIMUM UNSUPPORTED SPAN. GRATE ALL AREAS BOUND BY GUARD RAILS.
   9.2 FASTEN BAR GRATING WITH SADDLE CLIPS @ 900mm O/C OR WELD THE GRATING TO THE SUPPORT EVERY 900mm O/C TO HAVE CORROSION RESISTANT FINISH.
   9.3 BARRIER-FREE GRATING TO BE ADA COMPLIANT. SPACING OF BARS TO BE MAXIMUM 13mm WIDE IN THE PARALLEL DIRECTION OF TRAVEL.

10. GUARD RAILS AND HANDRAILS:
   10.1 DESIGN LOADS SHALL CONFORM TO THE REQUIREMENTS OF THE 2020 NATIONAL BUILDING CODE.

11. FLOOR PLATE:
   11.1 FORM FLOORING FROM 6mm THICK STEEL PLATE TO THE PROFILE INDICATED.

MODULE PLACEMENT:

1. DO NOT PLACE ANY MODULES UNTIL THE FULL FOUNDATION, INCLUDING ALL BRACING, PILE CAPS, ETC. HAS BEEN CONSTRUCTED.
2. DO NOT PLACE ANY EQUIPMENT IN MODULE DURING MODULE PLACEMENT. FOUNDATIONS HAS BEEN DESIGNED TO SUPPORT DEAD LOADS ONLY DURING PLACEMENT OF MODULES.
3. ENSURE EACH MODULE IS FULLY WELDED TO THE SUPPORTING PILE CAPS PRIOR TO PLACING THE NEXT MODULE. WELDED CONNECTION BY OTHERS.


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PROFESSIONAL ENGINEER — 22/04/2026 — S.F. VERSTEEGEN — LICENSEE — NWT/NU

PERMIT TO PRACTICE
Concentric Associates International Inc.
Signature
Date 22/04/2026
PERMIT NUMBER: P 492
The Association of Professional Engineers, Geologists and Geophysicists of the NWT / NU

ISSUED FOR CONSTRUCTION

Canada — Nunavut


CONCENTRIC
CLIENT-CENTRIC. CHALLENGE DRIVEN.
626 QUEEN ELIZABETH WAY
SUITE 201, IQALUIT, NU X0A 3H0
(867) 979-4180


| No. | ISSUED FOR | DATE | BY |
|---|---|---|---|
| 1 | CONSTRUCTION | 2026-APR-22 | VCV |
| 0 | ISSUED FOR TENDER | 2025-OCT-31 | VCV |

DESIGN: LJJ | REVIEWED BY: SFV
DRAWN: VCV | CHECKED BY: SFV
DATE: APRIL 2025
SCALE: N.T.S.

GOVERNMENT OF NUNAVUT 15265-00255-05
SANIKILUAQ NEW WATER TREATMENT PLANT

PROJECT NO. 24-10280

SHEET NO. S-1

GENERAL NOTES & TYPICAL DETAILS

PLOT DATE: 2026-04-17 1:47:38 PM
FILE NAME: Z:\Projects\24-10280 Dillon GN-NE-NTF Sanikiluaq NU\3- Design and Investigation\Drawings\24-10280 Sanikiluaq WTP.rvt