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October 14, 2025

Addendum No. 02

File Reference Number: RFP 2025 075

Title: Upgrade of RIP Track and Adjacent Facilities

RE: Clarifications/Questions

Please refer to the following information/clarification:

Item 1: Part 3 – RFP Specifications – Schedule 3-A-3 – Issue for Tender Drawings

a) Please provide the model information and details for the modular buildings.

b) Please provide details for the steel decks and stairs at the lunchroom/washroom shed.

c) Please confirm structural reinforcement requirements for:

(i) platform/wheelhouse/axle/tool storage slabs,
(ii) electrical and transformer pads, and
(iii) light pole bases.

The geotechnical report provides subgrade and frost recommendations but no reinforcement details; current drawings show no rebar schedules:

- platform area slabs.
- wheelhouse slabs.
- axle storage slabs.
- tool storage slabs.
- electrical and transformer slabs.
- light pole bases

d) Please provide a detail for foundations for the service posts in RIP track 3 and 4 where there are no concrete platform slabs to fasten to.

e) On civil drawing H375313-1000-220-270-0001, it shows the new sanitary line being install 0.72 meters off the wheelhouse foundation. Using the invert elevation off civil drawing H375313-1000-220-271-0005, including the bedding off 150 mm of clear stone and 100mm of A gravel, the bottom of excavation will be 2.54 meters below existing grade. Will this cause issues undermining the Wheelhouse Foundation?

f) The ONTC website identifies the wheel shop to be certified in ISO 9001:2008. Are the contractors required to be ISO certified and are they required to follow all the required policies and procedures related to this certification?

g) Civil & Drainage Buried Services Trenching Plan 1 shows alignment and width of trench. The width shown for the Sanitary Sewer adjacent to the Wheel shop has a shown width of 0.95 m. This width will not accommodate personnel or trench box required to place the pipe at shown depths.

h) Please provide the specification for the anchor bolts, support plates and rail clips

i) Pay item lists Steel Ties, but drawings only show wood ties for ballasted tracks and embedded rail in slab. Please confirm if steel ties are required anywhere or remove the pay item.

j) Please confirm if any new rail joints require flash-butt or thermite welding, and provide welding spec.

k) What model/standard is required (capacity, mounting details) on bumping posts?

l) Please provide details and specifications on concrete isolation joints around trench drains in wheelhouse slab.

m) Please confirm the manufacturer and model number of the tarp shelter building to be used for this project so that all bidders can price on an equal basis.

n) Please confirm where the 41m of 5" PVC reinsulated pipe is to be installed.

o) Please provide the concrete strength and mix for all concrete slabs, foundations, and piers.

p) Please provide details on the tarp shelter at the axle storage rack area. Does the shelter get fastened to the lock block.

q) Please confirm the rebar size and spacing for the new concrete platform over the existing slab in the Rip area (detail A Drawing H375313-1000-230-270-0013-B)

Answer: Please be advised that ONTC has released the Issued for Tender (IFT) Drawings. These drawings have been listed and attached at the end of this Addendum. For responses to all of the questions listed above, respondents are requested to refer to and review the IFT Drawings.

Item 2: Drawings instruct removal and disposal/salvage of ties/OTM, but do not assign responsibility or disposal site. Please confirm who pays and disposal facility requirements

Answer: Contractor is responsible for removal and dispose on site. They are going to stay on site, and a specific disposal location will be provided to the contractor during construction.

Item 3: Please confirm who will be paying for testing and inspection costs (Concrete, subgrade, rebar, dewatering, and soils).

Answer: Contractor shall arrange and pay for all the costs associated with the inspection that's part of Contractor's Quality Management Plan and as per the Contract Document for instance- Compaction Testing, Concrete Strength, ESA Inspection, TSSA etc. Water and Soil Sampling should be covered with the Cash Allowance. ONTC has provided the Sample Results of the Ground Water and Soil through the Env. Report by Hatch.

Item 4: Can RIP track 1, 2, 3, 4 each be completely shut down in its entire length at one time? How does the ONTC want to see the phasing in the RIP area?

Answer: ONTC will not close only half of the track at a time. The full length of a track can be closed at once. However, all four tracks cannot be closed at the same time. At least two tracks must remain open and accessible at all times.

For example, when repairing the concrete pad on Tracks 1 and 2, ONTC will need to keep at least one of those tracks open so that major repairs and car jacking can still be done.

Item 5: Can the groundwater in the deep excavation for foundations and services be pumped into the existing oil sanitary structures?

Answer: Please review the Environmental Report on Excess Soil & Ground Water management. Follow the Division01 section 013543 - Environmental Procedure to manage the Groundwater.

Item 6: Will the contaminated soils remain in the ONTC property, or will the soil be required to be disposed of off-site?

Answer: Will remain on ONTC Property.

Item 7: Will the ONTC consider making a cash allowance to cover the costs of the dewatering, sampling, testing, and handling?

Answer: These should be covered with the Cash Allowance under Excess Soil Management Cell on the Cost Breakdown Structure

Item 8: Please be advised that the submission deadline for this RFP has been revised to **Thursday, October 30, 2025 at 2:00:00 p.m.**

The below noted RFP Documents have been revised and sections affected are noted below. The revised RFP sections supersede all previous RFP Document versions for the said documents.

Part 4 – Form of Proposal

Delete Document	Replace with Revised Document
Proposal Form 10 – Schedule & Proposed Approach	Proposal Form 10 – Schedule & Proposed Approach_Rev.02

This Addendum hereby forms part of the RFP.

Regards,

Brinda Ranpura
Procurement Contracts Specialist
brinda.ranpura@ontarionorthland.ca

Ontario Northland Transportation Commission

REPAIR IN PLACE TRACK FACILITY

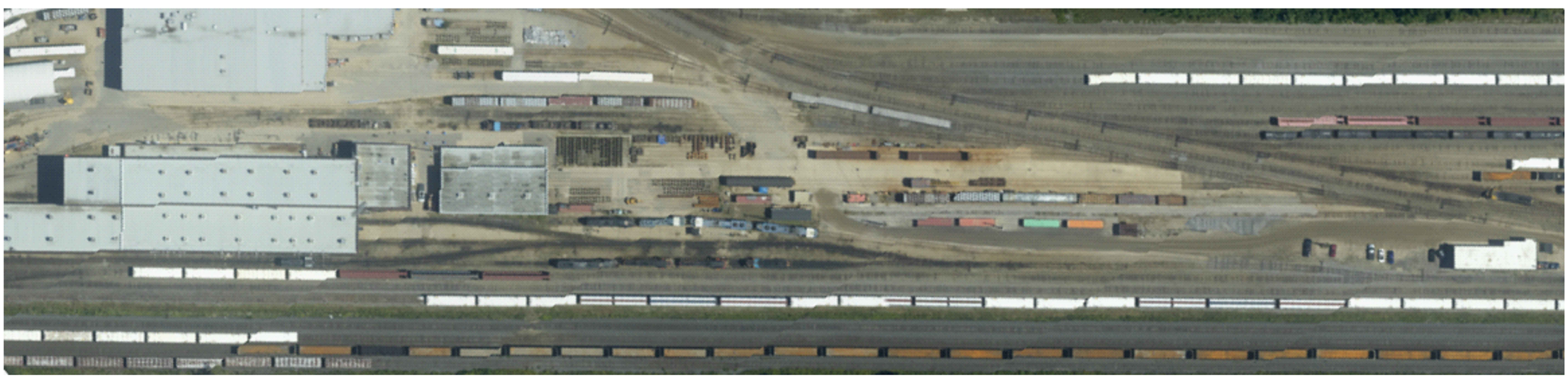
NORTH BAY, ONTARIO



HATCH

PROJECT No. H-375313

2025/10/06 ISSUED FOR TENDER



DWG. No. H375313-1000-224-026-0001

DISCIPLINE	DRAWING NUMBER	DRAWING TITLE	REVISION
CIVIL			
1	H375313-1000-220-251-0001	GENERAL NOTES	C
2	H375313-1000-220-258-0001	CIVIL REMOVAL & DEMOLITION PLAN	E
3	H375313-1000-220-260-0001	EROSION & SEDIMENT CONTROL DETAILS	C
4	H375313-1000-220-260-0004	TRENCHING DETAILS	C
5	H375313-1000-220-270-0001	OVERALL SITE PLAN	E
6	H375313-1000-220-271-0001	PROPOSED WATER SERVICE PLAN, PROFILE & DETAILS	C
7	H375313-1000-220-271-0002	OVERALL DRAINAGE PLAN & PROFILE	C
8	H375313-1000-220-271-0003	FINISHED GRADE LAYOUT PLAN & PROFILE	C
9	H375313-1000-220-271-0004	WHEEL STORAGE GRADING PLAN	C
10	H375313-1000-220-271-0005	PROPOSED SANITARY SYSTEM PLAN & PROFILE	C
11	H375313-1000-220-271-0006	GRADING LUNCHROOM & TOOL STORAGE BUILDINGS	C
12	H375313-1000-220-272-0001	PROPOSED COMPOSITE SITE SERVICES PLAN	C
13	H375313-1000-220-272-0002	BURIED SERVICES TRENCHING PLAN 1 OF 2	C
14	H375313-1000-220-272-0003	BURIED SERVICES TRENCHING PLAN 2 OF 2	C
15	H375313-1000-220-272-0004	EROSION & SEDIMENT CONTROL PLAN	C
RAIL			
1	H375313-1000-224-251-0001	TRACK MODIFICATION	E
2	H375313-1000-224-260-0001	RAIL RIP TRACK#3 & #4 TYPICAL SECTIONS	B
3	H375313-1000-224-260-0002	RAIL WHEEL STORAGE AREA TRACK ALLIGNMENT DATA TABLE	B
4	H375313-1000-224-271-0001	RIP TRACK 1 PLAN PROFILE	C
5	H375313-1000-224-271-0002	RIP TRACK 2 PLAN PROFILE	C
6	H375313-1000-224-271-0003	RIP TRACK 3 PLAN PROFILE	C
7	H375313-1000-224-271-0004	RIP TRACK 4 PLAN PROFILE	C
STRUCTURE			
1	H375313-1000-230-251-0002	GENERAL NOTES	B
2	H375313-1000-230-260-0005	AXLE STORAGE AREA -FABRIC SHELTER	E
3	H375313-1000-230-260-0006	SEACAN STORAGE CONTAINER AND SHELTER - ROOF COVER	E
4	H375313-1000-230-270-0001	GENERAL ARRANGEMENT PLAN - DEMOLITION AND PROPOSED WORKS	E
5	H375313-1000-230-270-0002	WHEEL STORAGE AREA - PROPOSED RETAINING WALLS	E
6	H375313-1000-230-270-0003	WHEEL STORAGE AREA- SECTION AND DETAILS	C
7	H375313-1000-230-270-0004	AXLE STORAGE AREA -PROPOSED CONCRETE SLAB	E
8	H375313-1000-230-270-0005	SEACAN STORAGE CONTAINER AND SHELTER - PROPOSED CONCRETE SLAB	E
9	H375313-1000-230-270-0006	ELECTRICAL AND MECHANICAL SERVICES BUILDING - PLAN VIEW, SECTIONS AND DETAILS	C
10	H375313-1000-230-270-0007	LUNCHROOM, WASHROOM EMERGENCY SHOWER BUILDING - PLAN VIEW SECTIONS AND DETAILS	B
11	H375313-1000-230-270-0008	SLAB ON GRADE - ACCESS PATHWAY AND LUNCHROOM AREA	B
12	H375313-1000-230-270-0009	WHEEL STORAGE AREA - RAIL SUPPORT UPSTAND AND BASE CONCRETE	C
13	H375313-1000-230-270-0010	RIP TRACK AREA - DEMOILITION / PROPOSED RAIL SUPPORTS	C
14	H375313-1000-230-270-0011	WHEEL STORAGE AREA - CONCRETE JOINTS LAYOUT AND REBAR	C
15	H375313-1000-230-270-0012	RIP TRACK AREA - DEMOLITION / PROPOSED PLATFORM AREA	C
16	H375313-1000-230-270-0013	RIP TRACK AREA - SECTION AND DETAILS	C
17	H375313-1000-230-270-0015	MISELANEOUS DETAILS	C
MECHANICAL			
1	H375313-1000-240-276-0001	COMPRESSED AIR P&ID OR RIP TRACK AREA & AIR BREAK CHARGING SHACK	E
2	H375313-1000-240-251-0001	ELEC/MECH SERVICES BUILDING GENERAL NOTES	C
3	H375313-1000-240-260-0002	ELEC/MECH SERVICES BUILDING SECTION AND DETAILS	C
4	H375313-1000-240-270-0001	RIP TRACK AREA OVERALL PIPING LAYOUT	C
5	H375313-1000-240-270-0002	ELEC/MECH SERVICES BUILDING G.A. - PLAN	C
6	H375313-1000-240-270-0003	ELEC/MECH SERVICES BUILDING SECTIONS A & B	C
7	H375313-1000-240-270-0004	ELEC/MECH SERVICES BUILDING EQUIPMENT SCHEDULES	C

DISCIPLINE	DRAWING NUMBER	DRAWING TITLE	REVISION
ELECTRICAL			
1	H375313-1000-263-251-0003	GENERAL NOTES & LEGENDS	E
2	H375313-1000-263-258-0001	DEMOLITION PLAN	E
3	H375313-1000-263-260-0001	LIGHTING CALCULATION DETAIL	C
4	H375313-1000-263-260-0002	LIGHTING CALCULATION DETAIL	C
5	H375313-1000-263-260-0003	DUCT BANK INSTALLATION DETAIL	C
6	H375313-1000-263-270-0001	SITE POWER PLAN PROPOSED	E
7	H375313-1000-263-270-0002	SITE POWER PLAN PROPOSED	C
8	H375313-1000-263-270-0003	RIP TRACK POWER PLAN PROPOSED	C
9	H375313-1000-263-270-0004	ELECTRICAL/MECHANICAL BUILDING POWER PROPOSED PLAN	E
10	H375313-1000-263-270-0005	ELECTRICAL/MECHANICAL BUILDING GROUNDING PROPOSED PLAN	C
11	H375313-1000-263-284-0001	PANEL SCHEDULE	E
12	H375313-1000-263-284-0002	PANEL SCHEDULE	E
13	H375313-1000-263-284-0004	PANEL SCHEDULE	C
14	H375313-1000-263-284-0005	PANEL SCHEDULE	C
15	H375313-1000-263-284-0006	PANEL SCHEDULE	C
16	H375313-1000-263-284-0007	LIGHTING SCHEDULE	C
17	H375313-1000-263-288-0001	SINGLE LINE DIAGRAM REMOVAL	E
18	H375313-1000-263-288-0002	SINGLE LINE DIAGRAM PROPOSED	E
ARCHITECTURE			
1	H375313-1000-290-270-005	LUNCH ROOM, WASHROOM, & EMERGENCY SHOWER/EYEWASH BLDG FLOOR PLAN & BUILDING ELEVATIONS	E
2	H375313-1000-290-270-007	ELECTRICAL & MECHANICAL SERVICES BLDG FLOOR PLAN & BUILDING ELEVATIONS	E

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C	ISSUED FOR INTERNAL REVIEW	H.S.	F.B.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	H.S.	F.B.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	H.S.	F.B.	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	C. ISBISTER		2025/10/06
DESIGNER	-		-
CHECKER	H. SINGH	Singh, Harshdeep	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee 2025.10.10	2025/10/06
RESP. ENG.	-		-
LEAD DISC. ENG.	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

LIST OF DRAWINGS

Ref Drawing No -

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS | DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE NTS OR AS NOTED

DWG. No. H375313-1000-224-026-0001

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File Name: queue26.dwg

DWG. No. H375313-1000-220-251-0001

GENERAL NOTES:

1. ALL CONSTRUCTION BY CONTRACTOR, ONTARIO NORTHLAND TRANSPORT COMMISSION (ONTC), OR OTHER FORCES SHALL BE IN ACCORDANCE WITH THE CITY OF NORTH BAY ENGINEERING DESIGN GUIDELINES MARCH 2021, DESIGN BASIS MEMO (H373090-0000-200-210-0001), OPSS, OPSD, GEOTECHNICAL REPORT BY HATCH H375313-1000-2A0-230-0001(2025-06-20 Rev A), AND OTHER REGULATIONS OR PROCEDURES AS IDENTIFIED BY ONTC AND DETAILED ELSEWHERE.
2. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON THE SURVEY PERFORMED BETWEEN JULY 24 AND NOVEMBER 16, 2023 BY TULLOCH GEOMATICS INC.
3. COORDINATE SYSTEM SHOWN HERE IS UTM ZONE 17N, NAD83 (CSRS) (2010).
4. ELEVATIONS SHOWN HERE ARE GEODETIC, REFER TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28) AND ARE DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
5. CONTRACTOR TO OBTAIN ENGINEER'S APPROVAL FOR ANY DEVIATION FROM THE DESIGN.
6. ALL SITE WORK, TRENCHING, BEDDING AND BACKFILL, ROADWORK, EXCAVATION AND CONCRETE WORKS ARE TO BE SUPPLIED AND CONSTRUCTED IN ACCORDANCE WITH ONTARIO PROVINCIAL STANDARDS FOR ROADS AND PUBLIC WORK STANDARD SPECIFICATIONS (OPSS) AND DRAWINGS (OPSD). ADDITIONALLY, CURRENT "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS (OSHA) AND GEOTECHNICAL REPORT BY HATCH H375313-1000-2A0-230-0001(2025-08-22 Rev 0) SHOULD ALSO BE FOLLOWED.
7. REFER TO EROSION AND SEDIMENT CONTROL DRAWINGS FOR THE EROSION AND SEDIMENT CONTROL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR THE MANAGEMENT OF EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
8. ALL PROPOSED INFRASTRUCTURE, BUILDINGS, WORK SHALL BE AT A MINIMUM CLEARANCE OF 2.54m FROM CENTER OF ANY EXISTING RAIL TRACKS. FOLLOW STRUCTURAL AND RAIL DRAWINGS FOR DETAILS.
9. THE CONTRACTOR IS TO MAINTAIN A COMPLETE SET OF DRAWINGS MARKED UP IN RED TO RECORD ANY FIELD REVISIONS OR APPROVED DEVIATION FROM DESIGN FOR THIS PROJECT. THE REDLINED SET IS TO BE AVAILABLE ON SITE FOR THE ENGINEER TO REVIEW AT ALL TIMES. AT THE COMPLETION OF THE PROJECT, THIS MARKED UP SET IS TO BE SUBMITTED TO HATCH FOR THEIR RECORDS.
10. CONTRACTOR TO ENSURE THAT THEY ARE USING THE LATEST VERSION OF THE DRAWINGS ISSUED.
11. ANY REVISIONS TO THESE DRAWINGS MUST BE APPROVED BY THE ENGINEER, WHO SHALL REVIEW ANY CHANGES WITH ONTC.
12. THE CONTRACTOR SHALL ENSURE THAT ALL THE INTERNAL AND EXTERNAL PERMITS, LICENSES, AND APPROVALS REQUIRED FOR THE PROPOSED WORK HAVE BEEN OBTAINED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
13. ALL LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND AND ABOVEGROUND SERVICES HAVE BEEN DETERMINED FROM TOPOGRAPHIC SURVEY CONDUCTED BETWEEN JULY 24, 2023 AND NOVEMBER 16, 2023 BY TULLOCH GEOMATICS INC. (FILE 232577) AND SUE INVESTIGATION REPORT AUGUST 2025 BY 4SIGHT UTILITY ENGINEERS. THE ENGINEER CANNOT BE HELD RESPONSIBLE FOR THEIR ACCURACY. THE CONTRACTOR IS TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING SERVICES AND TIE-IN POINTS PRIOR TO CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES, CONFLICTS, AND OMISSIONS.
14. CONTRACTOR TO OBTAIN ONTC APPROVAL FROM SERVICES/UTILITIES PROVIDER/OWNER PRIOR TO DISRUPTION OF ANY EXISTING SERVICES/UTILITIES.
15. DIMENSIONS, GRADES, COORDINATES, AND DETAILS OF THE DESIGN ARE TO BE CONFIRMED IN THE FIELD PRIOR TO CONSTRUCTION. IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES, CONFLICTS OR OMISSIONS.
16. TRAFFIC MANAGEMENT PLAN DURING CONSTRUCTION IS TO BE PREPARED BY THE CONTRACTOR AND APPROVED BY ONTC PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
17. THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING NEAR ANY EXISTING SERVICES AND INFRASTRUCTURE. ANY SERVICES OR INFRASTRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF ONTC OR OTHER APPROVED AGENCIES AT THE EXPENSE OF THE CONTRACTORS.
18. ALL SURVEY MONUMENTS, POSTS OR IRON PINS MUST BE PROTECTED AND ANY DAMAGE IS TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE PRIOR TO THE COMPLETION OF CONSTRUCTION.
19. FIGURED DIMENSIONS SHALL GOVERN OVER SCALED DIMENSIONS. ALL LENGTHS ARE PROVIDED IN METRES (m) AND ALL PIPE NOMINAL DIAMETERS ARE IN MILLIMETRES (mm), UNLESS MENTIONED OTHERWISE.
20. GEOTECHNICAL ENGINEER TO REVIEW UTILITY AND ROADWAY SUBGRADE AND DENSITY TESTING ON ENGINEERED FILLS PLACED AND COMPACTED IN THE ROADS AND RIGHT OF WAYS.
21. THE CONTRACTOR IS TO REVIEW THE GEOTECHNICAL REPORT FOR THE PROJECT AND DETERMINE THE DEWATERING MEASURES AS NECESSARY DURING TRENCHING OPERATIONS. DESIGN AND IMPLEMENTATION OF DEWATERING SYSTEM IS THE RESPONSIBILITY OF THE CONTRACTOR.
22. CONTRACTOR TO NOTIFY ONTC IMMEDIATELY IF CONTAMINATED SOIL IS DISCOVERED DURING ANY PART OF CONSTRUCTION AND PROCEED WITH MITIGATION MEASURES PER ONTC PROCEDURES AFTER OBTAINING ONTC APPROVAL.
23. CONTRACTOR SHALL PREPARE CONSTRUCTION EMERGENCY PLAN FOR APPROVAL BY ONTC.
24. THE SEQUENCE OF PIPE/SERVICE PLACEMENT AND EARTH EXCAVATION SHOULD GO FROM DEEPEST TO SHALLOWEST. IF AN ALTERNATE CONSTRUCTION METHODOLOGY IS CHOSEN, IT IS THEN THE CONTRACTOR'S RESPONSIBILITY THAT THE SHALLOWER INSTALLED PIPES/SERVICES ARE PROPERLY SUPPORTED BEFORE EXCAVATING FOR DEEPER PIPES/SERVICES.
25. THE DRAWINGS SHALL BE CONSIDERED TO SHOW THE GENERAL CHARACTER AND SCOPE OF THE WORK AND NOT THE EXACT DETAILS OF THE INSTALLATION. THE INSTALLATION SHALL BE COMPLETE WITH ALL ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIVE INSTALLATION.
26. ANY CONFLICT OR QUESTIONS THAT ARISE IN RELATION TO THE DESIGN DOCUMENTS DURING THE TENDER AND DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. IF THIS PROCEDURE IS NOT FOLLOWED, REROUTING AND MODIFICATION AS REQUIRED TO COMPLETE THE WORK SHALL BE RESPONSIBILITY OF THE CONTRACTOR.

CIVIL NOTES:

STORM AND SANITARY NOTES:

1. A MINIMUM OF 2 METRES OF COVER IS REQUIRED OVER EXTERIOR SANITARY AND STORM PIPING RESPECTIVELY DUE TO FROST DEPTH. PIPES WITH LESS THAN 2 METRE DEPTHS SHALL EMPLOY INSULATION AS NOTED IN THE DETAILS IN THIS SET. THE ENGINEER IS TO BE NOTIFIED OF ANY CHANGES PRIOR TO THE INSTALLATION AND OBTAIN THE ENGINEER APPROVAL FOR ANY DEVIATIONS.
2. ALL STORM AND SANITARY PIPING AND FITTINGS TO BE PVC. ALL PVC STORM AND SANITARY PIPING AND FITTINGS TO COMPLY WITH OPSS 1841. ALL PIPES TO BE BELL AND SPIGOT WITH SMOOTH WALLS AND TO BE WATERTIGHT (IPEX OR OTHER APPROVED EQUIVALENT). IF PIPES ARE BEING PLACED ABOVE FROST DEPTH THEN PRE-INSULATED URECON PIPES SHALL BE OBTAINED FROM GF PIPING SYSTEMS OR APPROVED EQUIVALENT.
3. ALL MANHOLES AND CATCH BASINS TO BE AS PER OPSS 1351 UNLESS INDICATED OTHERWISE. PRECAST CONCRETE MANHOLES WITH FLAT CAP TO BE AS PER OPSD 701.030 C/W MANHOLE COVER AS PER OPSD 401.020. PRECAST CONCRETE CATCH BASINS TO BE AS PER OPSD 705.010 WITH FRAME AND GRATE AS PER OPSD 400.010.
4. ALL CLEANOUTS TO BE 100mm N-12 DUAL WALL NYLOPLAST CLEANOUT AS PER ADS OR APPROVED EQUIVALENT.
5. DROP STRUCTURES ARE TO BE PROVIDED IN ALL CASES WHERE THE INVERT DIFFERENCE BETWEEN THE OUTLET AND THE INLET IS GREATER THAN 610mm.
6. ALL GEOTEXTILE CLOTHES MUST MEET REQUIREMENTS SETOUT IN OPSS PROV 1860 WITH GEOTEXTILE CLOTH BEING TERRAFIX 360R OR APPROVED EQUIVALENT UNLESS OTHERWISE STATED.
7. ALL MANHOLE LIDS, VALVE COVERS, CATCH BASINS RIMS, IN LINE DRAIN BASINS, AND LIDS OF ANY OTHER STRUCTURES TO BE ADJUSTED TO SUIT FINAL ROAD, SIDEWALK AND LANDSCAPING GRADES. SEE H375313-1000-271-0002 FOR THE OPSD REQUIREMENTS THAT MUST BE MET.
8. PROPOSED AND EXISTING STORM AND SANITARY UTILITY PIPES ARE TO MAINTAIN 2.5 METRES OF HORIZONTAL CLEARANCE FROM EXISTING OR PROPOSED WATERMAINS. CROSSINGS BETWEEN PROPOSED STORM UTILITY PIPES AND EXISTING/PROPOSED WATERMAINS MUST MAINTAIN A MINIMUM OF 0.5 METRE OF VERTICAL SEPARATION.
9. ALL PRE-FABRICATED TRENCH DRAINS TO BE ACO S100K OR S200K (AS PER H375313-1000-220-271-0002), LOAD CLASS F OR APPROVED EQUIVALENT. ALL PRE-FABRICATED CATCH BASINS TO BE ACO SK1-621D OR APPROVED EQUIVALENT.

CIVIL NOTES CONTINUED:

CIVIL TRENCHING, GRADING, AND EXCAVATION NOTES:

1. FOR TRENCH BEDDING, COVER, EMBEDMENT, & BACKFILL MATERIAL SEE DETAIL SHEET H375313-1000-220-260-0004 FOR MATERIAL SPECIFICATIONS.
2. CONTRACTOR SHOULD EMPLOY SHORING CAGES TO SUPPORT TRENCHING WORKS WHERE SPACE IS LIMITED. WHERE SPACE ALLOWS FOR SLOPED TRENCHING THE SLOPES SHOULD NOT BE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
3. CONTRACTOR SHOULD REFER TO ALL RELEVANT OPSS AND OPSD DRAWINGS REFER TO IN THIS SET FOR THE EXCAVATION OF EARTHWORKS.

FINISHED GRADE LAYOUT NOTES:

1. ALL FINISHED GRADE LAYOUT SHALL BE CONCRETE AND WILL COMPLY WITH THE REQUIREMENTS SET OUT ON ROAD DRAWING SHEETS.
2. ALL SUB STRUCTURE AGGREGATES BELOW THE FINISHED GRADE LAYOUT TO COMPLY WITH OPSS 1010.
3. ALL EXISTING PAVEMENTS DISTURBED DURING CONSTRUCTION NEED TO BE REINSTATED TO THE LIFT THICKNESS AS SHOWN ON THE DETAIL IN THIS SET OR TO THE EXISTING THICKNESS WHICHEVER IS MORE CONSERVATIVE. CONTRACTOR TO NOTIFY THE ENGINEER AND ONTC OF THE EXISTING PAVEMENT STRUCTURE THICKNESS PRIOR TO REINSTATEMENT WORKS.
4. ALL EXISTING PAVEMENTS DISTURBED DURING CONSTRUCTION NEED TO BE REINSTATED FOR TRAFFIC MARKINGS MATCHING THE EXISTING CONDITIONS OR BETTER.

DUST CONTROL AND CLEANUP NOTES:

1. USE ALL MEANS NECESSARY TO CONTROL DUST ON AND NEAR WORK INCLUDING ON AND NEAR BORROW AND DISPOSAL AREAS AND DURING TRANSPORTATION.
2. THOROUGHLY MOISTEN SURFACES AND/OR USE TARPAULINS.
3. DURING CONSTRUCTION AND AT THE COMPLETION OF THE CONTRACT, CLEAN ALL ROADS USED TO HAUL MATERIALS, OF MATERIAL DROPPED ON THEM.
4. AT THE END OF THE CONSTRUCTION, CONTRACTOR MUST REMOVE AND DISPOSE ALL DEBRIS AND WASTE AS PER ONTC PROCEDURES.
5. AT THE END OF CONSTRUCTION ALL NON-VEGETATED & NON-PAVED AREAS CONTRACTOR SHALL INSTALL EROSION & SEDIMENT CONTROL MEASURES SUCH AS MULCHING WHICH MEETS THE OPS VOLUME 5 SECTION 8 REQUIREMENTS.

WASTE MANAGEMENT NOTES:

1. A WASTE MANAGEMENT & DISPOSAL PLAN SHOULD BE PREPARED BY THE CONTRACTOR AND APPROVED BY ONTC.

WATER NOTES:

1. A MINIMUM OF 2 METRES OF COVER IS REQUIRED OVER ALL WATERMAINS DUE TO FROST DEPTH. THE ENGINEER IS TO BE NOTIFIED OF ANY CHANGES PRIOR TO THE INSTALLATION AND OBTAIN THE ENGINEER APPROVAL FOR ANY DEVIATIONS.

CIVIL DRAWINGS LIST

H375313-1000-220-251-0001	General Notes
H375313-1000-220-258-0001	Civil Removal & Demolition Plan
H375313-1000-220-260-0001	Erosion & Sediment Control Details
H375313-1000-220-260-0004	Trenching Details
H375313-1000-220-270-0001	Overall Site Plan
H375313-1000-220-271-0001	Proposed Water Service Plan, Profile, & Details
H375313-1000-220-271-0002	Wheel Storage Drainage Plan & Profile
H375313-1000-220-271-0003	Finished Grade Layout Plan & Profile
H375313-1000-220-271-0004	Grading Plan, Sections, & Details
H375313-1000-220-271-0006	Grading Lunch Room, Container, & Shelter Buildings
H375313-1000-220-271-0005	Proposed Sanitary System Plan & Profile
H375313-1000-220-272-0001	Proposed Buried Dry Services Plan
H375313-1000-220-272-0002	Buried Services Trenching Plan 1 of 2
H375313-1000-220-272-0003	Buried Services Trenching Plan 2 of 2
H375313-1000-220-272-0004	Erosion & Sediment Control Plan

SURVEY CONTROL POINTS (IN METRES)

CONTROL POINT NAME	GRID COORDINATES		ELEVATION
	NORTHING	EASTING	
22149 SPIKE	5128512.739	619161.889	201.140
20006 IRON BAR	5128245.754	619133.177	198.002
20009 IRON BAR	5128196.441	619010.889	197.705

LEGEND:

EXISTING

- EX. BUILDINGS
- EX. SEACAN
- EX. STOCKPILE AREA
- EX. CONCRETE AREA TO BE REMOVED
- EX. ROADWAY
- EX. RETAINING WALL
- EX. ASPHALT OUTLINE
- EX. CONCRETE OUTLINE
- EX. FENCE CENTERLINE
- EX. RAILWAY TRACK CENTERLINE
- EX. RAILWAY TRACKS
- EX. DITCH BOTTOM
- EX. COMPRESSED AIR LINE (ASSDUMED)
- EX. ELECTRICAL OVERHEAD POWERLINE CENTERLINE (ASSUMED)
- EX. SANITARY OIL CENTERLINE
- EX. SANITARY SEWER CENTERLINE (ASSUMED)
- EX. STORMWATER CENTERLINE
- EX. WATER MAIN CENTERLINE
- EX. STM CATCH BASIN
- EX. DITCH INLET
- EX. STM MANHOLE
- EX. SAN MANHOLE
- EX. HYDRO POLE
- EX. LIGHT STANDARD POLE
- EX. WATER MAIN VALVE
- EX. FIRE HYDRANT
- EX. BOLLARDS
- EXISTING SURFACE CONTOUR

PROPOSED

- PROP. CONCRETE SLAB
- PROP. SEACAN AND BUILDINGS
- PROP. RETAINING WALL
- PROP. CONSTRUCTION ACCESS PAD
- PROP. BURIED SERVICES TRENCHES
- PROP. TRENCHLESS PIPE INSTALLATION
- PROP. CONCRETE OUTLINE
- PROP. COMPRESSED AIR LINE (2"-Ø HDPE)
- PROP. UNDERGROUND POWER DUCT BANK
- PROP. SANITARY SEWER
- PROP.UNDERGROUND STM PIPE
- PROP. WATER MAIN CENTERLINE
- PROP. TRENCH DRAIN CENTERLINE
- PROP. TRACKS
- PROP. SILT FENCE
- FINISHED GRADE SLOPE & DIRECTION
- FINISHED GRADE POINT
- PROP. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM CATCH BASIN MAINTENANCE HOLE
- PROP. STM CLEANOUT
- PROP. SAN MANHOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE
- PROP. ELECTRICAL MANHOLE

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

REFERENCE DRAWINGS

DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
GENERAL NOTES

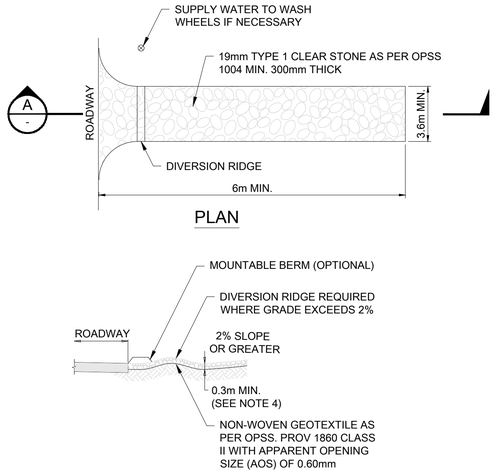
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DWG. No. H375313-1000-220-251-0001

REV C

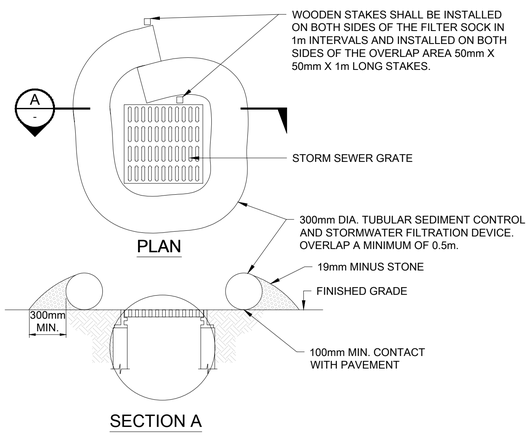
SHEET SIZE: A1

DWG. No. H375313-1000-220-260-0001



CONSTRUCTION ACCESS NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADS OUTSIDE THE CONSTRUCTION ZONE. THIS MAY REQUIRE TOP DRESSING, REPAIR AND / OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO EXITING THE CONSTRUCTION ZONE.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A STABILIZED AREA THAT DRAINS INTO AN APPROVED SEDIMENT CONTAINMENT SYSTEM.
4. STONE SIZE - USE 19mm TYPE 1 CLEAR STONE AS PER OPSS 1004, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT, FOR CONSTRUCTION ENTRANCE.
   -- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
   -- MAINTENANCE - THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OUTSIDE OF THE CONSTRUCTION ZONE MUST BE REMOVED IMMEDIATELY.



INLET PROTECTION NOTES:

1. TUBULAR SEDIMENT CONTROL AND STORM WATER FILTRATION DEVICES SHALL BE FILTREXX INLET SOXX OR EQUIVALENT.
2. PLACEMENT, REMOVAL, AND DISPOSAL FOR SEDIMENT CONTROL SOCKS SHALL BE AS PER MANUFACTURER'S SPECIFICATIONS.
3. WHEN INLET IS NOT AT LOW POINT, AND IS OFFSET FROM THE PAVEMENT OR GUTTER LINE, PROTECTION SHOULD BE SELECTED AND INSTALLED SO THAT FLOWS ARE NOT DIVERTED AROUND INLET. THIS PRACTICE INCLUDES SANDBAGS, COMPOST FILTER SOCKS, GEO-TUBES FILLED WITH BALLAST, AND MANUFACTURED SURFACE BARRIERS. PEA GRAVEL CAN ALSO BE USED IN CONJUNCTION WITH THESE PROTECTIONS TO IMPROVE PERFORMANCE.
4. THE DRAINAGE AREA SHOULD BE LIMITED TO 0.4ha AT THE DRAINAGE INLET. ALL PROTECTIONS WILL BE PLACED AT THE INLET PERIMETER OR BEYOND TO MAXIMIZE THE FLOW CAPACITY OF THE INLET. PROTECTIONS SHALL BE WEIGHTED, BRACED, TIED, OR OTHERWISE ANCHORED TO PREVENT MOVEMENT OR SHIFTING OF LOCATION ON PAVED SURFACES. TRAFFIC SAFETY CONES SHALL BE INTEGRATED WITH THE USE OF THIS PRACTICE. ALL PROTECTIONS SHOULD BE MARKED WITH TRAFFIC SAFETY CONES AS APPROPRIATE. STRUCTURE HEIGHT SHALL NOT CAUSE FLOODING OR BY-PASS FLOW THAT WOULD CAUSE ADDITIONAL EROSION. THE STRUCTURE SHOULD BE INSPECTED AFTER EVERY STORM EVENT. ANY SEDIMENT SHOULD BE REMOVED AND DISPOSED OF ON THE SITE. ANY BROKEN OR DAMAGED COMPONENTS SHOULD BE REPLACED. CHECK ALL MATERIAL FOR PROPER ANCHORING AND SECURE AS NECESSARY.
5. IF USING THE COMPOST FILTER SOCK, THE COMPOST IN FILL SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1% BY DRY WEIGHT, OF MANMADE FOREIGN MATTER. WHEN USING COMPOST FILTER SOCKS ADJACENT TO SURFACE WATER, THE COMPOST SHOULD HAVE LOW NUTRIENT VALUE.

1 - CONSTRUCTION ACCESS

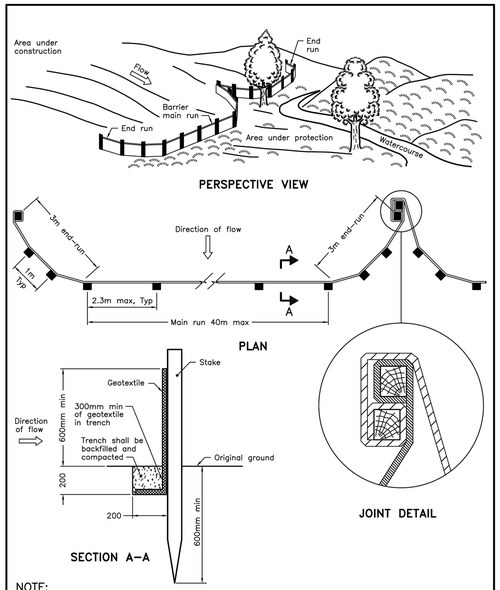
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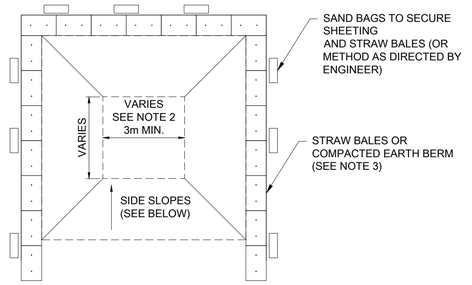
2 - INLET PROTECTION DETAIL

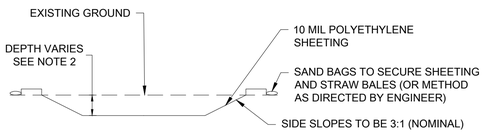
SCALE: 1:25

EROSION AND SEDIMENT CONTROL NOTES:

1. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON EROSION AND SEDIMENT CONTROL PLAN TO KEEP SILT AND/OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
2. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATED MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALL ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
3. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREAS.
4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
5. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND/OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES SHOULD MATCH THE EXISTING DITCH SLOPE.







CONCRETE WASHOUT AREAS NOTES:

1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED. ACTUAL LAYOUT SIZE TO BE FIELD DETERMINED.
2. LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) TO BE CONSISTENT WITH THE REQUIREMENTS BELOW.
   -- LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 30m FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE.
   -- SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, STRAW BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.
4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.
5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS,REGULATIONS, AND GUIDELINES.

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.

3 - CONCRETE WASHOUT AREAS

SCALE: 1:75

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-220-272-0004	EROSION & SEDIMENT CONTROL PLAN
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.P.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16

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HATCH

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

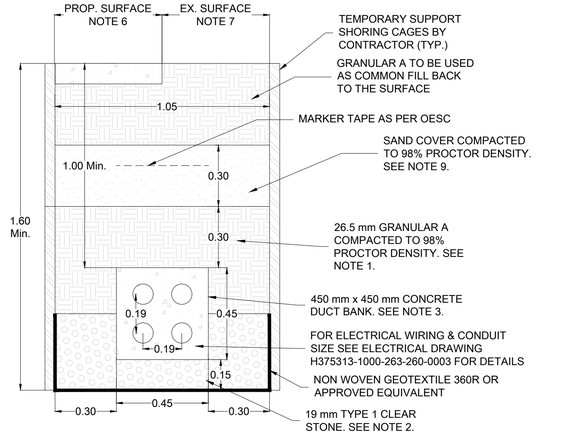
CIVIL
CIVIL & DRAINAGE
EROSION & SEDIMENT CONTROL DETAILS

SCALE: OR AS NOTED

DWG. No.: H375313-1000-220-260-0001

REV: C

SHEET SIZE: A1

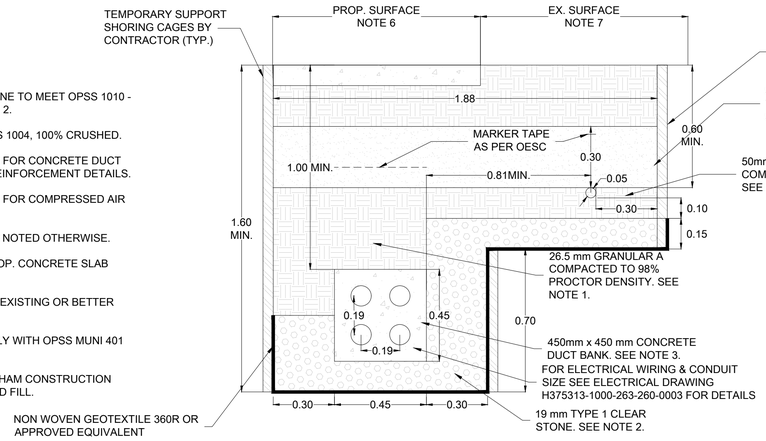


1 - TYPICAL ELECTRICAL DUCT BANK WITH 4 CONDUITS

SCALE: 1:15

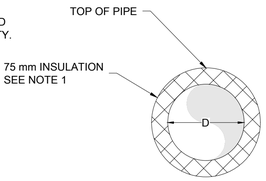
DETAIL 1 AND 2 NOTES:

1. 26.5 mm DIA. CRUSHER RUN LIMESTONE TO MEET OPSS 1010 - GRANULAR A SPECIFICATION - TABLE 2.
2. 19 mm TYPE 1 CLEAR STONE TO OPSS 1004, 100% CRUSHED.
3. REFER TO H375313-1000-263-260-0003 FOR CONCRETE DUCT BANK AND CONCRETE DUCT BANK REINFORCEMENT DETAILS.
4. REFER TO H375313-1000-240-251-0001 FOR COMPRESSED AIR PIPELINE DETAILS.
5. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
6. SEE STRUCTURAL DRAWING FOR PROP. CONCRETE SLAB DESIGN.
7. EX. SURFACE TO BE REINSTATED TO EXISTING OR BETTER CONDITION.
8. ALL BACKFILL PLACEMENT TO COMPLY WITH OPSS MUNI 401 & 501.
9. SAND TO BE AS PER REGION OF DURHAM CONSTRUCTION SPECIFICATION SECTION 02315 - SAND FILL.



2 - TYPICAL ELECTRICAL DUCT BANK WITH 4 CONDUITS & COMPRESSED AIR EARTH EXCAVATION

SCALE: 1:15

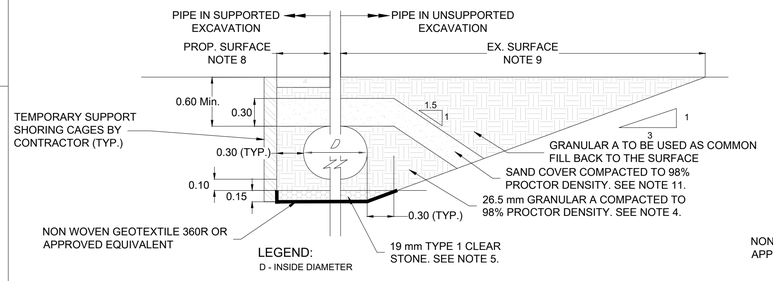


DETAIL 5 NOTES:

1. PRE-INSULATED URECON PIPES SHALL BE OBTAINED FROM GF PIPING SYSTEMS OR APPROVED EQUIVALENT.

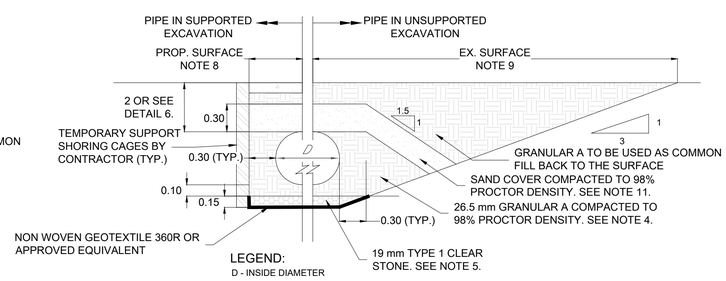
5 - PIPE INSULATION DETAIL

SCALE: NTS



3 - TYPICAL FLEXIBLE PIPE EXCAVATION

SCALE: NTS



4 - TYPICAL RIGID PIPE EXCAVATION

SCALE: NTS

DETAIL 3 AND 4 NOTES:

1. HEIGHT OF FILL IS MEASURED FROM THE FINISHED SURFACE TO TOP OF PIPE.
2. THE PIPE BEDDING SHALL BE COMPACTED AND SHAPED TO RECEIVE THE BOTTOM OF THE PIPE.
3. CONDITION OF EXCAVATION IS SYMMETRICAL ABOUT CENTERLINE OF PIPE
   - 3.1. GRANULAR MATERIAL PLACED IN THE HAUNCH AREA SHALL BE COMPACTED PRIOR TO PLACING AND COMPACTING THE REMAINDER OF THE EMBEDMENT MATERIAL
   - 3.2. SOIL TYPE AS DEFINED IN THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
   - 3.3. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
4. 26.5mm DIA. CRUSHER RUN LIMESTONE TO MEET OPSS 1010 - GRANULAR A SPECIFICATION - TABLE 2.
5. 19mm TYPE 1 CLEAR STONE TO OPSS 1004, 100% CRUSHED.
6. REFER TO H375313-1000-240-251-0001 FOR COMPRESSED AIR PIPELINE DETAILS.
7. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
8. SEE STRUCTURAL DRAWING FOR PROP. CONCRETE SLAB DESIGN.
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11. SAND TO BE AS PER REGION OF DURHAM CONSTRUCTION SPECIFICATION SECTION 02315 - SAND FILL.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-220-272-0001	PROPOSED COMPOSITE SITE SERVICES PLAN
H375313-1000-220-272-0003	BURIED SERVICES TRENCHING PLAN 2 OF 2
H375313-1000-220-272-0002	BURIED SERVICES TRENCHING PLAN 1 OF 2
H375313-1000-220-271-0002	OVERALL DRAINAGE PLAN & PROFILE
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
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DESIGN COORD.	L. CAMPBELL		2025/10/06
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LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
TRENCHING DETAILS

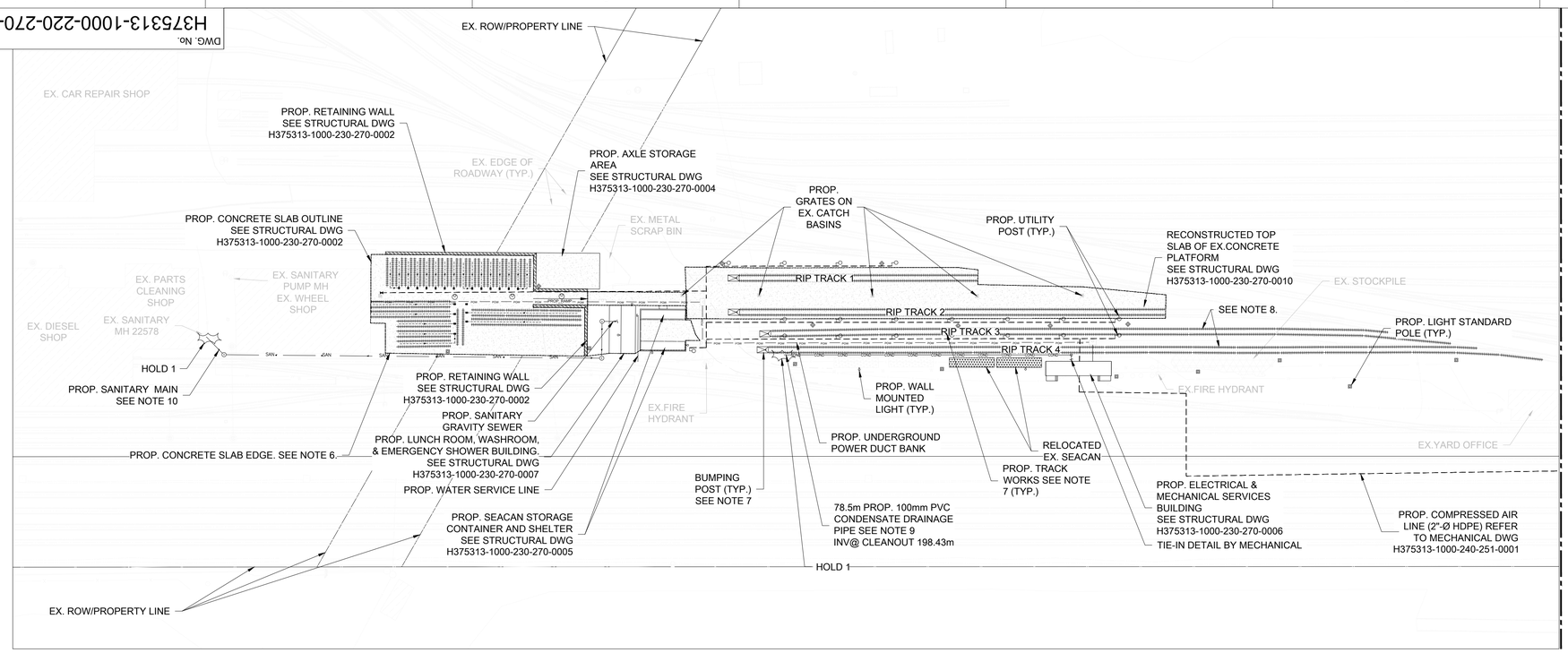
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DWG. No. H375313-1000-220-260-0004

REV: C

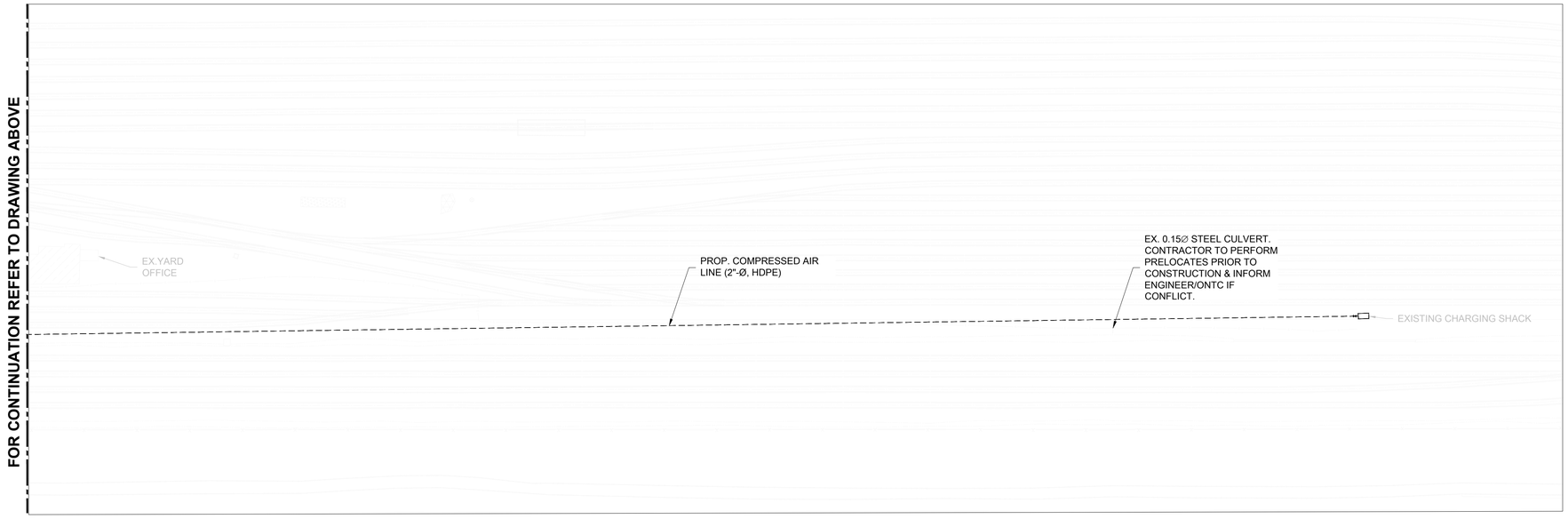
SHEET SIZE: A1

DWG. No. H375313-1000-220-270-0001



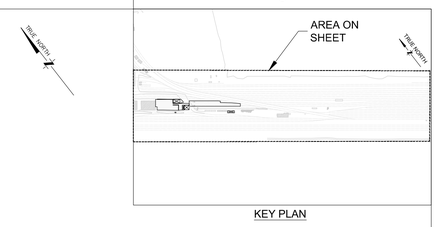
A OVERALL SITE PLAN

SCALE: 1:750



B OVERALL SITE PLAN

SCALE: 1:750



KEY PLAN

LEGEND:

- PROP. CONCRETE SLAB
- PROP. SEACAN, BUILDINGS AND AXLE RACKS
- PROP. CONCRETE PAVED ROADWAY
- PROP. RETAINING WALL
- PROP. COMPRESSED AIR LINE (2"-Ø HDPE)
- PROP. UNDERGROUND POWER DUCT BANK
- PROP. TRENCH DRAIN CENTERLINE
- PROP. TRACKS
- PROP. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM CATCH BASIN MAINTENANCE HOLE
- PROP. STM CLEANOUT
- PROP. SAN MANHOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE
- RELOCATED/PROP. BUMPING POST
- PROP. UTILITY POST
- PROP. ELECTRICAL MAINTENANCE HOLE

NOTES:

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2. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON THE SURVEY PERFORMED BETWEEN JULY 24 AND NOVEMBER 16, 2023 BY TULLOCH GEOMATICS. INC.
3. COORDINATE SYSTEM SHOWN HERE IS UTM ZONE 17N, NAD83 (CSRS) (2010.0).
4. ELEVATIONS SHOWN HERE ARE GEODETIC. REFER TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28), AND DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. ALL ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE.
5. SEE DRAWING H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. EX. CONCRETE SLAB EDGE TO BE VERIFIED BY THE CONTRACTOR DURING CONSTRUCTION.
7. FOR ALL PROPOSED WORKS ON TRACKS 1 TO 4 & FOR PROPOSED/ RELOCATED BUMPING POSTS REFER TO TRACK DRAWING H375313-1000-224-251-0001.
8. NO GRADING OR DRAINAGE ASSESSMENT COMPLETED FOR RIP TRACK 3 & 4. SEE STRUCTURAL DRAWINGS FOR GRADING & DRAINAGE ASSESSMENT IN THE RIP TRACK 1 & 2 AREA.
9. CONDENSATE PIPE TO BE 100mm PRE-INSULATED URECON PVC PIPE (INSULATION THICKNESS OF 50mm). CONDENSATE TIE-IN TO BE COORDINATED WITH ONTC FOR THE PROPOSED WORKS BEING COMPLETED UNDER THE "DRAINAGE & OGS STUDY" PROJECT.
10. SANITARY TIE-IN TO BE COORDINATED WITH ONTC FOR THE PROPOSED WORKS BEING COMPLETED UNDER THE "DRAINAGE & OGS STUDY" PROJECT.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16
B	ISSUED FOR 40% CLIENT REVIEW	R.P.	M.B.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/03/24

REVISIONS

DRAWING No.	DRAWING TITLE
H375313-1000-220-272-0001	PROPOSED COMPOSITE SITE SERVICES PLAN
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
OVERALL SITE PLAN

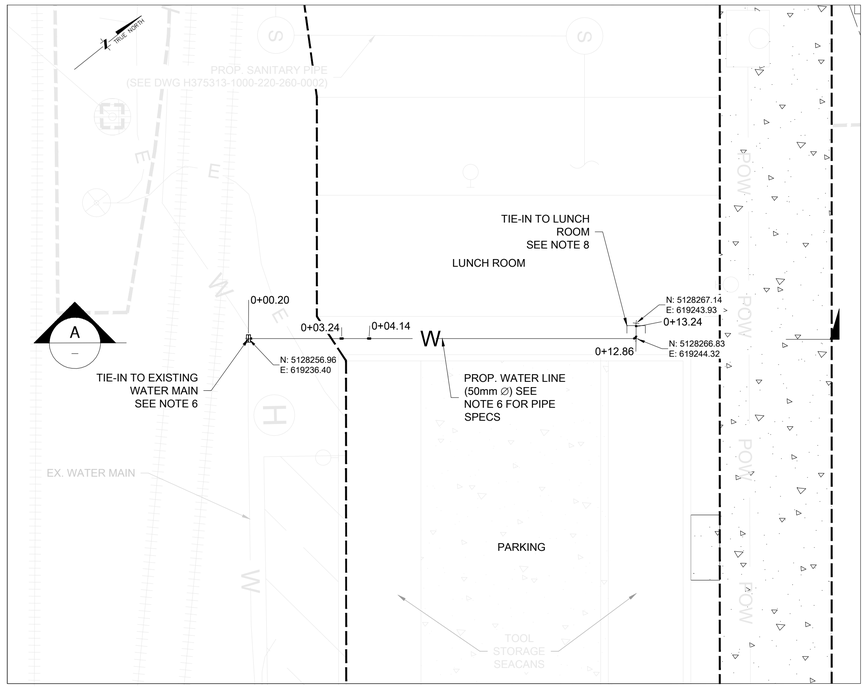
SCALE 1:750 OR AS NOTED

DWG. No. H375313-1000-220-270-0001

REV E

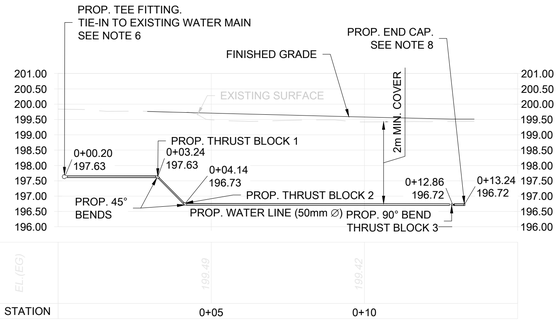
SHEET SIZE: A1

DWG. No. H375313-1000-220-271-0001



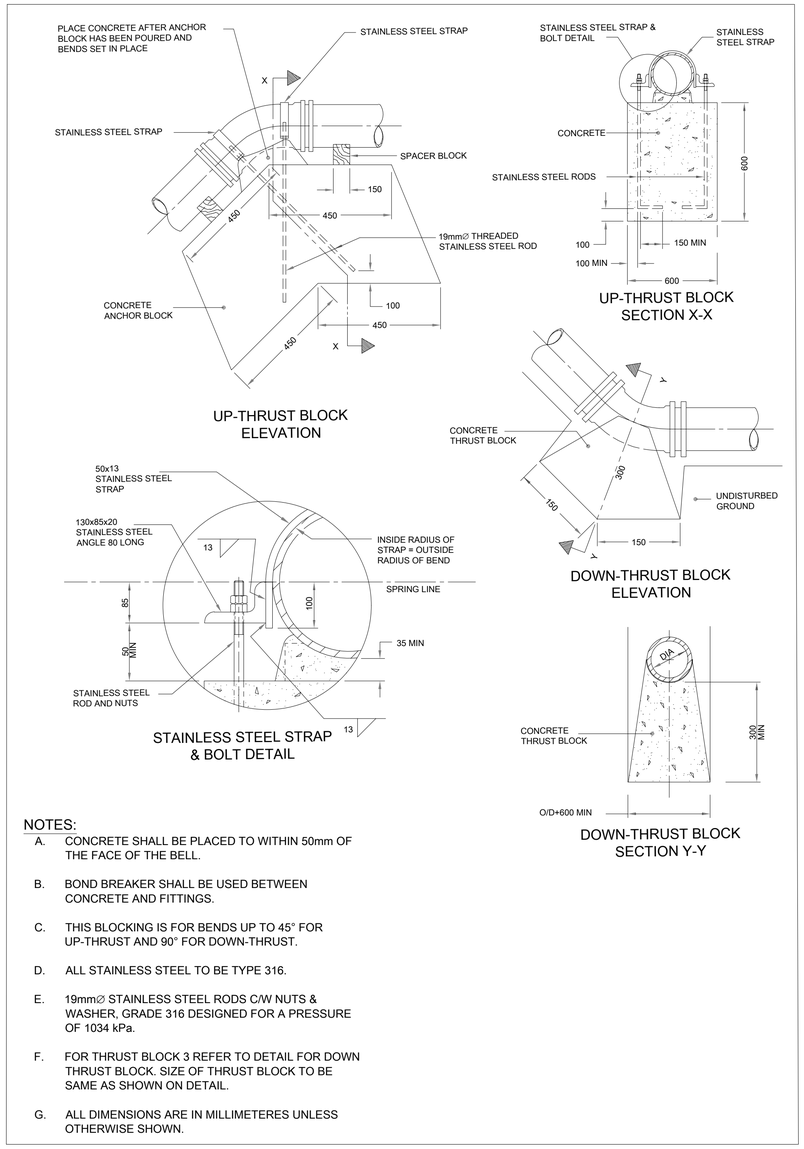
A – WATER SERVICE LINE TO LUNCH ROOM

SCALE: H 1:100



B – WATER SERVICE LINE TO LUNCH ROOM PROFILE

SCALE: H 1:100
V 1:100



NOTES:

A. CONCRETE SHALL BE PLACED TO WITHIN 50mm OF THE FACE OF THE BELL.

B. BOND BREAKER SHALL BE USED BETWEEN CONCRETE AND FITTINGS.

C. THIS BLOCKING IS FOR BENDS UP TO 45° FOR UP-THRUST AND 90° FOR DOWN-THRUST.

D. ALL STAINLESS STEEL TO BE TYPE 316.

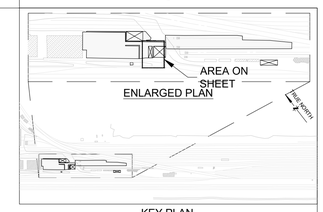
E. 19mm∅ STAINLESS STEEL RODS C/W NUTS & WASHER, GRADE 316 DESIGNED FOR A PRESSURE OF 1034 kPa.

F. FOR THRUST BLOCK 3 REFER TO DETAIL FOR DOWN THRUST BLOCK. SIZE OF THRUST BLOCK TO BE SAME AS SHOWN ON DETAIL.

G. ALL DIMENSIONS ARE IN MILLIMETERES UNLESS OTHERWISE SHOWN.

1 – THRUST BLOCK DETAIL

SCALE: NTS



KEY PLAN
SCALE 1:25000

LEGEND:

- PROP. CONCRETE OUTLINE
- EX. WATER LINE
- PROP. WATER LINE
- SAN MANHOLE
- ELECTRICAL MANHOLE

NOTES:

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4. ELEVATIONS SHOWN HERE ARE GEODETIC, REFER TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28), AND DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. ALL ELEVATIONS ARE IN METRES UNLESS MENTIONED OTHERWISE.
5. REFER DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. REFER TO MECHANICAL DRAWING H375313-1000-240-260-0002 FOR WATER TIE-IN DETAIL AND PIPE SPECIFICATIONS.
7. FOR PROPOSED WATER LINE EXCAVATION DETAIL, SEE DETAIL 4 ON H375313-1000-220-260-0004.
8. DESIGN AND EXECUTION OF THE TIE-IN TO BUILDING SHALL BE COMPLETED BY THE BUILDING CONTRACTOR.
9. ALL CONCRETE USED IN THRUST BLOCKS TO BE OF NON-REINFORCED 20 MPa STRENGTH, BEST COMMERCIAL.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-240-260-0002	ELEC/MECH SERVICES BUILDING SECTION AND DETAILS
H375313-1000-220-260-0004	TRENCHING DETAILS
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/31

REVISIONS

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HATCH

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DESIGNER	S. DHANANI		2025/10/06
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DESIGN COORD.	L. CAMPBELL		2025/10/06
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LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
PROPOSED WATER SERVICE PLAN, PROFILE & DETAILS

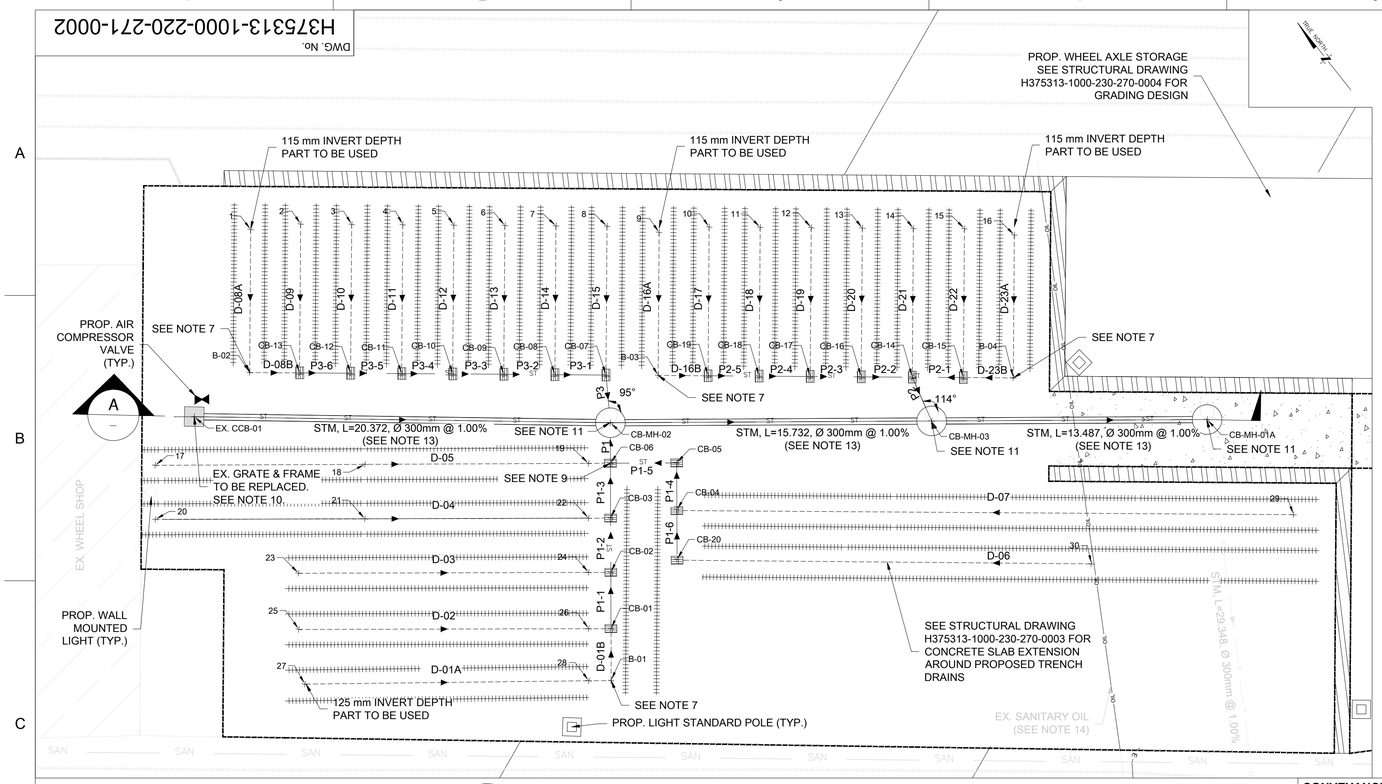
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-220-271-0001

REV C

SHEET SIZE: A1

DWG. No. H375313-1000-220-271-0002

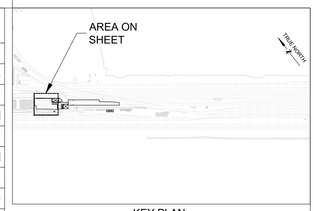


POINTS	NORTHING	EASTING	RIM EL.	INV. EL.
1	5128320.22	619200.15	200.09	199.98
2	5128318.91	619202.24	200.14	200.04
3	5128317.35	619204.19	200.14	200.04
4	5128315.79	619206.14	200.15	200.05
5	5128314.22	619208.09	200.15	200.05
6	5128312.66	619210.05	200.13	200.03
7	5128311.10	619212.00	200.10	200.00
8	5128309.53	619213.95	200.10	200.00
9	5128307.71	619215.76	200.08	199.96
10	5128306.41	619217.85	200.06	199.96
11	5128304.84	619219.80	200.04	199.94
12	5128303.28	619221.75	200.02	199.92
13	5128301.71	619223.70	199.98	199.88
14	5128300.15	619225.65	199.97	199.87
15	5128298.59	619227.60	199.97	199.87
16	5128296.83	619229.33	199.96	199.84
17	5128314.06	619189.33	200.14	200.04
18	5128307.73	619197.42	200.13	199.99
19	5128300.98	619206.04	200.12	199.93
20	5128311.98	619187.70	200.12	200.02
21	5128305.64	619195.76	200.11	199.97
22	5128298.88	619204.38	200.10	199.92
23	5128305.56	619191.56	200.10	200.00
24	5128296.79	619202.73	200.06	199.93
25	5128303.40	619189.86	200.10	200.00
26	5128294.62	619201.03	200.07	199.93
27	5128301.11	619188.44	200.10	199.98
28	5128292.62	619199.45	200.07	199.91
29	5128277.61	619231.57	200.11	200.01
30	5128281.86	619222.30	200.09	199.89

TRENCH DRAIN	LENGTH	SLOPE (%)
D-01A	15.00	0.50
D-01B	2.25	0.50
D-02	15.00	0.50
D-03	15.00	0.50
D-04	22.00	0.50
D-05	22.00	0.50
D-06 (1)	20.00	0.50
D-07	30.00	0.50
D-08A	7.00	0.50
D-08B	2.25	0.50
D-09	7.00	0.50
D-10	7.00	0.50
D-11	7.00	0.50
D-12	7.00	0.50
D-13	7.00	0.50
D-14	7.00	0.50
D-15	7.00	0.50
D-16A	7.00	0.50
D-16B	2.25	0.50
D-17	7.00	0.50
D-18	7.00	0.50
D-19	7.00	0.50
D-20	7.00	0.50
D-21	7.00	0.50
D-22	7.00	0.50
D-23A	7.00	0.50
D-23B	2.25	0.50

(1) TRENCH DRAIN IS ACO S200K, LOAD CLASS F OR APPROVED EQUIVALENT

PIPE NAME	LENGTH	SLOPE (%)
P1	1.78	1.07
P1-1	2.36	1.08
P1-2	2.27	1.53
P1-3	2.29	3.61
P1-4	1.94	1.05
P1-5	2.67	3.71
P1-6	2.04	1.05
P2	2.03	0.79
P2-1	2.11	0.97
P2-2	2.11	1.77
P2-3	2.11	1.66
P2-4	2.11	0.95
P2-5	2.11	1.18
P3	2.06	1.59
P3-1	2.11	1.63
P3-2	2.11	1.14
P3-3	2.11	0.81
P3-4	2.11	1.39
P3-5	2.11	0.87
P3-6	2.11	0.97



KEY PLAN
SCALE 1:25000

LEGEND:

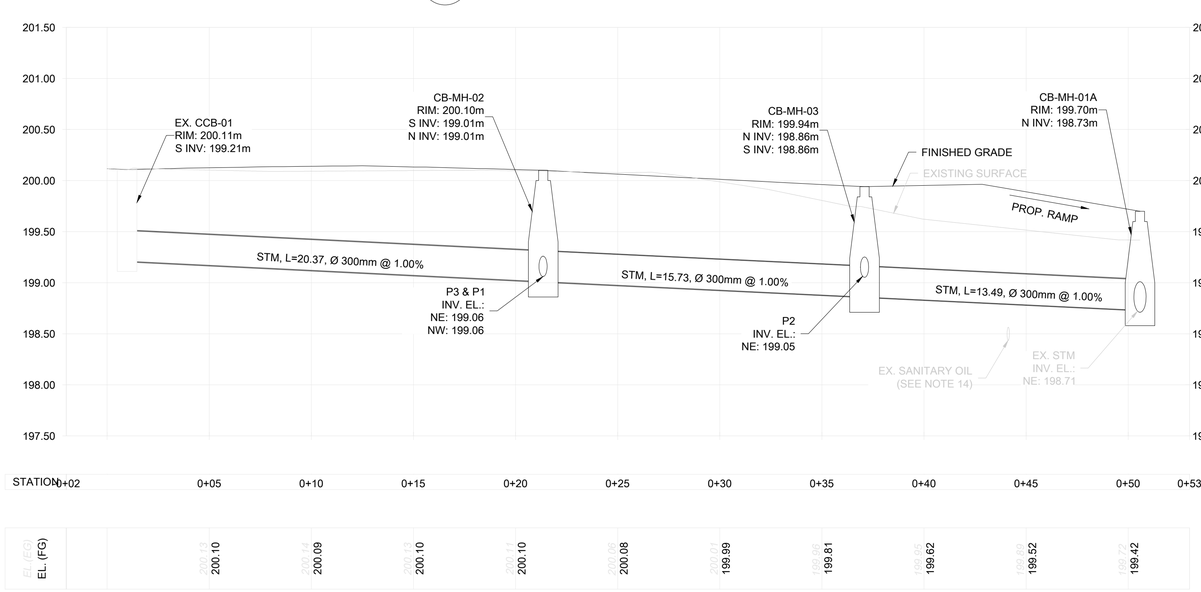
- FINISHED GRADE POINT
- PROP. AXLE RACKS
- PROP. RETAINING WALL
- PROP. CONCRETE OUTLINE
- PROP. TRENCH DRAIN CENTERLINE
- EX. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM CATCH BASIN MAINTENANCE HOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE

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5. REFER DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. ALL PRE-FABRICATED TRENCH DRAINS TO BE ACO S100K, LOAD CLASS F, OR EQUIVALENT UNLESS NOTED OTHERWISE. ALL TRENCH DRAINS TO START WITH THE SHALLOWEST DEPTH AVAILABLE AND TO FOLLOW 0.5% SLOPE UNLESS NOTED OTHERWISE.
7. 0.5 METRE ACO S100K TRENCH DRAIN CHANNEL PART TO BE USED IN AREAS INDICATED.
8. ALL PRE-FABRICATED CATCH BASINS TO BE ACO SK1-621D OR EQUIVALENT. ALL ACO SK1-621D CATCH BASINS REQUIRE ADDITIONAL 12" RISER PART UNLESS NOTED OTHERWISE.
9. 14" ACO SK1-621D CATCH BASIN RISER PART TO BE USED IN AREAS INDICATED.
10. PRECAST CONCRETE CATCH BASINS TO BE AS PER OPSD 705.010 WITH FRAME AND GRATE AS PER OPSD 400.010. EX. CCB01 NEW FRAME AND GRATE TO BE PROVIDED AND STRUCTURE TO BE RELOCATED TO THE NEW COORDINATES SHOWN.
11. PRECAST CONCRETE CATCH BASIN MANHOLES WITH FLAT CAP TO BE AS PER OPSD 701.030 WITH MANHOLE COVER AS PER OPSD 400.070.
12. ALL STORM PIPES TO BE 200 mm PVC, SDR35 COMPLYING WITH OPSS MUNI 1841. IF PIPES ARE PLACED ABOVE FROST DEPTH, THEN PIPES SHALL BE PRE-INSULATED PVC SEWER PIPE DR 35 WITH 75 mm INSULATION THICKNESS FROM GF URECON PIPING SYSTEMS OR APPROVED EQUIVALENT.
13. EX. 150 mm CONCRETE STORM MAIN TO BE UPGRADED TO 300 mm DIAMETER PVC TO SUPPORT DRAINAGE DESIGN.
14. EXISTING SANITARY OIL CROSSING WITH UNKNOWN SIZE AND INVERT. CONTRACTOR TO CONDUCT PRE-LOCATES PRIOR TO CONSTRUCTION AND INFORM THE ENGINEER AND ONTC IF ANY DISCREPANCIES/CONFLICTS.
15. FOR ALL VENDOR SUPPLIED STRUCTURES, PIPES, CHAMBERS, AND CATCHBASINS CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ENGINEER APPROVAL.

A - OVERALL DRAINAGE PLAN

SCALE: H 1:150



B - MAIN DRAINAGE LINE PROFILE

SCALE: H 1:150
V 1:30

CONVEYANCE STRUCTURE	NORTHING	EASTING	RIM EL.	INV. EL.	STRUCTURE BOTTOM
CB-MH-01A	5128283.89	619231.13	199.70	N: 198.73, W: 198.71	198.51
EX.CCB-01	5128314.74	619192.30	200.10	S: 199.21	(1) 198.46
CB-MH-02	5128301.88	619208.11	200.09	N: 199.01, S: 199.01, NE: 199.06, W: 199.06	198.81
CB-MH-03	5128292.19	619220.50	199.94	N: 198.86, NE: 199.36, S: 198.86	198.66
CB-01	5128293.95	619201.88	200.09	N: 199.93, E: 199.22, W: 199.89	199.05
CB-02	5128296.12	619203.58	200.09	N: 199.93, E: 199.19, W: 199.19	199.05
CB-03	5128298.21	619205.22	200.11	N: 199.91, E: 199.16, W: 199.16	199.07
CB-04	5128296.49	619208.00	200.10	S: 199.86, E: 199.20, W: 199.20	199.06
CB-05	5128298.32	619209.44	200.10	N: 199.18, W: 199.18	199.06
CB-06	5128300.32	619206.88	200.13	N: 199.93, S: 199.08, E: 199.08, W: 199.08	199.04
CB-07	5128303.85	619209.39	200.09	N: 199.09, SW: 199.09, E: 199.96	199.05
CB-08	5128305.41	619207.44	200.10	N: 199.12, S: 199.12, E: 199.97	199.06
CB-09	5128306.97	619205.49	200.12	N: 199.15, S: 199.15, E: 199.99	199.09
CB-10	5128308.54	619203.54	200.14	N: 199.17, S: 199.17, E: 200.01	199.10
CB-11	5128310.10	619201.59	200.15	N: 199.19, S: 199.19, E: 200.01	199.11
CB-12	5128311.66	619199.64	200.14	N: 199.21, S: 199.21, E: 200.01	199.10
CB-13	5128313.23	619197.68	200.13	N: 199.93, S: 199.23, E: 200.00	199.09
CB-14	5128294.46	619221.09	199.97	N: 199.07, S: 199.07, SW: 199.07, E: 199.84	198.93
CB-15	5128292.90	619223.04	199.96	N: 199.09, S: 199.80, E: 199.83	198.92
CB-16	5128296.03	619219.14	199.98	N: 199.11, S: 199.11, E: 199.85	198.94
CB-17	5128297.59	619217.19	200.02	N: 199.14, S: 199.14, E: 199.88	198.98
CB-18	5128299.16	619215.24	200.04	N: 199.16, S: 199.16, E: 199.90	199.00
CB-19	5128300.72	619213.29	200.06	N: 199.91, S: 199.19, E: 199.93	199.02
CB-20	5128294.61	619206.53	200.09	S: 199.79, E: 199.22	199.05
B-01	5128291.95	619200.31	200.10	N: 199.90, E: 199.90	199.88
B-02	5128314.76	619195.78	200.09	S: 199.94, E: 199.94	199.92
B-03	5128302.25	619211.38	200.08	S: 199.93, E: 199.93	199.90
B-04	5128291.37	619224.95	199.96	N: 199.81, E: 199.81	199.78

(1) ASSUMED

DRAWING No.	DRAWING TITLE
H375313-1000-220-271-0004	GRADING PLAN, SECTIONS & DETAILS
H375313-1000-220-260-0004	TRENCHING DETAILS
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16

REVISIONS

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#13428] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

HATCH

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
WHEEL STORAGE DRAINAGE PLAN AND PROFILE

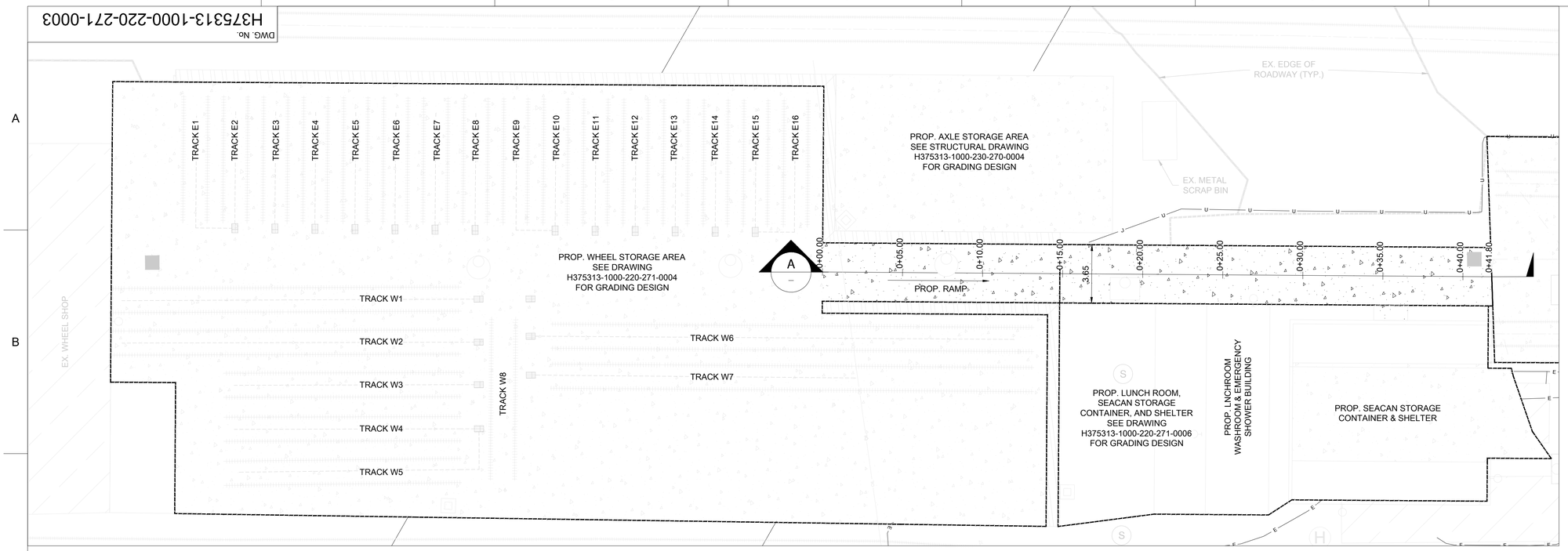
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NOT FOR CONSTRUCTION

ISSUED FOR TENDER

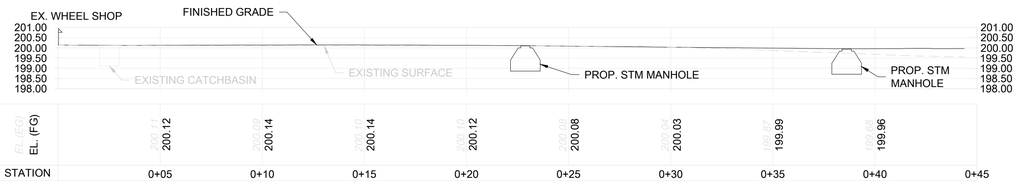
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DWG. No. H375313-1000-220-271-0003



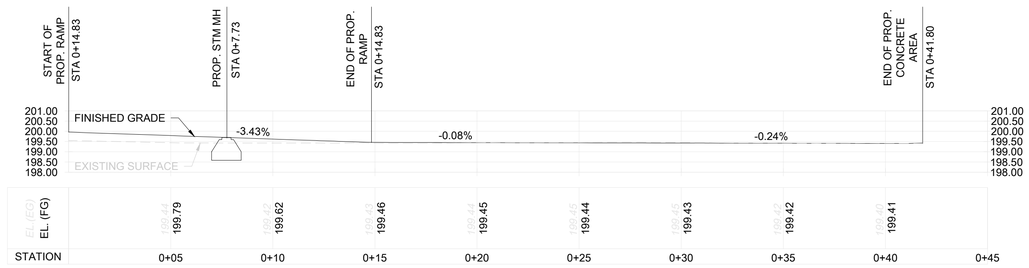
A
-
PROPOSED FINISHED GRADE LAYOUT PLAN

SCALE: H 1:150



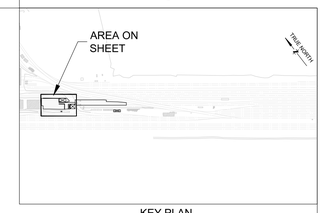
3
0004
SECTION DETAIL 3

SCALE: H 1:150
V 1:150



B
-
FINISHED GRADE PROFILE

SCALE: H 1:150
V 1:150



LEGEND:

- PROP. AXLE RACKS
- PROP. CONCRETE SLAB
- PROP. RETAINING WALL
- PROP. TRACKS
- PROP. TRENCH DRAIN CENTERLINE
- EX. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM MAINTENANCE HOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE

NOTES:

1. ALL DIMENSIONS SHOWN HERE ARE IN METRES UNLESS OTHERWISE SHOWN.
2. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON THE SURVEY PERFORMED BETWEEN JULY 24 AND NOVEMBER 16, 2023 BY TULLOCH GEOMATICS INC.
3. COORDINATE SYSTEM SHOWN HERE IS UTM ZONE 17N, NAD83 (CSRS) (2010.0).
4. ELEVATIONS SHOWN HERE ARE GEODETIC, ARE REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28) AND ARE DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. ALL ELEVATIONS ARE IN METRES UNLESS MENTIONED OTHERWISE
5. REFER DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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REFERENCE DRAWINGS		REG. PROFESSIONAL
DRAWING No.	DRAWING TITLE	
H375313-1000-220-271-0004	GRADING PLAN, SECTIONS, & DETAILS	
H375313-1000-220-251-0001	GENERAL NOTES	

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16

HATCH

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
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PROJ. MANAGER	H. SINGH		2025/10/06

Ontario Northland

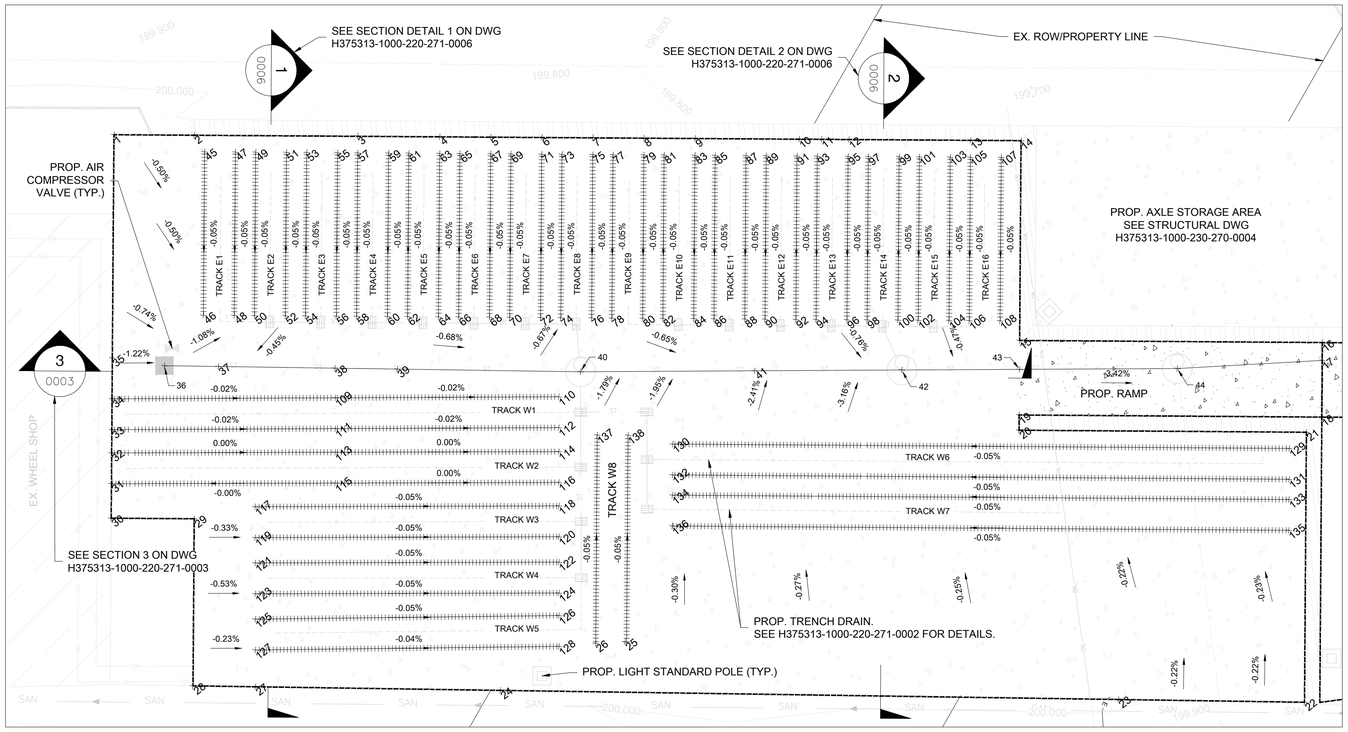
ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
FINISHED GRADE LAYOUT PLAN, PROFILE & PROFILE

SCALE	DWG. No.	REV
NTS OR AS NOTED	H375313-1000-220-271-0003	C

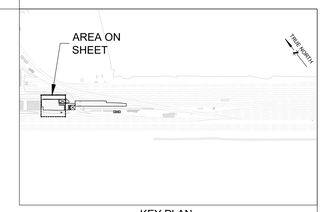
SHEET SIZE: A1

DWG. No. H375313-1000-220-271-0004



A — GRADING PLAN (WHEEL STORAGE AREA)

SCALE: H 1:150



KEY PLAN

LEGEND:

- EXISTING SURFACE CONTOUR
- FINISHED GRADE SLOPE & DIRECTION
- FINISHED GRADE POINT
- PROP. AXLE RACKS
- PROP. CONCRETE SLAB
- PROP. RETAINING WALL
- PROP. TRACKS
- PROP. TRENCH DRAIN CENTERLINE
- EX. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM MAINTENANCE HOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE

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5. SEE DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. THE CONTRACTOR IS RESPONSIBLE FOR ACCURATELY LOCATING AND PROTECTING ALL EXISTING SERVICES AND UTILITIES WITHIN AND ADJACENT TO THE WORK AREA. ANY DISCREPANCY BETWEEN THE EXISTING SURVEY INFORMATION AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER.
7. ANY MODIFICATION TO THE EXISTING SERVICES REQUIRED DUE TO CONFLICT WITH THE WORK SHALL BE APPROVED BY THE ENGINEER. THE CONTRATOR IS RESPONSIBLE FOR SOIL/WATER MANAGEMENT INCLUDING DE-WATERING, ACCESSIBILITY, EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.
8. CONTRACTOR TO PROVIDE DRAWINGS FOR CONCRETE ELEVATIONS.
9. REFER DWG SHEET H375313-1000-230-270-0003 FOR PROP. RETAINING WALL DETAILS.

POINT	NORTHING	EASTING	ELEVATION
1	5128325.15	619197.38	200.15
2	5128322.70	619200.44	200.14
3	5128317.70	619206.71	200.16
4	5128315.19	619209.84	200.15
5	5128313.61	619211.78	200.13
6	5128312.06	619213.74	200.11
7	5128310.50	619215.69	200.10
8	5128308.93	619217.64	200.09
9	5128307.36	619219.59	200.07
10	5128304.18	619223.57	200.03
11	5128303.49	619224.43	199.99
12	5128302.65	619225.47	199.99
13	5128298.93	619230.11	199.97
14	5128297.39	619232.04	199.98
15	5128289.75	619225.93	199.96
16	5128280.48	619237.49	199.46
17	5128279.80	619236.95	199.46
18*	5128277.64	619235.21	199.46
19	5128286.91	619223.64	199.96
20	5128286.32	619223.18	200.09
21	5128277.52	619234.16	200.12
22	5128267.21	619225.89	200.13
23	5128272.96	619218.83	200.13
24	5128292.08	619195.35	200.12
25	5128290.15	619201.62	200.11

POINT	NORTHING	EASTING	ELEVATION
26	5128290.98	619200.44	200.11
27	5128299.65	619186.06	200.12
28*	5128301.58	619183.69	200.09
29*	5128307.96	619188.80	200.12
30*	5128310.50	619185.63	200.12
31*	5128311.82	619186.69	200.13
32*	5128313.00	619187.63	200.13
33*	5128313.88	619188.34	200.15
34*	5128315.06	619189.29	200.15
35*	5128316.62	619190.54	200.13
36	5128314.74	619192.30	200.11
37	5128313.07	619194.35	200.12
38	5128309.47	619198.78	200.14
39	5128307.55	619201.14	200.14
40	5128301.88	619208.11	200.10
41	5128296.63	619214.83	200.01
42	5128292.19	619220.50	199.94
43	5128288.65	619225.05	199.96
44	5128283.89	619231.13	199.70
45	5128321.74	619200.34	200.10
46	5128315.50	619195.33	200.10
47	5128320.80	619201.51	200.10
48	5128314.55	619196.51	200.10
49	5128320.18	619202.29	200.14
50	5128313.93	619197.28	200.14

POINT	NORTHING	EASTING	ELEVATION
51	5128319.23	619203.46	200.14
52	5128312.99	619198.46	200.14
53	5128318.61	619204.24	200.15
54	5128312.37	619199.23	200.14
55	5128317.67	619205.42	200.15
56	5128311.43	619200.41	200.14
57	5128317.05	619206.19	200.15
58	5128310.81	619201.18	200.15
59	5128316.10	619207.37	200.15
60	5128309.86	619202.36	200.15
61	5128315.49	619208.14	200.15
62	5128309.24	619203.13	200.15
63	5128314.54	619209.32	200.15
64	5128308.30	619204.31	200.15
65	5128313.92	619210.09	200.13
66	5128307.68	619205.09	200.13
67	5128312.98	619211.27	200.13
68	5128306.74	619206.26	200.13
69	5128312.36	619212.04	200.11
70	5128306.12	619207.04	200.11
71	5128311.41	619213.22	200.11
72	5128305.17	619208.21	200.11
73	5128310.79	619213.99	200.10
74	5128304.55	619208.99	200.10
75	5128309.85	619215.17	200.10

POINT	NORTHING	EASTING	ELEVATION
76	5128303.61	619210.16	200.10
77	5128309.23	619215.94	200.08
78	5128302.99	619210.94	200.08
79	5128308.29	619217.12	200.08
80	5128302.04	619212.12	200.08
81	5128307.67	619217.89	200.07
82	5128301.42	619212.89	200.07
83	5128306.72	619219.07	200.07
84	5128300.48	619214.07	200.07
85	5128306.10	619219.84	200.04
86	5128299.86	619214.84	200.04
87	5128305.16	619221.02	200.04
88	5128298.92	619216.02	200.04
89	5128304.54	619221.79	200.02
90	5128298.30	619216.79	200.02
91	5128303.60	619222.97	200.02
92	5128297.35	619217.97	200.02
93	5128302.98	619223.74	199.99
94	5128296.73	619218.74	199.99
95	5128302.03	619224.92	199.99
96	5128295.79	619219.92	199.99
97	5128301.41	619225.69	199.98
98	5128295.17	619220.69	199.97
99	5128300.47	619226.87	199.98
100	5128294.23	619221.87	199.97

POINT	NORTHING	EASTING	ELEVATION
101	5128299.85	619227.64	199.97
102	5128293.61	619222.64	199.97
103	5128298.90	619228.82	199.97
104	5128292.66	619223.82	199.97
105	5128298.28	619229.60	199.97
106	5128292.04	619224.59	199.96
107	5128297.34	619230.77	199.97
108	5128291.10	619225.77	199.96
109	5128308.32	619197.90	200.15
110	5128301.58	619206.51	200.14
111	5128307.14	619196.96	200.15
112	5128300.39	619205.57	200.14
113	5128306.23	619196.24	200.13
114	5128299.47	619204.85	200.13
115	5128305.05	619195.30	200.13
116	5128298.29	619203.91	200.13
117	5128306.57	619191.51	200.10
118	5128297.38	619203.20	200.10
119	5128305.38	619190.57	200.10
120	5128296.20	619202.27	200.10
121	5128304.41	619189.81	200.10
122	5128295.22	619201.50	200.10
123	5128303.22	619188.88	200.10
124	5128294.03	619200.56	200.10
125	5128302.25	619188.11	200.12

POINT	NORTHING	EASTING	ELEVATION
126	5128293.17	619199.88	200.11
127	5128301.06	619187.17	200.12
128	5128291.98	619198.95	200.11
129	5128277.42	619233.01	200.12
130	5128296.30	619209.46	200.10
131	5128276.24	619232.07	200.12
132	5128295.12	619208.51	200.10
133	5128275.47	619231.45	200.11
134	5128294.35	619207.89	200.10
135	5128274.29	619230.50	200.11
136	5128293.17	619206.95	200.10
137	5128298.95	619206.83	200.10
138	5128298.00	619208.01	200.10

* MEETS AT EXISTING SURFACE ELEVATIONS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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PROJ. MANAGER	H. SINGH		2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-220-271-0003	FINISHED GRADE LAYOUT PLAN & PROFILE
H375313-1000-220-271-0006	GRADING LUNCHROOM, CONTAINER, & SHELTER BUILDINGS
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
WHEEL STORAGE GRADING PLAN

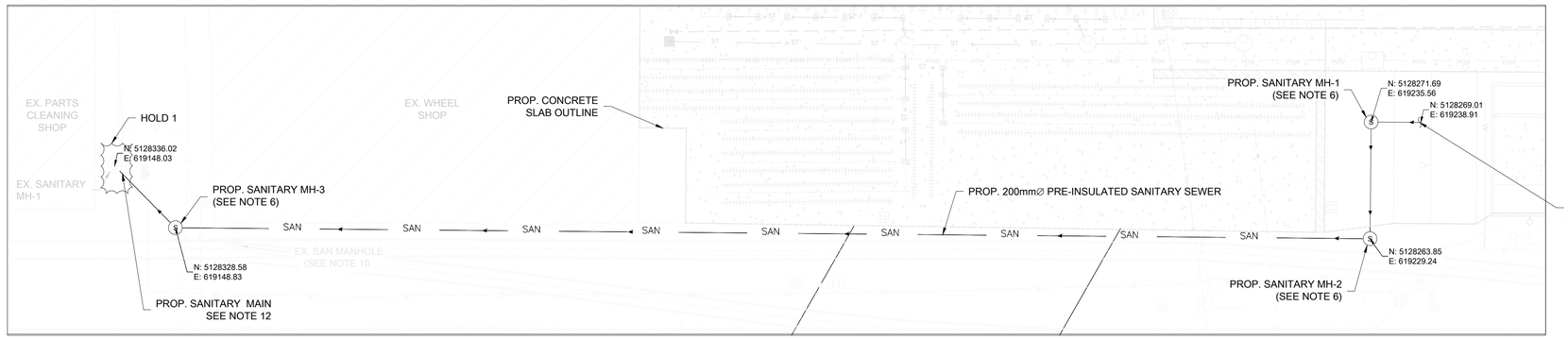
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-220-271-0004

REV C

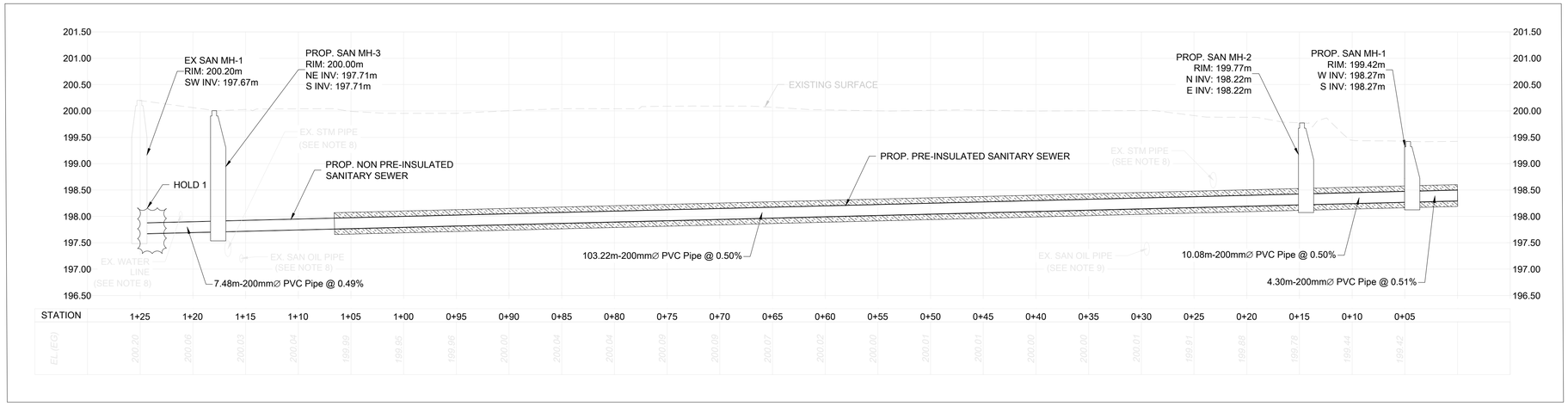
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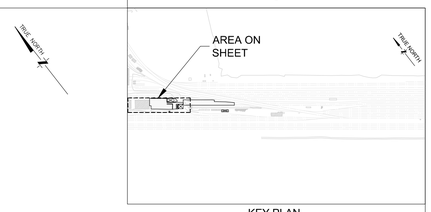
A - PROPOSED SANITARY SYSTEM PLAN

SCALE: 1:150



B - PROPOSED SANITARY SYSTEM PROFILE

SCALE: H 1:150
V 1:50



KEY PLAN

LEGEND:

- PROP. CONCRETE SLAB
- PROP. STM CONCRETE CATCH BASIN
- PROP. SAN MANHOLE
- PROP. SANITARY SEWER
- PROP. STM ACO CATCH BASIN
- PROP. ELECTRICAL MANHOLE
- PROP. STM PIPE
- PROP. STM CATCH BASIN MAINTENANCE HOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE

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5. SANITARY PIPES ARE PRE-INSULATED PVC SEWER PIPE DR 35 WITH 75 mm INSULATION THICKNESS AS PER GF URECON PIPING SYSTEMS OR APPROVED EQUIVALENT. REFER TO DETAIL 5 ON SHEET H375313-1000-220-260-0004.
6. PRECAST CONCRETE MANHOLE WITH FLAT CAP TO BE AS PER OPSD 701.030 WITH MANHOLE COVER AS PER OPSD 401.020. BENCHING AND PIPE OPENINGS TO BE AS PER OPSD 701.021.
7. FOR PROPOSED SANITARY LINE EXCAVATION DETAIL SEE DETAIL 4 ON H375313-1000-220-260-0004.
8. EXISTING CROSSINGS ARE ASSUMED. CONTRACTOR TO CONDUCT PRE-LOCATES PRIOR TO CONSTRUCTION AND INFORM ENGINEER AND ONTC INCASE OF DISCREPANCIES/CONFLICTS.
9. EXISTING SANITARY OIL CROSSING WITH UNKNOWN SIZE AND INVERT. CONTRACTOR TO CONDUCT PRE-LOCATES PRIOR TO CONSTRUCTION AND INFORM THE ENGINEER AND ONTC IF ANY DISCREPANCIES/CONFLICTS.
10. EXISTING SANITARY MANHOLE FOUND DURING SUE INVESTIGATION BY 4SIGHT UTILITY ENGINEERS ON AUGUST 8, 2025. LOCATION TO BE CONFIRMED.
11. EX. SANITARY SYSTEM APPEARS TO BE UNDERSIZED PER THE LATEST SUE REPORT BY 4SIGHT ON AUGUST 8, 2025. DESIGN TO BE FINALIZED WITH ONTC.
12. SANITARY TIE-IN TO BE COORDINATED WITH ONTC FOR THE PROPOSED WORKS BEING COMPLETED UNDER THE "DRAINAGE & OGS STUDY" PROJECT.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT SUBMISSION	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/31

REVISIONS

DRAWING No.	DRAWING TITLE
H375313-1000-220-260-0004	TRENCHING DETAILS
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

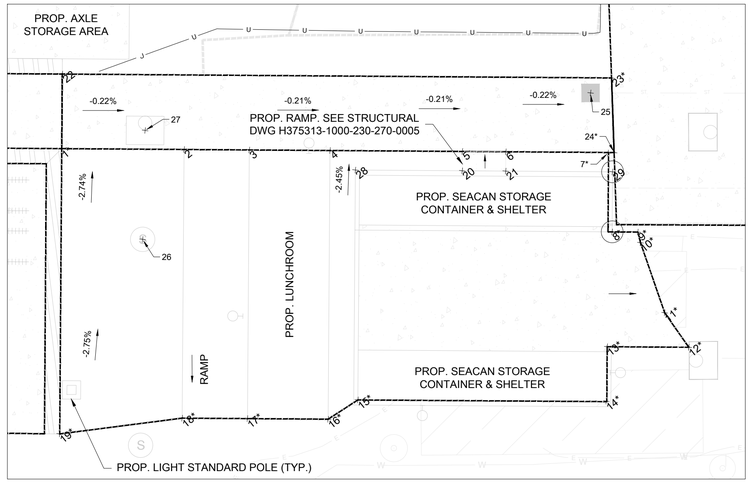
ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
PROPOSED SANITARY SYSTEM PLAN & PROFILE

SCALE	DWG. No.	REV
1:150 OR AS NOTED	H375313-1000-220-271-0005	C

SHEET SIZE: A1

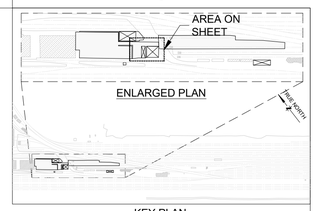
DWG. No. H375313-1000-220-271-0006



POINT	NORTHING	EASTING	ELEVATION
1*	5128277.64	619235.21	199.456
2	5128273.89	619239.88	199.451
3	5128271.89	619242.38	199.449
4	5128269.42	619245.46	199.445
5	5128265.36	619250.52	199.440
6	5128264.03	619252.18	199.438
7*	5128260.88	619256.07	199.435
8*	5128257.73	619253.83	199.453
9*	5128256.94	619254.82	199.457
10*	5128256.45	619254.60	199.463
11*	5128253.03	619253.40	199.461
12*	5128250.97	619253.28	199.478
13*	5128253.46	619250.16	199.475
14*	5128251.40	619248.47	199.514
15*	5128258.99	619238.96	199.743

POINT	NORTHING	EASTING	ELEVATION
16*	5128259.16	619237.24	199.782
17*	5128261.63	619234.15	199.806
18*	5128263.63	619231.66	199.802
19*	5128266.74	619226.48	199.839
20	5128264.62	619249.93	199.457
21	5128263.29	619251.59	199.447
22	5128280.48	619237.49	199.456
23*	5128263.66	619258.48	199.411
24*	5128260.71	619256.32	199.434
25	5128263.72	619257.22	199.388
26	5128271.69	619235.56	199.573
27	5128275.80	619238.96	199.450
28	5128267.90	619245.85	199.468
29	5128260.02	619255.67	199.448

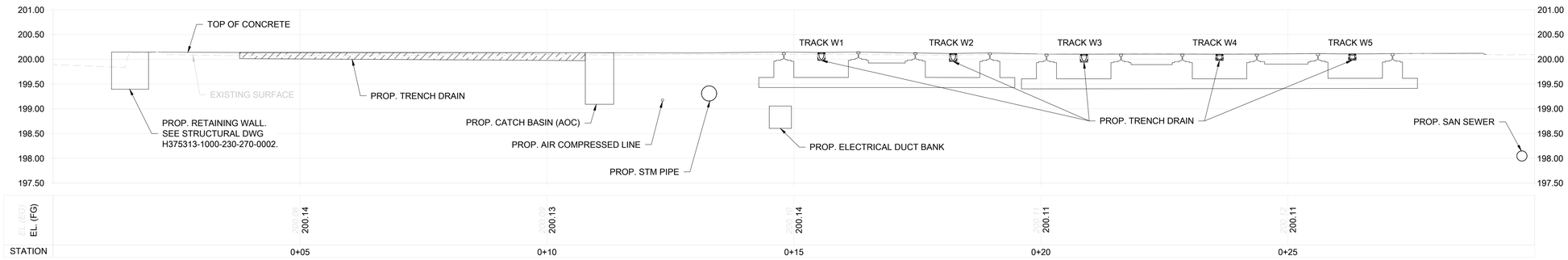
* MEETS AT EXISTING SURFACE ELEVATIONS



KEY PLAN

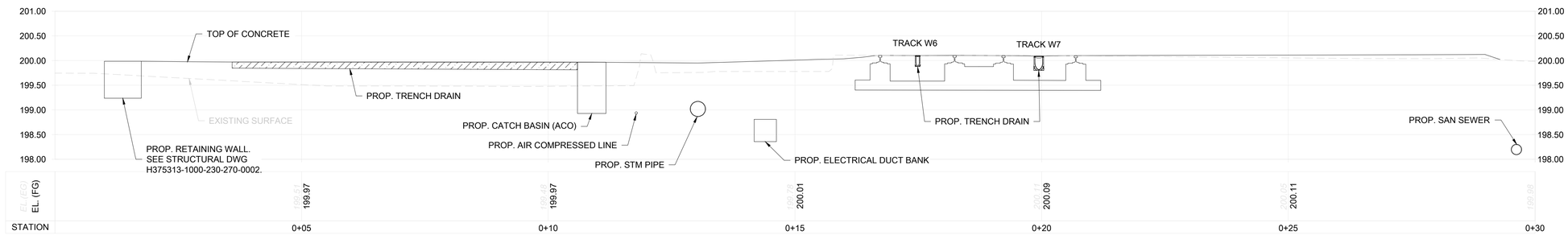
A - GRADING PLAN (LUNCHROOM, WASHROOM, EMERGENCY SHOWER BUILDING, SEACAN STORAGE CONTAINER & SHELTER AREA)

SCALE: 1:150



1 / 0004 SECTION DETAIL 1

SCALE: H 1:50
V 1:50



2 / 0004 SECTION DETAIL 2

SCALE: H 1:50
V 1:50

LEGEND:

- EXISTING SURFACE CONTOUR (199.600)
- FINISHED GRADE SLOPE & DIRECTION (-2.65%)
- FINISHED GRADE POINT (+14)
- PROP. AXLE RACKS
- PROP. CONCRETE SLAB
- PROP. RETAINING WALL
- PROP. TRACKS
- PROP. TRENCH DRAIN CENTERLINE
- EX. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. CATCH BASIN MAINTENANCE HOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE

NOTES:

1. ALL DIMENSIONS SHOWN HERE ARE IN METRES UNLESS OTHERWISE SHOWN.
2. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON THE SURVEY PERFORMED BETWEEN JULY 24 AND NOVEMBER 16, 2023 BY TULLOCH GEOMATICS INC.
3. COORDINATE SYSTEM SHOWN HERE IS UTM ZONE 17N, NAD83 (CSRS) (2010.0).
4. ELEVATIONS SHOWN HERE ARE GEODETIC, ARE REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28) AND ARE DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. ALL ELEVATIONS ARE IN METRES UNLESS MENTIONED OTHERWISE.
5. SEE DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. THE CONTRACTOR IS RESPONSIBLE FOR ACCURATELY LOCATING AND PROTECTING ALL EXISTING SERVICES AND UTILITIES WITHIN AND ADJACENT TO THE WORK AREA. ANY DISCREPANCY BETWEEN THE EXISTING SURVEY INFORMATION AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER.
7. ANY MODIFICATION TO THE EXISTING SERVICES REQUIRED DUE TO CONFLICT WITH THE WORK SHALL BE APPROVED BY THE ENGINEER. THE CONTRATOR IS RESPONSIBLE FOR SOIL-WATER MANAGEMENT INCLUDING DE-WATERING, ACCESSIBILITY, EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.
8. CONTRACTOR TO PROVIDE DRAWINGS FOR CONCRETE ELEVATIONS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

REFERENCE DRAWINGS		REG. PROFESSIONAL
DRAWING No.	DRAWING TITLE	
H375313-1000-220-271-0003	FINISHED GRADE LAYOUT PLAN & PROFILE	
H375313-1000-220-271-0004	WHEEL STORAGE GRADING PLAN	
H375313-1000-220-251-0001	GENERAL NOTES	

REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	M.B.	R.R.	2025/07/25

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HATCH

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI	Campbell, Lee	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

Ontario Northland

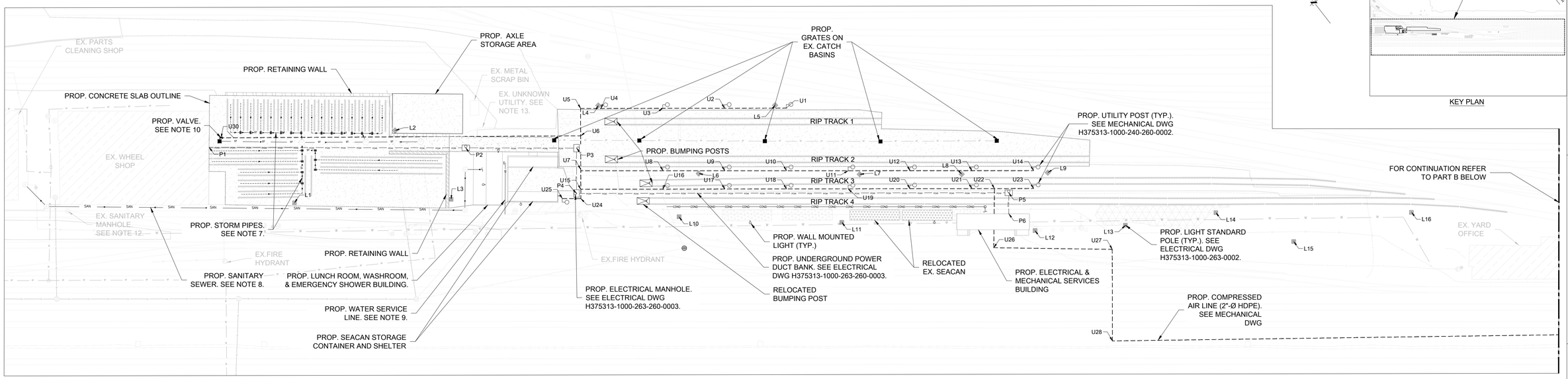
ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
GRADING LUNCHROOM, CONTAINER, & SHELTER BUILDINGS

SCALE	DWG. No.	REV
OR AS NOTED	H375313-1000-220-271-0006	C

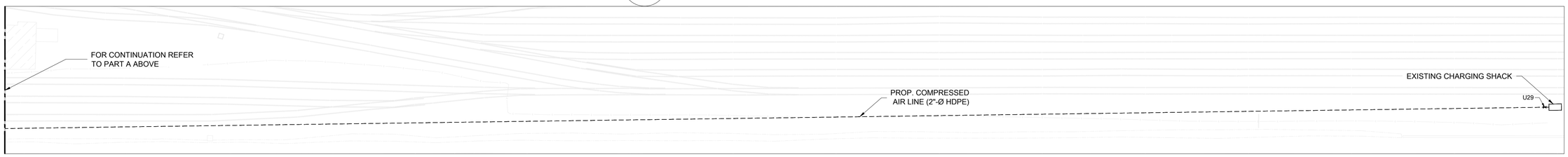
SHEET SIZE: A1

DWG. No. H375313-1000-220-272-0001



A OVERALL SERVICES PLAN

SCALE: 1:500



B OVERALL SERVICES PLAN

SCALE: 1:500

SETTING OUT TABLE			
POINT	NORTHING	EASTING	NOTE
L1	5128291.36	619197.40	
L2	5128289.96	619227.95	
L3	5128268.07	619228.26	
L4	5128263.74	619271.10	
L5	5128236.73	619305.37	
L6	5128235.21	619280.13	
L7	5128210.43	619311.19	
L8	5128194.85	619330.93	
L9	5128181.98	619347.85	
L10	5128229.84	619269.71	
L11	5128203.85	619300.39	
L12	5128172.71	619336.52	
L13	5128159.91	619354.86	
L14	5128148.52	619374.30	
L15	5128131.02	619384.92	

SETTING OUT TABLE			
POINT	NORTHING	EASTING	NOTE
L16	5128118.66	619412.22	
P1	5128315.16	619189.36	
P2	5128275.84	619238.97	ELECTRICAL MANHOLE
P3	5128258.78	619260.38	ELECTRICAL MANHOLE
P4	5128250.02	619253.44	ELECTRICAL MANHOLE
P5	5128184.08	619337.20	ELECTRICAL MANHOLE
P6	5128179.99	619334.00	
U1	5128234.47	619307.09	UTILITY POST
U2	5128243.89	619295.12	UTILITY POST
U3	5128253.32	619283.14	UTILITY POST
U4	5128262.74	619271.16	UTILITY POST
U5	5128265.85	619267.21	
U6	5128260.55	619263.04	
U7	5128254.04	619257.92	
U8	5128241.23	619273.63	UTILITY POST

SETTING OUT TABLE			
POINT	NORTHING	EASTING	NOTE
U9	5128231.79	619285.59	UTILITY POST
U10	5128222.34	619297.55	UTILITY POST
U11	5128212.90	619309.51	UTILITY POST
U12	5128203.45	619321.47	UTILITY POST
U13	5128194.01	619333.43	UTILITY POST
U14	5128184.56	619345.38	UTILITY POST
U15	5128250.19	619254.89	
U16	5128237.66	619270.80	UTILITY POST
U17	5128228.23	619282.78	UTILITY POST
U18	5128218.80	619294.75	UTILITY POST
U19	5128209.37	619306.73	UTILITY POST
U20	5128199.94	619318.70	UTILITY POST
U21	5128190.52	619330.67	UTILITY POST
U22	5128187.04	619335.08	
U23	5128181.09	619342.65	UTILITY POST

SETTING OUT TABLE			
POINT	NORTHING	EASTING	NOTE
U24	5128248.39	619253.47	
U25	5128251.21	619249.89	UTILITY POST
U26	5128175.71	619325.90	
U27	5128157.26	619348.59	
U28	5128139.51	619334.61	
U29	5127854.18	619706.19	PROPOSED VALVE
U30	5128315.17	619193.12	PROPOSED VALVE

L#: LIGHT POSTS
P#: POWER/ELECTRICAL MANHOLE SETTING OUT
U#: UTILITY POSTS/COMPRESSED AIR LINE SETTING OUT

LEGEND:

- PROP. CONCRETE SLAB
- PROP. BUILDINGS
- PROP. COMPRESSED AIR LINE (2"-Ø HDPE)
- POW — PROP. UNDERGROUND POWER DUCT BANK
- SAN — PROP. SAN SEWER
- ST — PROP. STM LINE
- W — PROP. WATER LINE
- PROP. TRENCH DRAIN CENTERLINE
- PROP. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM CATCH BASIN MAINTENANCE HOLE
- PROP. SAN MANHOLE
- PROP. ELECTRICAL MAINTENANCE HOLE
- PROP. UTILITY POST
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE

NOTES:

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5. SEE DRAWING H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. EX. CONCRETE SLAB EDGE TO BE VERIFIED BY THE CONTRACTOR DURING CONSTRUCTION.
7. REFER TO DRAWING H375313-1000-220-271-0002 FOR DRAINAGE PLAN AND PROFILE.
8. REFER TO DRAWING H375313-1000-220-271-0005 FOR SANITARY SERVICE PLAN AND PROFILE.
9. REFER TO DRAWING H375313-1000-220-271-0001 FOR WATER LINE PLAN AND PROFILE. FOR TIE-IN DETAIL REFER TO DRAWING H375313-1000-240-260-0002.
10. CONTRACTOR TO PRE-LOCATE THE EXACT LOCATION OF EX. VALVE NEAR THE EX. WHEELSHOP AND INFORM ONTC AND ENGINEER INCASE OF DISCREPANCY.
11. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR PIPE SPECIFICATIONS AND ELECTRICAL MANHOLE INSTALLATION DETAILS.
12. EXISTING SANITARY MANHOLE FOUND DURING SUE INVESTIGATION BY 4SIGHT UTILITY ENGINEERS ON AUGUST 8, 2025. LOCATION TO BE CONFIRMED.
13. EXISTING UNKNOWN UTILITY FOUND DURING SUE INVESTIGATION BY 4SIGHT UTILITY ENGINEERS ON AUGUST 8, 2025. CONTRACTOR TO CONDUCT PRE-LOCATES PRIOR TO CONSTRUCTION AND INFORM THE ENGINEER AND ONTC IF ANY DISCREPANCIES/CONFLICTS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

REFERENCE DRAWINGS	
DRAWING No.	DRAWING TITLE
H375313-1000-220-272-0003	PROPOSED SITE EXCAVATION & LAYOUT PLAN 2 OF 2
H375313-1000-220-272-0002	PROPOSED SITE EXCAVATION & LAYOUT PLAN 1 OF 2
H375313-1000-220-260-0004	TRENCHING DETAILS
H375313-1000-220-271-0005	PROPOSED SANITARY SYSTEM PLAN & PROFILE
H375313-1000-220-271-0002	OVERALL DRAINAGE PLAN & PROFILE
H375313-1000-220-271-0001	PROPOSED WATER SERVICE PLAN, PROFILE & DETAILS
H375313-1000-220-270-0001	OVERALL SITE PLAN
H375313-1000-251-0001	GENERAL NOTES

REG. PROFESSIONAL

REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/31

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HATCH

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

Ontario Northland

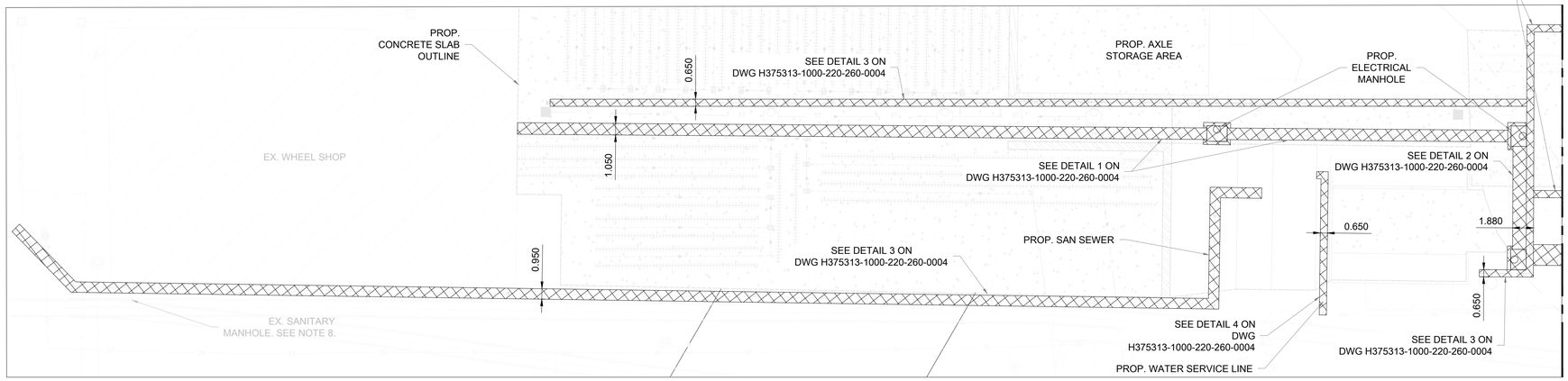
ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
PROPOSED BURIED DRY SERVICES PLAN

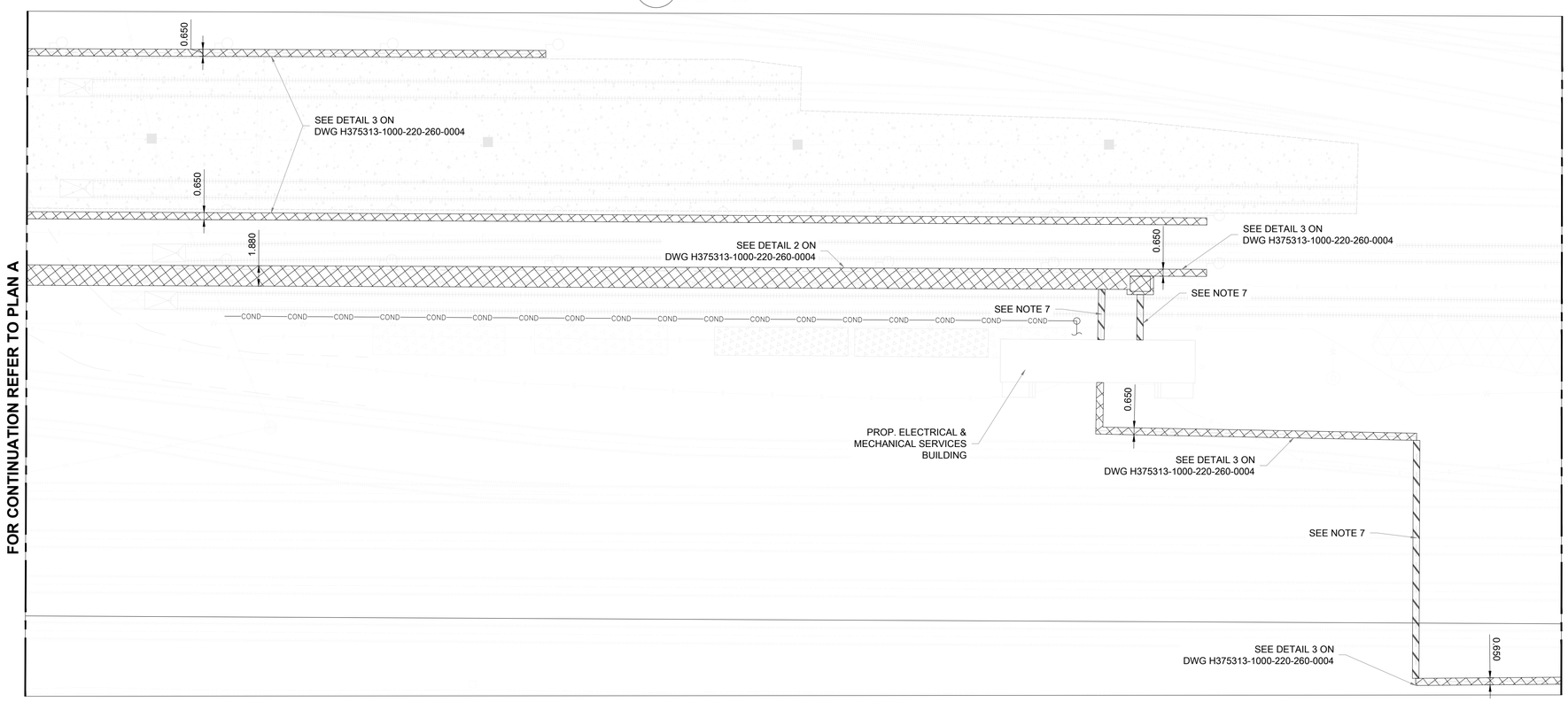
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1:500 OR AS NOTED	H375313-1000-220-272-0001	C

SHEET SIZE: A1

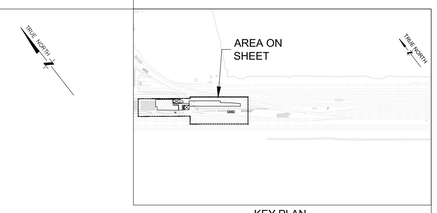
DWG. No. H375313-1000-220-272-0002



A BURIED SERVICES TRENCHING
SCALE: 1:250



B BURIED SERVICES TRENCHING
SCALE: 1:250



KEY PLAN

LEGEND:

- PROP. CONCRETE AREA
- PROP. TRACKS
- PROP. TRENCH DRAIN CENTERLINE
- EX. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM MAINTENANCE HOLE
- PROP. ELECTRICAL MANHOLE
- PROP. SAN MANHOLE
- PROP. SAN SEWER
- PROP. STM LINE
- PROP. WATER LINE
- PROP. AIR COMPRESSED LINE
- PROP. UNDERGROUND POWERLINE
- PROP. BURIED SERVICES TRENCHES
- PROP. TRENCHLESS PIPE INSTALLATION (SEE NOTE 7)
- PROP. AIR COMPRESSOR VALVE

NOTES:

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5. REFER DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. REFER TO DRAWING SHEET H375313-1000-220-260-0004 FOR ALL THE TRENCHING SECTION DETAILS.
7. UTILITIES TO BE INSTALLED BY TRENCHLESS TECHNOLOGY. THE DESIGN AND SELECTION OF THE TRENCHLESS TECHNOLOGY FOR UTILITY INSTALLATION IS BY THE CONTRACTOR.
8. EXISTING SANITARY MANHOLE FOUND DURING SUE INVESTIGATION BY 4SIGHT UTILITY ENGINEERS ON AUGUST 8, 2025. LOCATION TO BE CONFIRMED.
9. ALL EXCAVATIONS ARE TO BE SUPPLIED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS (OSHA) AND GEOTECHNICAL REPORT BY HATCH H375313-1000-2A0-230-0001(2025-08-22 Rev 0) SHOULD ALSO BE FOLLOWED.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/31

REVISIONS

REG. PROFESSIONAL

DRAWING No.	DRAWING TITLE
H375313-1000-220-272-0001	PROPOSED COMPOSITE SITE SERVICES PLAN
H375313-1000-220-260-0004	TRENCHING DETAILS
H375313-1000-220-272-0003	BURIED SERVICES TRENCHING PLAN 2 OF 2
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
BURIED SERVICES TRENCHING PLAN 1 OF 2

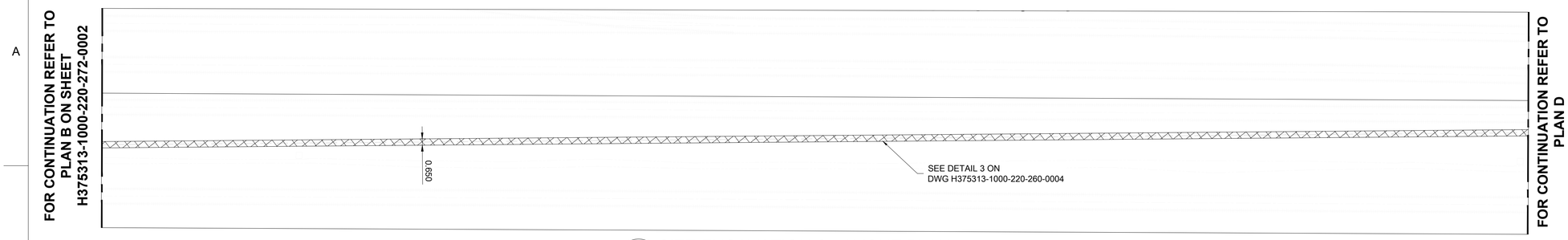
SCALE 1:250 OR AS NOTED

DWG. No. H375313-1000-220-272-0002

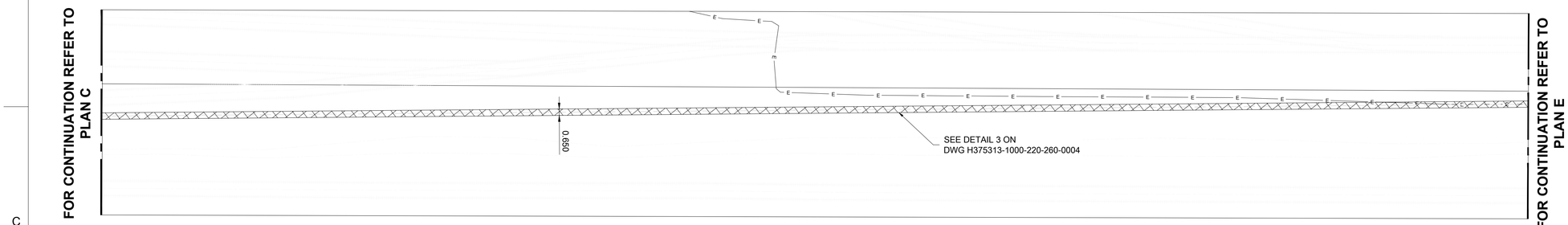
REV C

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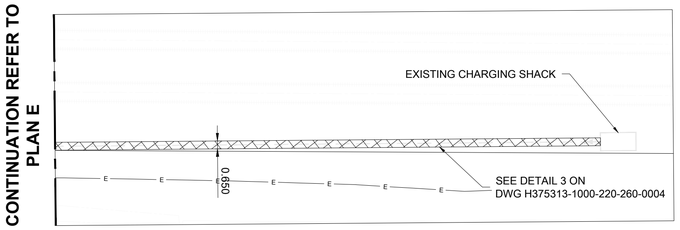


C SITE EXCAVATION & LAYOUT PLAN
- SCALE: 1:250

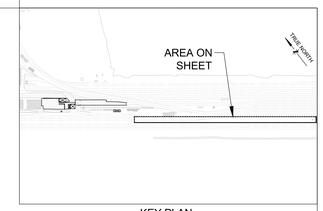


D SITE EXCAVATION & LAYOUT PLAN
- SCALE: 1:250

E SITE EXCAVATION & LAYOUT PLAN
- SCALE: 1:250



F SITE EXCAVATION & LAYOUT PLAN
- SCALE: 1:250



KEY PLAN

LEGEND:

- EXISTING TRACKS
- PROP. AIR COMPRESSED LINE
- PROP. BURIED SERVICES TRENCHES
- PROP. AIR COMPRESSOR VALVE

NOTES:

1. ALL DIMENSIONS SHOWN HERE ARE IN METRES UNLESS OTHERWISE SHOWN.
2. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON THE SURVEY PERFORMED BETWEEN JULY 24 AND NOVEMBER 16, 2023 BY TULLOCH GEOMATICS INC.
3. COORDINATE SYSTEM SHOWN HERE IS UTM ZONE 17N, NAD83 (CSRS) (2010.0).
4. ELEVATIONS SHOWN HERE ARE GEODETIC, ARE REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28) AND ARE DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. ALL ELEVATIONS ARE IN METRES UNLESS MENTIONED OTHERWISE.
5. REFER DRAWING SHEET H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. REFER TO DRAWING SHEET H375313-1000-220-260-0004 FOR ALL THE TRENCHING SECTION DETAILS.
7. UTILITIES TO BE INSTALLED BY TRENCHLESS TECHNOLOGY. THE DESIGN AND SELECTION OF THE TRENCHLESS TECHNOLOGY FOR UTILITY INSTALLATION IS BY THE CONTRACTOR.
9. ALL EXCAVATIONS ARE TO BE SUPPLIED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS (OSHA) AND GEOTECHNICAL REPORT BY HATCH H375313-1000-2A0-230-0001(2025-08-22 Rev 0) SHOULD ALSO BE FOLLOWED.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-220-272-0001	PROPOSED COMPOSITE SITE SERVICES PLAN
H375313-1000-220-260-0004	TRENCHING DETAILS
H375313-1000-220-272-0002	BURIED SERVICES TRENCHING PLAN 1 OF 2
H375313-1000-220-251-0001	GENERAL NOTES

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/31

REVISIONS

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HATCH

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
BURIED SERVICES TRENCHING PLAN 2 OF 2

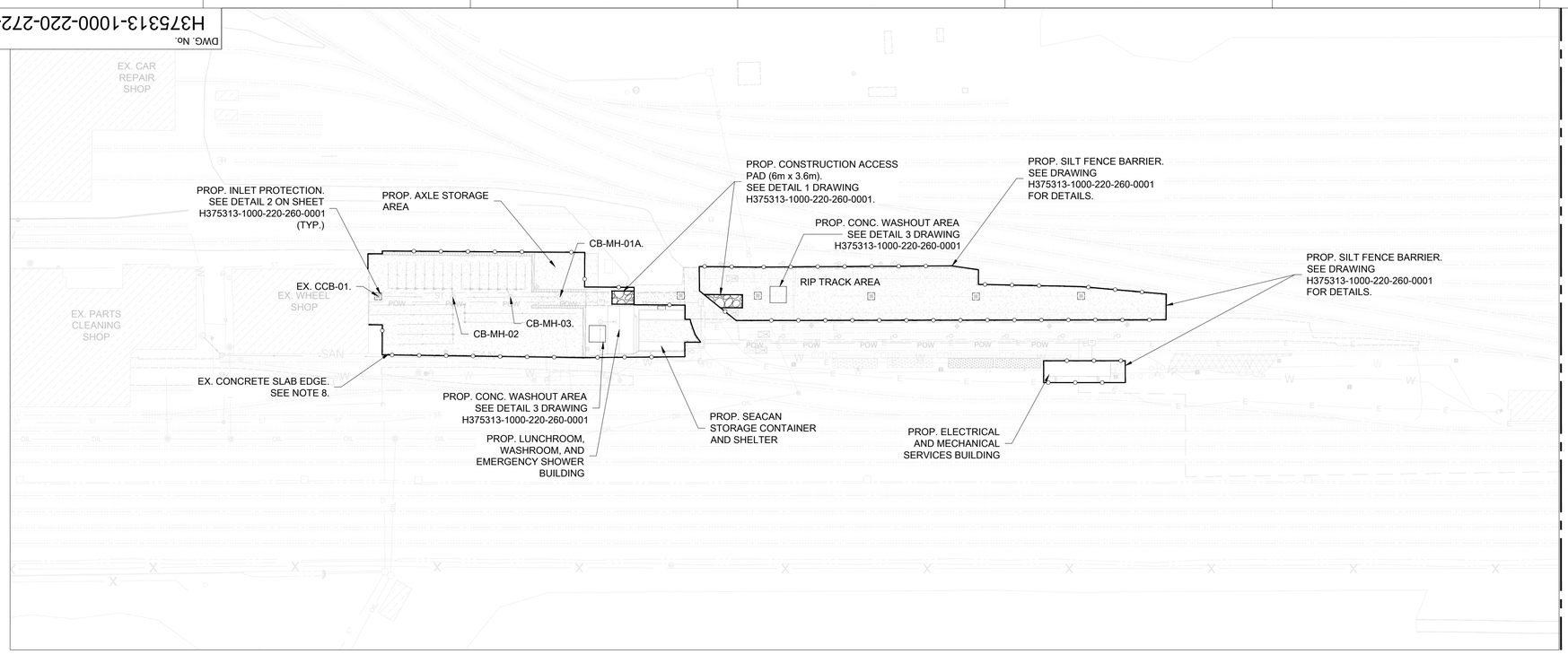
SCALE 1:250 OR AS NOTED

DWG. No. H375313-1000-220-272-0003

REV C

SHEET SIZE: A1

DWG. No. H375313-1000-220-272-0004



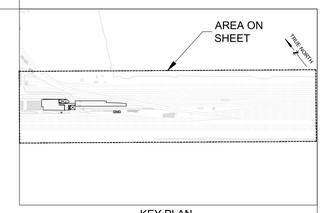
A
-
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1:750



B
-
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1:750



KEY PLAN

LEGEND:

- PROP. SEACAN
- PROP. BUILDINGS
- PROP. CONCRETE SLAB
- PROP. CONSTRUCTION ACCESS PAD
- PROP. CONCRETE OUTLINE
- PROP. COMPRESSED AIR LINE (2"-Ø HDPE)
- POW — PROP. UNDERGROUND POWER LINE
- PROP. SILT FENCE
- PROP. INLET PROTECTION
- PROP. BUMPING POST
- PROP. STM CONCRETE CATCH BASIN
- PROP. STM ACO CATCH BASIN
- PROP. STM CATCH BASIN MAINTENANCE HOLE
- S — PROP. SAN MANHOLE
- PROP. WALL MOUNTED LIGHT
- PROP. LIGHT STANDARD POLE
- PROP. UTILITY POST
- PROP. ELECTRICAL MAINTENANCE HOLE

NOTES:

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5. SEE DRAWING H375313-1000-220-251-0001 FOR GENERAL NOTES AND LEGEND.
6. EXISTING COMPRESSED AIR LINES TO BE REMOVED FROM FROM EXISTING 2" ISOLATION VALVE OUTSIDE WHEEL SHOP TO EXISTING 1" VALVE OUTSIDE OF CHARGING SHACK, AS REQUIRED. IT IS THE RESPONSIBILITY OF THE DEMOLITION CONTRACTOR TO INSTALL PLUGS AT EACH VALVE TIE POINT.
7. EXISTING RETAINING WALL ALONG THE WEST EDGE OF THE ROADWAY IN THE WHEEL STORAGE AREA WAS NOT INCLUDED IN THE SURVEY. CONTRACTOR TO FIELD VERIFY THE LOCATION OF THE RETAINING WALL DURING CONSTRUCTION.
8. EXISTING CONCRETE SLAB EDGE TO BE VERIFIED BY THE CONTRACTOR DURING CONSTRUCTION.
9. EXISTING SANITARY LINE REMOVALS TO BE CONFIRMED UPON THE RESULTS OF THE SUE INVESTIGATION BY 4SIGHT UTILITY ENGINEERS.
10. EXISTING BUILDING FOOTPRINT TO BE REINSTATED WITH CONCRETE PAVEMENT WHERE IT DOESN'T ALIGN WITH THE NEW PROPOSED BUILDINGS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI	Campbell, Lee	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

REFERENCE DRAWINGS	
H375313-1000-220-260-0001	EROSION & SEDIMENT CONTROL DETAILS
H375313-1000-220-251-0001	GENERAL NOTES & LEGEND
DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

Ontario Northland

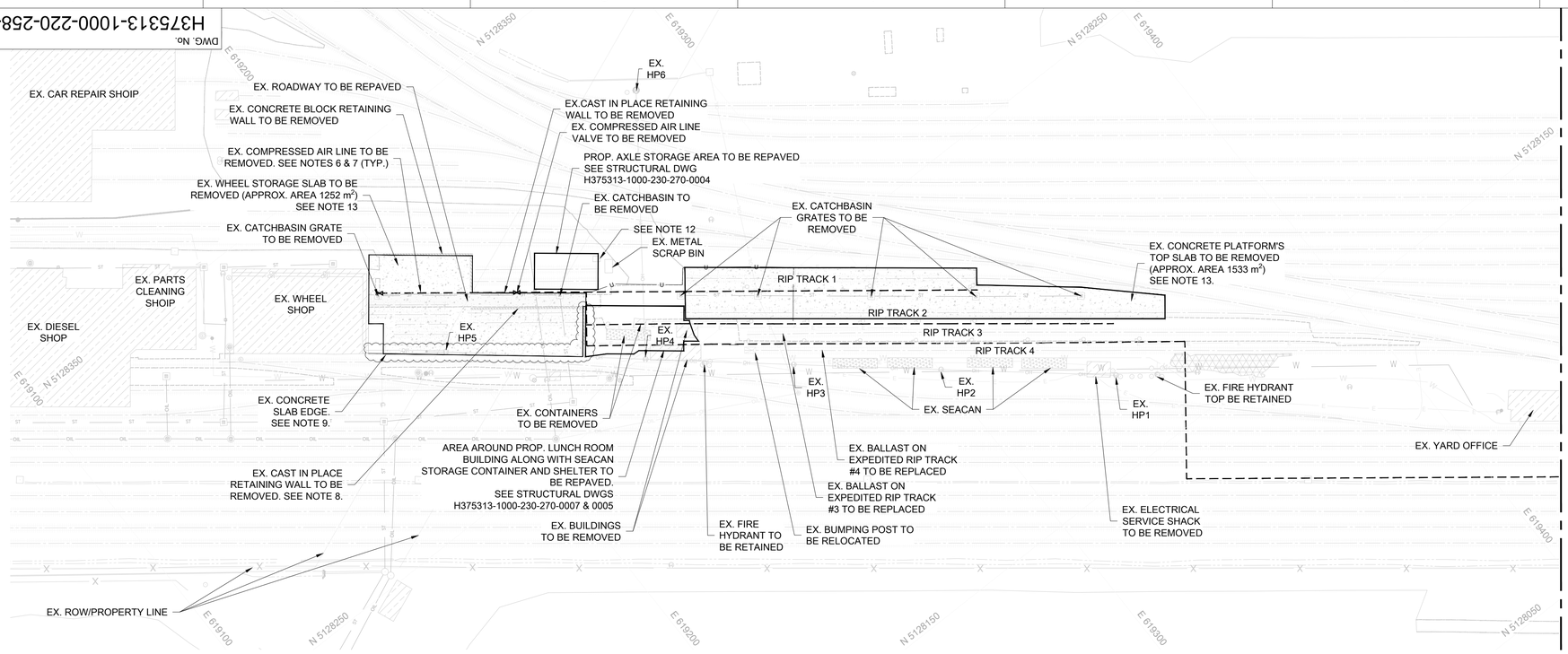
ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
EROSION & SEDIMENT CONTROL PLAN

SCALE	DWG. No.	REV
1:750 OR AS NOTED	H375313-1000-220-272-0004	C

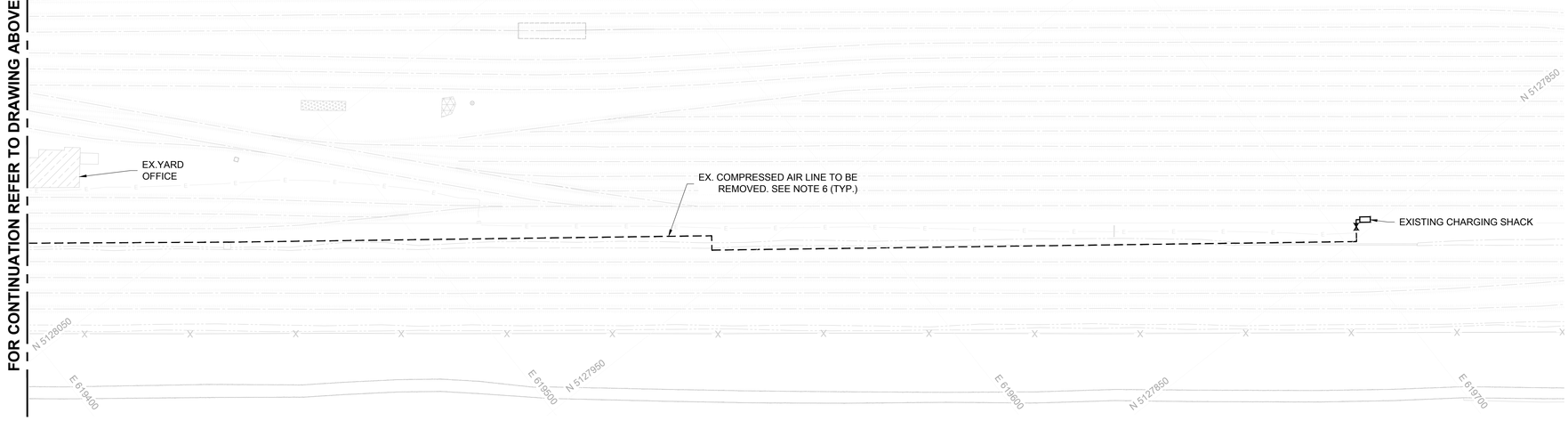
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DWG. No. H375313-1000-220-258-0001



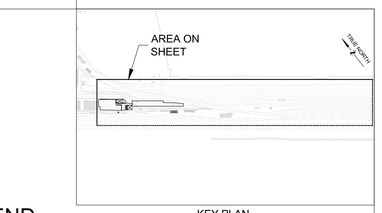
A CIVIL AND DRAINAGE - REMOVAL & DEMOLITION PLAN

SCALE: 1:750



B CIVIL AND DRAINAGE - REMOVAL & DEMOLITION PLAN

SCALE: 1:750



LEGEND:

- EX. STOCKPILE AREA
- EX. CONCRETE AREA TO BE REMOVED
- EX. ROADWAY
- EX. RETAINING WALL
- EX. ASPHALT OUTLINE
- EX. CONCRETE OUTLINE
- EX. FENCE CENTERLINE
- EX. RAILWAY TRACK CENTERLINE
- EX. RAILWAY TRACKS
- EX. DITCH BOTTOM
- EX. COMPRESSED AIR LINE (ASSUMED)
- EX. OVERHEAD POWERLINE CENTERLINE (ASSUMED)
- EX. SANITARY OIL CENTERLINE
- EX. SANITARY SEWER CENTERLINE (ASSUMED)
- EX. STORMWATER CENTERLINE
- EX. WATER MAIN CENTERLINE
- EX. STM CATCH BASIN
- EX. DITCH INLET
- EX. STM MANHOLE
- EX. HYDRO POLE
- EX. LIGHT STANDARD POLE
- EX. WATER MAIN VALVE
- EX. FIRE HYDRANT
- EX. BOLLARDS

NOTES:

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5. SEE DRAWING H375313-1000-220-251-0001 FOR GENERAL NOTES & LEGEND.
6. EXISTING COMPRESSED AIR LINES TO BE REMOVED FROM FROM EXISTING 2" ISOLATION VALVE OUTSIDE WHEEL SHOP TO EXISTING 1" VALVE OUTSIDE OF CHARGING SHACK, AS REQUIRED. ANY NON-REMOVED PIPE TO BE ABANDONED IN PLACE BY FILLING EXISTING PIPE WITH FLOWABLE LEAN CONCRETE FILL. IT IS THE RESPONSIBILITY OF THE DEMOLITION CONTRACTOR TO INSTALL PLUGS AT EACH VALVE TIE POINT.
7. THE LOCATION OF EXISTING COMPRESSED AIR LINES TO BE REMOVED BETWEEN THE TWO AFOREMENTIONED VALVES HAS BEEN ASSUMED. CONTRACTOR TO DO THEIR PRE-LOCATES PRIOR TO CONSTRUCTION TO DETERMINE THE PRECISE LOCATION.
8. EXISTING RETAINING WALL ALONG THE WEST EDGE OF THE ROADWAY IN THE WHEEL STORAGE AREA WAS NOT INCLUDED IN THE SURVEY. CONTRACTOR TO FIELD VERIFY THE LOCATION OF THE RETAINING WALL DURING CONSTRUCTION.
9. EXISTING CONCRETE SLAB EDGE TO BE VERIFIED BY THE CONTRACTOR DURING CONSTRUCTION.
10. EXISTING BUILDING FOOTPRINT TO BE REINSTATED WITH CONCRETE PAVEMENT WHERE IT DOESN'T ALIGN WITH THE PROP. BUILDINGS.
11. EXISTING OVERHEAD LINES CONNECTING HYDRO POLES EX. HP1 TO EX. HP5 & EX. HP4 to EX. HP6 TO BE REMOVED AND REPLACED BY PROP. UNDERGROUND POWER LINES. EXISTING POLES TO BE RETAINED.
12. CONTRACTOR TO LOCATE AND REMOVE EXISTING CONTAMINATED SOIL CHAMBER.
13. ALL DEMOLITION WORK TO COMPLY WITH OPSS MUNI 928 & OPSS PROV 510. SEE STRUCTURAL DRAWINGS FOR SPECIFIC REMOVAL DETAILS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	R. POKHAREL		2025/10/06
DESIGNER	S. DHANANI		2025/10/06
CHECKER	R. RIZVI		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	M. BASIQ		2025/10/06
LEAD DISC. ENG.	M. BASIQ		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	M.B.	R.R.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	M.B.	R.R.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/07/16
B	ISSUED FOR 40% CLIENT REVIEW	R.P.	M.B.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	R.P.	M.B.	2025/03/24

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

REFERENCE DRAWINGS

DRAWING No.	DRAWING TITLE
H375313-1000-220-251-0001	GENERAL NOTES

REG. PROFESSIONAL

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

CIVIL
CIVIL & DRAINAGE
CIVIL REMOVAL & DEMOLITION PLAN

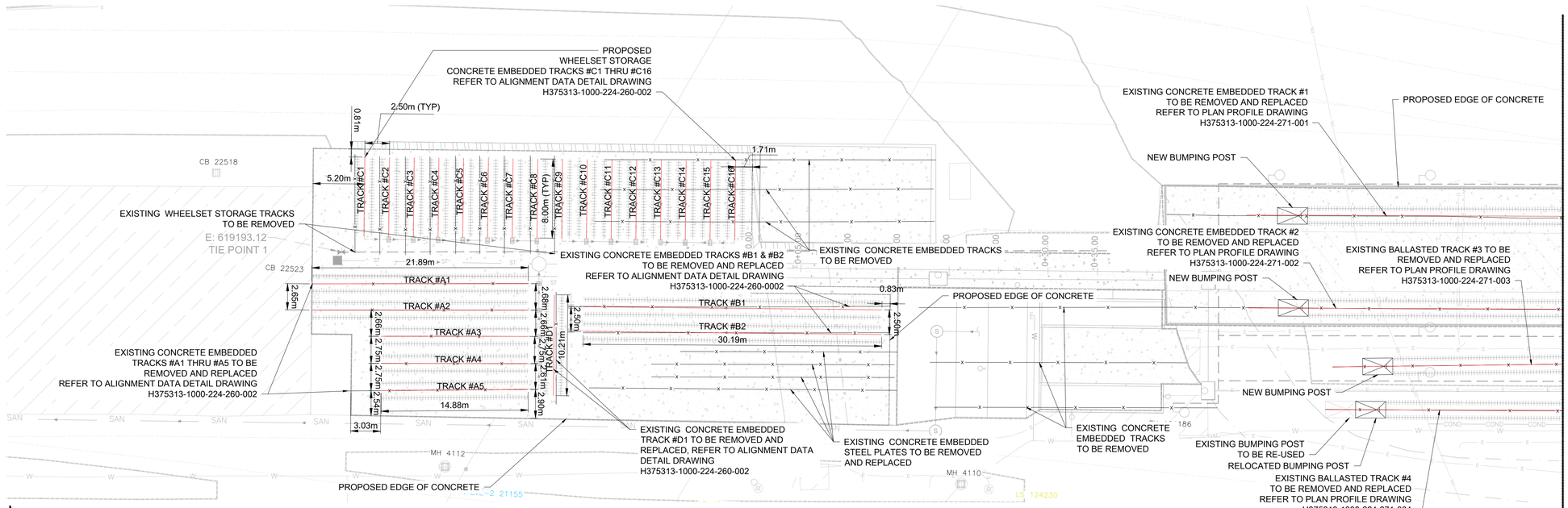
SCALE 1:750 OR AS NOTED

DWG. No. H375313-1000-220-258-0001

REV E

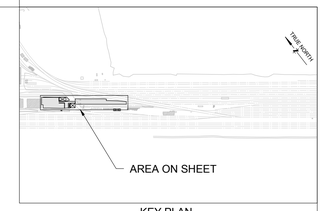
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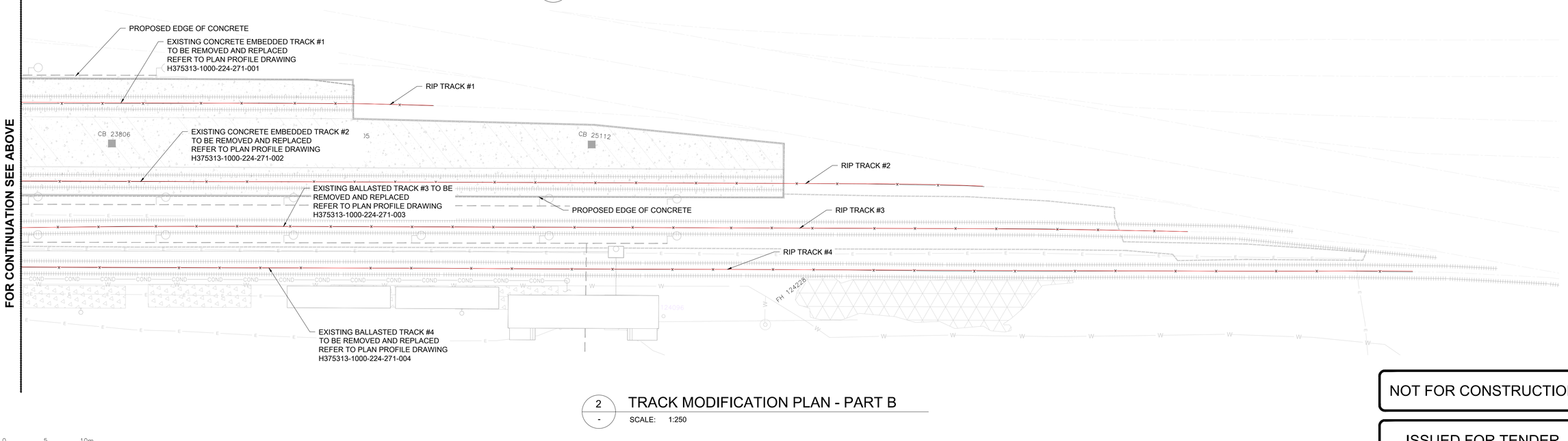


1 - TRACK MODIFICATION PLAN - PART A

SCALE: 1:250



KEY PLAN



2 - TRACK MODIFICATION PLAN - PART B

SCALE: 1:250

1:250 0 5 10m

NOT FOR CONSTRUCTION

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No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	CI	FD	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	CI	FD	2025/08/15
C	ISSUED FOR 90% INTERNAL REVIEW	CI	FD	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	CI	HS	2025/04/04
A	ISSUED FOR 40% INTERNAL REVIEW	CI	HS	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	C. ISBISTER		2025/10/06
DESIGNER	C. ISBISTER		2025/10/06
CHECKER	F. DU		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	F. DU		2025/10/06
LEAD DISC. ENG.	F. VAN BILJON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
TRACK MODIFICATIONS PLAN

Ref Drawing No	-

DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

SCALE NTS OR AS NOTED

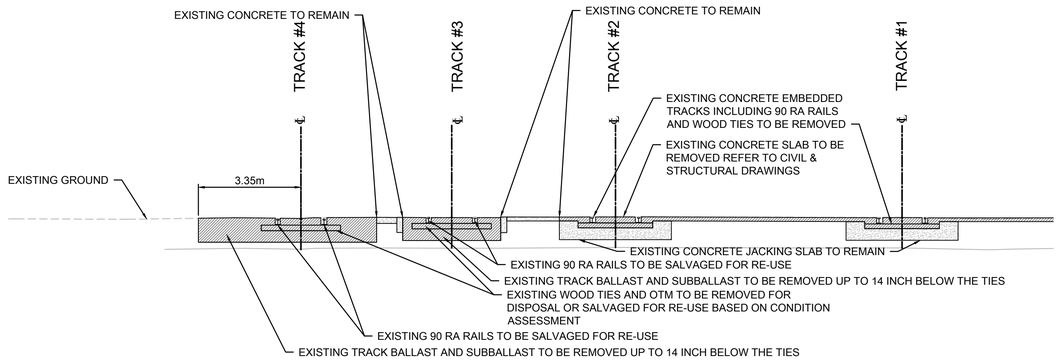
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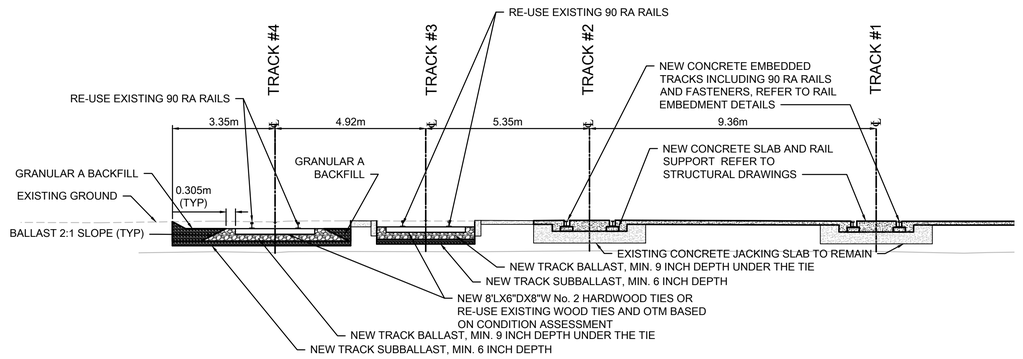
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Last Saved Date and Time: 08 Oct 2025, 3:37pm
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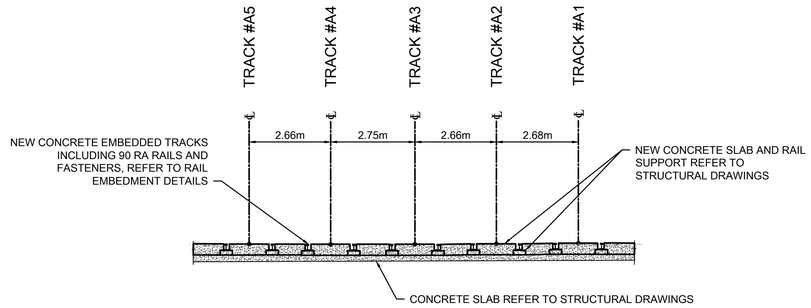
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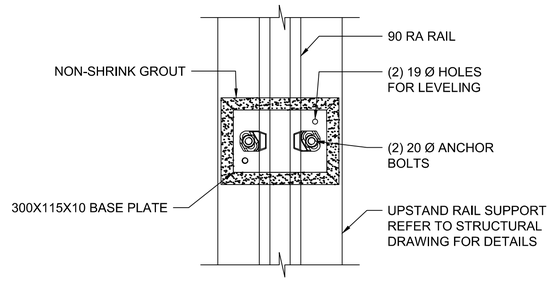
A
-
RIP TRACKS TYPICAL SECTION - EXCAVATION & REMOVAL
SCALE: 1 : 100



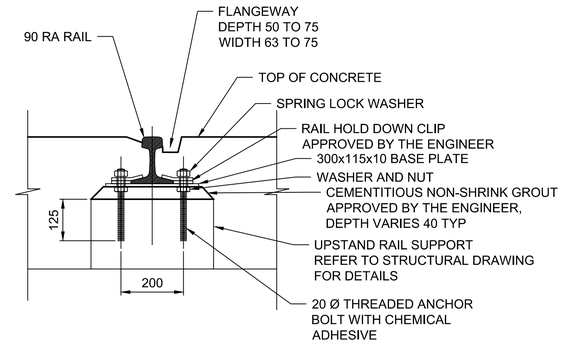
B
-
RIP TRACKS TYPICAL SECTION - NEW INSTALLATION
SCALE: 1 : 100



C
-
WHEEL STORAGE TRACKS TYPICAL SECTION
SCALE: 1 : 100



1
-
RAIL EMBEDMENT DETAIL - PLAN
SCALE: 1 : 10



2
-
RAIL EMBEDMENT DETAIL - SECTION
SCALE: 1 : 10

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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B	ISSUED FOR TENDER	CI	FD	2025/10/06
A	ISSUED FOR 90% CLIENT REVIEW	CI	FD	2025/10/06

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	C. ISBISTER		2025/10/06
DESIGNER	C. ISBISTER		2025/10/06
CHECKER	F. DU		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	F. DU		2025/10/06
LEAD DISC. ENG.	F. VAN BILJON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

REFERENCE DRAWINGS

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REG. PROFESSIONAL

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
TRACK MODIFICATIONS
TYPICAL SECTIONS

SCALE NTS OR AS NOTED

DWG. No. H375313-1000-224-260-0001

REV B

SHEET SIZE: A1

DWG. No. H375313-1000-224-260-0002

WHEEL STORAGE AREA TRACK ALIGNMENT DATA

TRACK ID	CENTRE LINE ALIGNMENT - BEGINNING			CENTRE LINE ALIGNMENT - END		
	NORTHING	EASTING	TOP RAIL ELEVATION	NORTHING	EASTING	TOP RAIL ELEVATION
#A1	5128300.988	619206.041	200.144	5128314.478	619188.807	200.149
#A2	5128298.879	619204.380	200.128	5128312.406	619187.158	200.128
#A3	5128296.791	619202.735	200.098	5128305.973	619191.037	200.105
#A4	5128294.627	619201.030	200.098	5128303.817	619189.342	200.105
#A5	5128292.575	619199.413	200.108	5128301.659	619187.631	200.115
#B1	5128276.829	619232.539	200.115	5128295.712	619208.984	200.100
#B2	5128274.878	619230.975	200.110	5128293.761	619207.420	200.095
#C16	5128297.806	619230.193	199.969	5128291.564	619225.189	199.965
#C15	5128299.376	619228.234	199.973	5128293.134	619223.230	199.969
#C14	5128300.940	619226.283	199.978	5128294.698	619221.280	199.974
#C13	5128302.504	619224.333	199.990	5128296.262	619219.329	199.986
#C12	5128304.067	619222.382	200.025	5128297.825	619217.378	200.021
#C11	5128305.631	619220.431	200.045	5128299.389	619215.428	200.041
#C10	5128307.195	619218.481	200.070	5128300.953	619213.477	200.066
#C9	5128308.758	619216.530	200.085	5128302.516	619211.526	200.081
#C8	5128310.322	619214.580	200.101	5128304.080	619209.576	200.097
#C7	5128311.886	619212.629	200.110	5128305.644	619207.625	200.106
#C6	5128313.450	619210.678	200.134	5128307.208	619205.675	200.130
#C5	5128315.013	619208.728	200.151	5128308.771	619203.724	200.147
#C4	5128316.577	619206.777	200.155	5128310.335	619201.773	200.151
#C3	5128318.141	619204.827	200.148	5128311.899	619199.823	200.144
#C2	5128319.704	619202.876	200.143	5128313.462	619197.872	200.139
#C1	5128321.268	619200.925	200.104	5128315.026	619195.922	200.100
#D1	5128298.473	619207.417	200.105	5128290.510	619201.034	200.110

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No.	DESCRIPTION	BY	CHK'D	DATE
B	ISSUED FOR TENDER	CI	FD	2025-10-06
A	ISSUED FOR 90% CLIENT REVIEW	CI	FD	2025/08/15

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	C. ISBISTER		2025/10/06
DESIGNER	C. ISBISTER		2025/10/06
CHECKER	F. DU		2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
RESP. ENG.	F. DU		2025-10-06
LEAD DISC. ENG.	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ref Drawing No -

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
WHEEL STORAGE AREA TRACK ALIGNMENT DATA TABLE

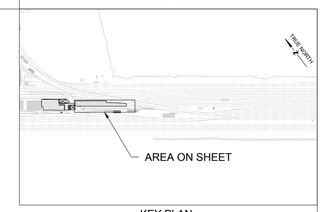
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-224-260-0002

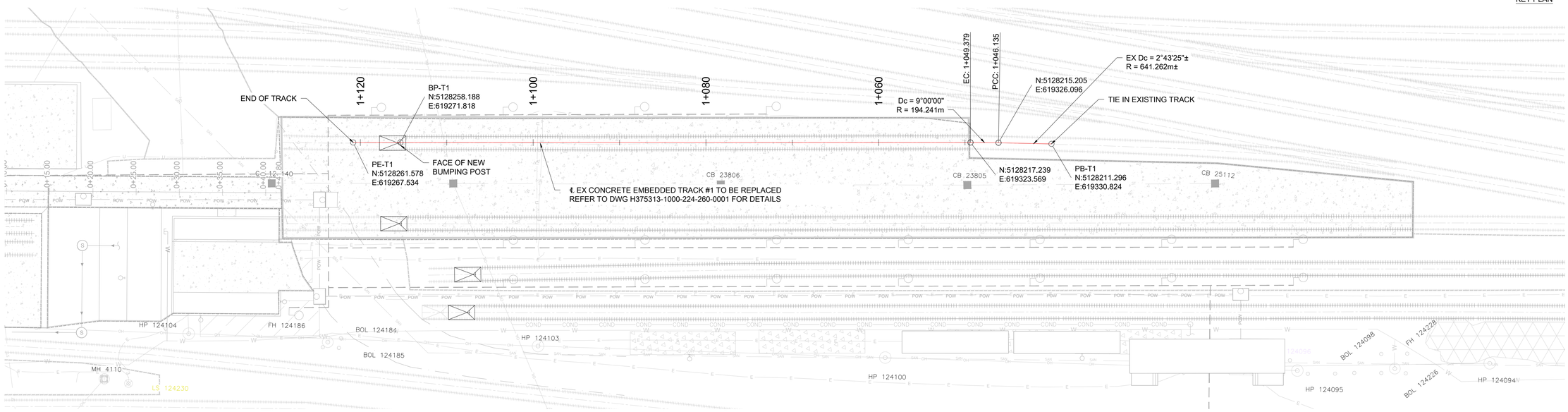
REV B

SHEET SIZE: A1

DWG. No. H375313-1000-224-271-0001

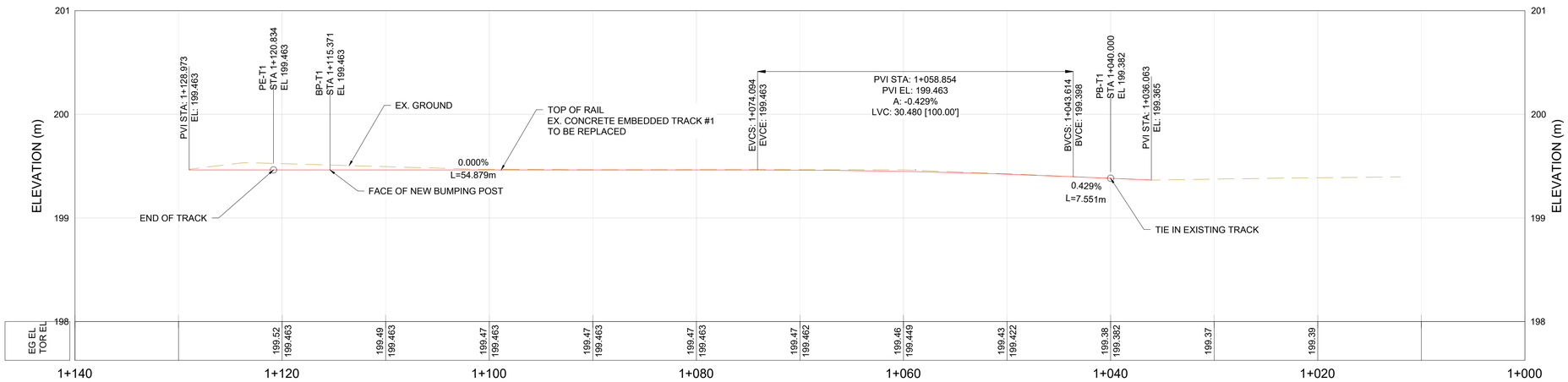


KEY PLAN



1 - PLAN - RIP TRACK #1

SCALE: 1:250



2 - PROFILE - RIP TRACK #1

SCALE: 1:250 H 1:25 V

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HATCH

Ontario Northland

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	C. ISBISTER		2025/10/06
DESIGNER	C. ISBISTER		2025/10/06
CHECKER	F. DU		2025/10/06
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ENG. MANAGER	F. VAN BILJON	[esp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

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DRAWING No.	DRAWING TITLE
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REFERENCE DRAWINGS

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REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
RIP TRACK #1
PLAN AND PROFILE

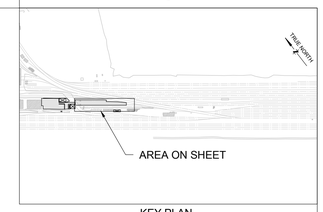
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-224-271-0001

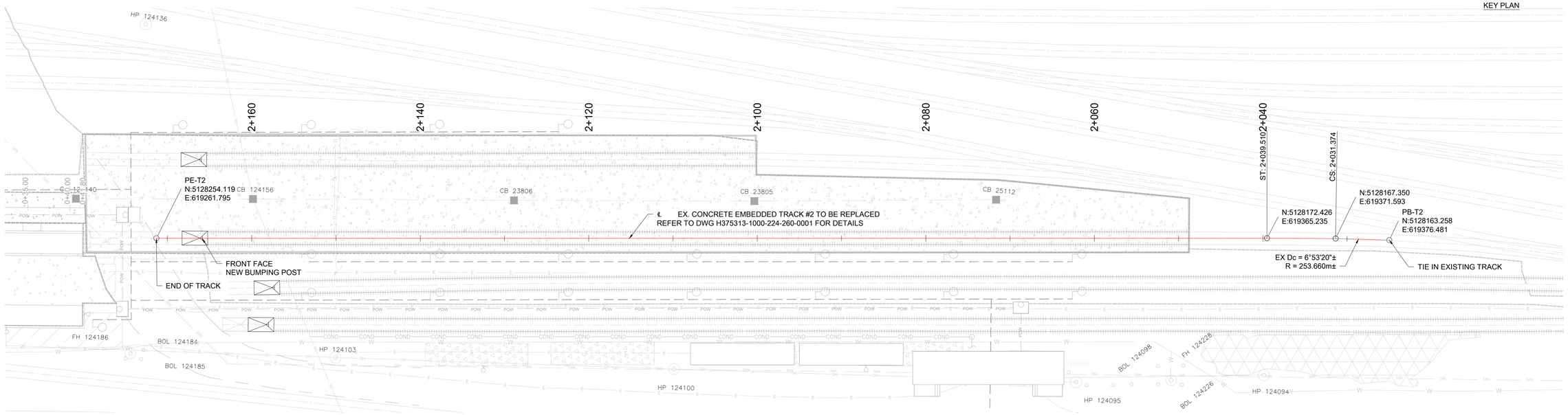
REV C

SHEET SIZE: A1

DWG. No. H375313-1000-224-271-0002

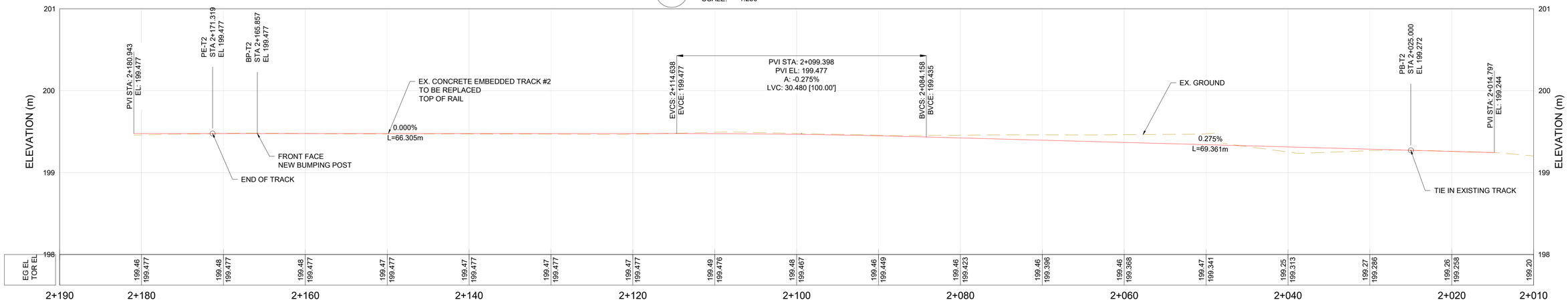


KEY PLAN



1 - PLAN - RIP TRACK #2

SCALE: 1:250



2 - PROFILE - RIP TRACK #2

SCALE: 1:250 H 1:25 V

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HATCH

Ontario Northland

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DESIGNER	C. ISBISTER		2025/10/06
CHECKER	F. DU		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	F. DU		2025/10/06
LEAD DISC. ENG.	F. VAN BILJON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

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Ref Drawing No -

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
RIP TRACK #2
PLAN AND PROFILE

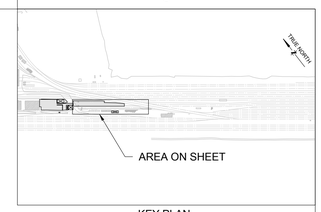
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-224-271-0002

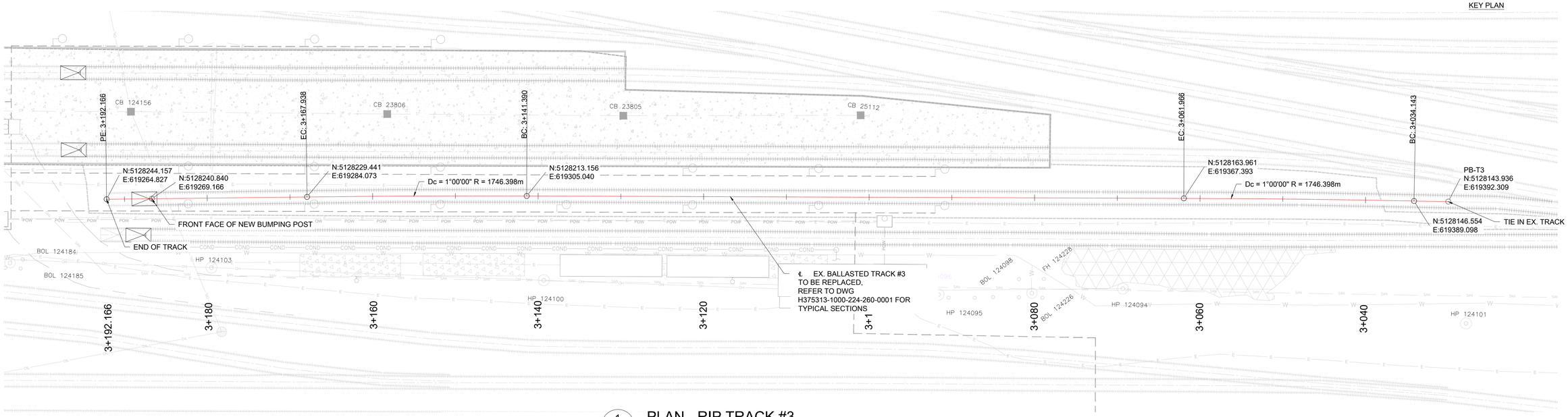
REV C

SHEET SIZE: A1

DWG. No. H375313-1000-224-271-0003

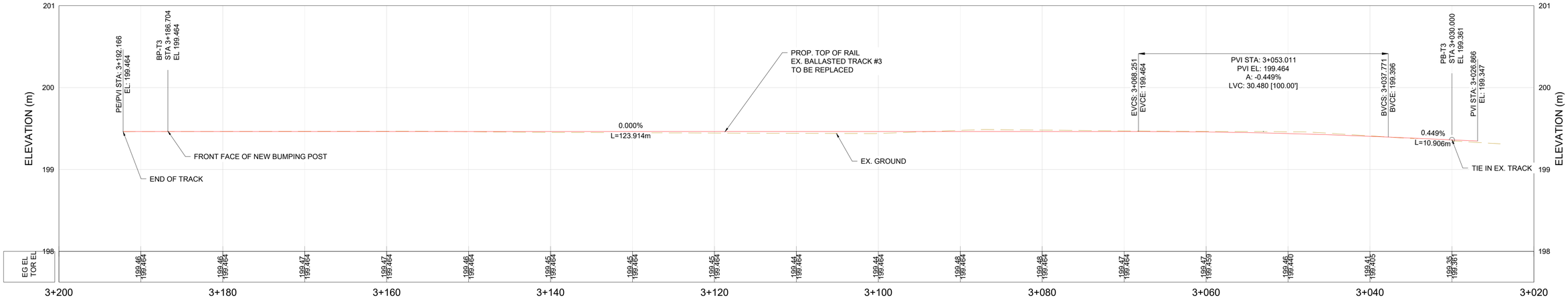


KEY PLAN



1 / - PLAN - RIP TRACK #3

SCALE: 1:250



1 / - PROFILE - RIP TRACK #3

SCALE: 1:250 H 1:25 V

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DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
RIP TRACK #3
PLAN AND PROFILE

REFERENCE DRAWINGS		REG. PROFESSIONAL
Ref Drawing No	-	
DRAWING No.	DRAWING TITLE	

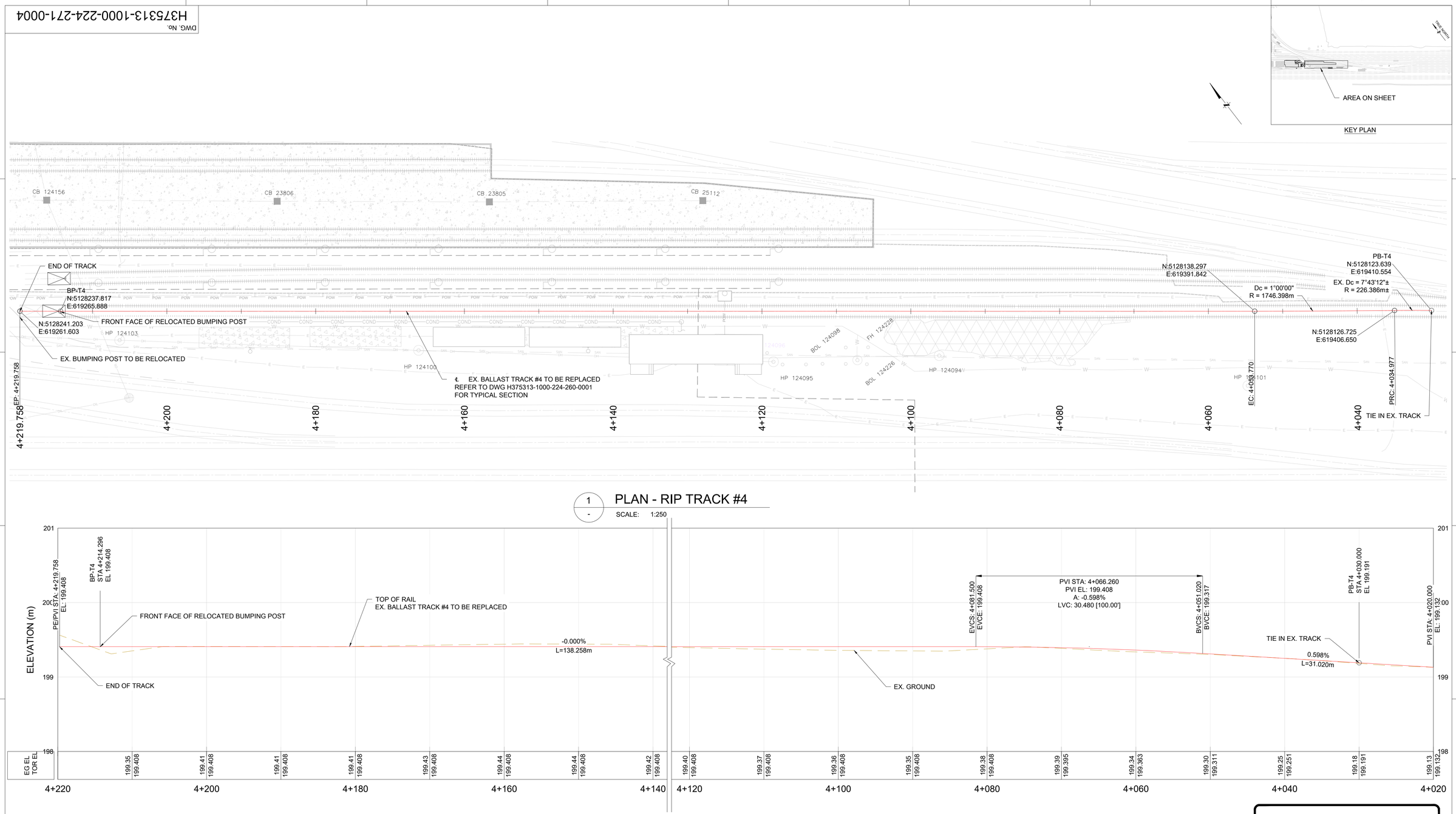
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-224-271-0003

REV C

SHEET SIZE: A1

DWG. No. H375313-1000-224-271-0004



1 - PLAN - RIP TRACK #4

SCALE: 1:250

2 - PROFILE - RIP TRACK #4

SCALE: 1:250 H 1:25 V

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Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

RAIL
RIP TRACK #4
PLAN AND PROFILE

SCALE: NTS OR AS NOTED

DWG. No.: H375313-1000-224-271-0004

REV: C

SHEET SIZE: A1

DWG. No. H375313-1000-230-251-0002

NOTES:

1.0 DESIGN CODES AND REFERENCES :

- CSA A23.3-24 - DESIGN OF CONCRETE STRUCTURES
- CSA S16-24 - DESIGN AND CONSTRUCTION OF STEEL STRUCTURES
- AREMA MANUAL FOR RAILWAY ENGINEERING 2024
- 2024 ONTARIO BUILDING CODE
- NATIONAL BUILDING CODE OF CANADA 2020
- GEOTECHNICAL REPORT - ONTC RIP TRACK FACILITY - GEOTECHNICAL INVESTIGATION AND DESIGN REPORT H375313-1000-2A0-230-0001 REV.A (2025-06-20)

2.0 CONCRETE :

1. CONCRETE, CONCRETE MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO AREMA MRE, CSA A23.1 AND CSA A23.3.
2. CONCRETE TESTING SHALL CONFORM TO CSA A23.2. TESTING SHALL BE PAID FOR BY CONTRACTOR.
3. ALL CONCRETE SHALL BE NORMAL DENSITY AND MEET THE REQUIREMENTS OF EXPOSURE CLASS C-1, WITH 28-DAY STRENGTH OF 35 MPA.
4. MAXIMUM AGGREGATE SIZE SHALL BE 20mm.
5. AIR ENTRAINMENT SHALL BE 5-8% WITH SLUMP OF 75mm +/- 25mm.
6. CONCRETE MIX CERTIFICATE TO BE SUBMITTED FOR ENGINEER'S REVIEW PRIOR TO MANUFACTURING.
7. LOCATION AND DETAILS OF CONSTRUCTION JOINTS TO BE REVIEWED BY ENGINEER.
8. CURING AND PROTECTION OF CONCRETE FOR HOT, COLD, OR DRY WEATHER TO BE IN ACCORDANCE WITH CSA A23.1. PROVIDE MOIST CURE FOR 3 DAYS MINIMUM (ANY ALTERNATIVE METHOD MUST BE APPROVED BY ENGINEER).
9. ALL EDGES AND CORNERS OF EXPOSED CONCRETE SHALL HAVE A 25MM CHAMFER.
10. ALL SLABS ON GRADE SHALL BE BROOM FINISHED.

3.0 JOINT SEALANT :

1. JOINT SEALANT TO CONFORM TO ASTM C920 GRADE "NS", CLASS 50, USE "T".

4.0 REINFORCEMENT :

1. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF CSA G30.18, GRADE 400W.
2. LAP SPLICES OF REINFORCEMENT SHALL CONFORM TO AREMA MRE CHAPTER 8 CL. 2.22, CLASS B.

MINIMUM LAP SPLICE LENGTH FOR REINFORCING STEEL (mm)						
BAR SIZE	10M	15M	20M	25M	30M	35M
TYP. BARS	400	500	700	900	1200	1600
TOP BARS *	550	700	1000	1200	1600	2000
* TOP BARS : HORIZONTAL REBAR WITH MORE THAN 300mm NEW CONCRETE BELOW THEM						

3. SPLICES FOR CLOSED STIRRUPS SHALL CONFORM TO AREMA MRE CHAPTER 8 CL. 2.9.C.
4. MECHANICAL SPLICES TO DEVELOP 125% OF THE YIELD STRENGTH OF THE REINFORCEMENT.
5. DEVELOPMENT LENGTH OF REINFORCING BARS SHALL CONFORM TO AREMA MRE CHAPTER 8 CL. 2.14 TO 2.21.
6. DOWEL ADHESIVE SHALL BE HILTI-HIT RE500 V3 OR APPROVED EQUIVALENT.
7. REINFORCEMENT SHOP DRAWINGS TO BE SUBMITTED PRIOR TO FABRICATION FOR ENGINEER'S REVIEW.
8. CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE ON THE DRAWINGS:

LOCATION	CLEAR CONCRTETE COVER
INTERFACE AT CONTRACTION AND CONSTRUCTION JOINTS	50 mm
CAST AGAINST AND PERMANENTLY EXPOSED TO SOIL	75 mm
SURFACES AND SIDES OF FORMED EXTERIOR CONCRETE	50 mm

5.0 STRUCTURAL STEEL :

1. WORKMANSHIP AND MATERIALS TO CONFORM TO THE LATEST EDITION OF CSA S16, CSA W59, CSA W47.1, CSA G40.20/G40.21.
2. STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE FOLLOWING GRADES AND SPECIFICATIONS:
   - W, WT, C AND WWF – G40.21 GRADE 350W.
   - BARS, ANGLES AND PLATES - G40.21 GRADE 350W.
   - HOLLOW STRUCTURAL STEEL (HSS) - G40.21 GRADE 350W CLASS C.
   - HIGH STRENGTH BOLTS – ASTM F3125 GRADE A325.
   - NUTS – ASTM A563.
   - WASHERS – ASTM F436, TYPE 1.
   - WELDING RODS – CSA W48 E49XX, LOW HYDROGEN.
3. ALL BOLTED STRUCTURAL CONNECTIONS SHALL BE MADE USING 19MM DIAMETER BOLTS AND 21MM HOLES.
4. ALL BOLTED CONNECTIONS TO BE TIGHTENED BY TURN-OF-NUT METHOD.
5. STRUCTURAL STEEL TO BE HOT DIP GALVANIZED AS PER ASTM A123, MINIMUM 600 G/M3.
6. HIGH-STRENGTH BOLTS, NUTS, AND WASHERS TO BE HOT DIP GALVANIZED AS PER ASTM F2329.
7. SHOP DRAWINGS FOR STRUCTURAL STEEL TO BE SUBMITTED PRIOR TO FABRICATION FOR ENGINEER'S REVIEW.

6.0 EXCAVATION AND FILL :

1. FOR EXCAVATION SLOPES REFER TO THE GEOTECHNICAL INVESTIGATION AND DESIGN REPORT.
2. SLAB ON GRADE SHALL BE UNDERLAIN BY A MINIMUM OF 150MM OF OPSS GRANULAR "A". ANY BULK FILL TO RAISE THE GRADE TO THE UNDERSIDE OF GRANULAR "A" SHALL CONSIST OF OPSS GRANULAR "B" TYPE II. UNDERSLAB FILL SHALL BE PLACED IN MAXIMUM 300MM THICK LIFTS AND SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIALS STANDARD PROCTOR MAXIMUM DENSITY (SPMDD) USING SUITABLE VIBRATORY COMPACTION EQUIPMENT.
3. IF CONCRETE FOR FOOTINGS CANNOT BE PLACED IMMEDIATELY AFTER EXCAVATION AND INSPECTION OF THE SUBGRADE, THEN LEAN CONCRETE SHALL BE PLACED IN EXCAVATION TO PROTECT THE INTEGRITY OF THE BEARING STRATUM.
4. EXCAVATED AREAS BEHIND ANY BELOW GRADE FOUNDATION ELEMENT SHALL BE BACKFILLED WITH NON-FROST SUSCEPTIBLE GRANULAR MATERIAL CONFORMING TO OPSS GRANULAR "B" TYPE I. BACKFILL MATERIALS SHALL BE PLACED IN MAXIMUM 200MM THICK LIFTS AND SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIALS STANDARD PROCTOR MAXIMUM DENSITY (SPMDD) USING SUITABLE VIBRATORY COMPACTION EQUIPMENT. LIGHT COMPACTION EQUIPMENT TO BE USED ADJACENT TO FOUNDATIONS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#1342B] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

Ref Drawing No	-

DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
B	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/10/01

REVISIONS

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee 2025.10.06	2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON	[ep] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
GENERAL NOTES

SCALE NTS OR AS NOTED

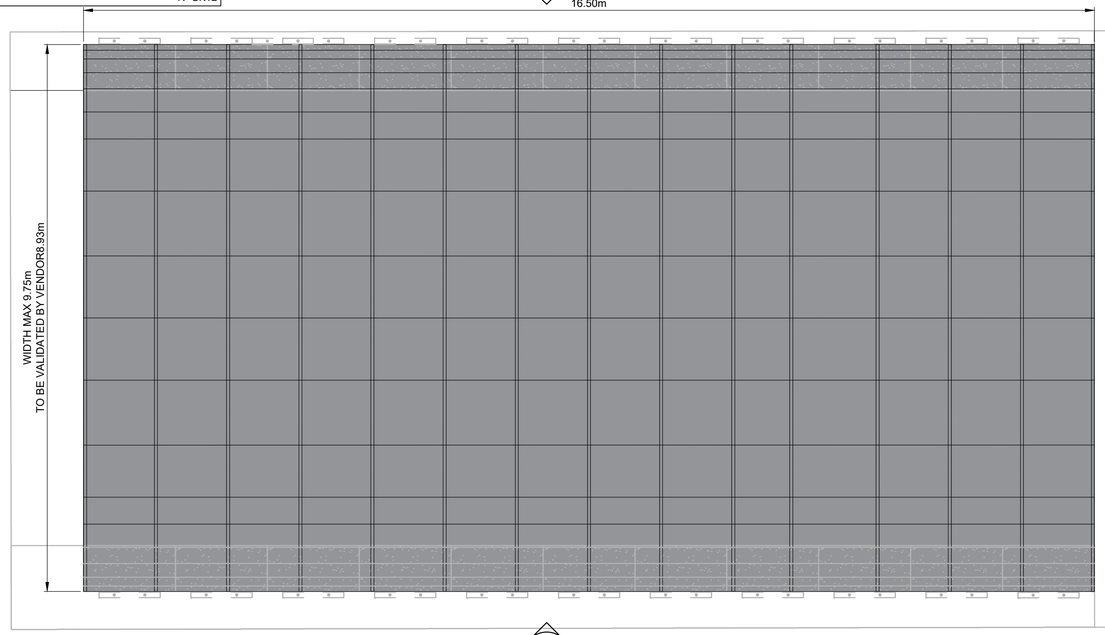
DWG. No. H375313-1000-230-251-0002

REV B

SHEET SIZE: A1

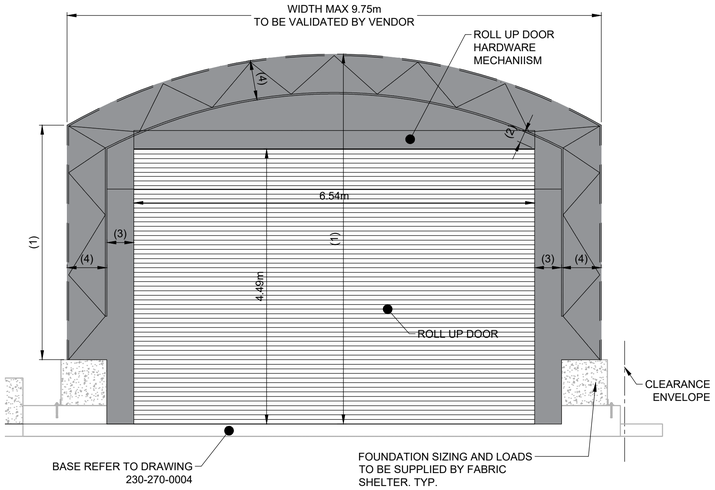
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Last Saved Date and Time: 09 Oct 2025, 7:43pm
File Name: H375313-1000-230-251-0002.dwg

DWG. No. H375313-1000-230-260-0005



1 AXLE STORAGE AREA PLAN VIEW

SCALE: 1:50



A AXLE STORAGE AREA FRONT VIEW

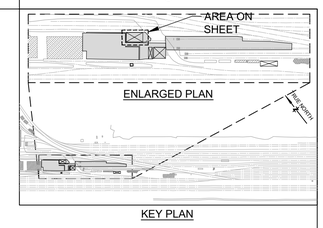
SCALE: 1:50

(1) DIMENSION TO BE SUPPLIED BY SHELTER SUPPLIER.

(2) MIN CLEARANCE BETWEEN OPENING AND STRUCTURE TO BE DETERMINED BY THE SUPPLIER AND TO INCLUDE ANY REQUIREMENTS FOR DOOR HARDWARE ECT.

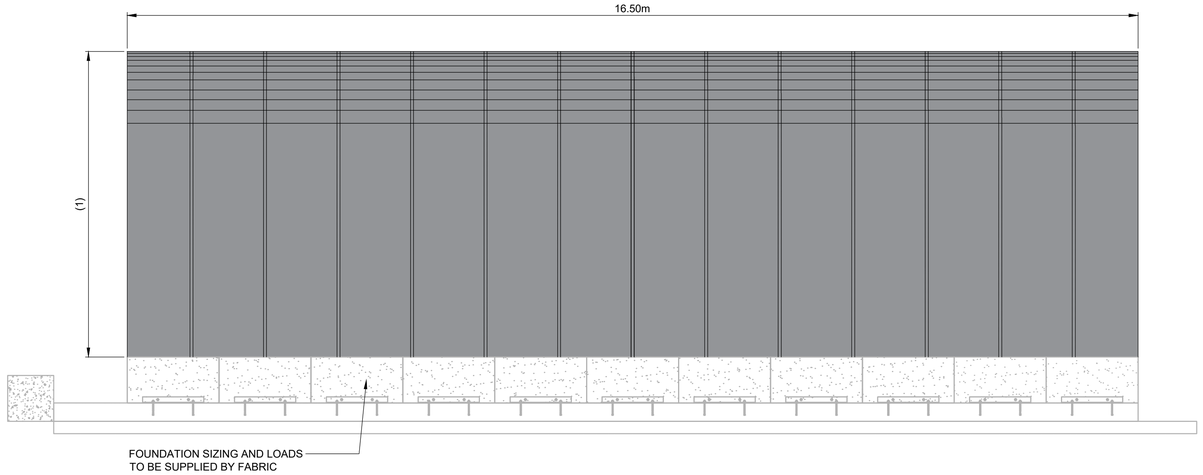
(3) MIN CLEARANCE DIMENSION TO BE PROVIDED BY SHELTER SUPPLIER AND INCLUDE ANY REQUIREMENTS FOR DOOR HARDWARE.

(4) DEPTH OF STRUCTURE TRUSSES AND DESIGN BY SHELTER SUPPLIER.



NOTES:

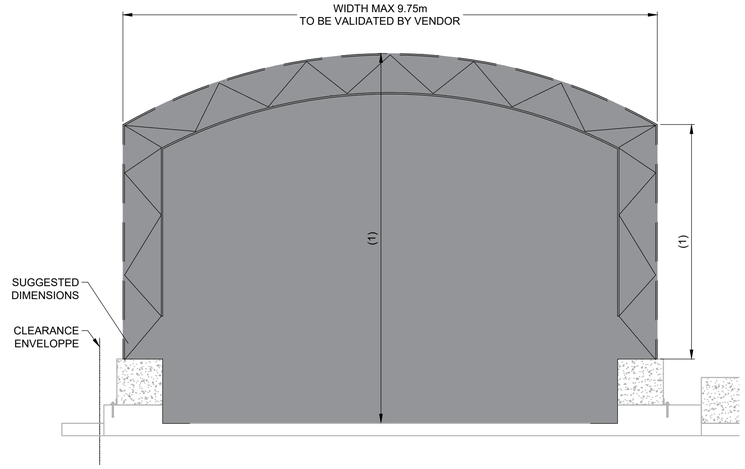
1. ALL DIMENSIONS SHOWN HERE ARE IN METERS UNLESS OTHERWISE SHOWN.
2. THE FABRIC SHELTER AND STRUCTURE IS TO BE DESIGNED AND SUPPLIED BY VENDOR FOR USE IN NORTH BAY ONTARIO PLUS OTHER REQUIREMENTS.
3. SUPPLIER TO PROVIDE DETAIL DESIGN DRAWINGS AND LOAD REACTIONS ON FOUNDATION BLOCKS.



C AXLE STORAGE AREA SIDE VIEW

SCALE: 1:50

(1) DIMENSION TO BE SUPPLIED BY SHELTER SUPPLIER.



B AXLE STORAGE AREA BACK VIEW

SCALE: 1:50

(1) DIMENSION TO BE SUPPLIED BY SHELTER SUPPLIER.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	H.SING		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	F. VAN BILJON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	H.S.	F.B.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	H.S.	F.B.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	H.S.	F.B.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	H.S.	F.B.	2025/03/24

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
AXLE STORAGE AREA
FABRIC SHELTER

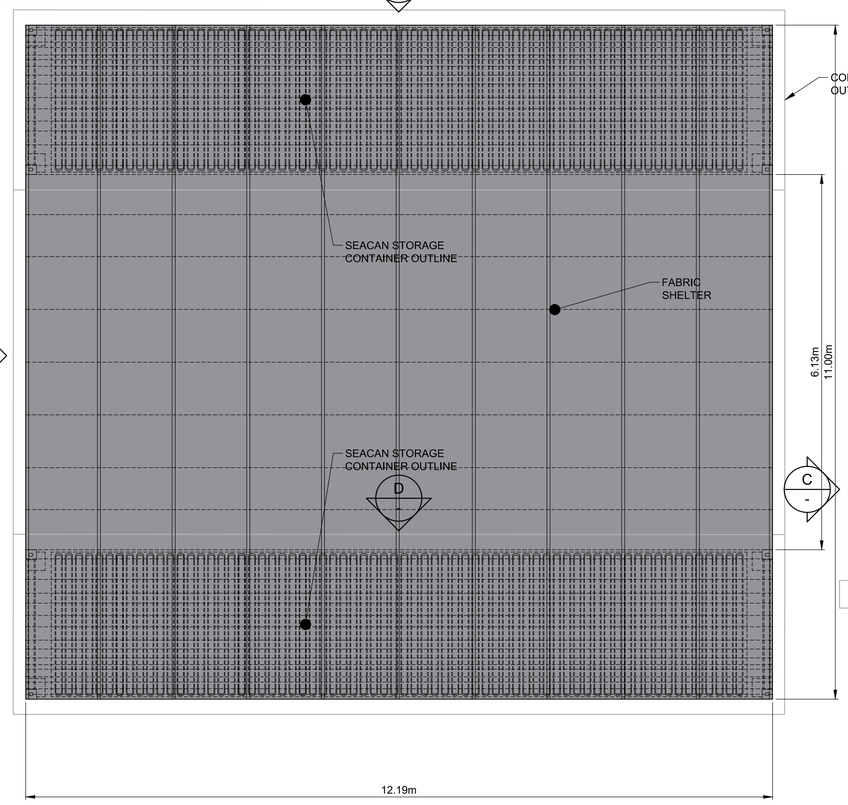
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-230-260-0005

REV E

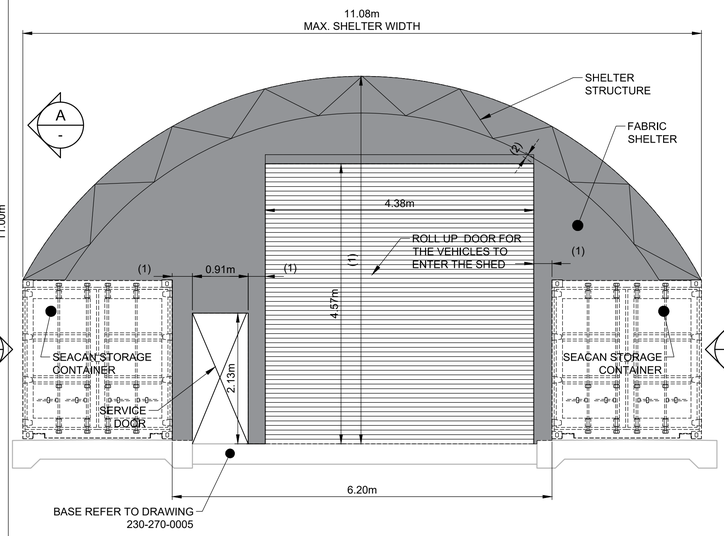
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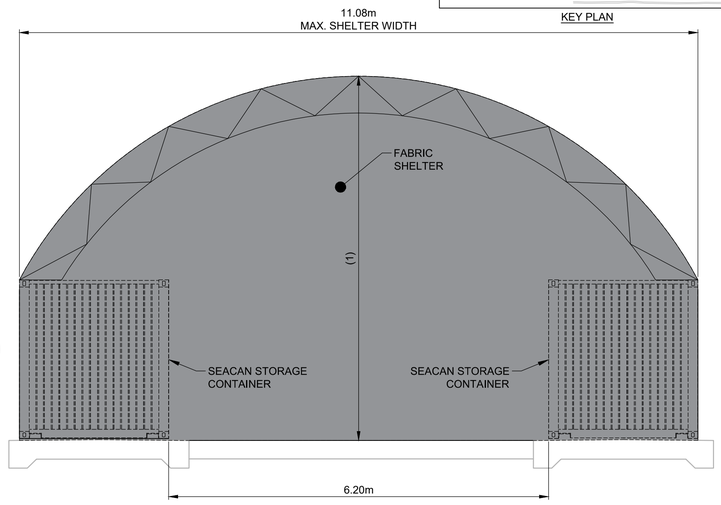
1 SHELTER AND CONTAINER PLAN VIEW

SCALE: 1:50



A SHELTER AND CONTAINER FRONT VIEW

SCALE: 1:50

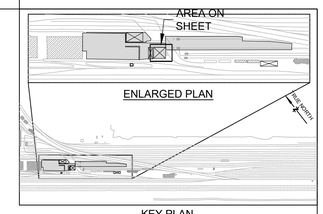


B SHELTER AND CONTAINER BACK VIEW

SCALE: 1:50

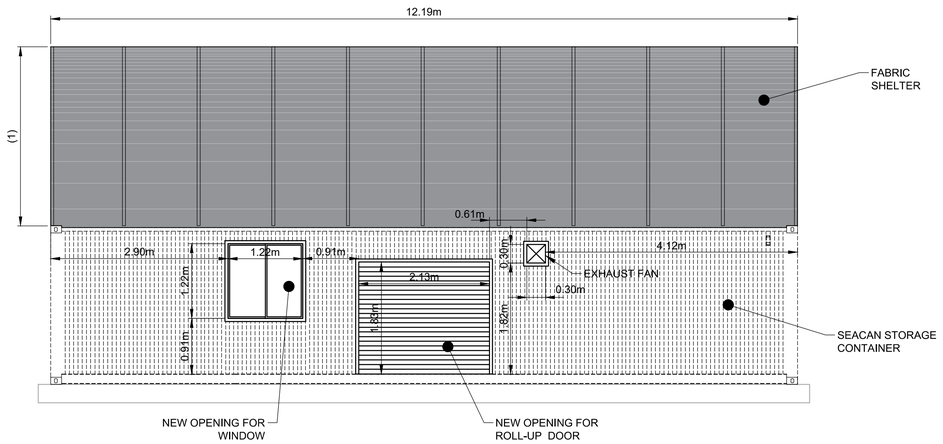
(1) DIMENSION TO BE SUPPLIED BY SHELTER SUPPLIER.

(2) MIN CLEARANCE BETWEEN OPENING AND STRUCTURE TO BE DETERMINED BY THE SUPPLIER AND TO INCLUDE ANY REQUIREMENTS FOR DOOR HARDWARE ECT.



NOTES:

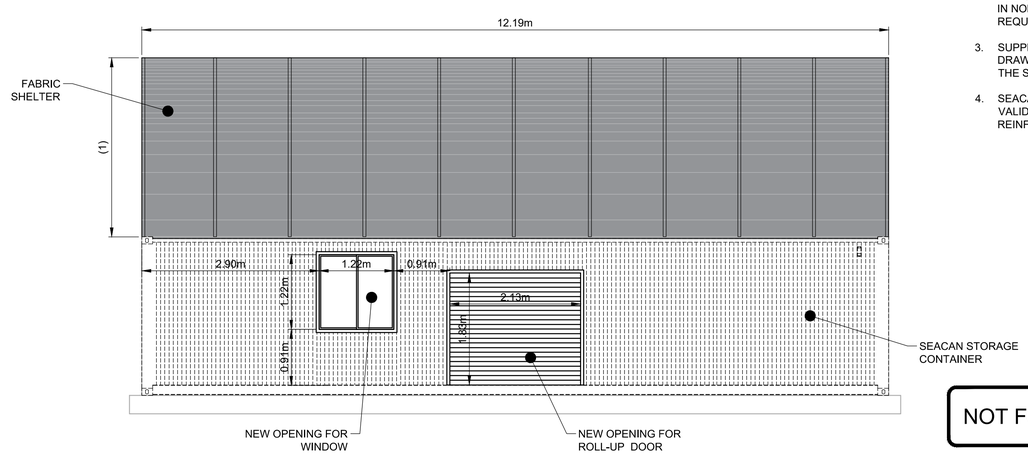
1. ALL DIMENSIONS SHOWN HERE ARE IN METERS UNLESS OTHERWISE SHOWN.
2. THE FABRIC SHELTER AND STRUCTURE IS TO BE DESIGNED AND SUPPLIED BY VENDOR FOR USE IN NORTH BAY ONTARIO PLUS OTHER REQUIREMENTS.
3. SUPPLIER TO PROVIDE DETAIL DESIGN DRAWINGS WITH APPLIED LOAD REACTIONS ON THE SEACAN STORAGE CONTAINERS.
4. SEACAN STORAGE CONTANER SUPPLIER TO VALIDATE ALL MODIFICATIONS AND PROVIDE ANY REINFORCEMENT IF NEEDED.



C SHELTER AND CONTAINER SIDE VIEW

SCALE: 1:50

(1) DIMENSION TO BE SUPPLIED BY SHELTER SUPPLIER.



D SHELTER AND CONTAINER SECTION VIEW

SCALE: 1:50

(1) DIMENSION TO BE SUPPLIED BY SHELTER SUPPLIER.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	H.S.	F.B.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	H.S.	F.B.	2025/07/25
B	ISSUED FOR40 % CLIENT REVIEW	H.S.	F.B.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	H.S.	F.B.	2025/03/24

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	H. SINGH		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	F. VAN BILJON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

REFERENCE DRAWINGS	
Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
SEACAN STORAGE CONTAINER AND SHELTER ROOF COVER

SCALE NTS OR AS NOTED

DWG. No. H375313-1000-230-260-0006

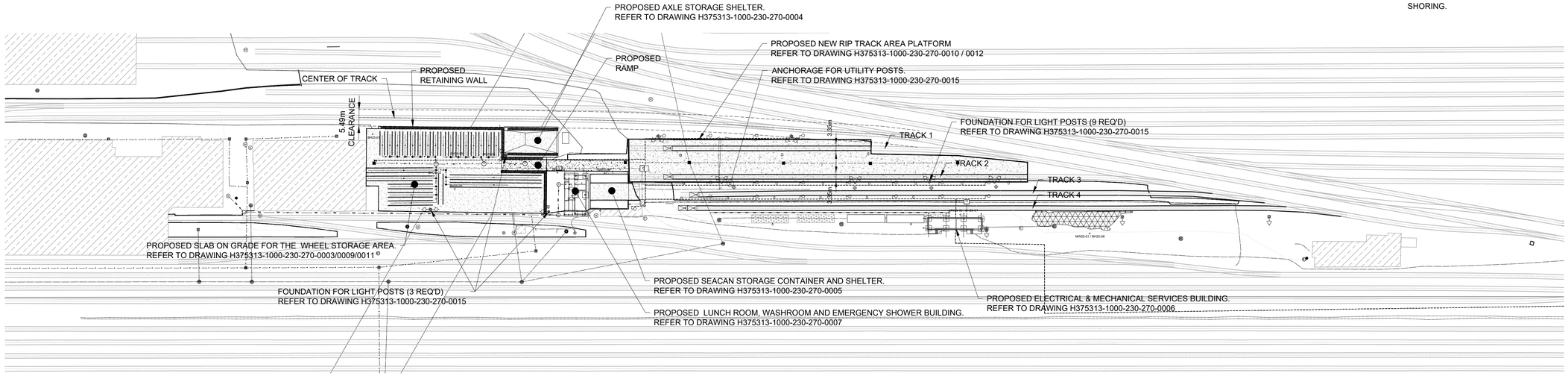
REV E

SHEET SIZE: A1

DWG. No. H375313-1000-230-270-0001

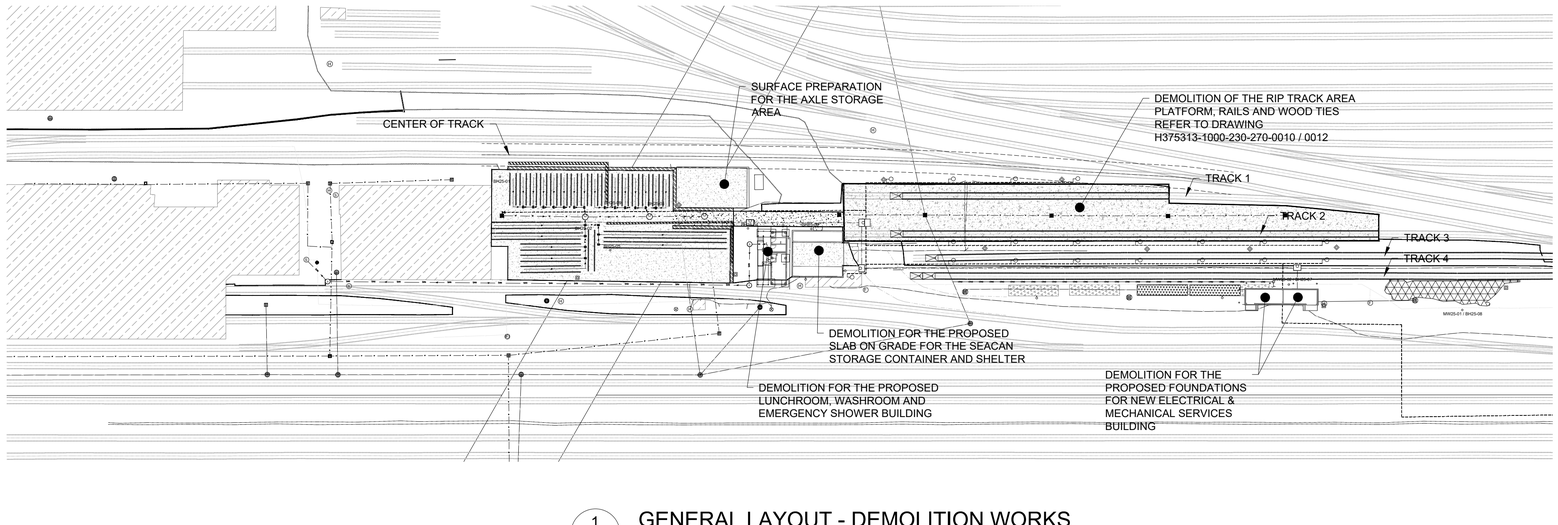
NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. CONTRACTOR TO ASSURE THAT ALL ADJACENT STRUCTURES ARE NOT TO BE COMPROMISED DURING EXCAVATION BY PROVIDING ADEQUATE SHORING.



2 - GENERAL LAYOUT - PROPOSED WORKS

SCALE: 1:750



1 - GENERAL LAYOUT - DEMOLITION WORKS

SCALE: 1:750

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D	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	G.F.	A.M.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.M.	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV	Digitally signed by Campbell, Lisa 2025.10.06	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON	[appl Rutherford, Kevin]	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ref Drawing No: -

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
GENERAL ARRANGEMENT PLAN
DEMOLITION AND PROPOSED WORKS

SCALE: NTS OR AS NOTED

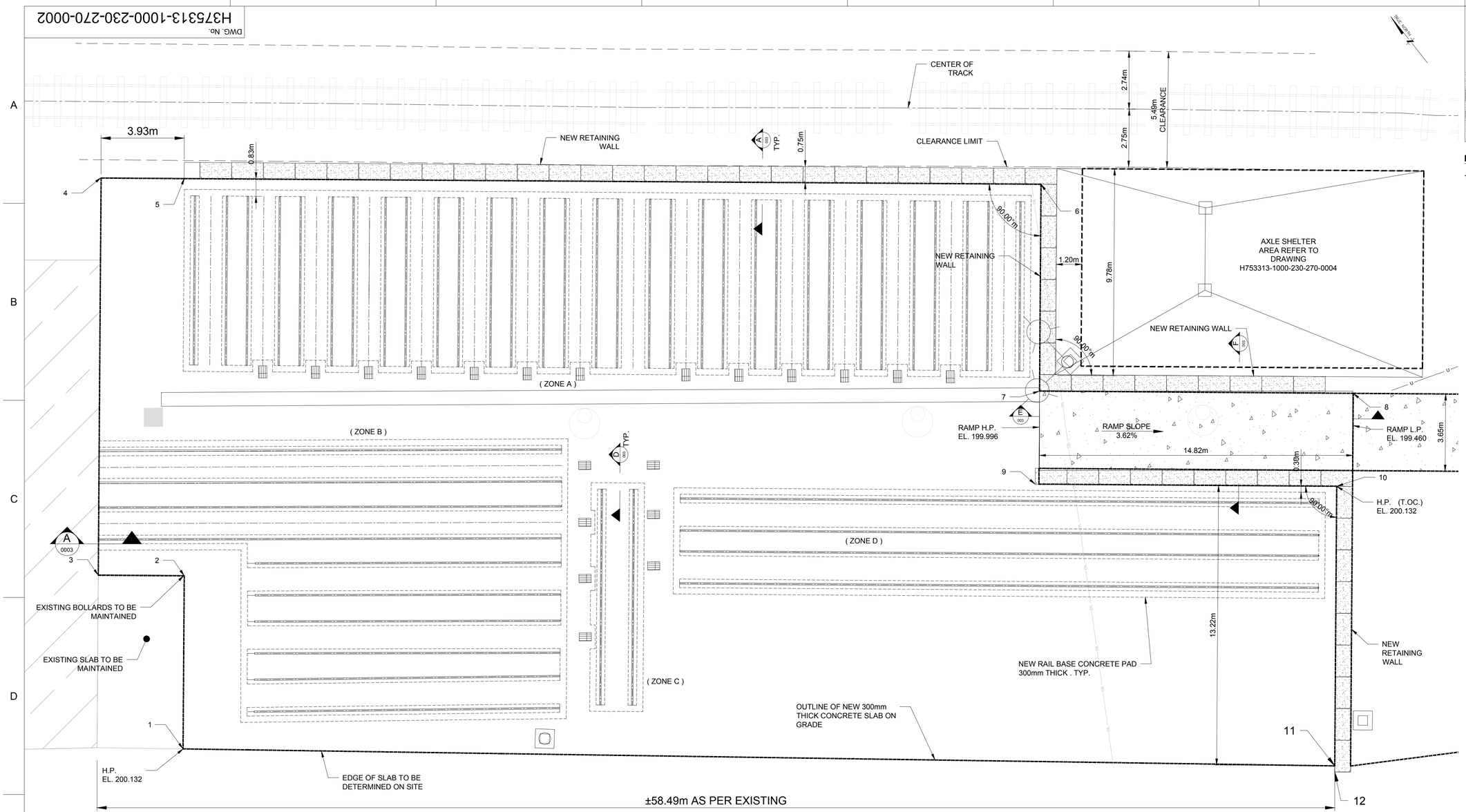
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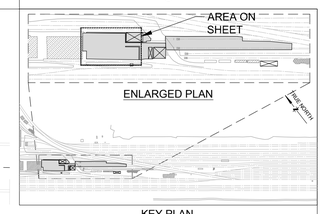
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Last Saved Date and Time: 09 Oct 2025, 7:11pm
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DWG. No. H375313-1000-230-270-0002





NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.

WORKING POINT TABLE		
WORKING POINT ID	NORTHING (Y)	EASTING (X)
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2	5128307.96	619188.8
3	5128310.49	619185.64
4	5128325.17	619197.39
5	5128322.71	619200.45
6	5128297.39	619232.03
7	5128289.75	619225.93
8	5128280.5	619237.47
9	5128286.43	619223.04
10	5128277.58	619234.08
11	5128267.21	619225.89
12	5128266.99	619225.71

1 WHEEL STORAGE AREA - RETAINING WALL AND CONCRETE SLAB

SCALE: 1:100

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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REVISIONS					
No.	DESCRIPTION	BY	CHK'D	DATE	
E	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06	
D	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15	
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B	ISSUED FOR 40% CLIENT REVIEW	G.F.	A.M.	2025/04/04	
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.M.	2025/03/24	

DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON	[zsp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

REFERENCE DRAWINGS	
Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
WHEEL STORAGE AREA
PROPOSED RETAINING WALLS

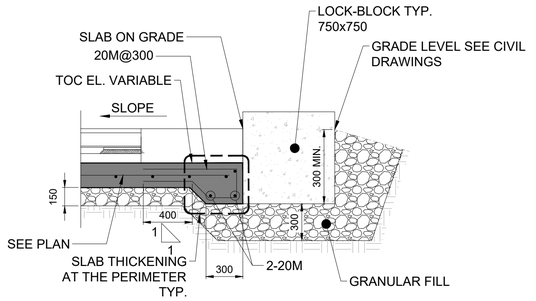
SCALE NTS OR AS NOTED | DWG. No. H375313-1000-230-270-0002 | REV E

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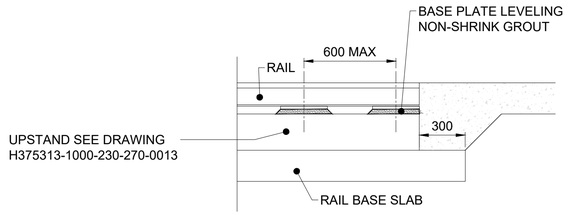
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Last Saved Date and Time: 09 Oct 2025, 10:25pm
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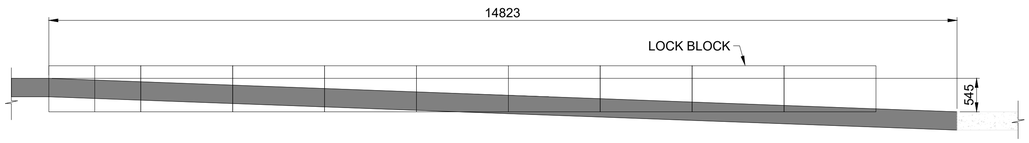
1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.



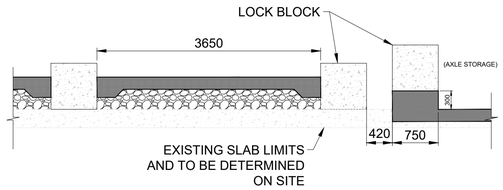
A 0002 SECTION
SCALE: 1:25



D 0002 SECTION AT END OF RAIL
SCALE: 1:20



E 0002 SECTION
SCALE: 1:50



F 0002 SECTION
SCALE: 1:50

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
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ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
WHEEL STORAGE AREA
SECTION AND DETAILS

Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

SCALE 1:50 OR AS NOTED

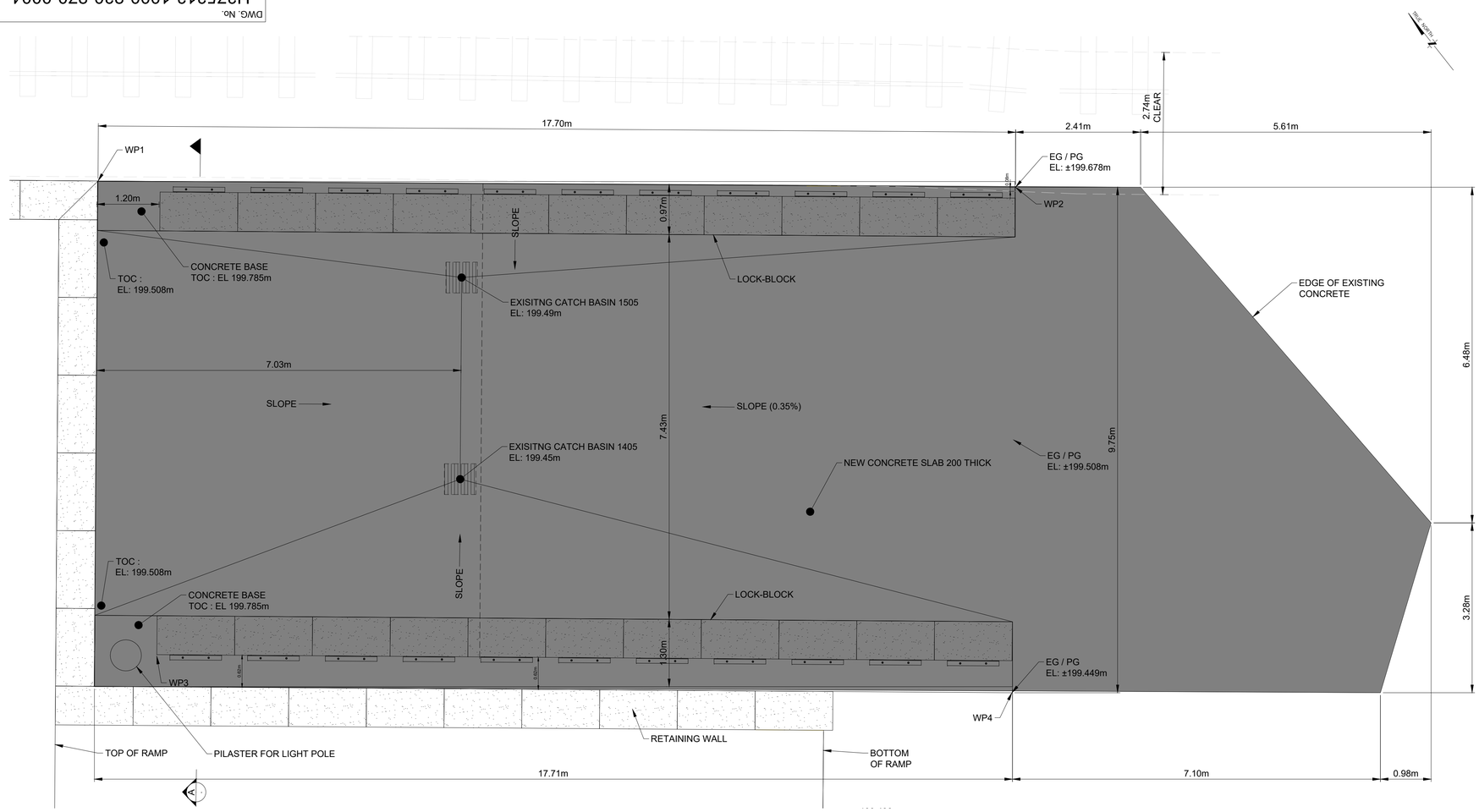
DWG. No. H375313-1000-230-270-0003

REV C

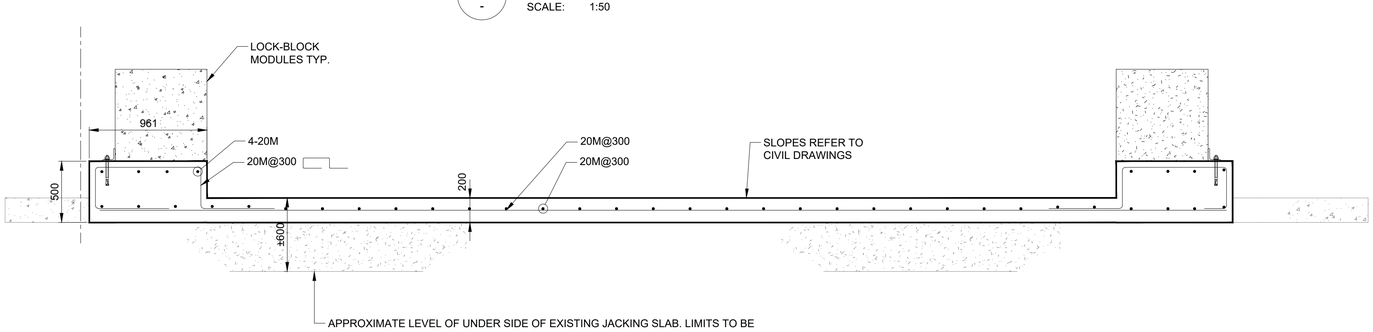
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Last Save By: FORLI10248
Last Saved Date and Time: 09 Oct 2025, 7:10pm
File Name: H375313-1000-230-270-0003.dwg

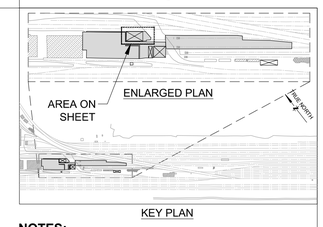
DWG. No. H375313-1000-230-270-0004



1 - AXLE STORAGE RACK AND SEACAN
SCALE: 1:50



A - SECTION
SCALE: 1:25



NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#13429] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

HATCH

Ontario Northland

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON	[app] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
AXLE STORAGE AREA
PROPOSED CONCRETE SLAB

No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	G.F.	A.M.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.M.	2025/03/24

REFERENCE DRAWINGS

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REG. PROFESSIONAL

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE 1:50 OR AS NOTED

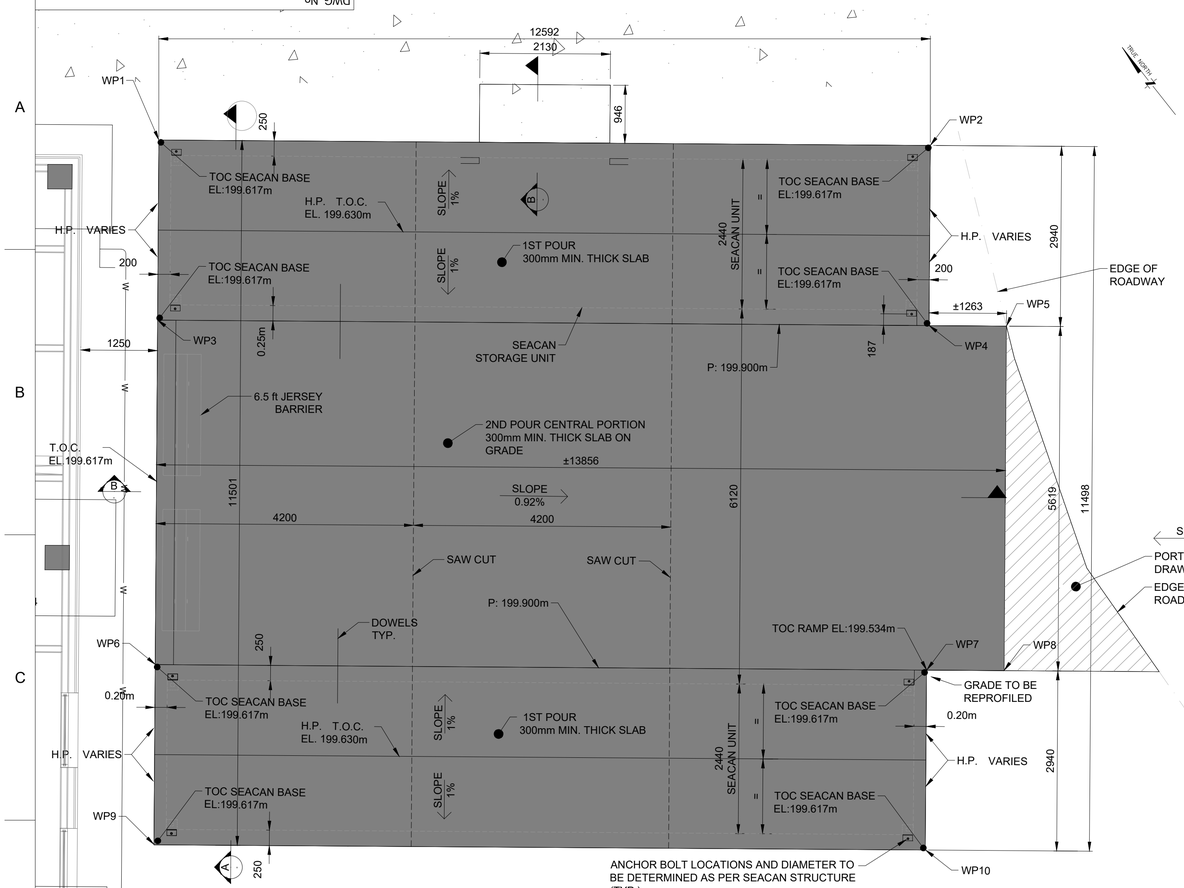
DWG. No. H375313-1000-230-270-0004

REV E

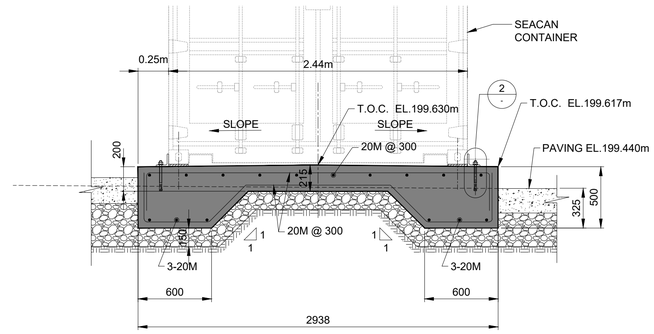
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Last Save By: FORL10248
Last Saved Date and Time: 09 Oct 2025, 7:10pm
File Name: H375313-1000-230-270-0004.dwg

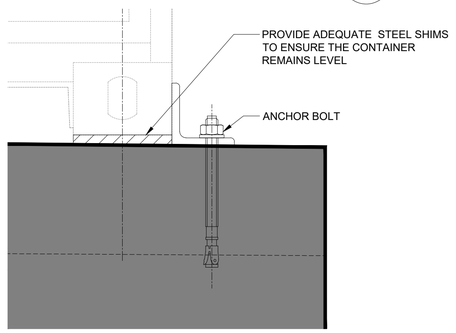
DWG. No. H375313-1000-230-270-0005



1 - TOOL STORAGE CONCRETE SLAB
SCALE: 1:50

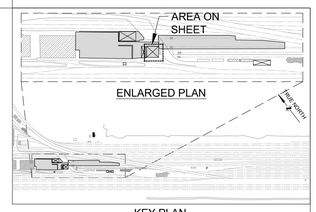


1 - DETAIL
SCALE: 1:25



2 - DETAIL
SCALE: 1:5

NOTE: ANCHORAGE DETAIL TO BE FINALIZED UPON RECEPTION OF SEACAN CONTAINER SHOP DRAWINGS AND LOADS



KEY PLAN

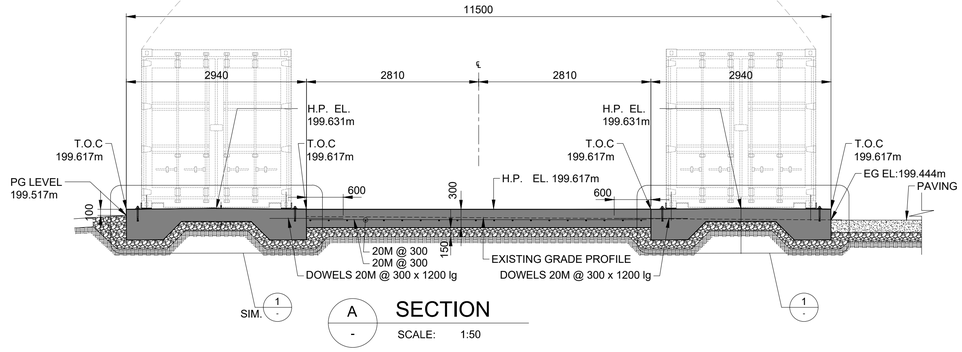
NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. FOR JOINT DETAILS REFER TO DRAWING H375313-1000-230-270-0015

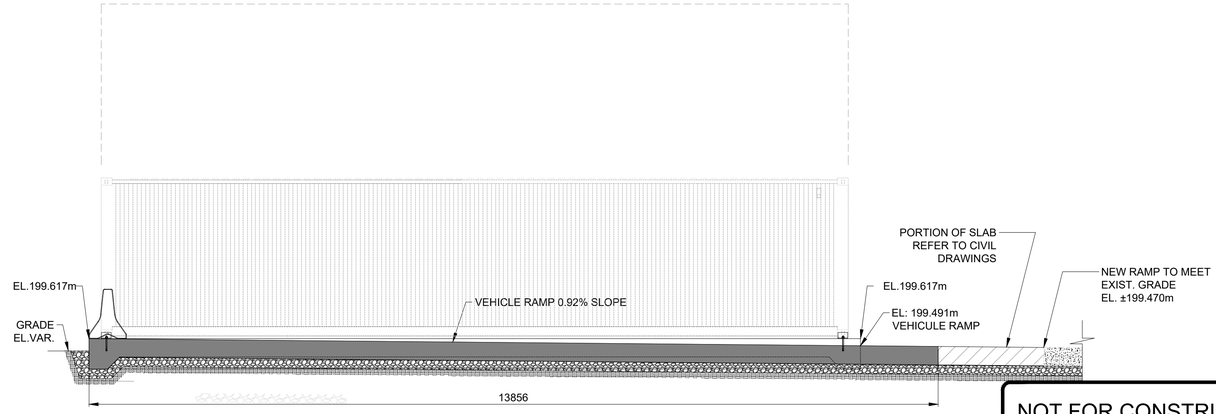
LEGEND:

EG = EXISTING GRADE
FG = FINAL GRADE
T.O.C.= TOP OF CONCRETE
WP = WORKING POINT

WORKING POINT TABLE		
WORKING POINT ID	NORTHING (Y)	EASTING (X)
WP. 1	5128267.90	619245.83
WP. 2	5128260.02	619255.66
WP. 3	5128265.60	619243.99
WP. 4	5128257.73	619253.82
WP. 5	5128256.94	619254.81
WP. 6	5128261.22	619240.48
WP. 7	5128253.34	619250.31
WP. 8	5128252.55	619251.29
WP. 9	5128258.93	619238.64
WP.10	5128251.05	619248.47



A - SECTION
SCALE: 1:50



B - SECTION
SCALE: 1:50

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#13428] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

HATCH

Ontario Northland

REVISIONS					
No.	DESCRIPTION	BY	CHK'D	DATE	
E	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06	
D	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15	
C	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25	
B	ISSUED FOR 40% CLIENT REVIEW	G.F.	A.M.	2025/04/04	
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.M.	2025/03/24	

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

REFERENCE DRAWINGS	
Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
SEACAN STORAGE CONTAINER AND SHELTER
PROPOSED CONCRETE SLAB

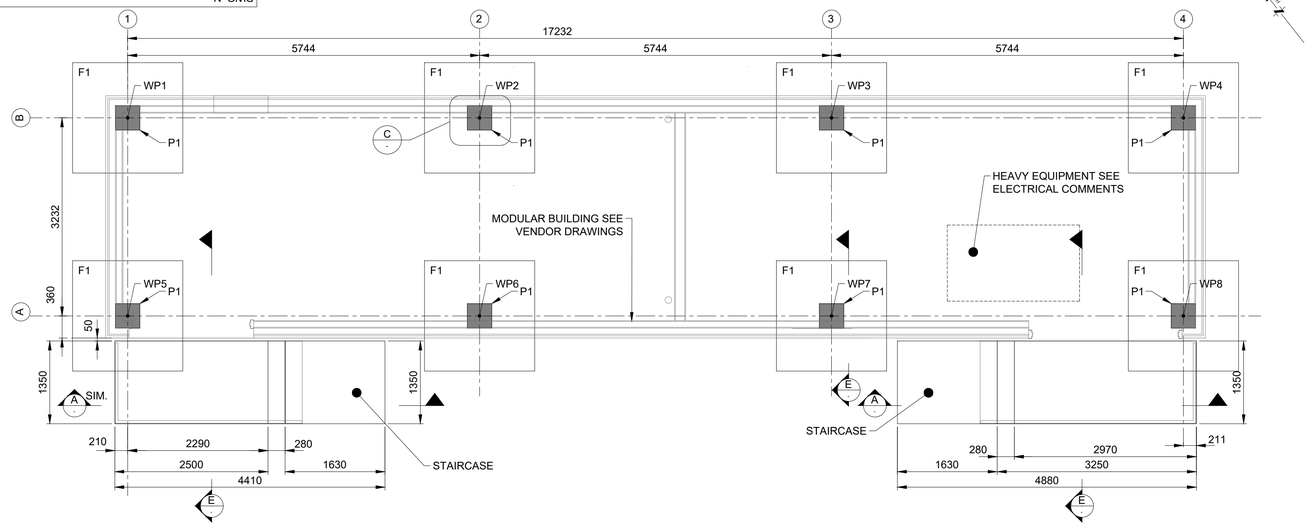
SCALE	DWG. No.	REV
1:50 OR AS NOTED	H375313-1000-230-270-0005	E

SHEET SIZE: A1

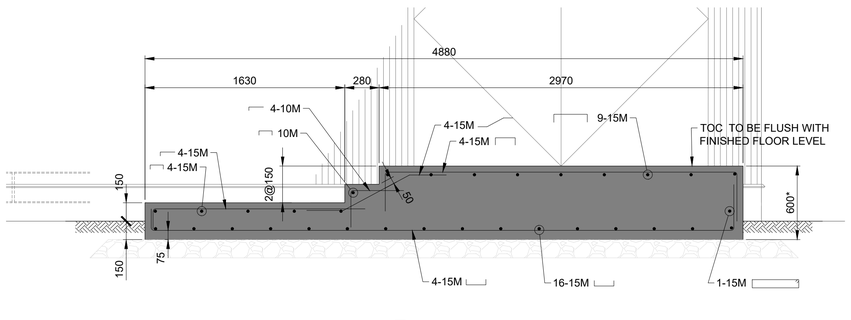
Last Save By: FORL10248
Last Saved Date and Time: 09 Oct 2025, 7:10pm
File Name: H375313-1000-230-270-0005.dwg

DWG. No. H375313-1000-230-270-0006

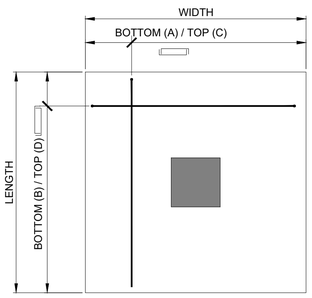
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	WIDTH (W) mm	LENGTH (L) mm	THICKNESS (T) mm	BOTTOM LAYER		TOP LAYER		
				A	B	C	D	
F1	1800	1800	400	9-20M	9-20M	9-20M	9-20M	



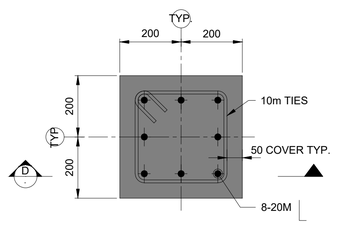
1 - PLAN VIEW
SCALE: 1:50



A - SECTION
SCALE: 1:25

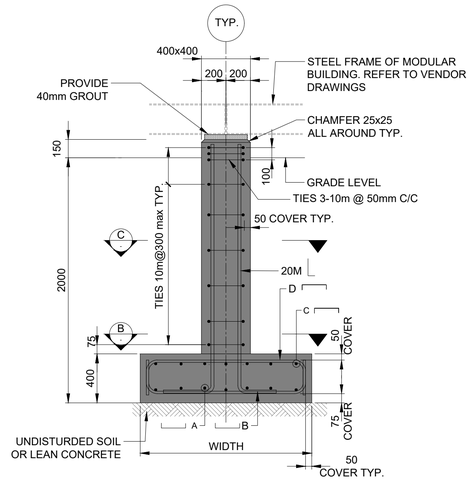


B - FOOTING (F1)
SCALE: 1:25

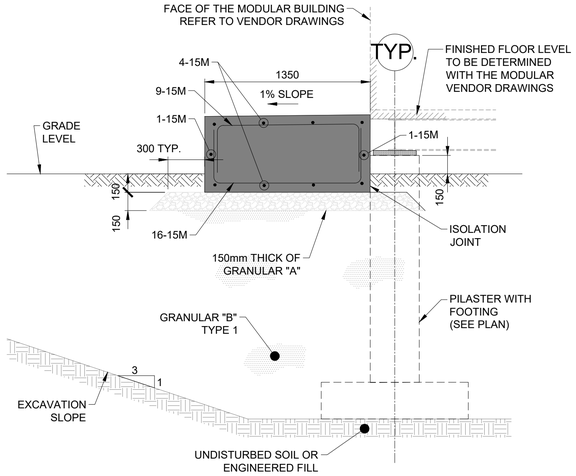


C - DETAIL - PILASTER (P1)
SCALE: 1:10

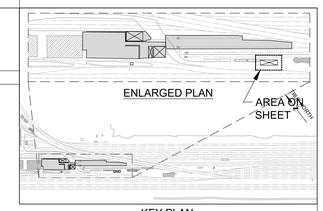
WORKING POINT TABLE		
WORKING POINT ID	NORTHING (Y)	EASTING (X)
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WP. 2	5128183.965	619328.543
WP. 3	5128180.369	619333.022
WP. 4	5128176.774	619337.501
WP. 5	5128185.040	619322.040
WP. 6	5128181.445	619326.519
WP. 7	5128177.849	619330.999
WP. 8	5128174.253	619335.478



D - SECTION
SCALE: 1:25



E - SECTION
SCALE: 1:25



KEY PLAN

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. POSITIONING OF PILASTERS FOR THE STEEL STRUCTURE TO BE FINALIZED AFTER RECEPTION OF FABRICATORS SHOP DRAWINGS.
3. DIMENSIONS WITH (*) ARE TO BE DETERMINED WITH THE MODULAR VENDOR DRAWINGS IN ORDER TO ESTABLISH THE FINISHED FLOOR LEVEL.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

REVISIONS					
No.	DESCRIPTION	BY	CHK'D	DATE	
C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06	
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15	
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25	

REFERENCE DRAWINGS	
DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REG. PROFESSIONAL

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HATCH

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee	2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
ELECTRICAL AND MECHANICAL SERVICES BUILDING
PLAN AND DETAILS

SCALE	DWG. No.	REV
NTS OR AS NOTED	H375313-1000-230-270-0006	C

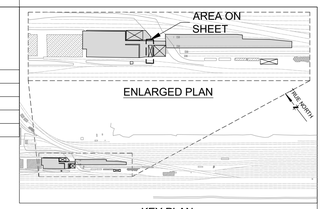
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Last Save By: FORL10248
Last Saved Date and Time: 09 Oct 2025, 7:26pm
File Name: H375313-1000-230-270-0006.dwg

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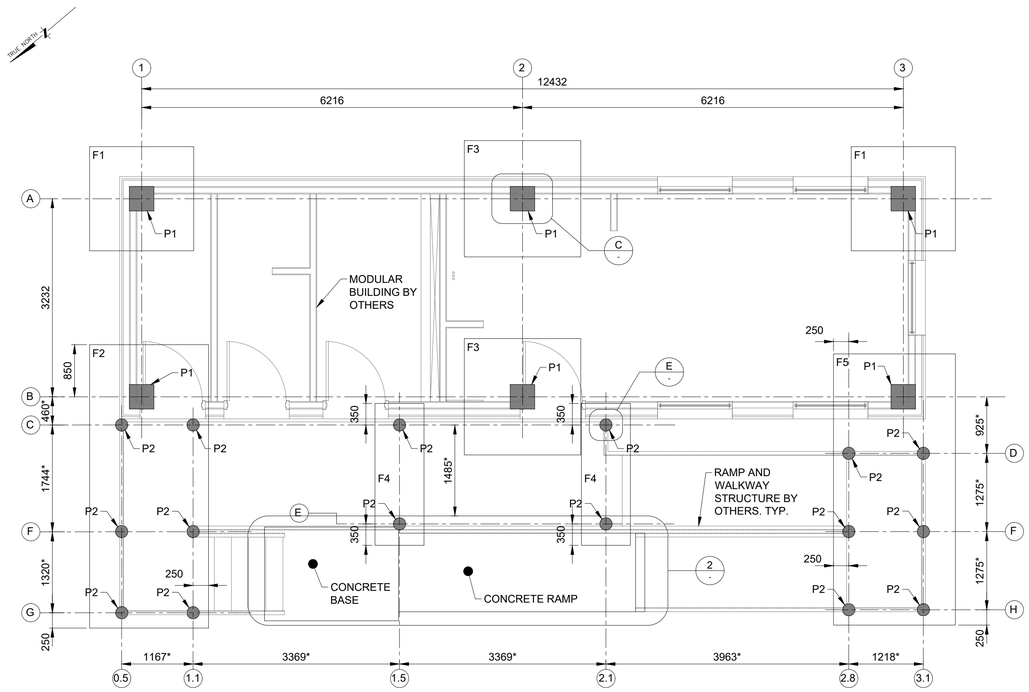
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MARK	SIZE			REINFORCEMENT				REMARKS
	WIDTH (W) mm	LENGTH (L) mm	THICKNESS (T) mm	BOTTOM LAYER		TOP LAYER		
				A	B	C	D	
F1	1700	1700	400	9-20M	9-20M	9-20M	9-20M	
F2	1940	4675	400	9-20M	27-20M	9-20M	27-20M	
F3	1900	1900	400	10-20M	10-20M	10-20M	10-20M	
F4	800	2315	300	5-20M	14-15M	5-20M	14-15M	
F5	1990	4425	400	9-20M	27-20M	9-20M	27-20M	



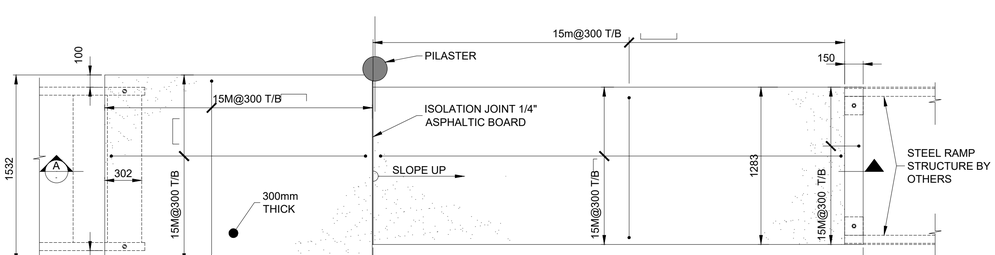
NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. POSITIONING OF PILASTERS FOR THE STEEL STRUCTURE TO BE FINALIZED AFTER RECEPTION OF FABRICATORS SHOP DRAWINGS.
3. DIMENSIONS WITH (*) ARE TO BE VALIDATED AND SUPPLIED BY THE FABRICATOR TO ASSURE THAT THE PILASTER ARE PLACED ADEQUATELY WITH THE STEEL STRUCTURE.



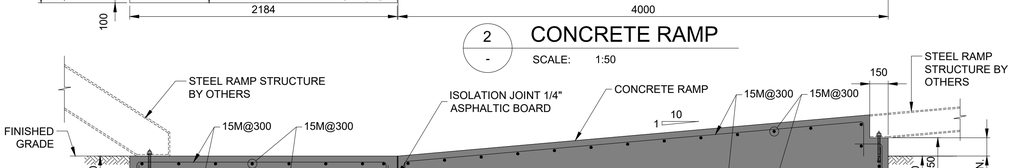
1 - PLAN VIEW - LUNCHROOM / WASHROOM SHED

SCALE: 1:50



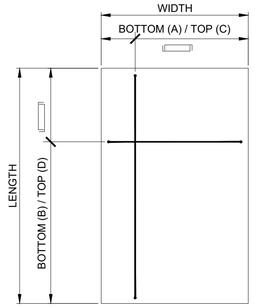
2 - CONCRETE RAMP

SCALE: 1:50



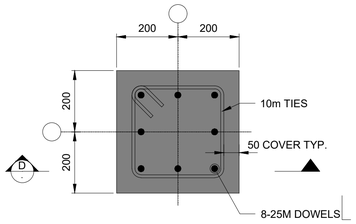
A - SECTION

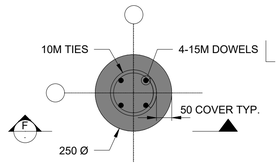
SCALE: 1:50



B - FOOTING TYP.

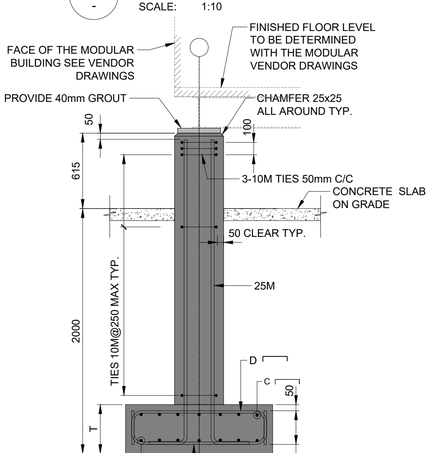
SCALE: 1:25





C - PILASTER (P1)

SCALE: 1:10

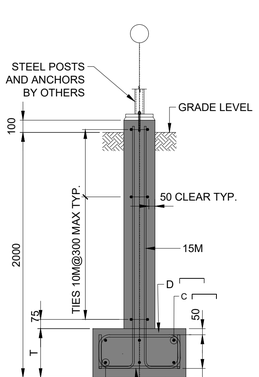


D - SECTION

SCALE: 1:25

E - PILASTER (P2)

SCALE: 1:10



F - SECTION

SCALE: 1:25

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
LUNCHROOM, WASHROOM EMERGENCY SHOWER BUILDING
PLAN VIEW SECTIONS AND DETAILS

SCALE NTS OR AS NOTED

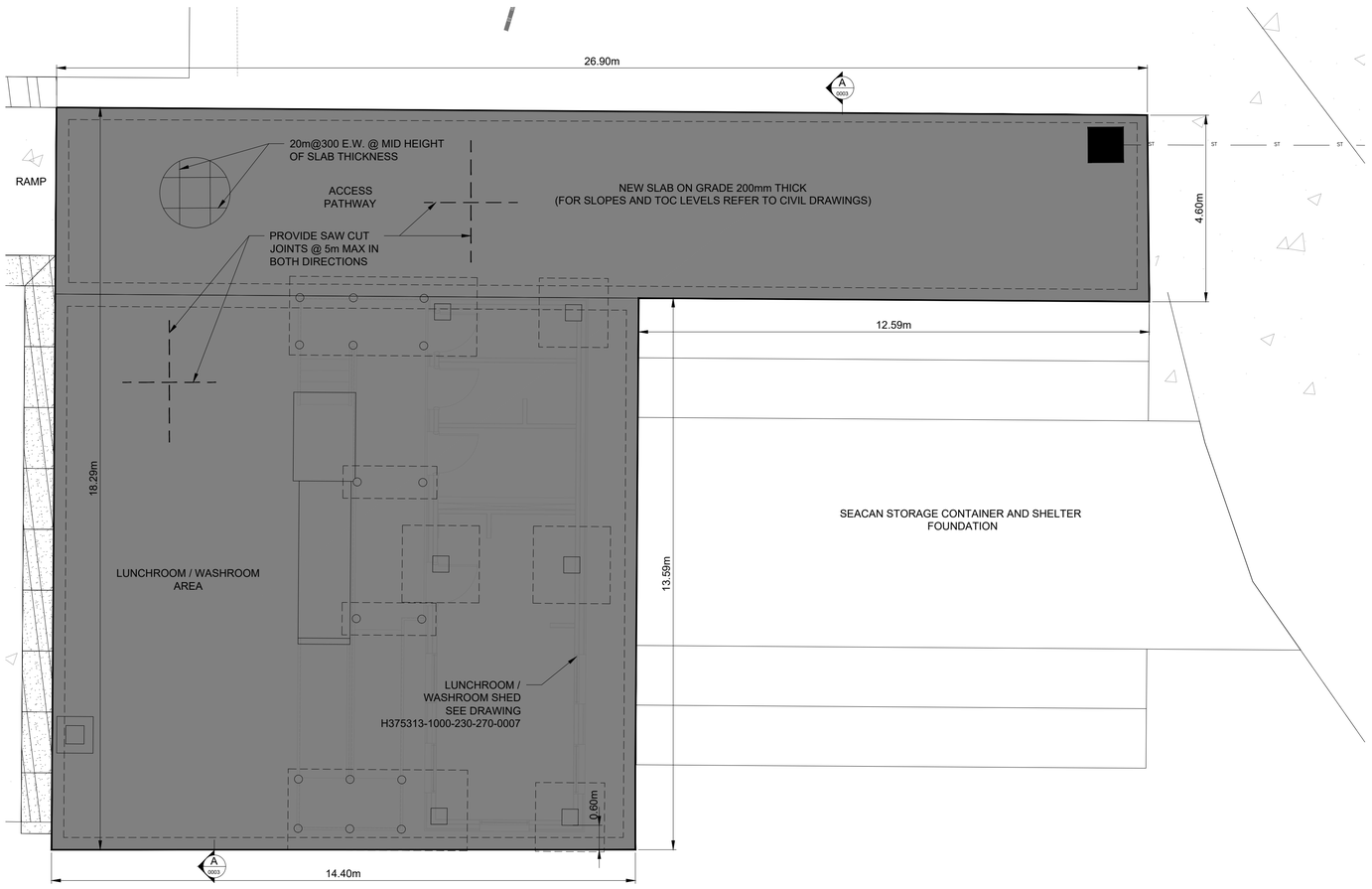
DWG. No. H375313-1000-230-270-0007

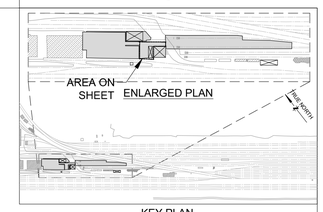
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Last Save By: FORL10248
Last Saved Date and Time: 09 Oct 2025, 7:25pm
File Name: H375313-1000-230-270-0007.dwg

DWG. No. H375313-1000-230-270-0008





KEY PLAN

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.

1 - SLAB ON GRADE - ACCESS PATH AND LUNCHROOM / WASHROOM SHED AREA

SCALE: 1:75

SLAB ON GRADE TO BE PLACED AROUND LUNCHROOM FOUNDATIONS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#13426] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

HATCH

Ontario Northland

DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV	Digitally signed by Campbell, Lisa 2025.10.06	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON	[pp] Ruthenford, Kevin	2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
B	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/10/01

Ref Drawing No -

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS | DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No. | DRAWING TITLE

ONTC
NORTH BAY RIP TRACK FACILITY

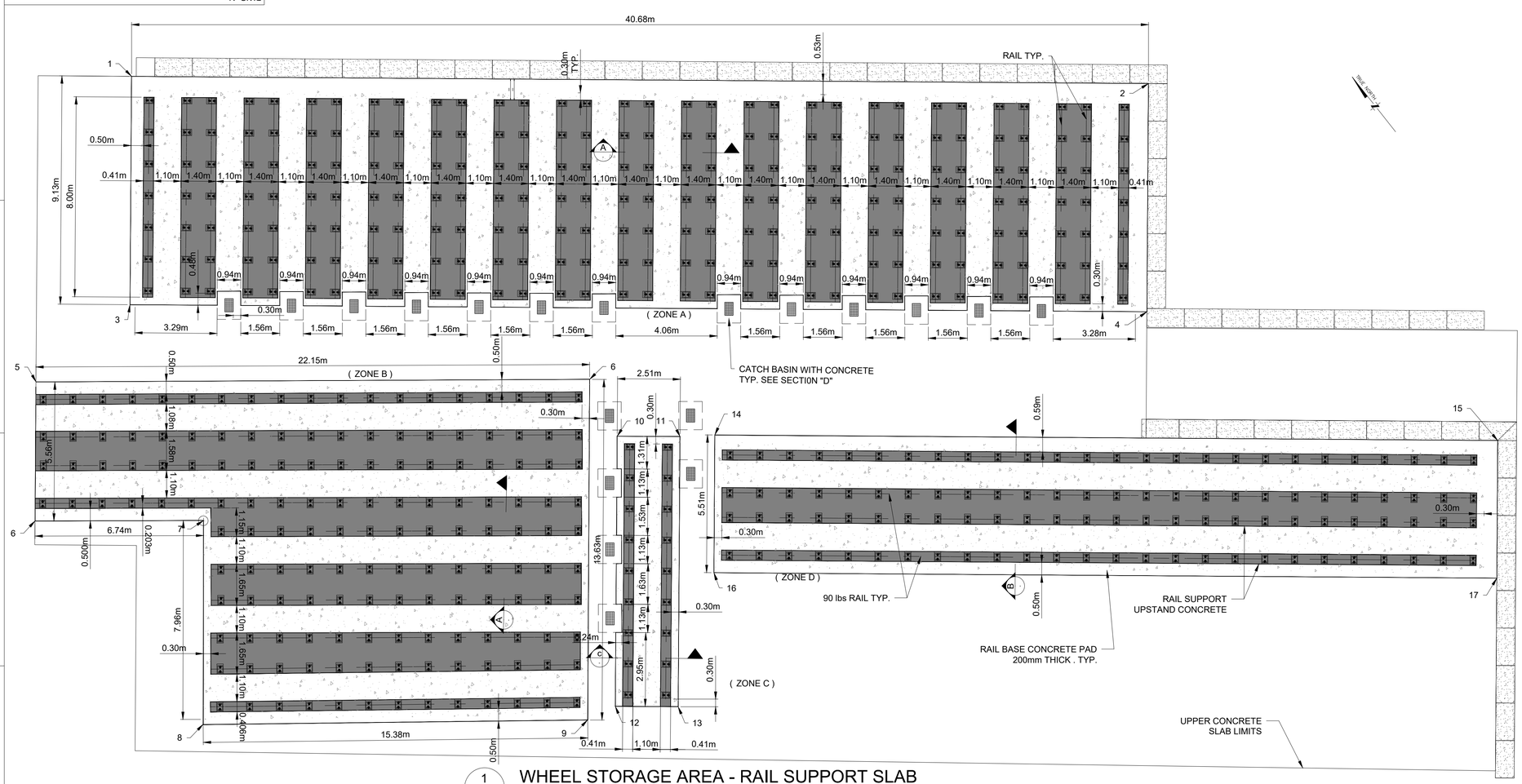
STRUCTURE
SLAB ON GRADE
ACCESS PATH AND LUNCHROOM AREA

SCALE NTS OR AS NOTED | DWG. No. H375313-1000-230-270-0008 | REV B

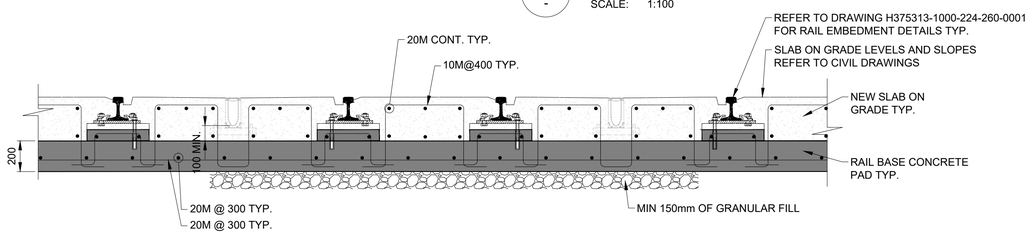
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Last Saved Date and Time: 09 Oct 2025, 7:31pm
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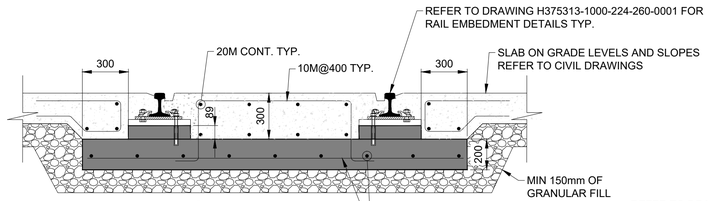
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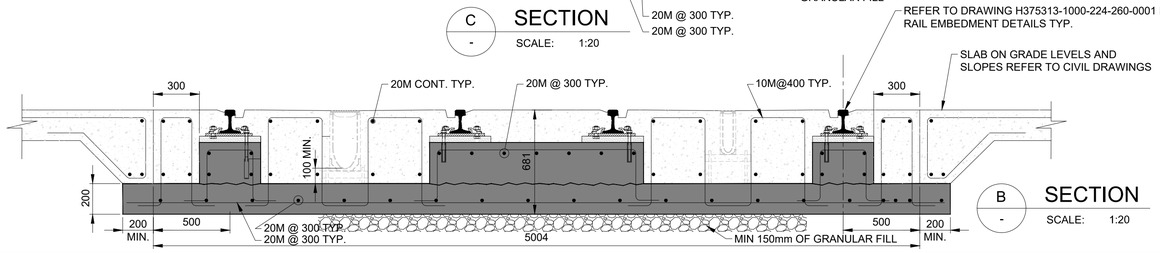
1 - WHEEL STORAGE AREA - RAIL SUPPORT SLAB
SCALE: 1:100



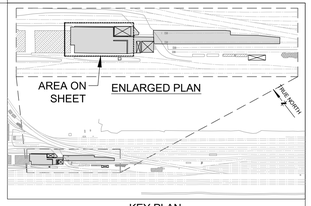
A - SECTION
SCALE: 1:20



C - SECTION
SCALE: 1:20



B - SECTION
SCALE: 1:20



KEY PLAN

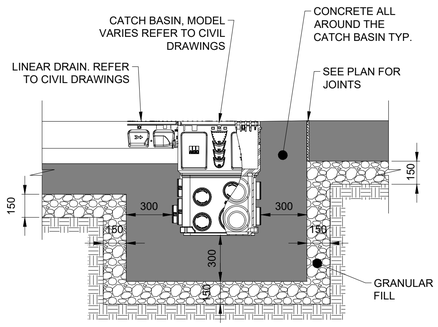
WORKING POINT TABLE		
WORKING POINT ID	NORTHING (Y)	EASTING (X)
1	5128322.83	619200.13
2	5128297.39	619232.05
3	5128315.7	619194.57
4	5128290.26	619226.32
5	5128315.61	619189.71
6	5128301.96	619207.15
7	5128307.1	619191.53
8	5128300.71	619186.48
9	5128291.32	619198.66
10	5128299.49	619206.62
11	5128297.92	619208.58
12	5128291.06	619199.87
13	5128289.49	619201.83
14	5128297.11	619209.72
15	5128277.52	619234.16
16	5128292.81	619206.27
17	5128273.22	619230.71

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. FOR ALL TOP OF RAIL ELEVATIONS, NORTHINGS AND EASTINGS REFER TO RAIL DRAWINGS H375313-1000-224-251-0001 AND H375313-1000-224-260-0002.
3. FOR CONCRETE SURFACE SLOPES REFER TO CIVIL DRAWING H375313-1000-220-271-0004.
4. FOR ALL TRENCH AND CATCH BASIN RELATED ITEMS REFER TO VENDOR SHOP DRAWINGS AND INSTALLATIOn INSTRUCTIONS

LEGEND:

EG = EXISTING GRADE
FG = FINAL GRADE
T.O.C.= TOP OF CONCRETE
WP = WORKING POINT



D - CATCH BASIN DETAIL TYP.
SCALE: 1:20

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

ONTC
NORTH BAY RIP TRACK FACILITY

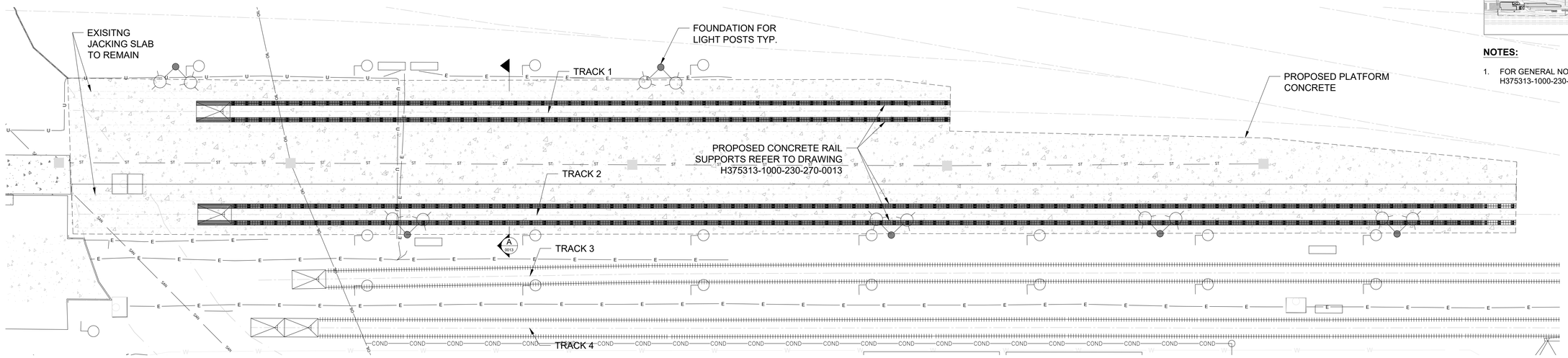
STRUCTURE
WHEEL STORAGE AREA
RAIL SUPPORT UPSTAND AND BASE CONCRETE

REFERENCE DRAWINGS		REG. PROFESSIONAL
Ref Drawing No	-	
DRAWING No.	DRAWING TITLE	

SCALE: NTS OR AS NOTED
DWG. No. H375313-1000-230-270-0009
REV C
SHEET SIZE: A1

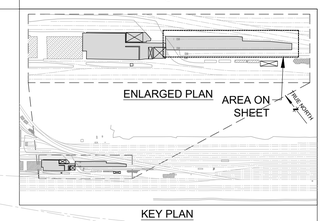
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DWG. No. H375313-1000-230-270-0010



2 - RAIL SUPPORT - PROPOSED WORKS

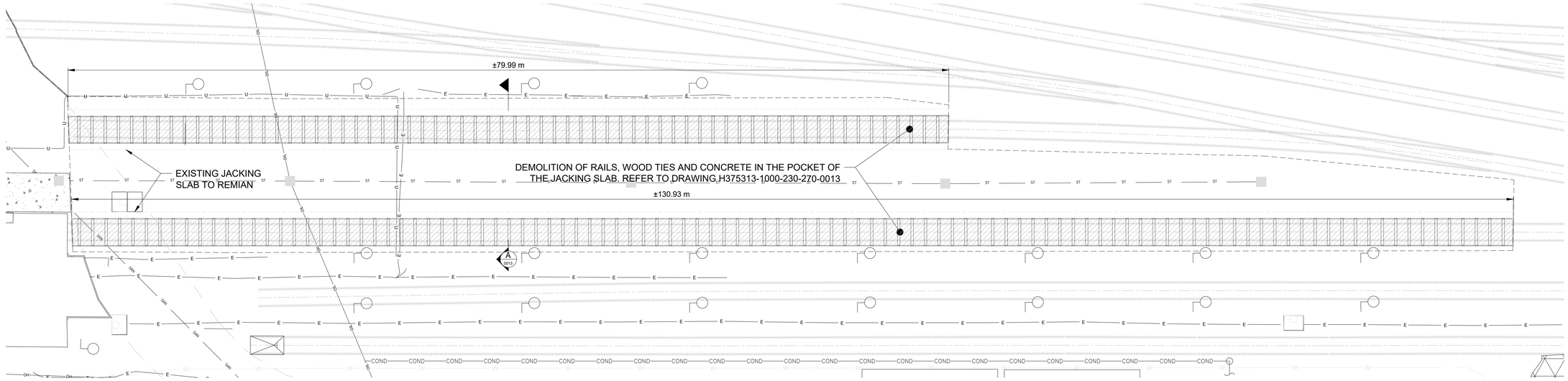
SCALE: 1:200



KEY PLAN

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.



1 - RAIL SUPPORT - DEMOLITION WORKS

SCALE: 1:200

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
RIP TRACK AREA
DEMOILITION / PROPOSED RAIL SUPPORTS

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE: NTS OR AS NOTED

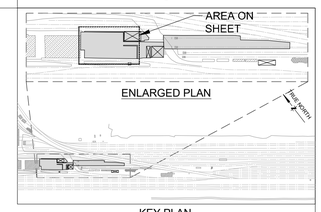
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REV: C

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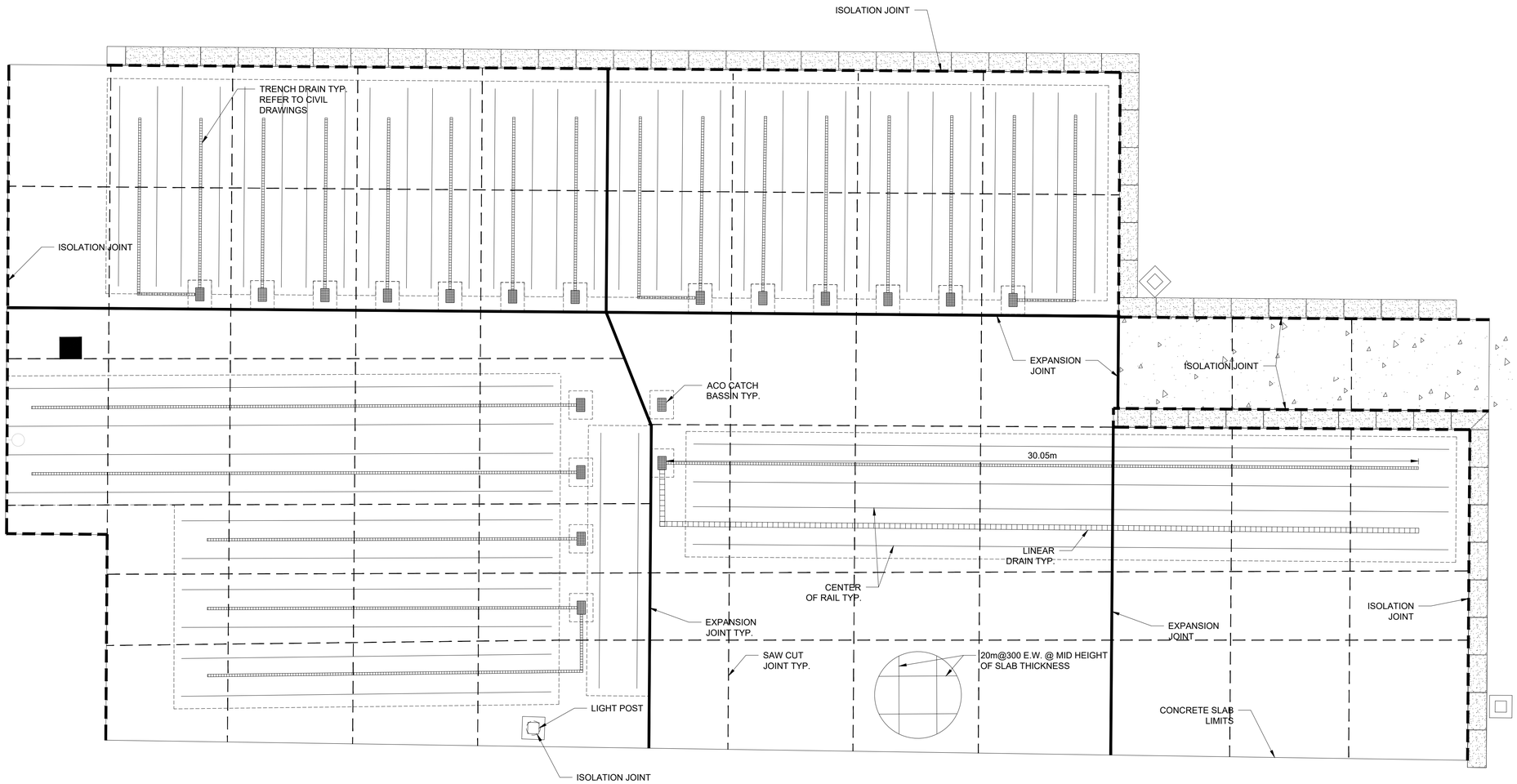
DWG. No. H375313-1000-230-270-0011



KEY PLAN

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. FOR CONCRETE SURFACE SLOPES REFER TO CIVIL DRAWING H375313-1000-220-271-0004.
3. FOR ALL JOINT DETAILS REFER TO DRAWING H375313-1000-230-271-0015



1 / - WHEEL STORAGE AREA - CONCRETE JOINTS LAYOUT

SCALE: 1:100

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
WHEEL STORAGE AREA
CONCRETE JOINTS LAYOUT AND REBAR

Ref Drawing No	-

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE NTS OR AS NOTED

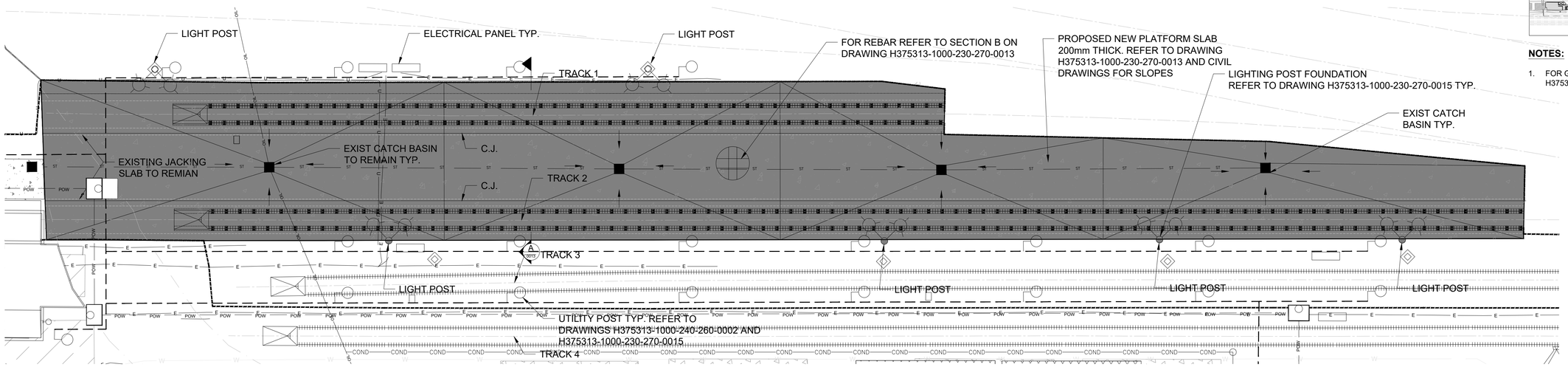
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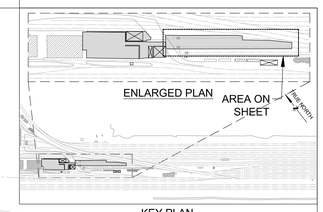
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DWG. No. H375313-1000-230-270-0012



2 / - PLATFORM - PROPOSED WORKS

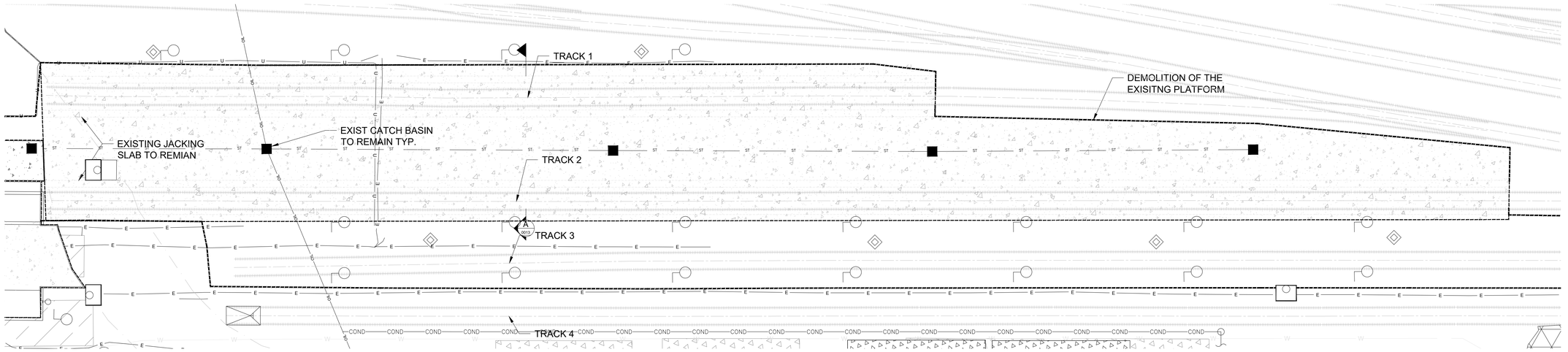
SCALE: 1:200



KEY PLAN

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.



1 / - PLATFORM - DEMOLITION WORKS

SCALE: 1:200

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ISSUED FOR TENDER

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REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV	Digitally signed by Campbell, Lisa 2025.10.06	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON	Digitally signed by Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

REFERENCE DRAWINGS	
Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

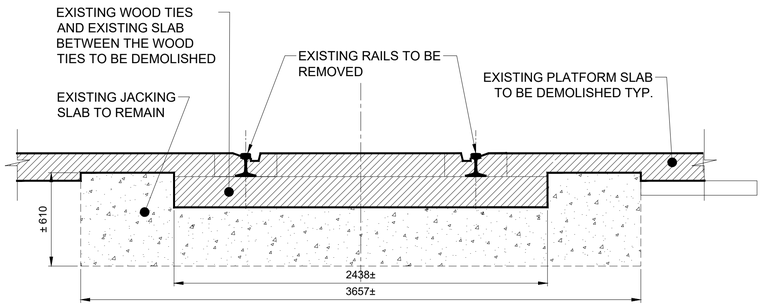
STRUCUTRE
RIP TRACK AREA
DEMOLITION / PROPOSED PLATFORM AREA

SCALE NTS OR AS NOTED | DWG. No. H375313-1000-230-270-0012 | REV C

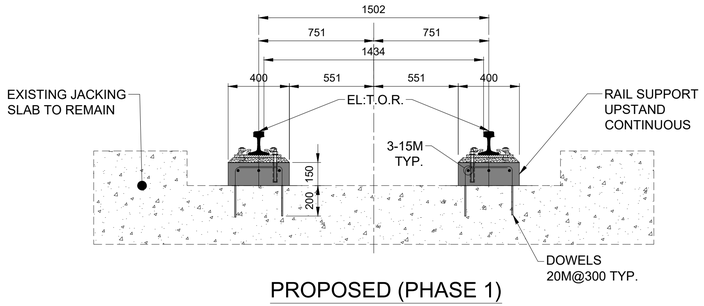
SHEET SIZE: A1

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Last Saved Date and Time: 09 Oct 2025, 7:33pm
File Name: H375313-1000-230-270-0012.dwg

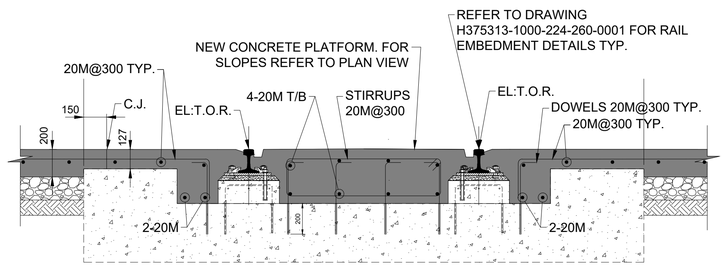
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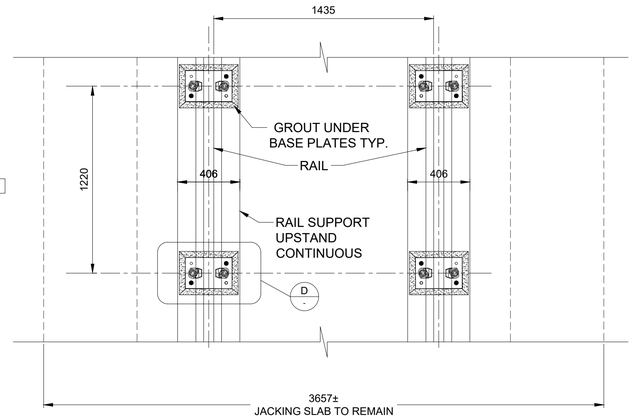
DEMOLITION



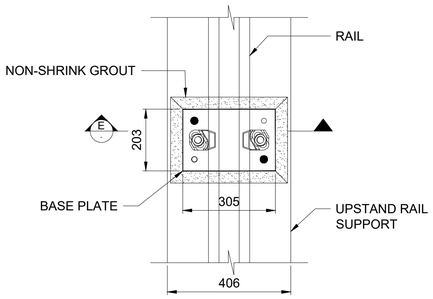
PROPOSED (PHASE 1)



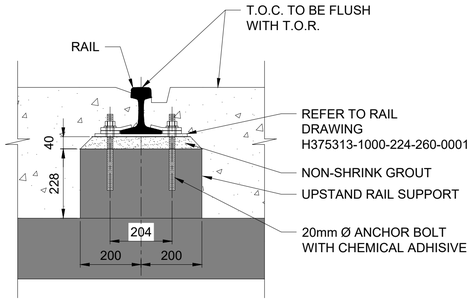
PROPOSED (PHASE 2)



C — PLAN VIEW DETAIL OF RAIL PLATES
SCALE: 1:20



D — RAIL BASE PLATE
SCALE: 1:10
REFER TO RAIL DRAWING H375313-1000-224-260-0001



E — RAIL BASE PLATE - SECTION
SCALE: 1:10

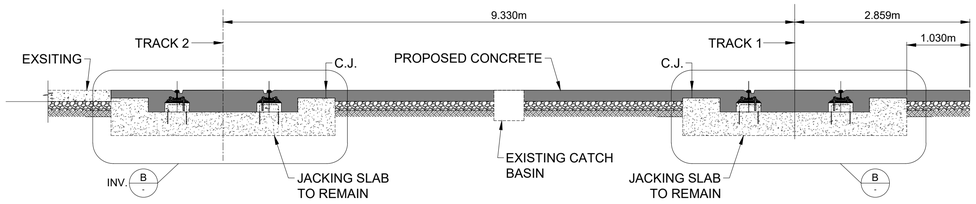
NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.
2. FOR RAIL EMBEDMENT DETAILS REFER TO DRAWING H375313-1000-224-260-0001.

LEGEND:

L.P. = LOW POINT
H.P = HIGH POINT
T.O.R. = TOP OF RAIL

B — DETAIL - DEMOLITION / PROPOSED
SCALE: 1:20



A — SECTION
SCALE: 1:20

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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C	ISSUED FOR TENDER	G.F.	A.K.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	G.F.	A.K.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	G.F.	A.K.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	G. FORLINI		2025/10/06
DESIGNER	G. FORLINI		2025/10/06
CHECKER	A. KONDRAT'EV		2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	A. KONDRAT'EV		2025/10/06
LEAD DISC. ENG.	A. MIDDLETON		2025/10/06
ENG. MANAGER	F. VAN BILJON		2025/10/06
PROJ. MANAGER	H. SINGH		2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS

HATCH

Ontario Northland

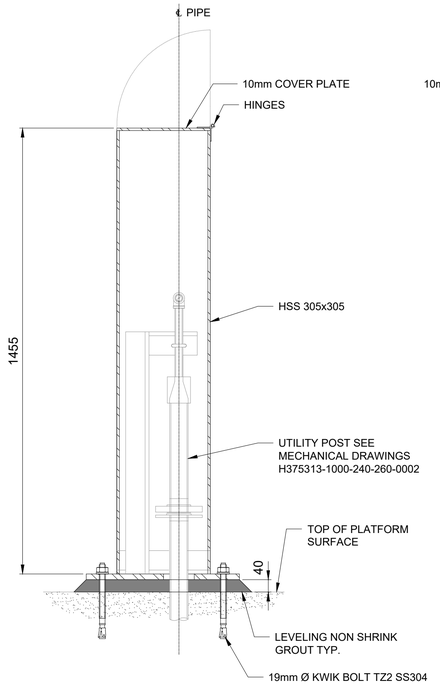
ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
RIP TRACK AREA
SECTIONS AND DETAILS

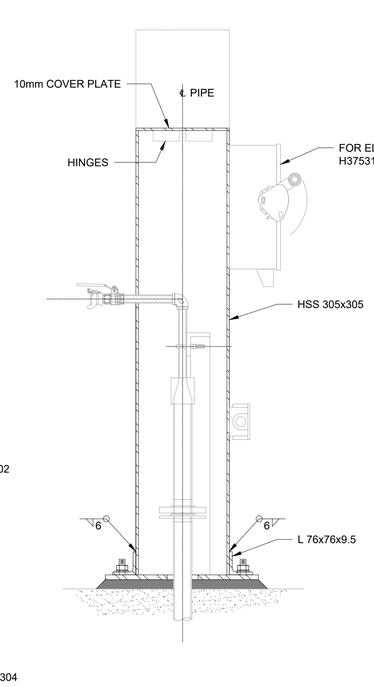
SCALE NTS OR AS NOTED | DWG. No. H375313-1000-230-270-0013 | REV C

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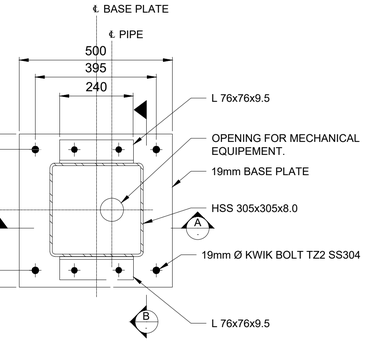
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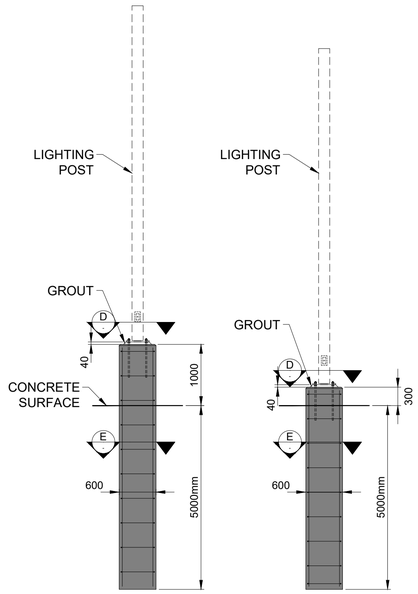
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B - SECTION
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1 - UTILITY POSTS
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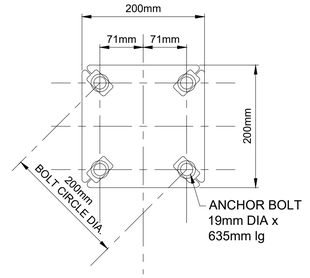


FOUNDATIONS FOR THE WHEEL STORAGE AREA

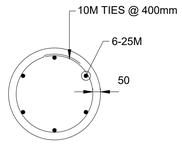
FOUNDATIONS FOR THE RIP TRACK AREA

FOR ELECTRICAL POST
REFER TO ELECTRICAL DRAWING H375313-1000-263-260-0002

C - LIGHT POST FOUNDATION DETAILS
SCALE: 1:50



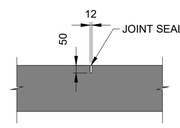
D - LIGHT POST ANCHOR DETAIL
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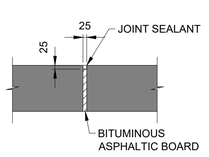
E - LIGHT POST FOUNDATION REBAR
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NOTES:

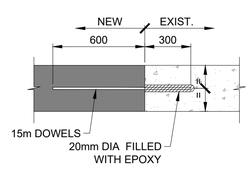
1. FOR GENERAL NOTES REFER TO DRAWING H375313-1000-230-251-0002.



SAW CUT DETAIL

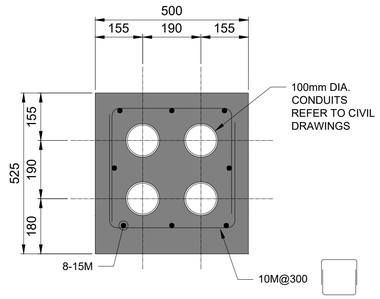


ISOLATOIN JOINT DETAIL

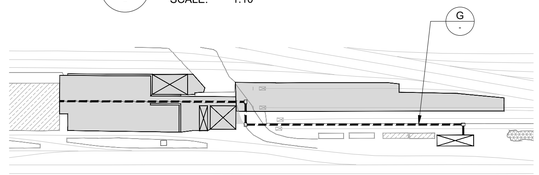


CONSTRUCTION JOINT DETAIL

F - JOINT DETAILS
SCALE: 1:20



G - POW CONDUIT
SCALE: 1:10



PLAN - POW CONDUIT LINE
SCALE : N.T.S.

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REVISIONS

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Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

STRUCTURE
MISCELLANEOUS DETAILS

SCALE: NTS OR AS NOTED

DWG. No. H375313-1000-230-270-0015

REV C

SHEET SIZE: A1

Last Save By: FORL10248
Last Saved Date and Time: 09 Oct 2025, 9:02pm
File Name: H375313-1000-230-270-0015.dwg

DWG. No. H375313-1000-240-251-0001

GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE ALL LABOUR, MATERIALS AND PROFESSIONAL SERVICES REQUIRED FOR CLEANING, NON-DESTRUCTIVE EXAMINATION, NON-DESTRUCTIVE TESTING AND PRESSURE TESTING.
2. CONTRACTOR SHALL PERFORM PRESSURE TESTING, FLUSHING, DISINFECTION AND CONTINUITY TESTING AS APPLICABLE, PRIOR TO BACKFILLING AROUND THE PIPE.
3. CONTRACTOR SHALL SUPPLY TEMPORARY TEST CONNECTIONS.
4. CONTRACTOR SHALL VERIFY CONNECTION TO EXISTING SERVICES PRIOR TO INSTALLATION.
5. CONTRACTOR SHALL HAVE A TSSA CERTIFICATE OF AUTHORIZATION AND BE RESPONSIBLE FOR ALL TSSA APPROVALS/CERTIFICATIONS. PREPARATION OF DETAIL DRAWINGS, SUCH AS ISOMETRICS AND SPOOL DRAWINGS, AS MAY BE REQUIRED BY THE CONTRACTOR FOR FABRICATION OF PIPING AND FOR TSSA APPROVAL/CERTIFICATION. CONTRACTOR SHALL BE RESPONSIBLE FOR REGISTERING THE PIPING SYSTEM WITH TSSA.
6. CONTRACTOR SHALL SUPPLY AND INSTALL ALL FLASHING AND SEALING FOR OPENINGS IN WALLS AND FLOORS.
7. CONTRACTOR SHALL DESIGN, SUPPLY, FABRICATE AND INSTALL ALL SECONDARY STEEL REQUIRED FOR PIPE AND DUCT SUPPORTS.
8. CONTRACTOR SHALL SUPPLY AND INSTALL ALL PIPE AND DUCT SUPPORT HARDWARE. (U-BOLTS, CLEVISES, SADDLES, ETC.)
9. PIPE SUPPORTS SHALL BE "UNISTRUT" P/N P2945 (305mm LENGTH), P2946 (458mm LENGTH) OR P2947 (610mm LENGTH) AS REQUIRED. PIPE SUPPORTS SHALL BE COMPLETE WITH PIPE CLAMPS, FOR DN40 PIPE: P/N P1115, FOR DN50 PIPE: P/N P1117.
10. MATERIALS, DESIGN, MANUFACTURE, AND INSTALLATION OF DUCT SUPPORTS SHALL COMPLY WITH EQUIPMENT MANUFACTURERS INSTALLATION GUIDELINES, AND RELEVANT CODES AND STANDARDS INCLUDING BUT NOT LIMITED TO ASHRAE/SMACNA.
11. MATERIALS, DESIGN, MANUFACTURE AND INSTALLATION OF PIPE SUPPORTS SHALL COMPLY WITH MSS-58.
12. WELDERS MUST BE QUALIFIED AND TSSA REGISTERED, ASME SECTION IX, WELDING PROCEDURES SPECIFIED.
13. DUCT INSULATION SHALL BE 50mm FIBERGLASS WITH VAPOR BARRIER, COMPLETE WITH 1.6mm ALUMINUM CLADDING, AND 12.7mm ALUMINUM BANDING. ALL FASTENERS SHALL BE COMPATIBLE WITH CLADDING MATERIAL.
14. ALL FITTINGS SHALL BE PROVIDED WITH A CANADIAN REGISTRATION NUMBER (CRN) FROM THE PROVINCE OF ONTARIO. PIPES ARE TO CONFORM WITH THE RELEVANT ASTM/ASME SPECIFICATIONS AND TO BE PROVIDED WITH MILL TEST REPORTS.
15. CONDENSATE DRAIN PIPING FOR OIL WATER SEPARATOR OUT OF BUILDING SHALL BE FIELD RUN AND COMPLETE WITH HEAT TRACE. DISCHARGE LOCATION OF DRAIN SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
16. FIELD RUN PIPING SHALL BE ROUTED IN ACCORDANCE WITH GOOD PIPING PRACTICES. CONTRACTOR SHALL ENSURE THAT PIPING DOES NOT INTERFERE WITH REMOVAL AND/OR MAINTENANCE OF EQUIPMENT.
17. FOR COMPRESSED AIR EQUIPMENT SPECIFICATION, REFER TO DOCUMENT H375313-1000-240-078-0001.
18. CONDENSATE PIPING TO BE CLEAR PVC TUBING AND SHALL BE FIELD RUN.
19. ALL DRAWING REFERENCE NUMBERS SHOWN ON DRAWINGS SHALL BE PREFIXED WITH "H375313-1000-240-" UNLESS NOTED OTHERWISE.

COMPRESSED AIR NOTES:

1. FOR BURIED COMPRESSED AIR PIPE, SEE STANDARD SPECIFICATION CB1A (DOCUMENT NUMBER H375313-1000-240-242-0001).
2. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION & INSTALLATION.
3. WELDING PROCEDURE SPECIFICATION (WPS) AND PROCEDURE QUALIFICATION RECORD (PQR) SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL PRIOR TO ANY WELDING.
4. CONTRACTOR TO SUPPLY, FABRICATE AND INSTALL ALL COMPRESSED AIR PIPING BETWEEN TIE POINTS TP-001 AND TP-002 SHOWN ON THE P&ID (DRAWING NUMBER H375313-1000-240-276-0001).
5. ALL ABOVE GROUND PIPING SHALL BE PAINTED RAL1023. THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED:
   a) ALL SURFACES TO BE COATED SHOULD BE CLEAN, DRY AND FREE FROM CONTAMINATION. OIL OR GREASE SHALL BE REMOVED IN ACCORDANCE WITH SSPC-SP1 SOLVENT CLEANING.
   b) ABRASIVE-BLAST CLEAN TO SSPC-SP6.
   c) TOP COAT SHALL BE BAR-RUST 235 OR APPROVED EQUIVALENT, MINIMUM 6-8mm DFT.
6. PIPE LABELING SHALL BE AS FOLLOWS:
   a) SAFETY LABELS SHALL HAVE WHITE BACKGROUND WITH BLACK LETTERING.
   b) LABELS SHALL INCLUDE AN ARROW INDICATING THE DIRECTION OF FLOW, THE PIPE LINE NUMBER AND THE DESIGN PRESSURE IN PSIG.
   c) FOR DN15 TO DN65 PIPE, USE 19mm HIGH LETTERING.

TSSA PIPING REGISTRATION DETAILS:

TSSA PIPING REGISTRATION DETAILS:

CODE:	ASME B31.3
FLUID CATEGORY:	NORMAL
SERVICE FLUID:	COMPRESSED AIR
MATERIALS:	SEE PIPE SPECIFICATIONS.
DESIGN TEMPERATURE:	-29 °C TO 38 °C
DESIGN PRESSURE:	150 PSIG
OPERATING TEMPERATURE:	-10 °C TO 38 °C
OPERATING PRESSURE:	125 PSIG
CORROSION ALLOWANCE:	1.5 mm
TEST METHOD:	HYDROSTATIC
TEST PRESSURE:	225 PSIG
PIPE SUPPORT TYPE:	CALLED OUT ON DRAWINGS AS REQUIRED
NDE REQUIREMENTS:	100% VISUAL INSPECTION; 5% RADIOGRAPHY ON BUTT WELDS.
GASKETS:	1.6mm THICK; FF; DRILLED TO MATCH CLASS 150 FLANGES TO ASME B16.5; GARLOCK BLU-GARD 3000 OR APPROVED EQUIVALENT.

HDPE NOTES:

1. FOR BURIED COMPRESSED AIR PIPE, SEE STANDARD SPECIFICATION PH1A (DOCUMENT NUMBER H375313-1000-240-242-0002).
2. STUB ENDS SHALL BE PE4710 HDPE TO MATCH TEE/BRANCH CONNECTIONS.
3. FOR WATER TIE IN, CONTRACTOR SHALL USE WATER TIE DETAIL (SEE DETAIL 3 ON DWG. H375313-1000-240-260-0002).
4. WATERMAIN DISINFECTION SHALL BE IN ACCORDANCE WITH ONTARIO WATERMAIN DISINFECTION PROCEDURE (WPD).
5. PIPE PROTECTION:
   a. PIPE SHALL BE BURIED AT THE DEPTHS OUTLINED ON THE PROJECT TRENCHING DRAWING. No. H375313-1000-220-260-0004.
   b. BACKFILL MATERIAL SHALL BE FREE OF SHARP OBJECTS, LARGE STONES OR ANY OTHER FOREIGN MATERIAL THAT CAN DAMAGE THE PIPING.
6. PIPING SHALL BE INSPECTED BEFORE AND AFTER INSTALLATION FOR DEFECTS SUCH AS CUTS, SCRATCHES AND GOUGES. DAMAGED SECTIONS SHALL BE CUT OUT AND REPLACED IN CYLINDRICAL SECTIONS.
7. ALL HDPE PIPE IS TO BE INSTALLED WITH AN INSULATED SOLID #12 AWG TRACER WIRE TAPED TO PIPE EVERY 3 METERS, AND PLASTIC YELLOW MARKING TAPE 610mm ABOVE PIPE FOR FULL LENGTH OF BURIED SECTION.
8. CONTINUITY TESTING TO BE COMPLETED ON ALL TRACER WIRES. TERMINATE TRACER WIRE IN PLASTIC JUNCTION BOX ON SURFACE AT EACH END OF PIPE RUN.
9. COVER JOINTS WITH APPROVED PROTECTIVE HEAT SHRINKABLE COATING SLEEVE OR 1/2 LAP DENSO TAPE, FOLLOWED BY 1/2 LAP POLYKEN TAPE.
10. PROVIDE SAND BEDDING FOR ALL HDPE SERVICES PER OPSS 1002.
11. HDPE PIPING SHALL BE JOINED BY HEAT FUSION OR ELECTROFUSION (FUSION METHOD TO BE APPROVED BY OWNER). SUCH JOINING METHODS SHALL BE COMPATIBLE WITH THE MATERIALS BEING JOINED AND THE MANUFACTURER'S RECOMMENDATIONS.
12. THE OPERATORS AND BONDING PROCEDURE MUST BE VENDOR CERTIFIED AND A WRITTEN BONDING PROCEDURE SPECIFICATION (BPS) MUST BE PROVIDED.
13. THERMAL BUTT FUSION METHOD OUTLINED IN ASTM F2620 OR AS DIRECTED BY THE PIPE VENDOR SHALL BE FOLLOWED. A FUSING PROCEDURE OUTLINING STEPS AND QUALITY CONTROL REQUIREMENTS SHALL BE PROVIDED TO OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO FUSING.
14. A FUSING PROCEDURE OUTLINING STEPS AND QUALITY CONTROL REQUIREMENTS SHALL BE APPROVED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO AND SENT TO OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO FUSING.
15. FUSION TECHNICIANS, WHO HAVE BEEN TRAINED IN THE USE OF PROCEDURES AND EVALUATED BY THE FUSION EQUIPMENT MANUFACTURER SHALL CONDUCT THE FUSING.
16. CRITICAL PARAMETERS OF EACH FUSION JOINT SHALL BE RECORDED EITHER MANUALLY OR BY AN ELECTRONIC DATA LOGGING SERVICE. ALL DATA SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE FOR REVIEW AFTER FUSING.
17. PIPE FUSION JOINTS SHALL BE VISUALLY CHECKED FOR EVIDENCE OF POOR BONDING. WHERE INSPECTION REVEALS DEFECT THEY SHALL BE CUT OUT AND REPLACED PRIOR TO PRESSURE TESTING.
18. NO MITERED JOINTS SHALL BE PERMITTED.
19. MINIMUM BEND RADIUS FOR HDPE PIPE IS 20 TIMES THE OUTSIDE DIAMETER OF THE PIPE WITH THE EXCEPTION NEAR FLANGED COMPONENTS WHERE THE MINIMUM BEND RADIUS IS 100 TIMES THE OUTSIDE DIAMETER.
20. COMPRESSED AIR BRANCH ENDS SHALL INCLUDE FUSED STUB ENDS, BACKING RINGS AND BLIND FLANGES (SEE DETAIL 2 ON DRAWING H375313-1000-240-260-0002).

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REVISIONS

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	P. PATEL		
DESIGNER	K. PIRO		
CHECKER	J. POULIN		2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee 2025.10.06	2025/10/06
RESP. ENG.	B. NOLAN		2025/10/06
LEAD DISC. ENG.	B. NOLAN		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

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Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

MECHANICAL
ELEC/MECH SERVICES BUILDING
GENERAL NOTES

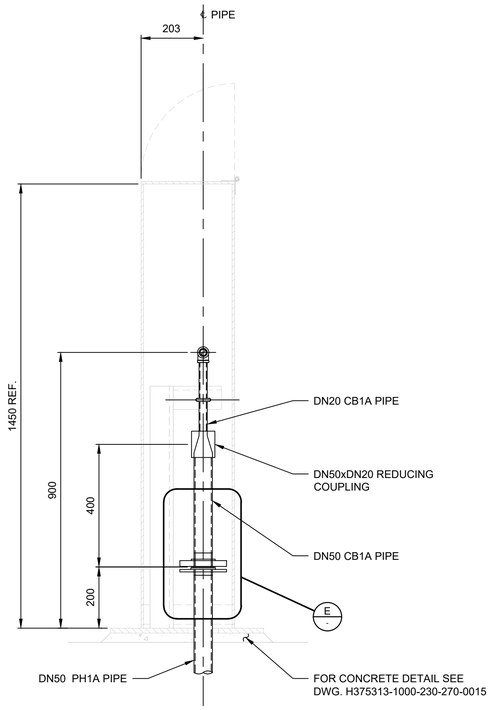
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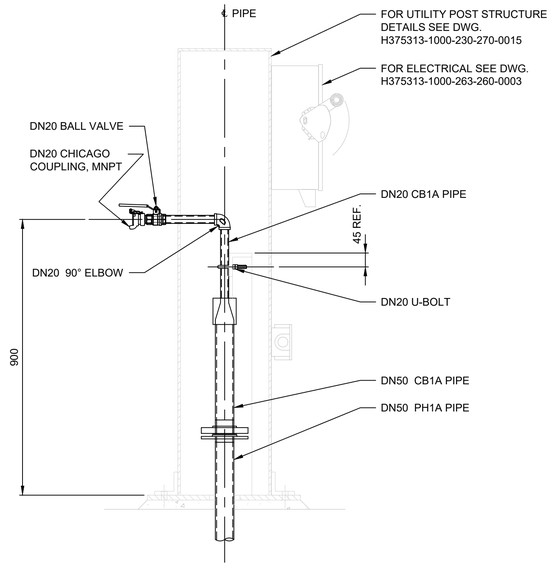
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DWG. No. H375313-1000-240-260-0002



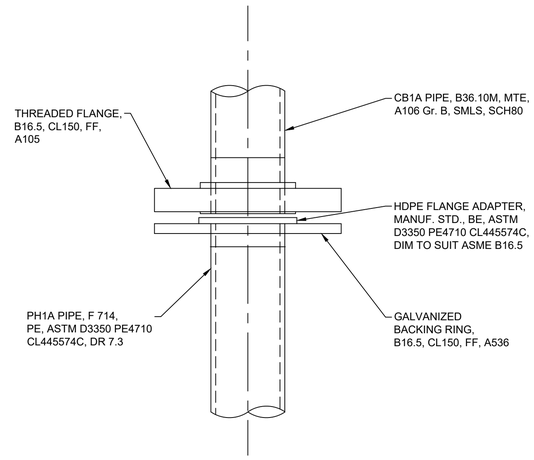
B - SECTION

SCALE: 1:10



C - SECTION

SCALE: 1:10

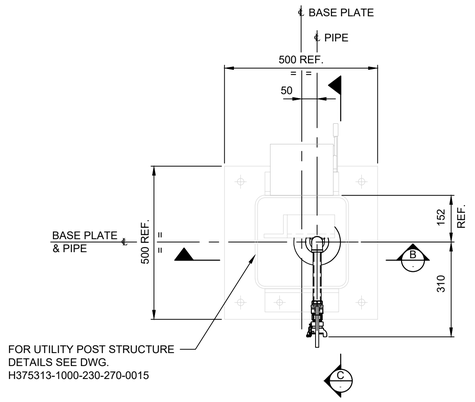


E - TYP. DETAIL - HDPE TO CARBON STEEL PIPING TRANSITION

SCALE: NTS

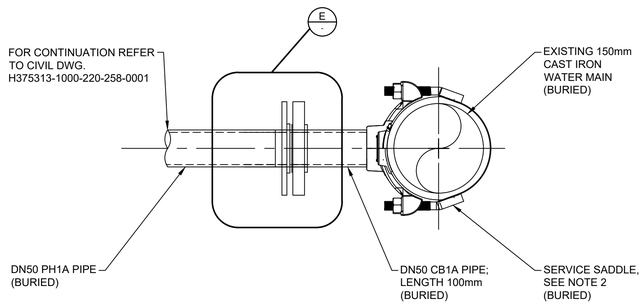
NOTES:

1. FOR GENERAL NOTES SEE DWG. H375313-1000- 240-251-0001.
2. SERVICE SADDLE TO BE DUCTILE IRON TO ASTM 536, GRADE 65-45-12. GASKETS SHALL BE NSF61 APPROVED NITRILE BUTADIENE RUBBER (NBR) IN ACCORDANCE WITH ASTM D 2000 MBC 610 AND NSF 61. STRAPS SHALL BE HEAVY GAUGE TYPE 304 STAINLESS STEEL AS PER ASTM A420. ROMAC STYLE 101NS OR APPROVED EQUIVALENT.
3. CONTRACTOR TO FIELD VERIFY LOCATION AND CONDITION OF EXISTING WATER MAIN PRIOR TO INSTALLATION.
4. WATER SUPPLIED TO EXISTING LUNCHROOM MAY BE RE-USED AND REROUTED IF SUFFICIENT FOR THE FACILITY PENDING APPROVAL FROM THE OWNER; IF NOT REROUTED, EXISTING LINE MUST BE CUTBACK AND ABANDONED APPROPRIATELY TO AVOID FREEZING.
5. ALL CARBON STEEL PIPE AND TRANSITIONS SHOWN IN DETAILS 2 & 3 SHALL BE PROTECTED PER HDPE NOTE 9.



A - 270-0001 DETAIL - UTILITY POST

SCALE: 1:10



D - 270-0001 DETAIL - WATER TIE-IN

SCALE: 1:5

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REFERENCE DRAWINGS	
DRAWING No.	DRAWING TITLE
H375313-1000-230-270-0015	STRUCTURE MISCELLANEOUS DETAILS
H375313-1000-240-270-0001	RIP TRACK AREA - OVERALL PIPING LAYOUT
H375313-1000-263-260-0003	ELECTRICAL INSTALLATION DETAILS
H375313-1000-240-251-0001	ELEC/MECH SERVICES BUILDING- GENERAL NOTES
H375313-1000-240-270-0003	ELEC/MECH SERVICES BUILDING - SECTIONS A & B
H375313-1000-240-270-0002	ELEC/MECH SERVICES BUILDING - G.A. - PLAN

REG. PROFESSIONAL

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HATCH

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	P. PATEL		
DESIGNER	K. PIRO		
CHECKER	J. POULIN		2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee 2025.10.06	2025/10/06
RESP. ENG.	B. NOLAN		2025/10/06
LEAD DISC. ENG.	B. NOLAN		2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

Ontario Northland

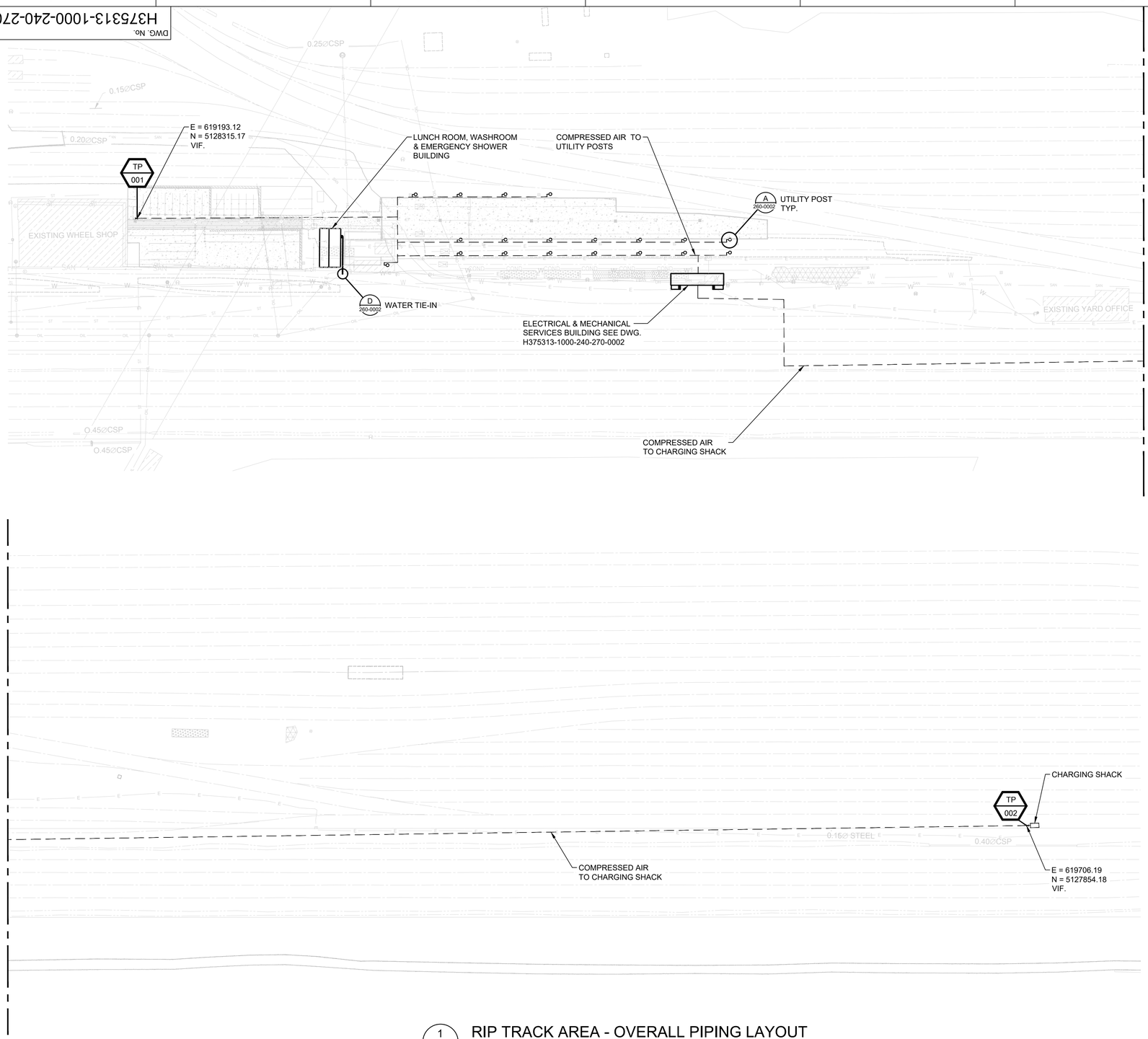
ONTC
NORTH BAY RIP TRACK FACILITY

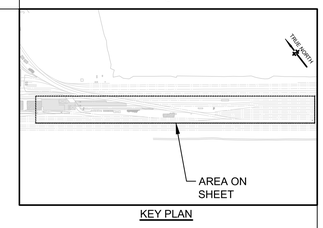
MECHANICAL
ELEC/MECH SERVICES BUILDING
SECTION AND DETAILS

SCALE	DWG. No.	REV
1:10 OR AS NOTED	H375313-1000-240-260-0002	C

SHEET SIZE: A1

DWG. No. H375313-1000-240-270-0001





KEY PLAN

NOTES:

1. FOR GENERAL NOTES SEE DWG. H375313-1000-240-251-0001.
2. FOR PIPE TRENCHING DETAILS REFER TO CIVIL DWG. H375313-1000-220-260-0004.

1 / - RIP TRACK AREA - OVERALL PIPING LAYOUT

SCALE: 1:750

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-240-260-0002	ELEC/MECH SERVICES BUILDING - SECTION AND DETAILS
H375313-1000-240-270-0002	ELEC/MECH SERVICES BUILDING - G.A. - PLAN
H375313-1000-220-260-0004	CIVIL PIPE TRENCHING DETAILS
H375313-1000-240-251-0001	ELEC/MECH SERVICE BUILDING - GENERAL NOTES
H375313-1000-240-276-0001	MECH. COMP. AIR P&ID FOR RIP TRACK AREA & AIR BREAK CHARGING SHACK
H375313-1000-220-270-0001	CIVIL OVERALL SITE PLAN

REFERENCE DRAWINGS

REG. PROFESSIONAL

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	PP	JP	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	PP	TS	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	PP	TS	2025/07/25

REVISIONS

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ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

OVERALL PIPING LAYOUT
RIP TRACK AREA
AIR BREAK CHARGING SHACK

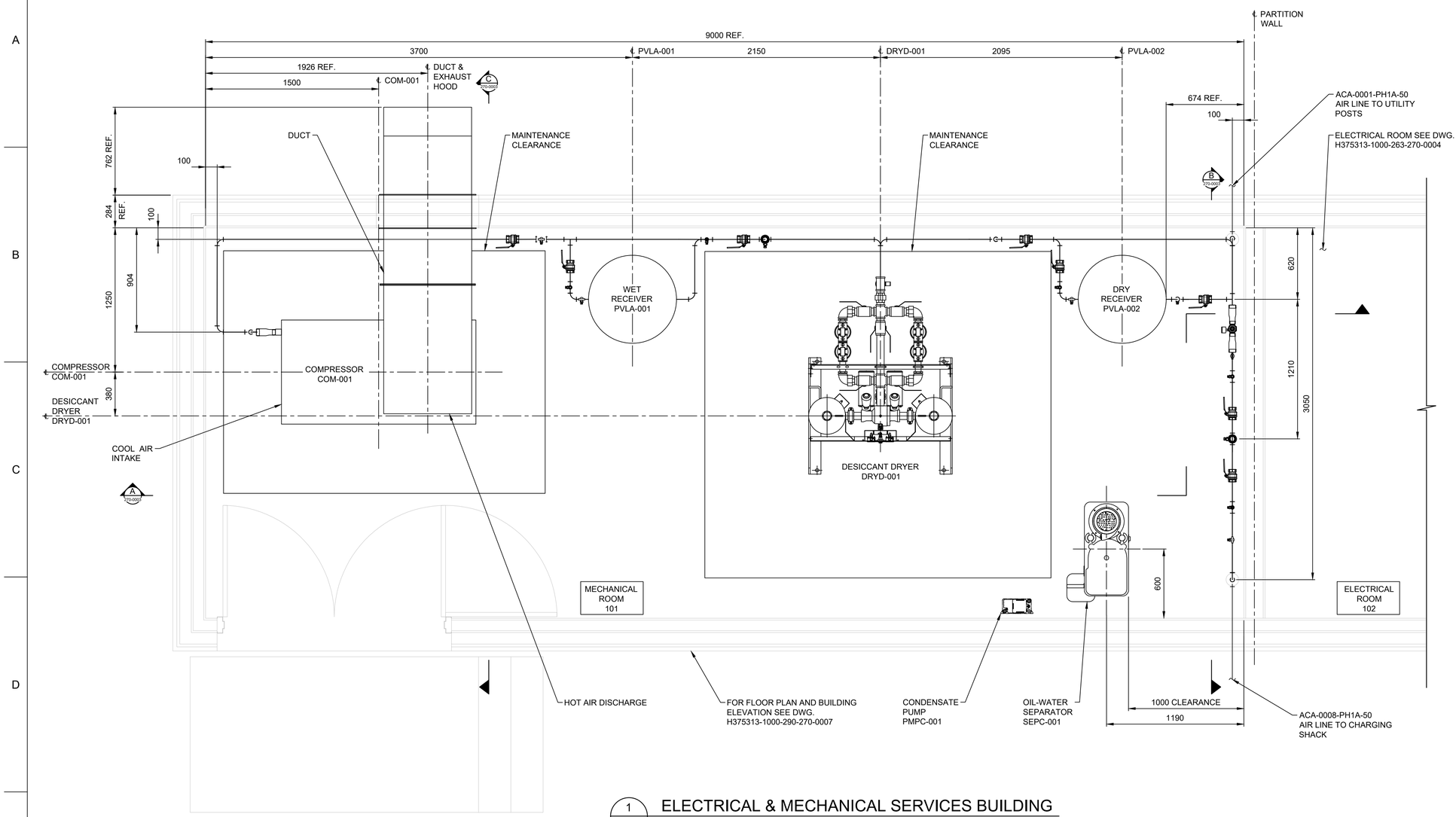
SCALE NTS OR AS NOTED

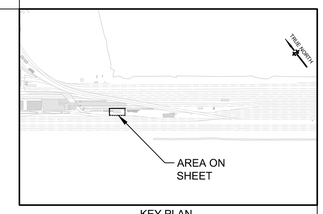
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REV C

SHEET SIZE: A1

DWG. No. H375313-1000-240-270-0002





KEY PLAN

NOTES:

1. FOR GENERAL NOTES SEE DWG. H375313-1000-240-251-0001.
2. LOCATION OF PIPE SUPPORTS SHALL BE FIELD VERIFIED.

1 - ELECTRICAL & MECHANICAL SERVICES BUILDING

SCALE: 1:20
PRESSURE SAFETY VALVES REMOVED FOR CLARITY

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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Ontario Northland

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PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

MECHANICAL
MECHANICAL SHACK PLAN VIEW
G.A. - PLAN

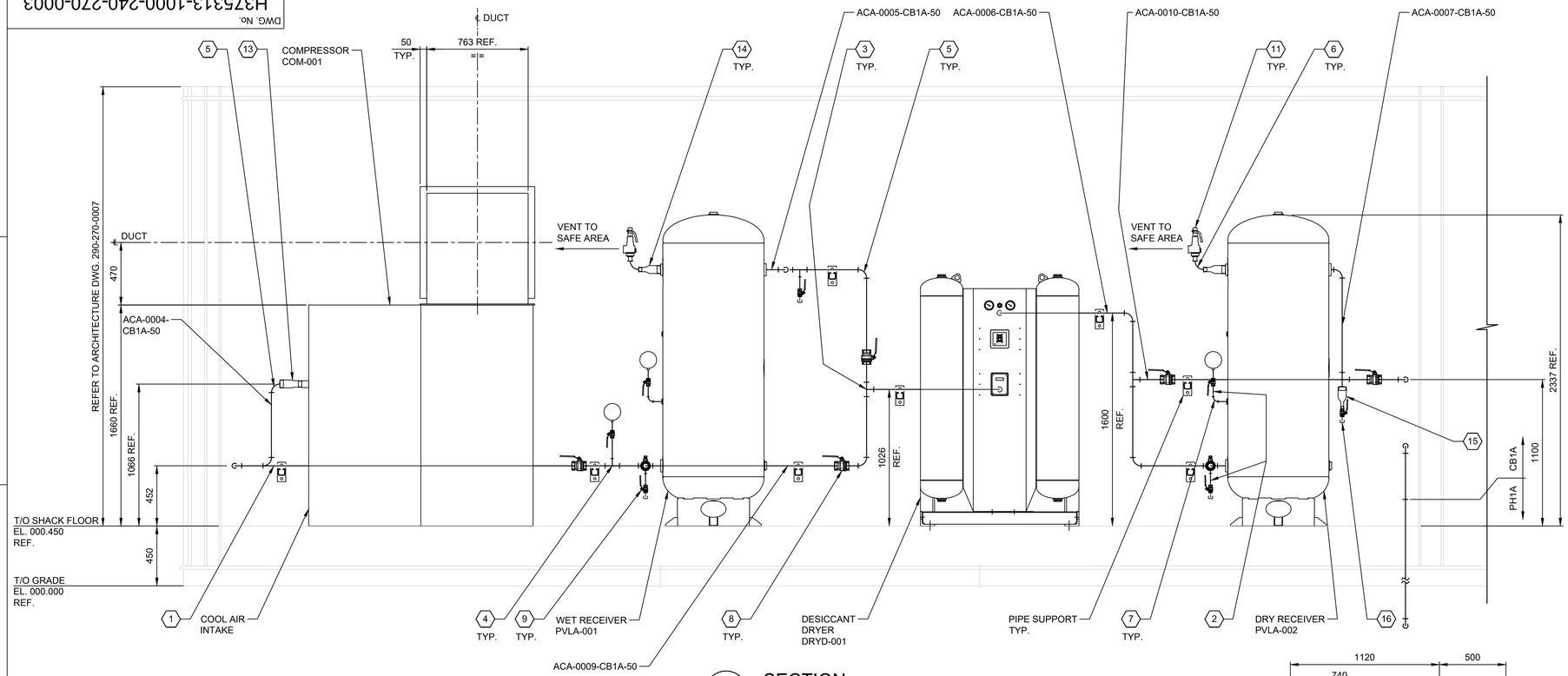
REFERENCE DRAWINGS		REG. PROFESSIONAL
DRAWING No.	DRAWING TITLE	
H375313-1000-240-251-0001	ELEC/MECH SERVICES BUILDING - GENERAL NOTES	
H375313-1000-240-270-0001	RIP TRACK AREA - OVERALL PIPING LAYOUT	
H375313-1000-240-276-0001	MECH. COMP. AIR P&ID FOR RIP TRACK AREA & AIR BREAK CHARGING SHACK	
H375313-1000-290-270-0007	ELEC/MECH SERVICES BUILDING - FLOOR PLAN & BUILDING ELEVATION	

REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	PP	JP	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	PP	TS	2025/08/15
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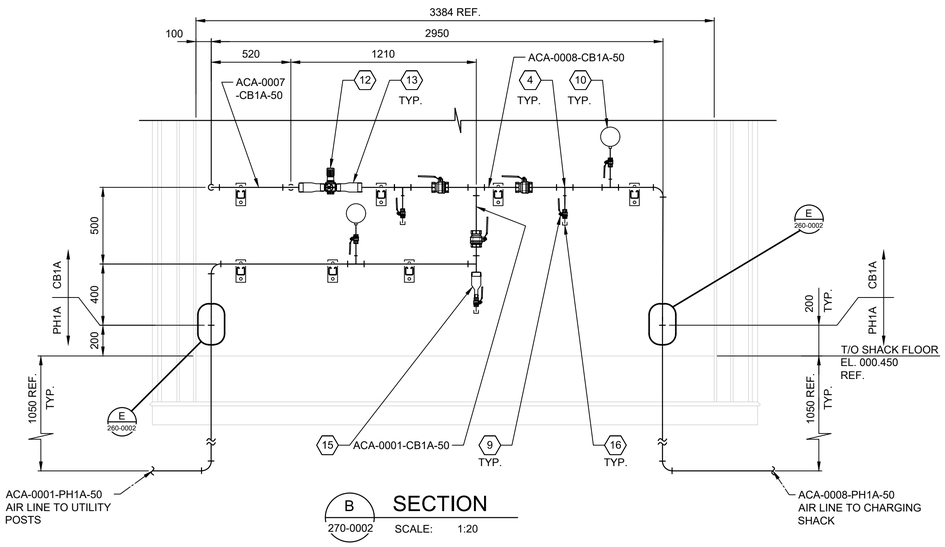
SCALE	DWG. No.	REV
1:20 OR AS NOTED	H375313-1000-240-270-0002	C

SHEET SIZE: A1

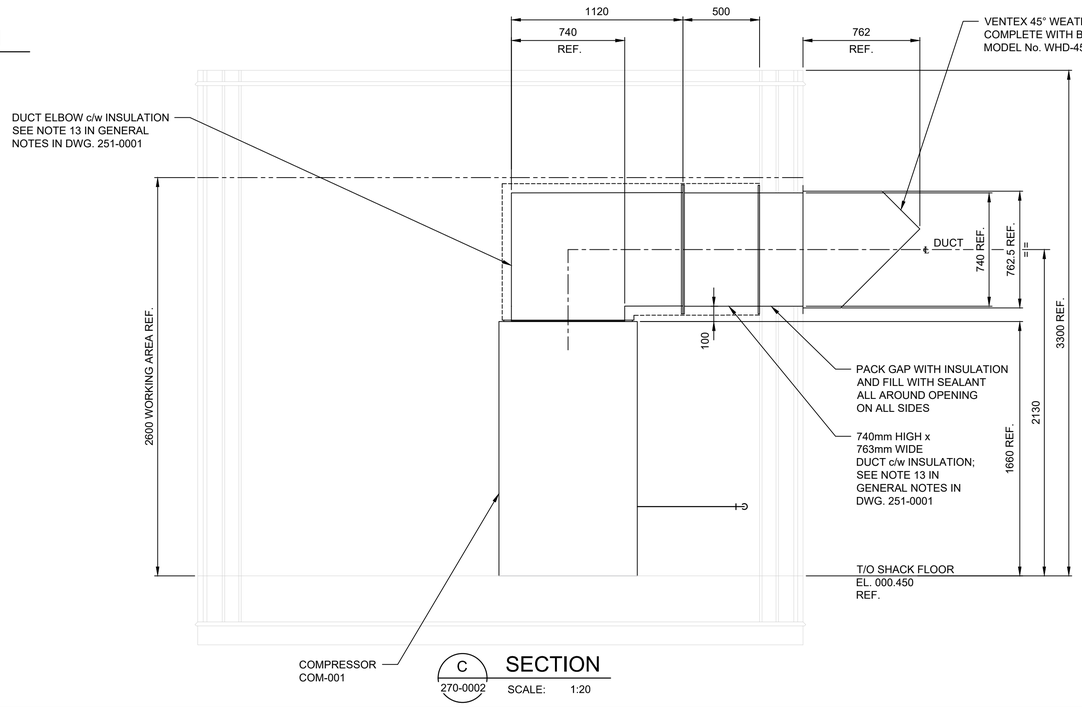
DWG. No. H375313-1000-240-270-0003



A 270-0002 SECTION
SCALE: 1:20



B 270-0002 SECTION
SCALE: 1:20



C 270-0002 SECTION
SCALE: 1:20

NOTES:

1. FOR GENERAL NOTES SEE DWG. H375313-1000-240-251-0001.
2. BOM MATERIALS ARE AN APPROXIMATION ONLY CONTRACTOR TO PERFORM MATERIAL TAKEOFF PRIOR TO PURCHASE/INSTALLATION.

BILL OF MATERIALS (SEE NOTE 2)

ITEM NO.	QTY	DESCRIPTION	SIZE	MATERIAL
1	28m	PIPE, B36.10M, MTE, SMLS	DN50	A 106 Gr. B.
2	4m	PIPE, B36.10M, MTE, SMLS	DN15	A 106 Gr. B.
3	7	EQUAL TEE, B16.11, CL3000, FTE NPT	DN50 x DN50	A105
4	8	REDUCING TEE, CLASS 3000, FNPT	DN50 x DN15	A105
5	18	90° ELBOW, B16.11, CL3000, FTE NPT	DN50	A105
6	2	90° ELBOW, B16.11, CL3000, FTE NPT	DN25	A105
7	2	90° ELBOW, B16.11, CL3000, FTE NPT	DN15	A105
8	10	BALL VALVE, CLASS 3000, VBA-703	DN50	A 216 Gr. WCB
9	12	BALL VALVE, CLASS 3000, VBA-703	DN15	A 216 Gr. WCB
10	5	PRESSURE INDICATOR, BOTTOM MOUNT, LIQUID FILLED, 0-150 PSIG RANGE	DN15	-
11	2	PRESSURE SAFETY VALVE (SEE NOTE 14 IN GENERAL NOTES IN DWG. 251-0001)	DN25	-
12	1	PRESSURE REGULATOR (SEE NOTE 15 IN GENERAL NOTES IN DWG. 251-0001)	DN40	-
13	3	CONCENTRIC SWAGE, MSS SP-95, TBE NPT	DN50 x DN40	A 216 Gr. WCB
14	2	CONCENTRIC SWAGE, MSS SP-95, TBE NPT	DN40 x DN25	A 216 Gr. WCB
15	2	CONCENTRIC SWAGE, MSS SP-95, TBE NPT	DN50 x DN15	A 216 Gr. WCB
16	7	PLUG HEX HEAD, CL3000, MTE NPT	DN15	A105

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

REFERENCE DRAWINGS	
DRAWING No.	DRAWING TITLE
H375313-1000-240-251-0001	ELEC/MECH SERVICES BUILDING - GENERAL NOTES
H375313-1000-240-260-0002	ELEC/MECH SERVICES BUILDING - SECTION AND DETAILS
H375313-1000-240-270-0002	ELEC/MECH SERVICES BUILDING - G.A. - PLAN

REG. PROFESSIONAL

REVISIONS					
No.	DESCRIPTION	BY	CHK'D	DATE	
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HATCH

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DRAFTSPERSON	P. PATEL		
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CHECKER	J. POULIN		2025/10/06
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PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

MECHANICAL
ELEC/MECH SERVICES BUILDING
SECTIONS A & B

SCALE 1:20 OR AS NOTED | DWG. No. H375313-1000-240-270-0003 | REV C

SHEET SIZE: A1

NOTES:

1. FOR GENERAL NOTES SEE DWG. H375313-1000-240-251-0001.

CONDENSATE PUMP SCHEDULE												
TAG	MANUF / MODEL	TOTAL QTY.	PIPE INLET CONNECTION SIZE (O.D.)	PIPE OUTLET CONNECTION SIZE (O.D.)	MAXIMUM WATER TEMPERATURE	MOTOR			PERFORMANCE @ 10FT HEAD	OUTLET PRESSURE	WEIGHT	REMARKS
			INCH	INCH	F	HP	AMPS	VOLTS	GPH	PSI	LBS	
PMPC-001	FRANKLIN ELECTRIC / VCMA-15ULS	1	1-1/8	3/8	75	1/50	1	115/3/60	25	6.5	4.5	CONDENSATE PUMP c/w 1/2 GALLON COLLECTION TANK,THERMALLY PROTECTED MOTOR, AUTO START/STOP OPERATION, AND FLOAT ACTIVATED SWITCH FOR AUTO HIGH-LEVEL WATER LEVEL DETECTION. APPROVED EQUIVALENTS ACCEPTED.

PRESSURE GAUGE SCHEDULE				
TAG	TOTAL QTY.	PRESSURE RANGE	CONNECTION SIZE	REMARKS
		PSI	INCH	
N/A	5	0-200	1/2	BOTTOM MOUNT, LIQUID FILLED. APPROVED EQUIVALENTS ACCEPTED.

PRESSURE SAFETY VALVE SCHEDULE					
TAG	MANUF / MODEL	TOTAL QTY.	MAXIMUM PRESSURE	CONNECTION SIZES	REMARKS
			PSI	INCH	
PSV-001, PSV-002	EMERSON CROSBY 961101MFA	2	137	INLET: 3/4 OUTLET: 1	PRESSURE SAFETY VALVE c/w THREADED CONNECTIONS. APPROVED EQUIVALENTS ACCEPTED.

PRESSURE REGULATOR VALVE SCHEDULE						
TAG	MANUF / MODEL	TOTAL QTY.	CONNECTION SIZE (INCH)	REGULATING PRESSURE	MAXIMUM PRESSURE	REMARKS
				PSI	PSI	
PRV-001	EMERSON FISCHER MR95H	1	1-1/2	90-110	300	ADJUSTABLE PRESSURE REGULATING VALVE c/w THREADED CONNECTIONS. APPROVED EQUIVALENTS ACCEPTED.

WATER SEPARATOR SCHEDULE			
TAG	MANUF / MODEL	CAPACITY (CFM)	REMARKS
SPEC-001	GARDNER DENVER CTS30 ELIMENATOR II	300	OIL/WATER SEPARATOR c/w 5 GALLON OIL CONTAINER. APPROVED EQUIVALENTS ACCEPTED.

COMPRESSOR SCHEDULE		
TAG	MANUF / MODEL	REMARKS
COM-001	GARDNER DENVER L37	REFER TO SPECIFICATION H375313-1000-240-078-0001 AND DATASHEET H375313-1000-240-206-0001 FOR DETAILS.

RECEIVER SCHEDULE		
TAG	MANUF / MODEL	REMARKS
PVLA-001	200 USG	REFER TO SPECIFICATION H375313-1000-240-078-0001 AND DATASHEET H375313-1000-240-206-0002 FOR DETAILS.
PVLA-002	200 USG	REFER TO SPECIFICATION H375313-1000-240-078-0001 AND DATASHEET H375313-1000-240-206-0004 FOR DETAILS.

DESICCANT DRYER SCHEDULE		
TAG	MANUF / MODEL	REMARKS
DRYD-001	GARDNER DENVER DGH SERIES	REFER TO SPECIFICATION H375313-1000-240-078-0001 AND DATASHEET H375313-1000-240-206-0003 FOR DETAILS.

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HATCH

Ontario Northland

REFERENCE DRAWINGS	
H375313-1000-240-270-0002	ELEC/MECH SERVICES BUILDING - G.A. - PLAN
H375313-1000-240-276-0001	COMPRESSED AIR P&ID FOR RIP TRACK - AREA & AIR BREAK CHARGING SHACK
H375313-1000-240-251-0001	ELEC/MECH SERVICES BUILDING - GENERAL NOTES
DRAWING No.	DRAWING TITLE

REG. PROFESSIONAL

REVISIONS				
No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	PP	JP	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	PP	TS	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	PP	TS	2025/07/25

DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
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ONTC
NORTH BAY RIP TRACK FACILITY

MECHANICAL
ELEC/MECH SERVICES BUILDING
EQUIPMENT SCHEDULES

SCALE AS NOTED OR AS NOTED

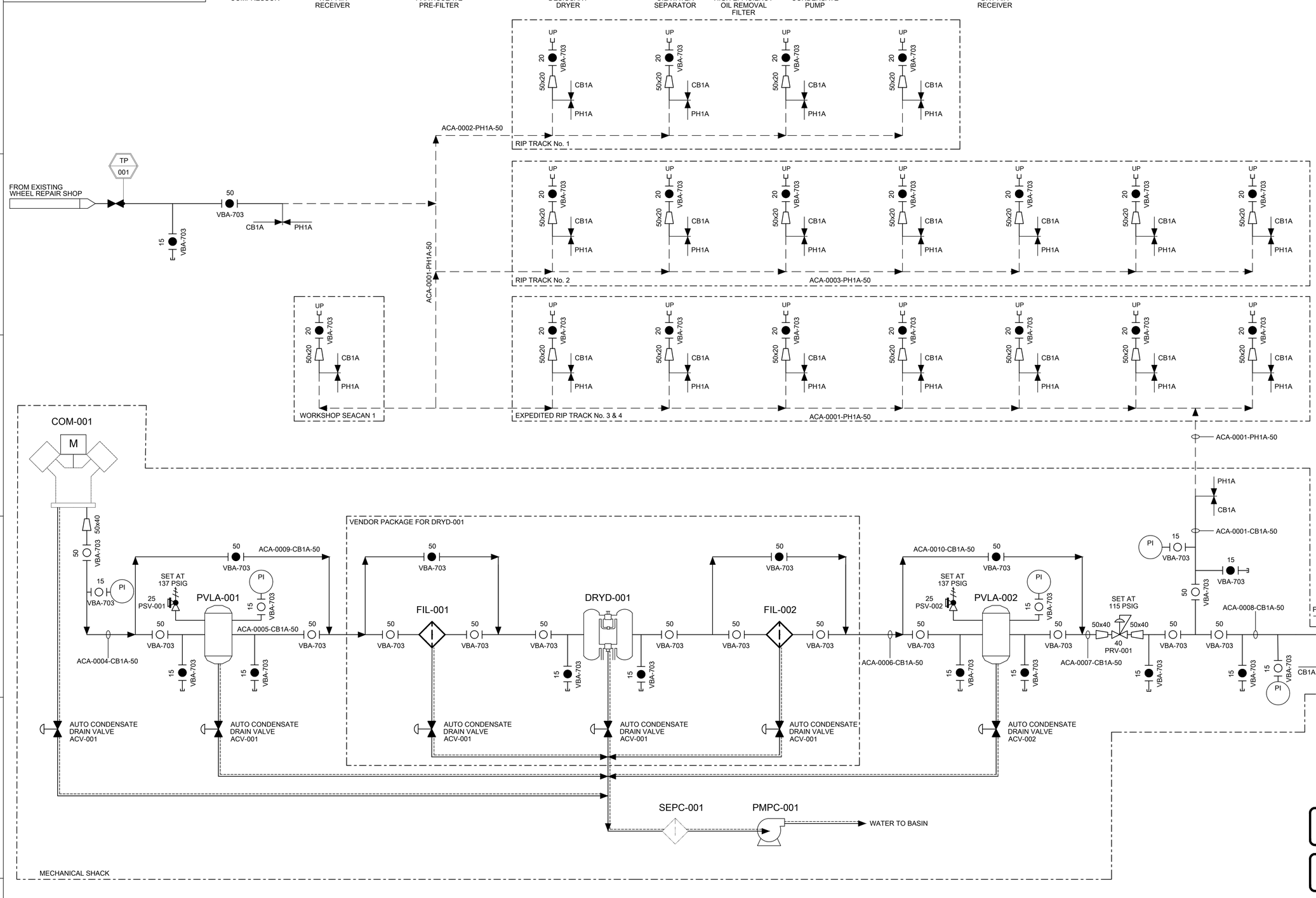
DWG. No. H375313-1000-240-270-0004

REV C

SHEET SIZE: A1

DWG. No. H375313-1000-240-276-0001

COM-001 COMPRESSOR | PVLA-001 WET AIR RECEIVER | FIL-001 PARTICULATE PRE-FILTER | DRYD-001 DESICCANT DRYER | SEPC-001 OIL/WATER SEPARATOR | FIL-002 HIGH EFFICIENCY OIL REMOVAL FILTER | PMPC-001 CONDENSATE PUMP | PVLA-002 DRY AIR RECEIVER



LEGEND:

- CS COMPRESSED AIR PIPING (ABOVE GROUND)
- HDPE COMPRESSED AIR PIPING (BURIED)
- CONDENSATE PIPING
- NORMALLY OPEN BALL VALVE
- NORMALLY CLOSED BALL VALVE
- AUTO CONDENSATE DRAIN VALVE (NORMALLY CLOSED)
- PRESSURE SAFETY VALVE
- PRESSURE REGULATOR
- CONCENTRIC REDUCER
- HOSE COUPLING
- UP UTILITY POST
- PI PRESSURE INDICATOR
- PLUG
- PIPE SPECIFICATION CHANGE

NOTES:

1. COMPRESSED AIR PIPING UPSTREAM OF TP-001 IS FOR BACKUP ONLY. NORMAL OPERATION WILL HAVE VALVES LOCKED CLOSED.
2. FOR GENERAL NOTES SEE DWG. H375313-1000-251-0001.
3. ALL HOSE COUPLINGS SHALL BE UNIVERSAL (CHICAGO) HOSE COUPLINGS.
4. BATTERY LIMITS ARE BETWEEN TIE POINTS TP-001 AND TP-002.

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D	ISSUED FOR 90% CLIENT REVIEW	PP	TS	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	PP	TS	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	OF	BN	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	OF	BN	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	P. PATEL		
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DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
H375313-1000-240-251-0001	ELEC/MECH SERVICES BUILDING - GENERAL NOTES

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

MECHANICAL
COMPRESSED AIR P&ID FOR RIP TRACK AREA & AIR BREAK CHARGING SHACK

SCALE NTS OR AS NOTED | DWG. No. H375313-1000-240-276-0001 | REV E

SHEET SIZE: A1

DWG. No. H375313-1000-263-251-0003

LEGEND:

SYMBOL	DESCRIPTION
	TRANSFORMER WINDING DELTA CONNECTED
	TRANSFORMER WINDING WYE CONNECTED
	TRANSFORMER WINDING WYE CONNECTED WITH GROUND
	TRANSFORMER WINDING WYE CONNECTED WITH NEUTRAL GROUNDING RESISTOR
	CIRCUIT BREAKER DRAW OUT TYPE
	SWITCH / DISCONNECT SWTCH
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER
	FUSE
	CIRCUIT BREAKER FIXED
	GROUND CONNECTION
	120V CONNECTION TO EQUIPMENT
	208V/ 1PH CONNECTION TO EQUIPMET
	480V/ 3PH CONNECTION TO EQUIPMET
	EMERGENCY BATTERY PACK C/W TWO REMOTE HEADS & RECEPTACLE
	EXIT LIGHT
$	WALL MOUNTED SWITCH
	LUMINAIRE WALL MOUNTED
	LUMINAIRE CEILING MOUNTED
	LIGHTING POLE C/W 1 HEAD
	LIGHTING POLE C/W 2 HEADS
	LIGHTING POLE C/W 2 HEADS @ 90 DEGREE
	WELDING RECEPTACLE
	GROUND ROD, 19mm x 3048mm
	GROUND ROD WITH INSPECTION WELL

SYMBOL	DESCRIPTION
	MOTOR
S	STARTER
D	DRIVE
	GENERATOR
	TRANSFORMER
VFD	VARIABLE SPEED DRIVE
	DUPLEX RECEPTACLE
M	METERING
K	KEY INTERLOCK
E	ELECTRICAL INTERLOCK
SPD	SURGE PROTECTION DEVICE
	MANUAL TRANSFER SWITCH
	DISCONNECT SWITCH
JB	JUNCTION BOX
PB	PULL BOX
T	TRANSFORMER
	PANELBOARD
	LIGHTING LUMINAIRE
P C	PHONE CELL SENSOR
	THERMOWELD TYPE CONNECTION (CADWELD)
	COMPRESSION TYPE CONNECTION

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE FRAME
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BAT	BATTERY
BLDG	BUILDING
CCT	CIRCUIT
CM	CIRCULAR MILS
DWG. NO.	DRAWING NUMBER
DS	DISCONNECT SWITCH
EA	EACH
ELEC	ELECTRICAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTERS
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HP	HORSE POWER
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HZ	HERTZ
JB	JUNCTION BOX
KAIC	KILO AMPERE INTERRUPTING CAPACITY
KCMIL	CONDUCTOR AREA (THOUSANDS OF CIRCULAR MILS)
KVA	KILOVOLT AMPERE
KVAR	KILOVOLT AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LTG	LIGHTING
M	METER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MLO	MAIN LUGS ONLY
MVA	MEGAVOLT AMPERE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
P	POLE
PH	PHASE
PWR	POWER
QTY	QUANTITY
RM	ROOM
SPD	SURGE PROTECTIVE DEVICE
SWGR	SWITCHGEAR
TBD	TO BE DETERMINED
TYP	TYPICAL
VAC	VOLTS, ALTERNATING CURRENT
TX	TRANSFORMER
3P4W	THREE PHASE FOUR WIRE
RGS	RIGID GALVANIZED STEEL
WP	WEATHERPROOF

NOTES:

1. WHERE DOCUMENTS ARE REFERENCED IN THE GENERAL AND DESIGN NOTES, THEY SHALL BE THE LATEST EDITIONS, UNLESS OTHERWISE NOTED OR SHOWN.
2. DIMENSIONS NOT CONSISTENT WITH OTHER DRAWINGS SHALL BE BROUGHT TO THE PROFESSIONAL RECORD'S ATTENTION FOR REVIEW AND CLARIFICATION.
3. BEFORE PROCEEDING WITH WORK, CHECK ALL THE DIMENSIONS SHOWN ON THE DRAWINGS AGAINST THE EXCAVATION, SYSTEMS, TRACK, MECHANICAL AND ELECTRICAL DRAWINGS AND REPORT DISCREPANCIES TO THE PROFESSIONAL OF RECORD.
4. ALL ELECTRICAL SYSTEMS INCLUDED IN THE SCOPE OF THIS PACKAGE WILL BE INSTALLED IN EXISTING EXCAVATIONS, THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE EXISTING EXCAVATIONS WITH REGARDS TO DRAWINGS. CONTRACTOR TO NOTIFY PROFESSIONAL OF RECORD IN CASE OF ANY MAJOR DISCREPANCIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE ELECTRICAL SYSTEMS REGARDING MINOR DISCREPANCIES.
5. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE INSTALLATION OF ELECTRICAL WITH OTHER TRADES AND CONTRACTORS.
6. CONTRACTOR TO INSTALL PROPER CONDUIT AS INDICATED IN DRAWINGS.
7. ALL RECEPTACLES SHALL BE 20A/120V.
8. ALL JUNCTION BOXES DIMENSIONS SHALL BE 150mm X 150mm X 100mm, UNLESS NOTED OTHERWISE.
9. GROUNDING SHALL BE AS PER THE REQUIREMENTS OF OESC.
10. THE EXACT LOCATIONS OF ELECTRICAL GROUND FEATURES SUCH AS LIGHTING POLES AND CABINETS ADJACENT TO THE RAIL TRACK SHALL MEET THE TRANSPORT CANADA TRACK CLEARANCE ENVELOPE REQUIREMENTS OR BE APPROVED FOR EXEMPTION FROM THE STANDARD CLEARANCE REQUIREMENTS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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E	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	J.M.	Z.W.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/03/24

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
GENERAL NOTES & LEGEND

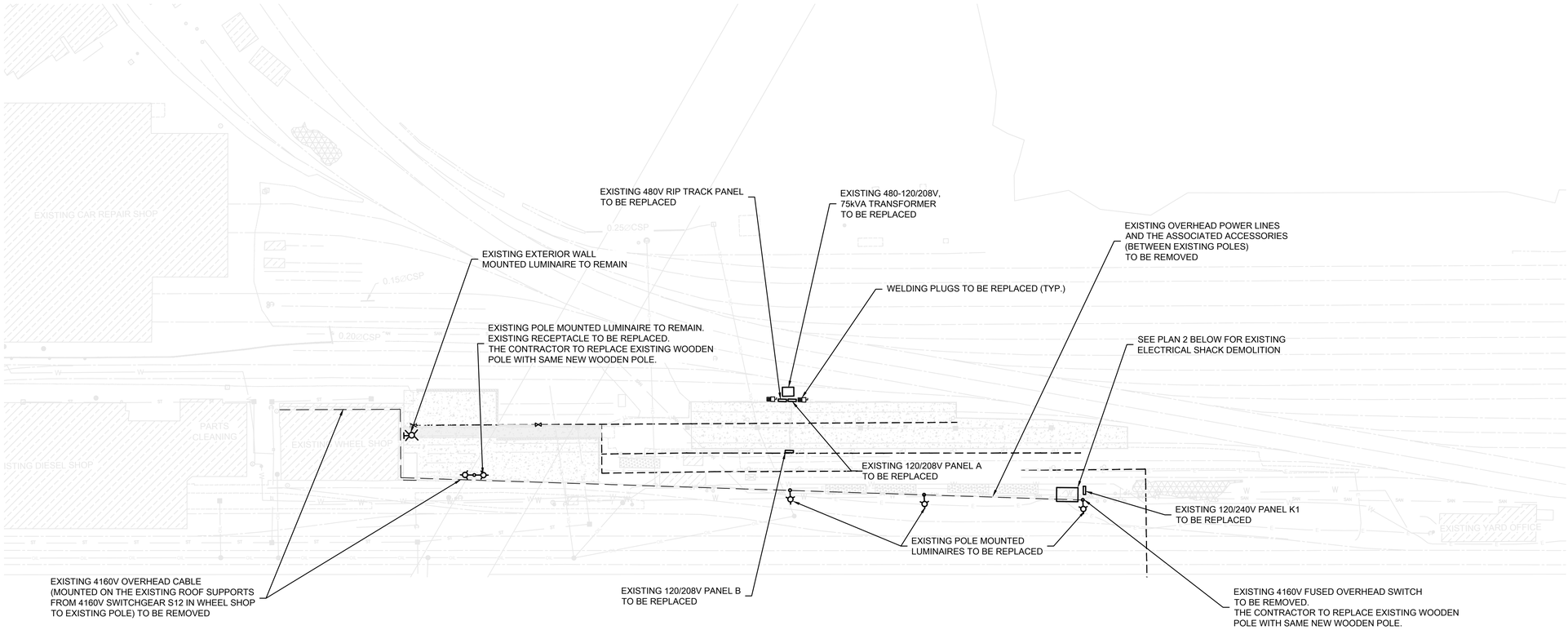
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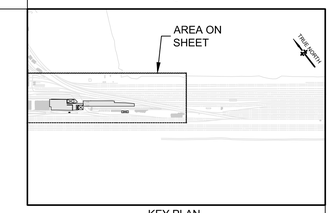
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1 - ELECTRICAL - REMOVAL & DEMOLITION PLAN

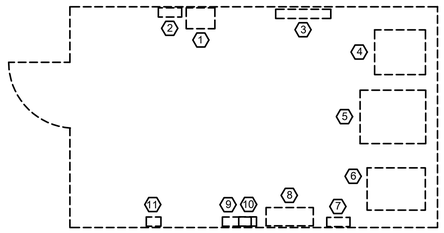
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KEY PLAN

NOTES:

1. THE EXISTING SHACK WILL BE REPLACED BY A NEW ELECTRICAL SHACK MODULAR BUILDING. THE MAIN EXISTING ELECTRICAL EQUIPMENT STATUS IN EXISTING ELECTRICAL SHACK ARE AS BELOW BASED ON THE CLIENT'S CONFIRMATION.
   - (1) TRANSFORMER T16 (480-120/240V, 15kVA): TO BE REPLACED
   - (2) PANEL-K (120/240V, 1P3W): TO BE REPLACED
   - (3) PANEL-Y (NOT IN USE, CONNECT TO TRANSFORMER 4160-220/127V): TO BE REMOVED
   - (4) TRANSFORMER (4160-220/127V, NOT IN USE): TO BE REMOVED
   - (5) TRANSFORMER (4160-330/220V, NOT IN USE): TO BE REMOVED
   - (6) TRANSFORMER TX-7 (4160-480/277V, 112.5kVA): TO BE UPGRADED
   - (7) BREAKER (CONNECTED TO TRANSFORMER 4160-330/220V, NEXT TO PANEL-6): TO BE REMOVED
   - (8) PANEL-6 (480V, 200A, 3P3W): TO BE REPLACED
   - (9) TRANSFER SWITCH (480V, GENERATOR SUPPLY/NORMAL SUPPLY): TO BE REPLACED
   - (10) YARD OFFICE MAIN BREAKER (480V, ABOVE TRANSFER SWITCH): TO BE REPLACED
   - (11) AIR COMPRESSOR CONTROLLER (480V POWER, 20A, 120V CONTROL): TO BE REMOVED
2. THE EXISTING RECEPTACLES INSTALLED ON EXISTING UTILITY POSTS AT RIP TRACK #1, #2 AND #3 SHALL BE REMOVED UNDER THE CLIENT'S DIRECTION.
3. ALL EXISTING CONDUITS AND CABLES RELATED TO THE REPLACED OR REMOVED EXISTING ELECTRICAL EQUIPMENT SHALL BE REMOVED.
4. THE CONTRACTOR SHALL CONFIRM EQUIPMENT AND MATERIALS REMOVALS WITH THE CLIENT PRIOR TO DEMOLITION.



2 - EXISTING ELECTRICAL SHACK - REMOVAL & DEMOLITION PLAN

SCALE: 1:50

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

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Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
DEMOLITION PLAN

REFERENCE DRAWINGS		REG. PROFESSIONAL
Ref Drawing No	-	
DRAWING No.	DRAWING TITLE	

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

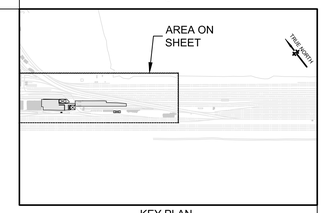
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SHEET SIZE: A1

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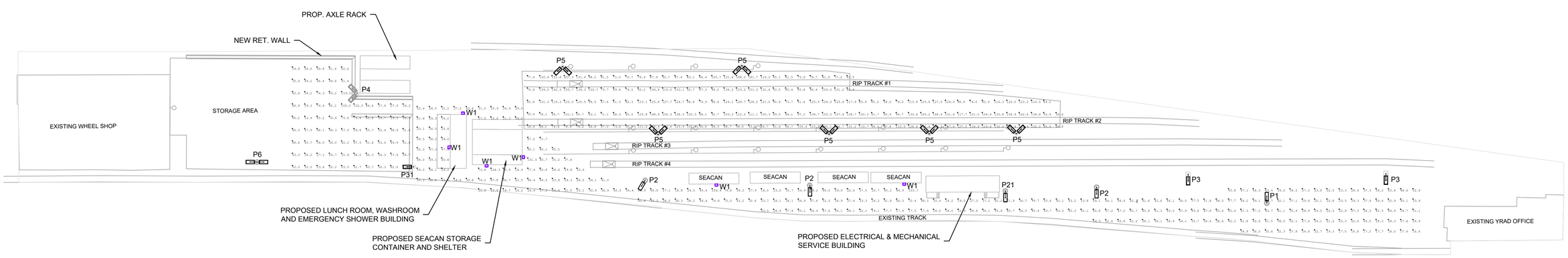


KEY PLAN

LUMINAIRE SCHEDULE							
SYMBOL	QTY	LABEL	ARRANGEMENT	LLF	DESCRIPTION	LUM. WATTS	LUM. LUMENS
	1	DSX2 LED P2 40K 70CRI T5M	SINGLE	0.800	P1 TYPE, EXISTING ROUND POLE MOUNTED	179.22	26022
	4	DSX2 LED P2 40K 70CRI T4M	SINGLE	0.800	P2 TYPE, EXISTING ROUND POLE MOUNTED P21 TYPE, NEW REPLACED ROUND POLE MOUNTED	179.22	25294
	3	DSX2 LED P2 40K 70CRI T4M_1	SINGLE	0.800	P3 TYPE, SQUARE POLE MOUNTED P31 TYPE, SQUARE POLE MOUNTED	179.22	25294
	6	DSX2 LED P5 40K 70CRI T4M	2 @ 90 DEGREES	0.800	P5 TYPE, SQUARE POLE MOUNTED	326.58	40783
	1	EXISTING LUMINAIRE	BACK-BACK	0.800	P6 TYPE, NEW REPLACED ROUND POLE MOUNTED	179.22	25294
	6	DSXW1 LED P6 40K T3M	SINGLE	0.800	W1 TYPE, WALL MOUNTED	48.25	7120
	1	DSX2 LED P2 40K 70CRI T4M_4	2 @ 90 DEGREES	0.800	P4 TYPE, SQUARE POLE MOUNTED	179.22	25294

CALCULATION SUMMARY							
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
ACCESS WAY	ILLUMINANCE	LUX	39.59	131.5	16.0	2.47	8.22
EXTERIOR STORAGE AREA	ILLUMINANCE	LUX	52.45	119.5	22.2	2.36	5.38
RIP TRACK AREA	ILLUMINANCE	LUX	108.54	218.5	54.4	2.00	4.02

TARGET ILLUMINANCE LEVELS CHART					
SPACE NAME	SPACE NAME IN REFERENCE	SURFACE	LIGHTING LEVEL (H) LUX	AVG/MIN RATIO	REFERENCE
ACCESS WAY	LOCAL STREET	FLOOR	10~18	6:1	ANSI/IES RP-8-22
EXTERIOR STORAGE AREA	STORAGE YRAD	FLOOR	50	N/A	ANSI/IES RP-7-17
RIP TRACK AREA	RAILWAY YARDS	FLOOR	50~100	N/A	ANSI/IES RP-7-17



1 / - PROPOSED LIGHTING CALCULATION DETAIL

SCALE: 1:500

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DRAWING APPROVAL STATUS: ISSUED FOR TENDER			
ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
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ENG. MANAGER	F. VAN BILJON	Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
LIGHTING CALCULATION DETAIL

REFERENCE DRAWINGS		REG. PROFESSIONAL
DRAWING No.	DRAWING TITLE	
Ref Drawing No	-	

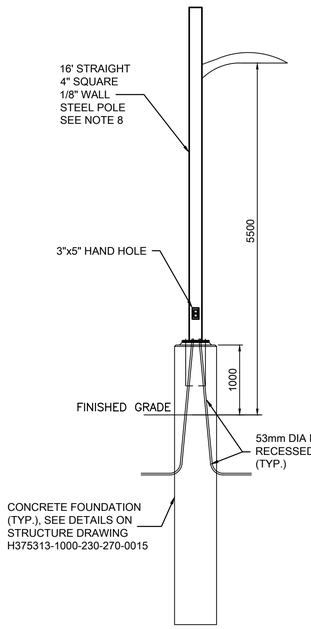
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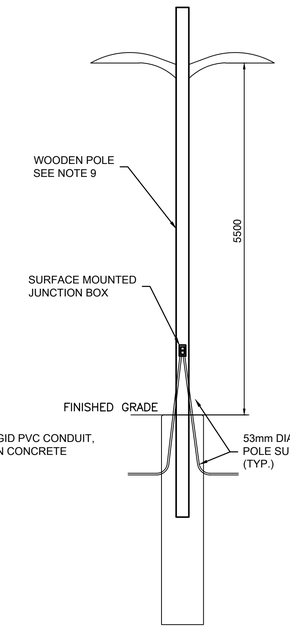
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SHEET SIZE: A1

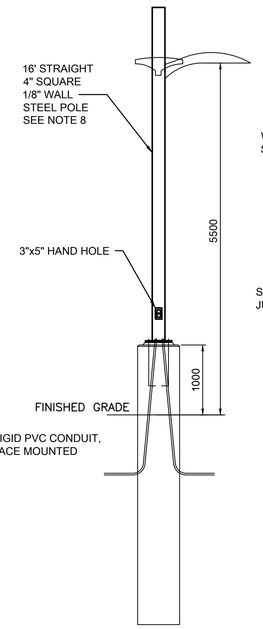
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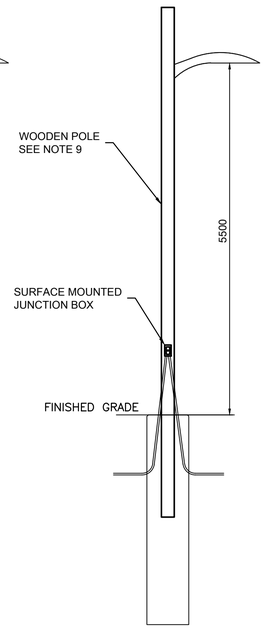
LIGHTING POLE P31 WITH SINGLE LUMINAIRE IN THE WHEEL STORAGE AREA



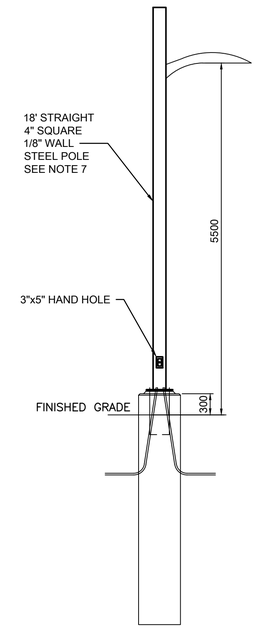
LIGHTING POLE P6 WITH TWO BACK TO BACK LUMINAIRES IN THE WHEEL STORAGE AREA



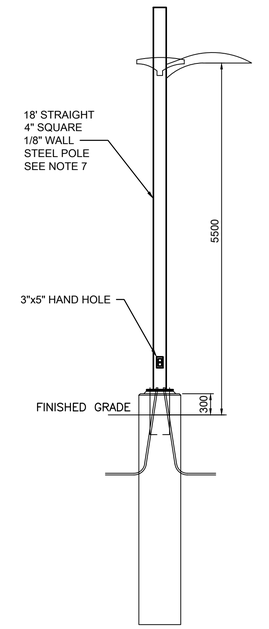
LIGHTING POLE P4 WITH TWO @ 90 DEGREES LUMINAIRES IN THE WHEEL STORAGE AREA



LIGHTING POLE P1,P2&P21 WITH SINGLE LUMINAIRE IN THE RIP TRACK AREA



LIGHTING POLE P3 WITH SINGLE LUMINAIRE IN THE RIP TRACK AREA



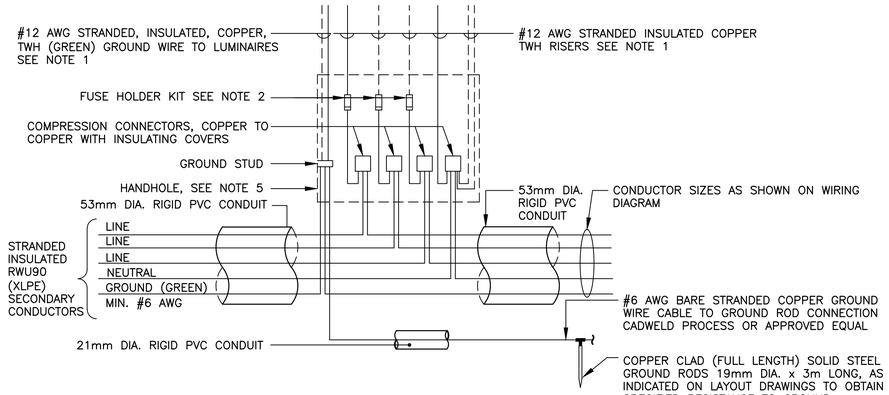
LIGHTING POLE P5 WITH TWO @ 90 DEGREES LUMINAIRES IN THE RIP TRACK AREA

A
-
LIGHTING POLE DETAILS

SCALE: NTS

NOTES:

1. BROKEN LINES INDICATE ADDITIONAL CONDUCTORS FOR DOUBLE LUMINAIRE INSTALLATION AND / OR ALTERNATE CIRCUIT IN ACCORDANCE WITH THE DRAWING H375313-1000-263-270-0002.
2. IN-LINE WATERPROOF FUSEHOLDER 6OOV, 3OA WITH BREAKAWAY FEATURE. GOULD GEB-11-11 C/W WATERPROOF INSULATING BOOTS AND ONE 10 AMP FUSE TYPE KTK 600 VOLTS OR APPROVED EQUAL.
3. ALL GROUNDING WIRES TO BE FITTED WITH COMPRESSION LUGS BEFORE SECURING TO GROUND STUD IN POLE.
4. ALL NUTS & BOLTS TO BE STAINLESS STEEL.
5. HANDHOLE SHALL BE USED FOR 18FT 4INCHES SQUARE STEEL POLE, AND JUNCTION BOX SHALL BE USED FOR WOODEN POLE.
6. 480/277V SYSTEM SHALL BE APPLIED TO THE POLE LIGHTING FIXTURES FED FROM PANEL 4PL1, 4PL3 AND SWITCHBOARD 4SB-01, AND 208/120V SYSTEM SHALL BE APPLIED TO THE POLE LIGHTING FIXTURES FED FROM PANEL-A.
7. 18' STRAIGHT 4" SQUARE STEEL POLE WITH GALVANIZED COATING TO BE SUPLLIED BY DYNAPOLE (SSS4-18-DC) OR APPROVED EQUIVALENT.
8. 16' STRAIGHT 4" SQUARE STEEL POLE WITH GALVANIZED COATING TO BE SUPLLIED BY DYNAPOLE (SSS4-16-DC) OR APPROVED EQUIVALENT.
9. POLE P1 AND P2 ARE EXISTING WOODEN POLE. POLE P21 AND P6 ARE NEW REPLACED WOODEN POLE SAME AS EXISTING WOODEN POLE. NEW REPLACED WOODEN POLE SHALL BE PROVIDED BY THE CONTRACTOR.



B
-
480/277V, 3 PHASE SYSTEM (SEE NOTE 6)

SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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ENG. MANAGER	F. VAN BILJON	[ppt Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
LIGHTING INSTALLATION DETAILS

Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

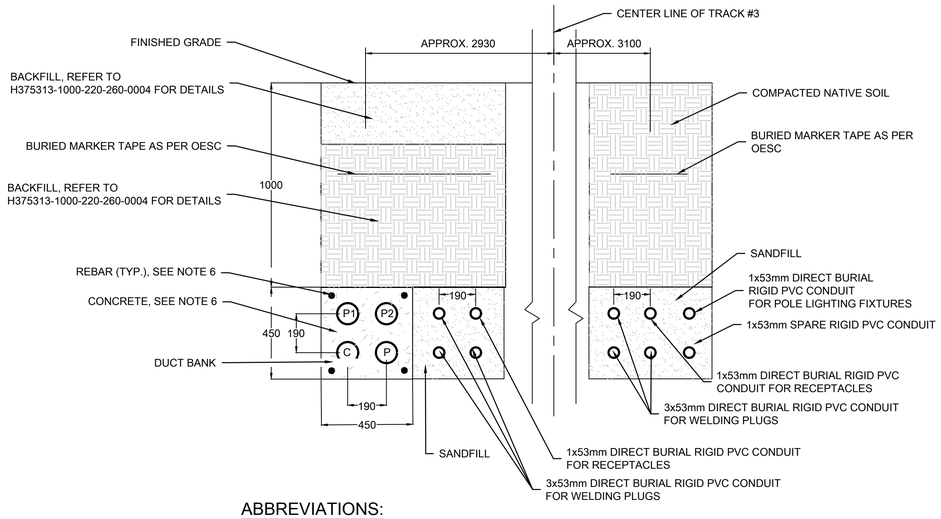
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SCALE: NTS OR AS NOTED

DWG. No. H375313-1000-263-260-0002

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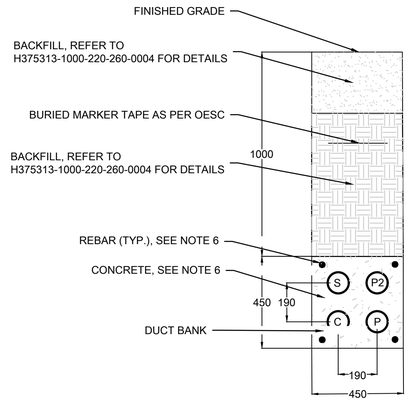
SHEET SIZE: A1



ABBREVIATIONS:

P - 103mm 4160V (AC) DUCT FOR 5kV CABLE FROM SWITCHGEAR S-12 IN WHEEL SHOP TO 4160V INTERRUPTER IN ELECTRICAL ROOM
C - 103mm COMMUNICATION DUCT FOR COMMUNICATION SYSTEM CABLES
P1 - 103mm 480V (AC) DUCT FOR 480V CABLE FROM SWITCHBOARD 4SB-01 TO PANEL 4PL3 IN STORAGE SEACAN
P2 - 103mm 480V (AC) DUCT FOR 480V CABLE FROM SWITCHBOARD 4SB-01 TO 480V RIP TRACK PANEL AT TRACK #1

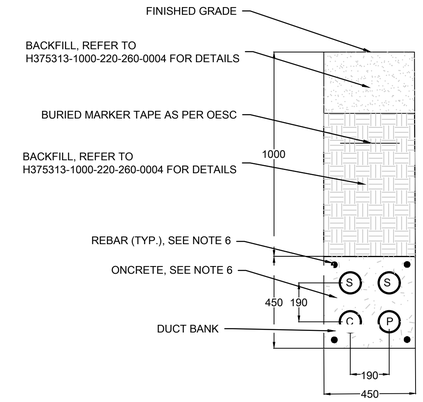
A - CONCRETE ENCASED DUCT BANK & DIRECT BURIAL CONDUIT TRENCH
SCALE: NTS



ABBREVIATIONS:

P - 103mm 4160V (AC) DUCT FOR 5kV CABLE FROM SWITCHGEAR S-12 IN WHEEL SHOP TO 4160V INTERRUPTER IN ELECTRICAL ROOM
C - 103mm COMMUNICATION DUCT FOR COMMUNICATION SYSTEM CABLES
P2 - 103mm 480V (AC) DUCT FOR 480V CABLE FROM SWITCHBOARD 4SB-01 TO 480V RIP TRACK PANEL AT TRACK #1
S - 103mm SPARE DUCT

B - CONCRETE ENCASED DUCT BANK
SCALE: NTS



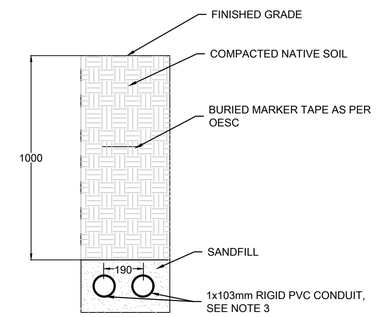
ABBREVIATIONS:

P - 103mm 4160V (AC) DUCT FOR 5kV CABLE FROM SWITCHGEAR S-12 IN WHEEL SHOP TO 4160V INTERRUPTER IN ELECTRICAL ROOM
C - 103mm COMMUNICATION DUCT FOR COMMUNICATION SYSTEM CABLES
S - 103mm SPARE DUCT

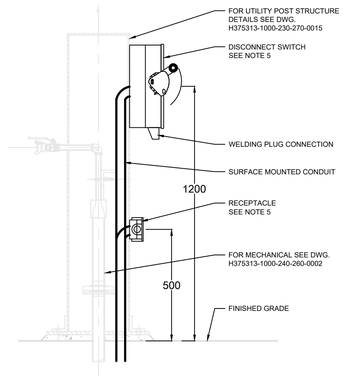
C - CONCRETE ENCASED DUCT BANK
SCALE: NTS

NOTES:

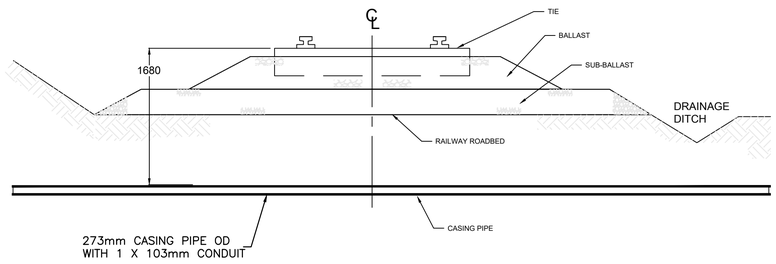
1. ALL DUCTS SHALL BE SPACED ACCORDING TO OESC.
2. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. IT IS TYPICAL DIRECT BURIAL CONDUIT TRENCH DETAILS, CONDUIT NUMBERS AND CONDUIT DIAMETER MAY VARY ACCORDING TO THE DRAWINGS H375313-1000-263-270-0001~0004.
4. ALL CONDUIT RUN SHALL BE AS PER THE REQUIREMENTS OF OESC.
5. CONTRACTOR SHALL COORDINATE WITH MECHANICAL AND STRUCTURAL, INSTALL WELDING PLUG (INCLUDING DISCONNECT SWITCH) AND RECEPTACLE ON THE UTILITY POST.
6. FOR REBAR AND CONCRETE DETAILS, REFER TO STRUCTURAL DRAWING H375313-1000-230-270-0015.
7. CASING PIPES SHALL BE INSTALLED IN ACCORDANCE WITH CSA C22.3 No. 7.



D - DIRECT BURIAL CONDUIT TRENCH (TYP.)
SCALE: NTS



E - UTILITY POST (TYP.)
SCALE: NTS



F - TRACK CROSSING CASING PIPE TYPICAL DETAIL (TYP.)
SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#13428] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[appl Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
INSTALLATION DETAILS

Ref Drawing No	-

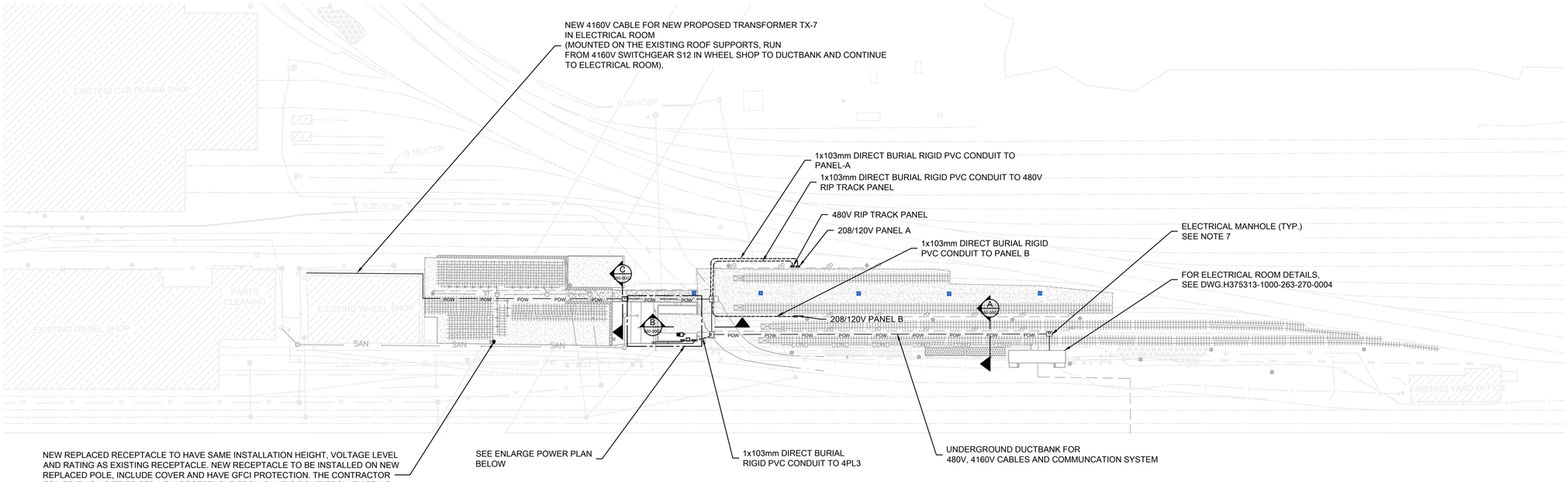
REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS | DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE

SCALE NTS OR AS NOTED | DWG. No. H375313-1000-263-260-0003 | REV C

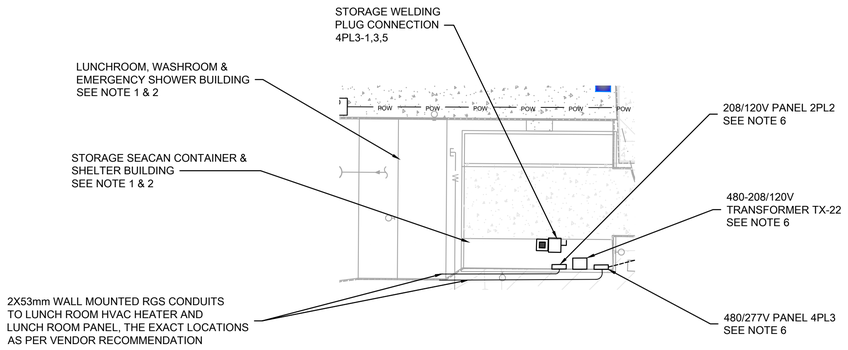
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DWG. No. H375313-1000-263-270-0001



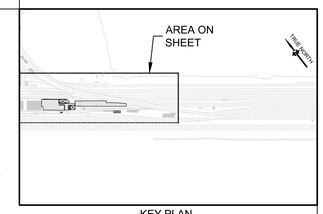
1 / - PROPOSED SITE POWER PLAN

SCALE: 1:750



2 / - PROPOSED ENLARGED POWER PLAN

SCALE: 1:250



KEY PLAN

LEGEND:

SYMBOL	DESCRIPTION
———	1x53mm RGS CONDUIT SURFACE INSTALLED ON THE BUILDING WALL
– – – – – – – –	1x103mm DIRECT BURIAL RIGID PVC CONDUIT

NOTES:

1. FOR THE LIGHTING AND GENERAL POWER REQUIREMENT OF LUNCHROOM, WASHROOM & EMERGENCY SHOWER BUILDING AND STORAGE SEACAN CONTAINER & SHELTER BUILDING, REFER TO THESE TWO BUILDING PERFORMANCE SPECIFICATIONS RESPECTIVELY. POWER CONNECTIONS TO BE FED FROM LUNCH ROOM PANEL (SUPPLIED BY BUILDING VENDOR), PANEL 4PL3 AND PANEL 2PL2, REFER TO DWG. H375313-1000-263-284-0001 AND H375313-1000-263-284-0004 FOR THE DETAILS.
2. MECHANICAL HVAC SYSTEM TO BE DESIGNED BY BUILDING VENDOR, HVAC EQUIPMENT POWER CONNECTIONS TO BE FED FROM FROM LUNCH ROOM PANEL (SUPPLIED BY BUILDING VENDOR), PANEL 4PL3 AND PANEL 2PL2, REFER TO DWG. H375313-1000-263-284-0001 AND H375313-1000-263-284-0004 FOR THE DETAILS.
3. THE EXACT LOCATION FOR WELDING PLUG TO BE VERIFIED ON SITE.
4. WHEN EXISTING ELECTRICAL SHACK WILL BE REPLACED, THE CONTRACTOR SHALL COORDINATE WITH THE CLIENT AND PROVIDE TEMPORARY GENERATOR INCLUDING ASSOCIATED ACCESSORIES TO FEED POWER SUPPLY TO EXISTING YARD OFFICE.
5. THE CLIENT SHALL BE RESPONSIBLE FOR COMMUNICATION SYSTEM CABLE RUNNING.
6. ALL ELECTRICAL EQUIPMENT SHALL BE BONDED TO THE GROUND WIRE, CONTRACTOR TO BOND ALL REQUIRED ITEMS PER OESC. REFER TO DWG. H375313-1000-263-270-0004 FOR OTHER GROUNDING REQUIREMENTS.
7. FOR ELECTRICAL MANHOLE DETAILS, REFER TO OPSD STANDARD - OPSD 2111.040 - ELECTRICAL MAINTENANCE HOLE, PRECAST CONCRETE, 1200MM X 1650MM, DIVISION 2100, VOLUME 4.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	J.M.	Z.W.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[appl Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
SITE POWER PLAN PROPOSED

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

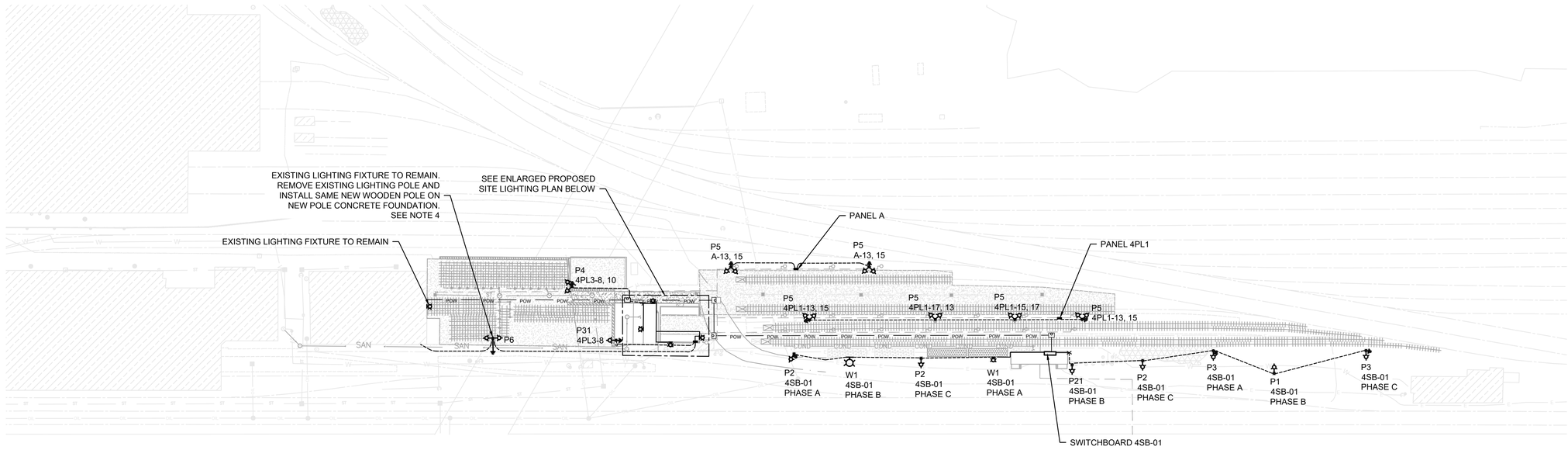
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DWG. No. H375313-1000-263-270-0001

REV: E

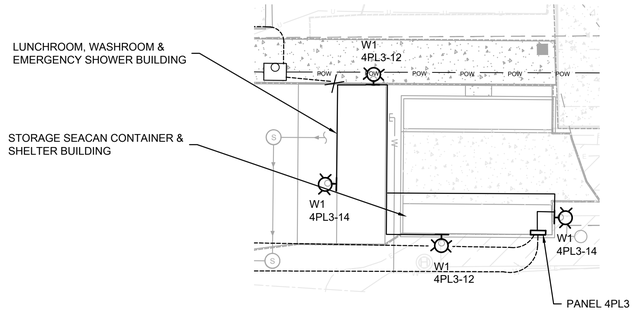
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DWG. No. H375313-1000-263-270-0002



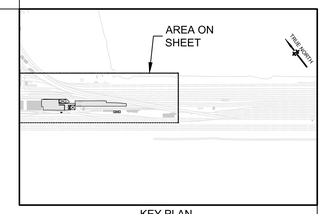
1 - PROPOSED SITE LIGHTING PLAN

SCALE: 1:750



2 - ENLARGED PROPOSED SITE LIGHTING PLAN

SCALE: 1:250



KEY PLAN

LEGEND:

SYMBOL	DESCRIPTION
———	1x53mm RGS CONDUIT SURFACE INSTALLED ON THE BUILDING WALL
– – – – – – – –	1x53mm DIRECT BURIAL PVC RIGID CONDUIT

NOTES:

1. FOR LIGHTING FIXTURE INSTALLATION DETAILS ON LIGHTING POLE, REFER TO DWG. H375313-1000-263-260-0002.
2. CONTRACTOR SHALL INSTALL GROUNDING ROD OF POLE AS PER SCHEMATICS ON DWG. H375313-1000-263-260-0002.
3. POLE MOUNTED LUMINAIRES SHALL BE INSTALLED AT 5.5m AFF. WALL MOUNTED LUMINAIRES ON EXISTING SEACANS AND STORAGE SEACAN CONTAINER TO BE 2.2m HIGH, WALL MOUNTED LUMINAIRES ON LUNCHROOM/WASHROOM & EMERGENCY SHOWER BUILDING TO BE 4m HIGH.
4. CONTRACTOR TO VERIFY VOLTAGE LEVEL OF EXISTING LIGHTING FIXTURE P6. IF THE VOLTAGE LEVEL OF LIGHTING FIXTURE P6 IS 277V OR 120V, IT SHALL BE FED FROM PANEL 4PL3 OR 2PL2 IN STORAGE SEACAN, IF IT HAS OTHER VOLTAGE LEVEL, IT SHALL BE FED FROM ORIGINAL SAME PANEL IN EXISTING WHEEL HOUSE.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
SITE LIGHTING PLAN PROPOSED

Ref Drawing No	-

DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

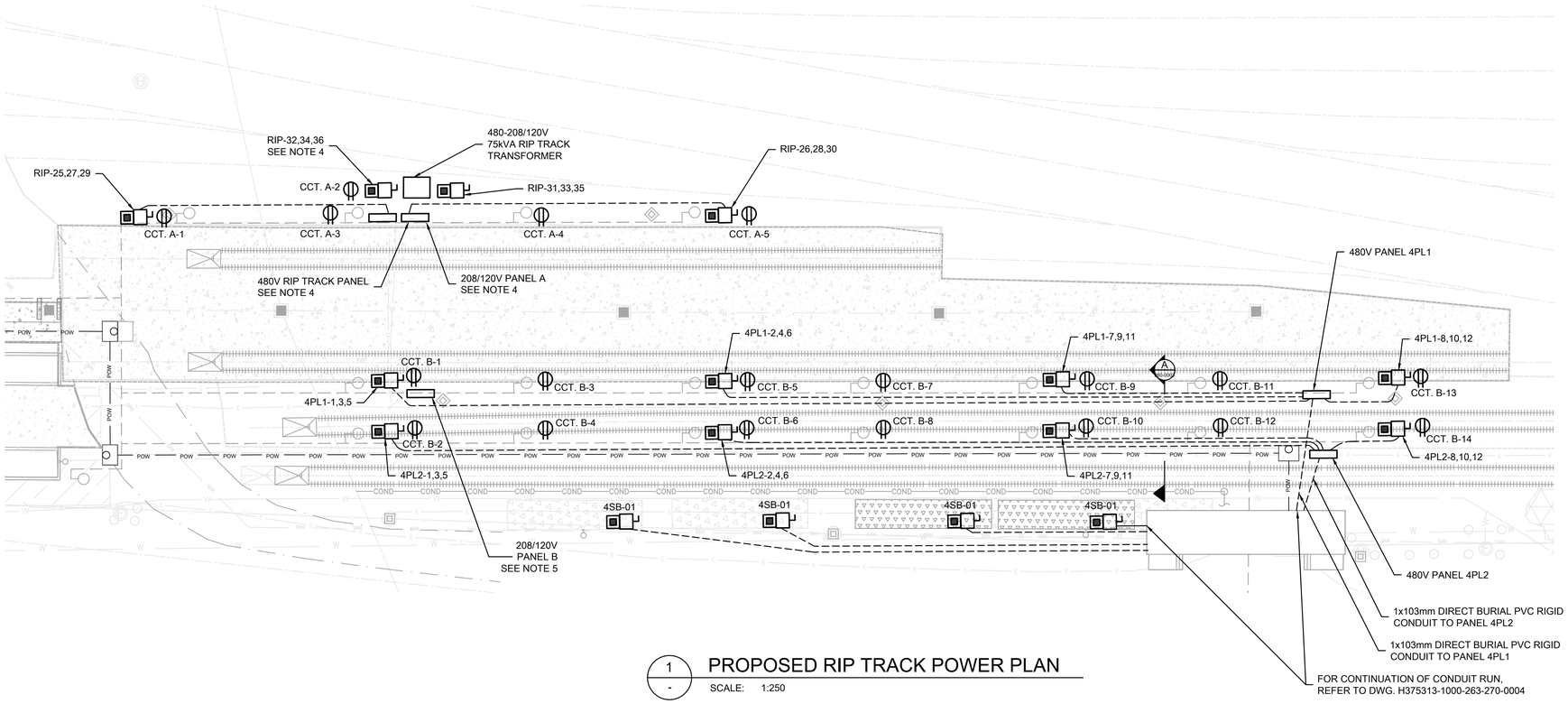
SCALE: NTS OR AS NOTED

DWG. No. H375313-1000-263-270-0002

REV C

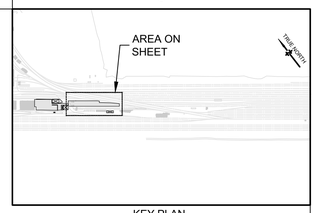
SHEET SIZE: A1

DWG. No. H375313-1000-263-270-0003



1 / - PROPOSED RIP TRACK POWER PLAN

SCALE: 1:250



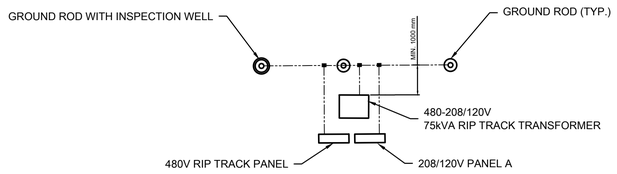
KEY PLAN

LEGEND:

SYMBOL	DESCRIPTION
———	1x53mm RGS CONDUIT SURFACE INSTALLED ON THE BUILDING WALL
– – – – –	1x53mm DIRECT BURIAL RIGID PVC CONDUIT UNLESS NOTED OTHERWISE

NOTES:

1. ALL WELDING PLUGS TO INCLUDE A DISCONNECT SWITCH, THE ASSOCIATED EXTERIOR DISCONNECT SWITCH TO HAVE 3R ENCLOSURE.
2. ALL WELDING PLUGS TO BE INSTALLED AT 1.2m HIGH. FOR THE WELDING PLUGS INSTALLATION DETAILS ON THE UTILITY POSTS, SEE DWG. H375313-1000-263-260-0003 FOR THE INSTALLATION DETAILS.
3. ALL RECEPTACLES INSTALLED ON UTILITY POSTS TO INCLUDE COVER AND HAVE GFCI PROTECTION. THE INSTALLATION HEIGHT ON UTILITY POST IS 0.5m, SEE DWG. H375313-1000-263-260-0003 FOR THE INSTALLATION DETAILS.
4. 480V RIP TRACK PANEL, 208/120V PANEL A AND WELDING PLUG (RIP-31,33,35) TO BE INSTALLED INSIDE EXISTING WOODEN ENCLOSURE AND KEEP SAME LOCATIONS. WELDING PLUG (RIP-32,34,36) AND RECEPTACLE (CCT. A-2) TO BE INSTALLED OUTSIDE WOODEN ENCLOSURE AND KEEP SAME LOCATIONS.
5. 208/120V PANEL B TO BE INSTALLED IN SAME LOCATION AS EXISTING PANEL B.
6. REFER TO DWG. H375313-1000-263-270-0004 FOR GROUNDING REQUIREMENTS.



2 / - PROPOSED EQUIPMENT GROUNDING PLAN

SCALE: 1:250

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
RIP TRACK POWER PLAN PROPOSED

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

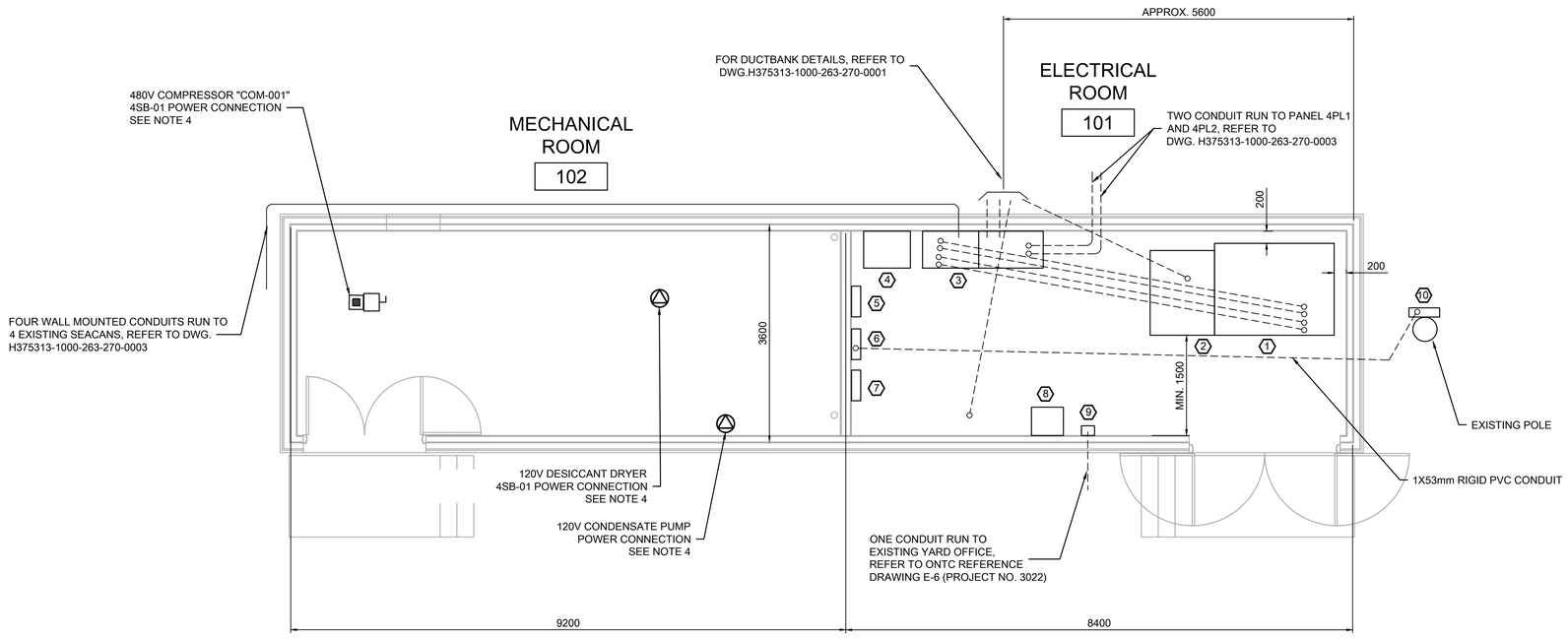
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DWG. No. H375313-1000-263-270-0003

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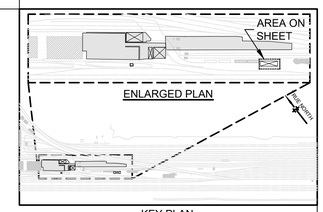
SHEET SIZE: A1

DWG. No. H375313-1000-263-270-0004



1 / - PROPOSED POWER PLAN

SCALE: 1:50



LEGEND:

SYMBOL	DESCRIPTION
———	53mm RGS CONDUIT SURFACE INSTALLED ON THE BUILDING WALL
- - - - - - - -	1x103mm RIGID PVC CONDUIT: DIRECT BURIAL OR INSTALLED BELOW BUILDING ROOM FLOOR UNLESS NOTED OTHERWISE

NOTES:

1. ALL IN-USE ELECTRICAL EQUIPMENT IN THE EXISTING ELECTRICAL SHACK TO BE REPLACED BY NEW EQUIPMENT AS SHOWN IN THE DRAWING.

(1) 750KVA 4160-480/277V TRANSFORMER TX-7
(2) 4160V LOAD INTERRUPTER
(3) 480V 3P4W SWITCHBOARD 4SB-01
(4) 30KVA 480-208/120V TRANSFORMER XT-21
(5) 120V/240V 1P3W PANEL K
(6) 208/120V 3P4W PANEL 2PL1
(7) 480V 3P3W PANEL-6
(8) 208V 3P 300A MANUAL TRANFER SWITCH MTS
(9) 208V 3P 225A YARD OFFICE MAIN BREAKER
(10) 120/240V 1P3W PANEL K1

2. FOR THE LIGHTING AND GENERAL POWER REQUIREMENT, REFER TO MODULAR BUILDING PERFRMANCE SPECIFICATION. POWER CONNECTIONS TO BE FED FROM PANEL 2PL1 AND PANEL-K, REFER TO DWG. H375313-1000-263-284-0001 AND H375313-1000-263-284-0002 FOR THE DETAILS.
3. MECHANICAL HVAC SYSTEM TO BE DESIGNED BY MODULAR BUILDING VENDOR, HVAC EQUIPMENT POWER CONNECTIONS TO BE FED FROM PANEL 2PL1 AND PANEL-6, REFER TO DWG. H375313-1000-263-284-0001 AND H375313-1000-263-284-0006 FOR THE DETAILS.
4. THE EXACT LOCATIONS OF POWER CONNECTIONS TO BE COORDINATED WITH EQUIPMENT SUPPLIERS.
5. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25
B	ISSUED FOR 40% CLENT REVIEW	J.M.	Z.W.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/03/24

REVISIONS

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[illegible] Rubergrind, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
ELECTRICAL/MECHANICAL BUILDING
POWER PROPOSED PLAN

Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

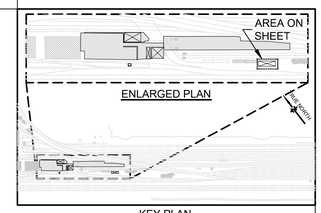
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-263-270-0004

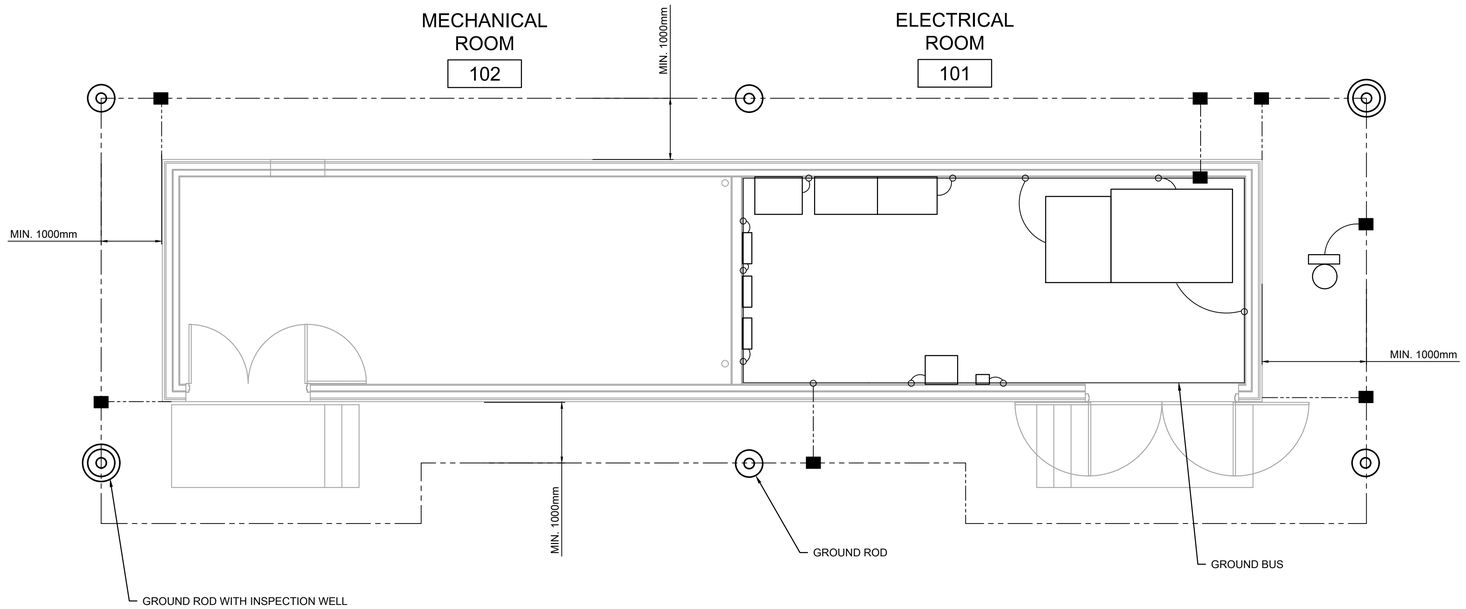
REV E

SHEET SIZE: A1

DWG. No. H375313-1000-263-270-0005



KEY PLAN



1 / - PROPOSED GROUNDING PLAN

SCALE: 1:50

LEGEND:

SYMBOL	DESCRIPTION
———	BARE STRANDED COPPER GROUNDING CONDUCTOR/GROUND BUS
—·—·—	BARE GROUND CABLE

NOTES:

1. GROUNDING CABLE SHALL BE BURIED BELOW THE GRADE AS PER THE REQUIREMENTS OF THE OESC.
2. NUMBER OF GROUNDING RODS IS INDICATIVE AND SHALL BE INCREASED BASED ON GROUND GRID RESISTIVITY TESTING.
3. GROUNDING CONNECTION TO EQUIPMENT FROM GROUND LOOP WIRE SHALL BE MINIMUM #2AWG BARE STRANDED COPPER CABLE.
4. GROUND LOOP SHALL BE #4/0AWG BARE STRANDED COPPER, UNLESS OTHERWISE NOTED.
5. ALL NON-CONDUCTOR METALLIC ITEMS SHALL BE BONDED TO THE GROUND WIRE. CONTRACTOR TO BOND ALL REQUIRED ITEMS PER OESC.
6. GROUND BUS TO BE COPPER STRIP HAVING CROSS-SECTION OF 25mm x 6mm.
7. REFER TO DWG. H375313-1000-263-270-0004 FOR THE LABELLING OF EQUIPMENT IN THE ELECTRICAL ROOM.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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HATCH

Ontario Northland

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
ELECTRICAL/MECHANICAL BUILDING
GROUNDING PROPOSED PLAN

SCALE NTS OR AS NOTED

DWG. No. H375313-1000-263-270-0005

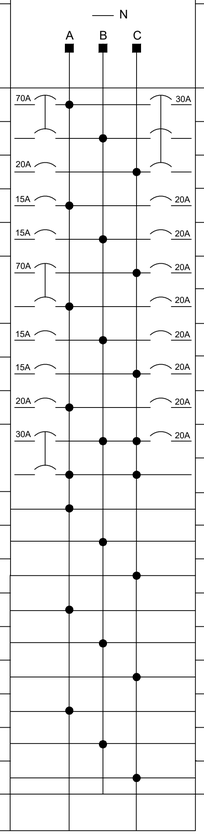
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SHEET SIZE: A1

DWG. No. H375313-1000-263-284-0001

FED FROM: TRANSFORMER TX-21
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 90A (NOTE 2)

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD
1A	PANEL-K (NEW)			
3B				
5C	MECHANICAL ROOM RECEPTACLE			
7A	ELEC. / MECH. ROOM EMG. LTG. & EXIT SIGN			
9B	MECHANICAL ROOM LIGHTING			
11C	PANEL-K1 (NEW)			
13A				
15B	SPARE			
17C	SPARE			
19A	SPARE			
21B	SPARE			
23C				
25A	SPACE			
27B	SPACE			
29C	SPACE			
31A	SPACE			
33B	SPACE			
35C	SPACE			
37A	SPACE			
39B	SPACE			
41C	SPACE			
	TOTAL WATTS/PHASE			

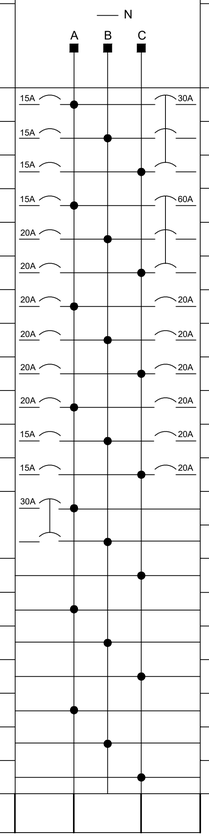


PANELBOARD IDENTIFICATION: 2PL1
LOCATION: ELECTRICAL ROOM
PANEL TYPE: -
MAINS: 150A 3PH 4W VOLT: 208/120V

WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
			SURGE PROTECTIVE DEVICE (SPD)	2A
				4B
				6C
			ELECTRICAL ROOM SUPPLY FAN	8A
			ELECTRICAL ROOM EXHAUST FAN	10B
			MECHANICAL ROOM SUPPLY FAN	12C
			MECHANICAL ROOM EXHAUST FAN	14A
			DRYD-001 DESICCANT DRYER	16B
120			PMPC-001 CONDENSATE PUMP	18C
			SPARE	20A
			SPARE	22B
			SPACE	24C
			SPACE	26A
			SPACE	28B
			SPACE	30C
			SPACE	32A
			SPACE	34B
			SPACE	36C
			SPACE	38A
			SPACE	40B
			SPACE	42C

FED FROM: TRANSFORMER TX-22
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 90A (NOTE 2)

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD
1A	STORAGE SEACAN / SHELTER EMG. LTG., EXIT			
3B	STORAGE SEACAN LIGHTING			
5C	STORAGE SEACAN LIGHTING			
7A	SHELTER LIGHTING			
9B	STORAGE SEACAN RECEPTACLE			
11C	STORAGE SEACAN RECEPTACLE			
13A	STORAGE SEACAN RECEPTACLE			
15B	STORAGE SEACAN RECEPTACLE			
17C	SPARE			
19A	SPARE			
21B	SPARE			
23C	SPARE			
25A	SPARE			
27B				
29C	SPACE			
31A	SPACE			
33B	SPACE			
35C	SPACE			
37A	SPACE			
39B	SPACE			
41C	SPACE			
	TOTAL WATTS/PHASE			



PANELBOARD IDENTIFICATION: 2PL2
LOCATION: STORAGE SEACAN
PANEL TYPE: -
MAINS: 150A 3PH 4W VOLT: 208/120V

WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
			SURGE PROTECTIVE DEVICE (SPD)	2A
				4B
				6C
			LUNCHROOM, WASHROOM & EMERGENCY SHOWER BUILDING PANEL	8A
				10B
				12C
			STORAGE SEACAN SUPPLY FAN	14A
			STORAGE SEACAN EXHAUST FAN	16B
			STORAGE SEACAN SUPPLY FAN	18C
			STORAGE SEACAN EXHAUST FAN	20A
			SPARE	22B
			SPARE	24C
			SPACE	26A
			SPACE	28B
			SPACE	30C
			SPACE	32A
			SPACE	34B
			SPACE	36C
			SPACE	38A
			SPACE	40B
			SPACE	42C

NOTES:

1. THE PANELS SHOWN ON THIS DRAWING TO HAVE A MINIMUM SHORT CIRCUIT INTERRUPTING CAPACITY OF 22KAIC.
2. 90A MAIN BREAKER IN PANEL 2PL1 AND 2PL2 TO BE 100% RATED.
3. ALL HVAC SHOWN ON THE DRAWING TO BE REFERENCE ONLY, BUILDING VENDORS SAHLL SUPPLY THE EXACT INFORMATION.
4. ALL LIGHTING AND RECEPTACLES SHOWN ON THE DRAWING TO BE REFERENCE ONLY, BUILDING VENDORS SAHLL SUPPLY THE EXACT INFORMATION.

1 / - PANEL SCHEDULE
SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	JM	ZW	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	JM	ZW	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	JM	ZW	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	JM	ZW	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	JM	ZW	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[xp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
PANEL SCHEDULE

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS | DRAWING APPROVAL STATUS: ISSUED FOR TENDER

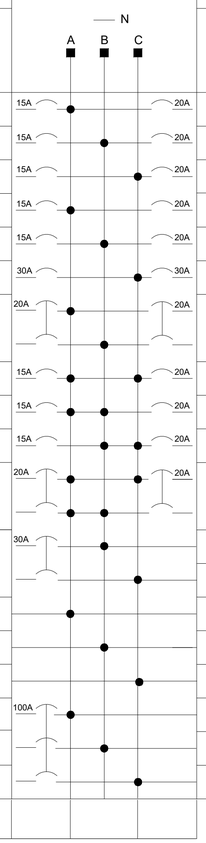
SCALE NTS OR AS NOTED | DWG. No. H375313-1000-263-284-0001 | REV E

SHEET SIZE: A1

FED FROM: 75kVA RIP TRACK TRANSFORMER (NEW)
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : N/A (NOTE 4)

PANELBOARD IDENTIFICATION: PANEL A (NEW)
LOCATION: RIP TRACK #1
PANEL TYPE: -
MAINS: 250A 3PH 4W VOLT: 208/120V

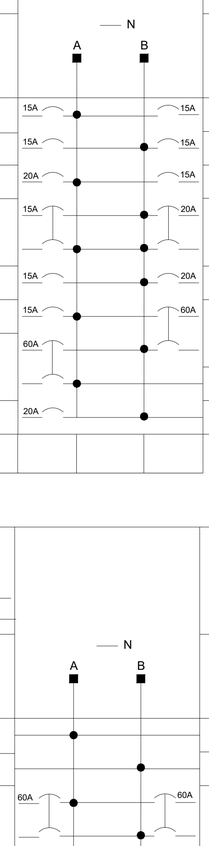
CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	POST RECEPTACLE							POST RECEPTACLE	2A
3B	POST RECEPTACLE							POST RECEPTACLE	4B
5C	POST RECEPTACLE							SPARE	6C
7A	SPARE							SPARE	8A
9B	SPARE							SPARE	10B
11C	SPARE							SPARE	12C
13A	RIP TRACK LIGHTING			1308				SPARE	14A
15B									16B
17C	SPARE							SPARE	18C
19A	SPARE							SPARE	20A
21B	SPARE							SPARE	22B
23C	SPARE							SPARE	24A
25A									26B
27B	SPARE							SPACE	28C
29C								SPACE	30A
31A	SPACE							SPACE	32B
33B	SPACE							SPACE	34B
35C	SPACE							SPACE	36C
37A	PANEL B (NEW)							SPACE	38A
39B								SPACE	40B
41C								SPACE	42B
	TOTAL WATTS/PHASE								



FED FROM: PANEL 2PL1
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : N/A

PANELBOARD IDENTIFICATION: PANEL-K (NEW)
LOCATION: ELECTRICAL ROOM
PANEL TYPE: -
MAINS: 100A 1PH 3W VOLT: 120/208V

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	SPARE							ELECTRICAL ROOM LIGHTING	2A
3B	SPARE							ELECTRICAL ROOM RECEPTACLE	4B
5A	SPARE							ELECTRICAL ROOM RECEPTACLE OUTSIDE	6A
7B	SPARE							SPARE	8B
9A									10A
11B	SPARE							SPARE	12B
13A	SPARE							RIP TRACK SHACK (TO BE DEMOLISHED)	14A
15B	SCALE HOUSE (TO BE DEMOLISHED)								16B
17A								SPACE	18A
19B	SPARE							SPACE	20B
	TOTAL WATTS/PHASE								



FED FROM: PANEL 2PL1
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: POLE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 70A

PANELBOARD IDENTIFICATION: PANEL-K1 (NEW)
LOCATION: EXISTING POLE OUTSIDE ELECTRICAL ROOM
PANEL TYPE: -
MAINS: 100A 1PH 3W VOLT: 120/208V

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	SPACE							SPACE	2A
3B	SPACE							SPACE	4B
5A	EXISTING LOAD							EXISTING LOAD	6A
7B									8B
9A	EXISTING LOAD							EXISTING LOAD	10A
11B	EXISTING LOAD							EXISTING LOAD	12B
13A	SPACE							EXISTING LOAD	14A
15B	SPACE							EXISTING LOAD	16B
17A	SPACE							SPACE	18A
19B	SPACE							SPACE	20B
	TOTAL WATTS/PHASE								

NOTES:

1. THE PANELS SHOWN ON THIS DRAWING TO HAVE A MINIMUM SHORT CIRCUIT INTERRUPTING CAPACITY OF 22KAIC.
2. THE CLIENT TO CONFIRM ALL CIRCUIT DESCRIPTIONS.
3. NEW PANEL A TO REPLACE EXISTING PANEL A.
4. THE CLIENT TO CONFIRM IF THE MAIN BREAKER IS AVAILABLE.
5. NEW PANEL-K TO REPLACE EXISTING PANEL-K. THE FEEDERS FOR SCALE HOUSE AND RIP TRACK TO BE DEMOLISHED AND TO BE CHANGED TO SPARE.
6. NEW PANEL-K1 TO REPLACE EXISTING PANEL-K1.
7. ALL LIGHTING SHOWN ON NEW PANEL-K TO BE REFERENCE ONLY, BUILDING VENDORS SAHLL SUPPLY THE EXACT INFORMATION.

1 / - PANEL SCHEDULE
SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	JM	ZW	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	JM	ZW	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	JM	ZW	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	JM	ZW	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	JM	ZW	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
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RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
PANEL SCHEDULE

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS | DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE NTS OR AS NOTED | DWG. No. H375313-1000-263-284-0002 | REV E

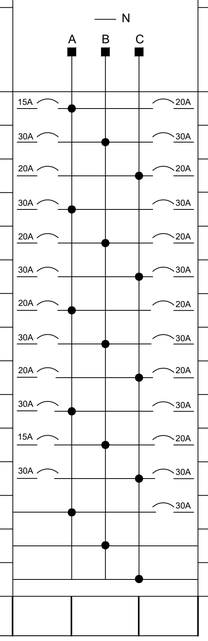
SHEET SIZE: A1

DWG. No. H375313-1000-263-284-0004

FED FROM: PANEL A (NEW)
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : N/A

PANELBOARD IDENTIFICATION: PANEL B (NEW)
LOCATION: RIP TRACK #2
PANEL TYPE: -
MAINS: 150A 3PH 4W VOLT: 208/120V

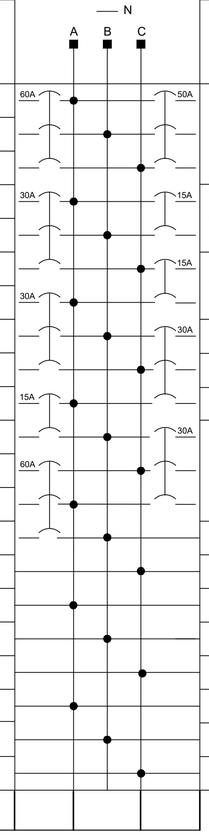
CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	UTILITY POST							UTILITY POST	2A
3B	UTILITY POST							UTILITY POST	4B
5C	UTILITY POST							UTILITY POST	6C
7A	UTILITY POST							UTILITY POST	8A
9B	UTILITY POST							UTILITY POST	10B
11C	UTILITY POST							UTILITY POST	12C
13A	UTILITY POST							UTILITY POST	14A
15B	SPARE							SPARE	16B
17C	SPARE							SPARE	18C
19A	SPARE							SPARE	20A
21B	SPARE							SPARE	22B
23C	SPARE							SPARE	24A
25A	SPACE							SPARE	26B
27B	SPACE							SPACE	28C
29C	SPACE							SPACE	30A
	TOTAL WATTS/PHASE								



FED FROM: SWITCHBOARD 4SB-01
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 150A

PANELBOARD IDENTIFICATION: PANEL - 4PL3
LOCATION: STORAGE SEACAN
PANEL TYPE: -
MAINS: 200A 3PH 4W VOLT: 480/277V

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	STORAGE SEACAN WELDING PLUG							TX-22 STORAGE SEACAN TRANSFORMER	2A
3B									4B
5C									6C
7A	LUNCH ROOM HEATER				537			EXTERIOR STORAGE AREA LIGHTING	8A
9B									10B
11C					192			ACCESS WAY LIGHTING	12C
13A	STORAGE SEACAN HEATER								14A
15B								STORAGE SEACAN HEATER	16B
17C									18C
19A	SPARE								20A
21B								SPARE	22B
23C	SPARE								24A
25A									26B
27B								SPACE	28C
29C	SPACE							SPACE	30A
31A	SPACE							SPACE	32B
33B	SPACE							SPACE	34B
35C	SPACE							SPACE	36C
37A	SPACE							SPACE	38A
39B	SPACE							SPACE	40B
41C	SPACE							SPACE	42B
	TOTAL WATTS/PHASE								



NOTES:

1. NEW PANEL B TO HAVE A MINIMUM SHORT CIRCUIT INTERRUPTING CAPACITY OF 22KAIC.
2. PANEL 4PL3 TO HAVE A MINIMUM SHORT CIRCUIT INTERRUPTING CAPACITY OF 35KAIC. THE BREAKERS IN PANEL 4PL3 TO BE 100% RATED.
3. NEW PANEL B TO REPLACE EXISTING PANEL B.
4. ALL HVAC SHOWN ON PANEL 4PL3 TO BE REFERENCE ONLY, BUILDING VENDORS SAHLL SUPPLY THE EXACT INFORMATION.

1 - PANEL SCHEDULE
SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF ONTC ("CLIENT") AND IS ISSUED PURSUANT TO [AGREEMENT#13429] BETWEEN CLIENT AND [HATCH LTD.] ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

HATCH

Ontario Northland

No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUED FOR TENDER	JM	ZW	2025/10/06
B	ISSUED FOR 90% CLIENT REVIEW	JM	ZW	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	JM	ZW	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Campbell, Lee	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
PANEL SCHEDULE

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS | REG. PROFESSIONAL | REVISIONS

SCALE NTS OR AS NOTED | DWG. No. H375313-1000-263-284-0004 | REV C

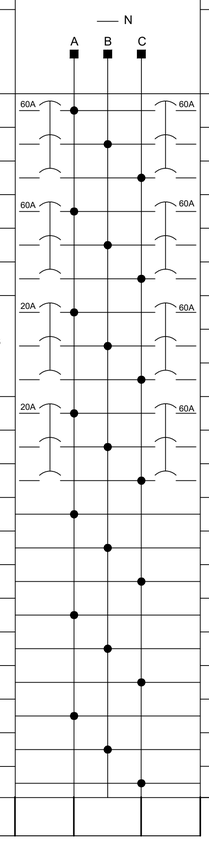
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DWG. No. H375313-1000-263-284-0005

FED FROM: SWITCHBOARD 4SB-01
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: BRACKET MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 150A

PANELBOARD IDENTIFICATION: 4PL1
LOCATION: RIP TRACK #2
PANEL TYPE: -
MAINS: 200A 3PH 4W VOLT: 480/277V

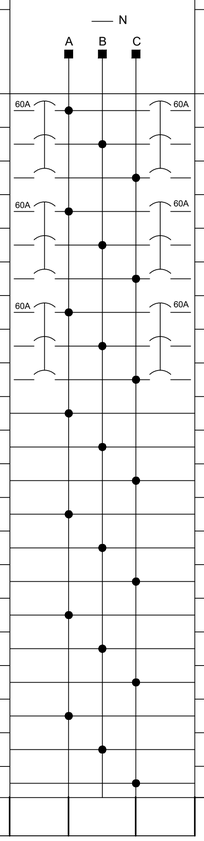
CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	RIP TRACK WELDING PLUG							RIP TRACK WELDING PLUG	2A
3B									4B
5C									6C
7A	RIP TRACK WELDING PLUG							RIP TRACK WELDING PLUG	8A
9B									10B
11C									12C
13A	RIP TRACK LIGHTING			2616				SPARE	14A
15B									16B
17C									18C
19A	SPARE							SPARE	20A
21B									22B
23C									24C
25A	SPACE							SPACE	26A
27B	SPACE							SPACE	28B
29C	SPACE							SPACE	30C
31A	SPACE							SPACE	32A
33B	SPACE							SPACE	34B
35C	SPACE							SPACE	36C
37A	SPACE							SPACE	38A
39B	SPACE							SPACE	40B
41C	SPACE							SPACE	42C
	TOTAL WATTS/PHASE								



FED FROM: SWITCHBOARD 4SB-01
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: BRACKET MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 150A

PANELBOARD IDENTIFICATION: 4PL2
LOCATION: RIP TRACK #3
PANEL TYPE: -
MAINS: 200A 3PH 4W VOLT: 480V

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	RIP TRACK WELDING PLUG							RIP TRACK WELDING PLUG	2A
3B									4B
5C									6C
7A	RIP TRACK WELDING PLUG							RIP TRACK WELDING PLUG	8A
9B									10B
11C									12C
13A	SPARE							SPARE	14A
15B									16B
17C									18C
19A	SPACE							SPACE	20A
21B	SPACE							SPACE	22B
23C	SPACE							SPACE	24C
25A	SPACE							SPACE	26A
27B	SPACE							SPACE	28B
29C	SPACE							SPACE	30C
31A	SPACE							SPACE	32A
33B	SPACE							SPACE	34B
35C	SPACE							SPACE	36C
37A	SPACE							SPACE	38A
39B	SPACE							SPACE	40B
41C	SPACE							SPACE	42C
	TOTAL WATTS/PHASE								



NOTES:

1. THE PANELS SHOWN ON THIS DRAWING TO HAVE A MINIMUM SHORT CIRCUIT INTERRUPTING CAPACITY OF 35KAIC.
2. THE BREAKERS IN THE PANELS TO BE 100% RATED.

1 / - PANEL SCHEDULE
SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
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B	ISSUED FOR 90% CLIENT REVIEW	JM	ZW	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	JM	ZW	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[sp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
PANEL SCHEDULE

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE NTS OR AS NOTED

DWG. No. H375313-1000-263-284-0005

REV C

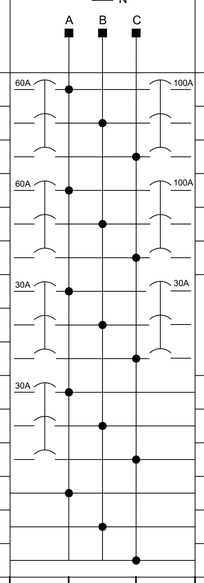
SHEET SIZE: A1

DWG. No. H375313-1000-263-284-0006

FED FROM: SWITCHBOARD 4SB-01
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: SURFACE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 200A

PANELBOARD IDENTIFICATION: PANEL-6 (NEW)
LOCATION: ELECTRICAL ROOM
PANEL TYPE: -
MAINS: 250A 3PH 3W VOLT: 480V

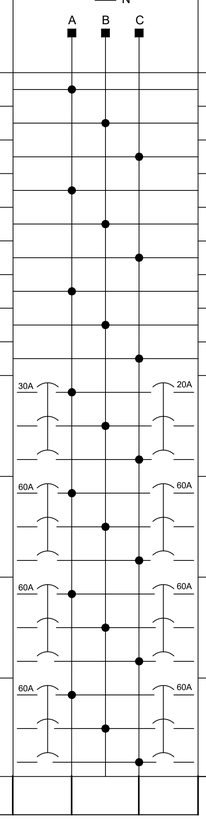
CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	SPARE (REPLACE EXISTING 15kVA TRANSFORMER T16)							SPARE (REPLACE FUEL PUMP HOUSE, NOT IN USE)	2A
3B									4B
5C									6C
7A	SPARE (REPLACE M.G. SET, NOT IN USE)							SPARE (REPLACE EXISTING 480V RIP TRACK PANEL)	8A
9B									10B
11C									12C
13A	MECHANICAL ROOM HEATER							ELECTRICAL ROOM HEATER (REPLACE EXISTING UNIT HEATER)	14A
15B									16B
17C									18C
19A	SPARE							SPACE	20A
21B								SPACE	22B
23C								SPACE	24C
25A	SPACE							SPACE	26A
27B	SPACE							SPACE	28B
29C	SPACE							SPACE	30C
	TOTAL WATTS/PHASE								



FED FROM: SWITCHBOARD 4SB-01
SEE REFERENCE DWG. No.: H375313-1000-263-288-0002
MOUNTING: ENCLOSURE MOUNTED FEEDER ENTRY: -
FEEDER No : - MAIN BKR. : 200A

PANELBOARD IDENTIFICATION: 480V RIP TRACK PANEL (NEW)
LOCATION: RIP TRACK #1
PANEL TYPE: -
MAINS: 250A 3PH 4W VOLT: 480/277V

CCT No.	LOCATION	DESCRIPTION & QUANTITY OF LOADS	CABLE/ CONDUIT NUMBER	WATTS CCT LOAD	WATTS CCT LOAD	CABLE/ CONDUIT NUMBER	DESCRIPTION & QUANTITY OF LOADS	LOCATION	CCT No.
1A	SPACE							SPACE	2A
3B	SPACE							SPACE	4B
5C	SPACE							SPACE	6C
7A	SPACE							SPACE	8A
9B	SPACE							SPACE	10B
11C	SPACE							SPACE	12C
13A	SPACE							SPACE	14A
15B	SPACE							SPACE	16B
17C	SPACE							SPACE	18C
19A	SPARE							SPARE	20A
21B									22B
23C									24C
25A	RIP TRACK WELDING PLUG							RIP TRACK WELDING PLUG	26A
27B									28B
29C									30C
31A	RIP TRACK WELDING PLUG (REPLACE EXISTING RIP TRACK WELDING PLUG)							RIP TRACK WELDING PLUG (REPLACE EXISTING RIP TRACK WELDING PLUG)	32A
33B									34B
35C									36C
37A	SPARE							75KVA RIP TRACK TRANSFORMER (NEW)	38A
39B									40B
41C									42C
	TOTAL WATTS/PHASE								



NOTES:

1. THE PANELS SHOWN ON THIS DRAWING TO HAVE A MINIMUM SHORT CIRCUIT INTERRUPTING CAPACITY OF 35KAIC.
2. THE BREAKERS IN THE PANELS TO BE 100% RATED.
3. THE CLIENT TO CONFIRM ALL CIRCUIT DESCRIPTIONS.
4. NEW 480-208/120V, 75KVA RIP TRACK TRANSFORMER TO REPLACE EXISTING 480-208/120V, 75KVA RIP TRACK TRANSFORMER.
5. NEW PANEL-6 TO REPLACE EXISTING PANEL-6.
6. NEW 480V RIP TRACK PANEL TO REPLACE EXISTING 480V RIP TRACK PANEL.
7. ALL HVAC SHOWN ON NEW PANEL-6 TO BE REFERENCE ONLY, BUILDING VENDORS SAHLL SUPPLY THE EXACT INFORMATION.

1 / - PANEL SCHEDULE
SCALE: NTS

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DESIGN COORD.	L. CAMPBELL	Digitally signed by Campbell, Lee Date: 2025.10.06	2025/10/06
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ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
PANEL SCHEDULE

DRAWING No.	DRAWING TITLE
Ref Drawing No	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

SCALE NTS OR AS NOTED

DWG. No. H375313-1000-263-284-0006

REV C

SHEET SIZE: A1

DWG. No. H375313-1000-263-284-0007

SCHEDULE OF LIGHTING FIXTURE AND LAMPS									CONTRACTOR SHALL ORDER OPTIONS, FEATURES OR ACCESSORIES TO SUIT THE INSTALLATION
FIXTURES					LAMPS				
TYPE	MANUFACTURER	CATALOGUE NO.	DESCRIPTION	VOLTAGE	WATTS	NUM	TYPE	MOUNTING	REMARKS
P1	LITHONIA LIGHTING	DSX2-LED-P2-40K-70CRI-T5M-MVOLT-RPA-DBLXD	LED AREA LUMINAIRE	277	179	1	LED	POLE MOUNTED	C/W PHOTOCELL CONTROL, SINGLE LUMINAIRE INSTALLED ON EXISTING ROUND POLE
P2, P21	LITHONIA LIGHTING	DSX2-LED-P2-40K-70CRI-T4M-MVOLT-RPA-DBLXD	LED AREA LUMINAIRE	277	179	1	LED	POLE MOUNTED	C/W PHOTOCELL CONTROL, SINGLE LUMINAIRE INSTALLED ON EXISTING ROUND POLE (P2) OR NEW REPLACED ROUND POLE (P21)
P3, P31	LITHONIA LIGHTING	DSX2-LED-P2-40K-70CRI-T4M-MVOLT-SPA-DBLXD	LED AREA LUMINAIRE	277	179	1	LED	POLE MOUNTED	C/W PHOTOCELL CONTROL, SINGLE LUMINAIRE INSTALLED ON SQUARE POLE
P4	LITHONIA LIGHTING	DSX2-LED-P2-40K-70CRI-T4M-MVOLT-SPA-DBLXD	LED AREA LUMINAIRE	277	179	2	LED	POLE MOUNTED	C/W PHOTOCELL CONTROL, TWO @ 90 DEGREES LUMINAIRES INSTALLED ON SQUARE POLE
P5	LITHONIA LIGHTING	DSX2-LED-P5-40K-70CRI-T4M-MVOLT-SPA-DBLXD	LED AREA LUMINAIRE	277/120	327	2	LED	POLE MOUNTED	C/W PHOTOCELL CONTROL, TWO @ 90 DEGREES LUMINAIRES INSTALLED ON SQUARE POLE. 277V LUMINAIRES TO BE FED FROM PANEL 4PL1, 120V LUMINIAIRES TO BE FED FROM PANEL A
P6		EXISTING LUMINAIRE						POLE MOUNTED	INSTALLED ON NEW REPLACED ROUND POLE
W1	LITHONIA LIGHTING	DSXW1-LED-P6-40K-70CRI-T3M-MVOLT-SRM-PE-DDBXD	WALL PACK	277	48	1	LED	WALL MOUNTED	C/W PHOTOCELL CONTROL

1 - LIGHTING SCHEDULE

SCALE: NTS

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

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No.	DESCRIPTION	BY	CHK'D	DATE
C	ISSUE FOR TENDER	J.M.	Z.W.	2025/10/06
B	ISSIED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	Dept: Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
LIGHTING SCHEDULE

Ref Drawing No	-

DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

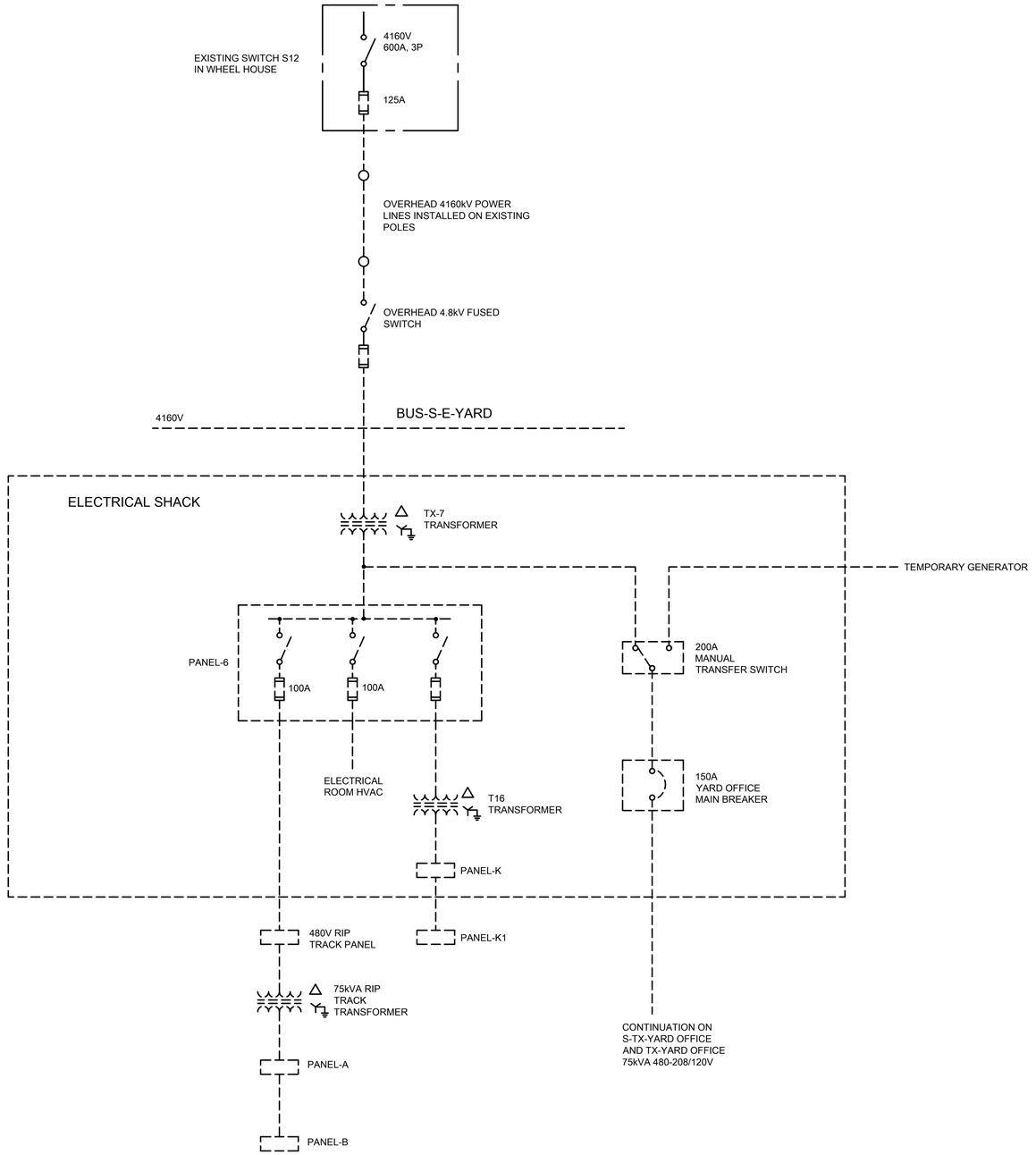
SCALE NTS OR AS NOTED

DWG. No. H375313-1000-263-284-0007

REV C

SHEET SIZE: A1

DWG. No. H375313-1000-263-288-0001



1 / - SINGLE LINE DIAGRAM REMOVAL

SCALE: NTS

LEGEND:

SYMBOL	DESCRIPTION
————	EXISTING EQUIPMENT TO REMAIN
- - - - - - -	EXISTING EQUIPMENT OR CABLES TO BE DEMOLISHED

NOTES:

1. THIS DRAWING WAS PREPARED AS PER ONTC REFERENCE DRAWING E-01 (PROJECT NO. 16-2199) AND THE INFORMATION PROVIDED BY THE CLIENT. THE CONTRACTOR TO CONFIRM SINGLE LINE DIAGRAM VIA SITE INSPECTIONS, PRIOR TO COMMENCING THE DEMOLITION.
2. THE EXISTING OVERHEAD POWER LINES (O/H 1/0) TO BE RELOCATED INTO UNDERGROUND CABLES (3C #2/0AWG). LIGHTNING ARRESTERS (L.A.'S) AND OVERHEAD 4.8kV FUSED SWITCH TO BE REMOVED.
3. FOR ALL IN-USE EXISTING ELECTRICAL EQUIPMENT IN EXISTING ELECTRICAL SHACK TO BE REPLACED BY NEW EQUIPMENT AND ALL REMOVED EXISTING ELECTRICAL EQUIPMENT IN EXISTING ELECTRICAL SHACK, SEE DWG. H375313-1000-263-258-0001 FOR THE DETAILS.
4. THE CONTRACTOR TO DISPOSE OF THE DEMOLISHED EQUIPMENT UNDER THE CLIENT'S DIRECTION.

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D	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25
B	ISSUED FOR 40% CLENT REVIEW	J.M.	Z.W.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
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PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
SINGLE LINE DIAGRAM REMOVAL

DRAWING No.	DRAWING TITLE
E-01	POWERHOUSE / WHEELHOUSE SINGLE LINE DIAGRAM AC DISTRIBUTION

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

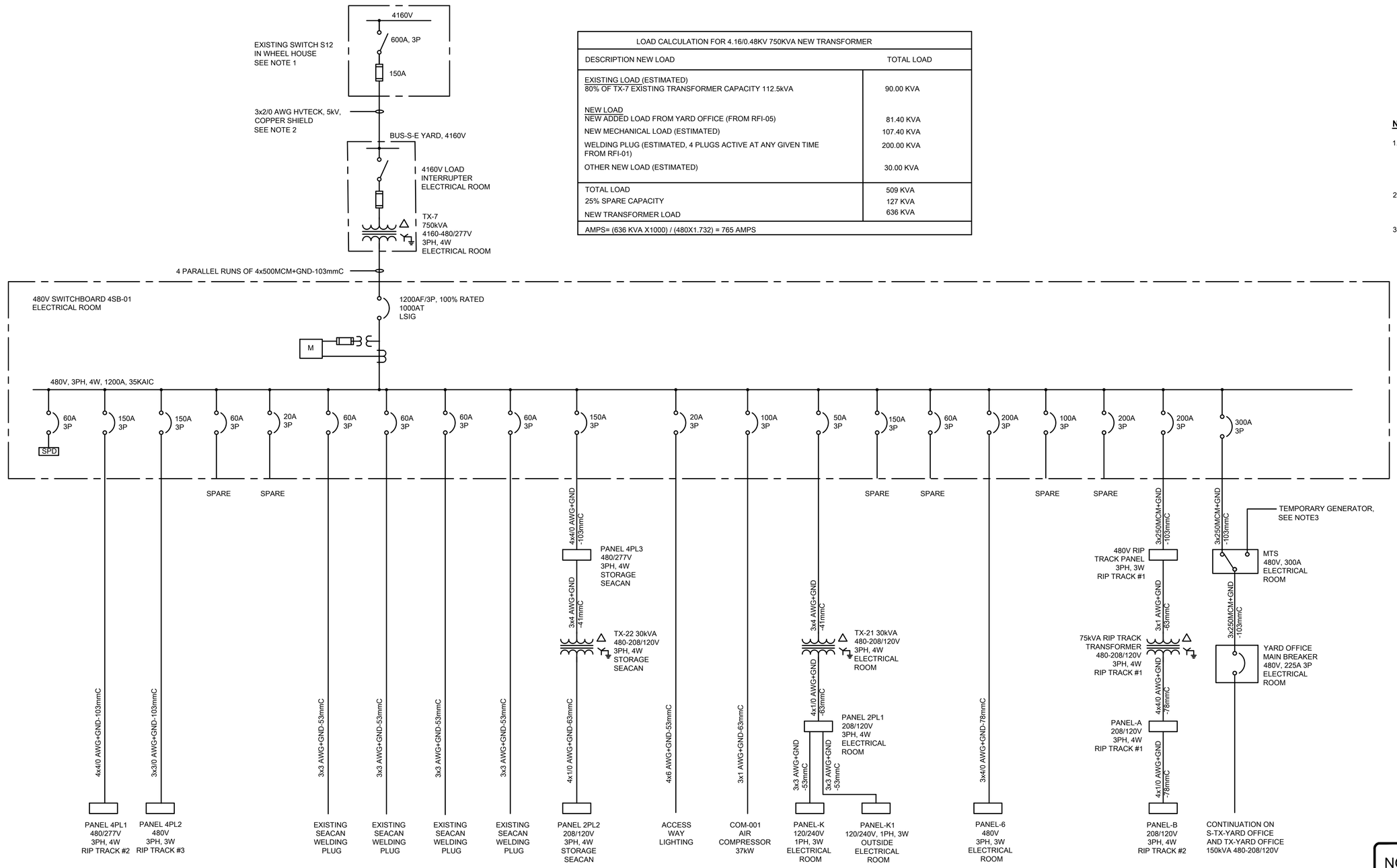
SCALE: NTS OR AS NOTED

DWG. No. H375313-1000-263-288-0001

REV: E

SHEET SIZE: A1

DWG. No. H375313-1000-263-288-0002



LOAD CALCULATION FOR 4.16/0.48KV 750KVA NEW TRANSFORMER	
DESCRIPTION NEW LOAD	TOTAL LOAD
EXISTING LOAD (ESTIMATED) 80% OF TX-7 EXISTING TRANSFORMER CAPACITY 112.5kVA	90.00 KVA
NEW LOAD NEW ADDED LOAD FROM YARD OFFICE (FROM RFI-05)	81.40 KVA
NEW MECHANICAL LOAD (ESTIMATED)	107.40 KVA
WELDING PLUG (ESTIMATED, 4 PLUGS ACTIVE AT ANY GIVEN TIME FROM RFI-01)	200.00 KVA
OTHER NEW LOAD (ESTIMATED)	30.00 KVA
TOTAL LOAD	509 KVA
25% SPARE CAPACITY	127 KVA
NEW TRANSFORMER LOAD	636 KVA
AMPS= (636 KVA X1000) / (480X1.732) = 765 AMPS	

NOTES:

1. THE FUSE IN EXISTING 4160V SWITCHGEAR IN WHEEL SHOP SHALL BE UPGRADED FROM 125A TO 150A. 4160V SWITCHGEAR MANUFACTURER TO ENSURE IT TO FIT THE PROPOSED 4160-480/277V 750kVA TRANSFORMER.
2. SINCE 4160V SHORT CIRCUIT CURRENT VALUE IS NOT AVAILABLE, THE CLIENT TO VERIFY THE PROPOSED 5KV HVTECK CABLE SIZE.
3. THE CONTRACTOR TO PROVIDE TEMPORARY GENERATOR, ASSOCIATED ACCESSORIES AND CONNECTIONS.

NOT FOR CONSTRUCTION

ISSUED FOR TENDER

1 / - SINGLE LINE DIAGRAM PROPOSED

SCALE: NTS

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No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	J.M.	Z.W.	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	J.M.	Z.W.	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/07/25
B	ISSUED FOR 40% CLIENT REVIEW	J.M.	Z.W.	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	J.M.	Z.W.	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	J. MAKKAR		2025/10/06
DESIGNER	J. MAKKAR		2025/10/06
CHECKER	Z. WANG	Wang, Zhenchuan	2025/10/06
DESIGN COORD.	L. CAMPBELL		2025/10/06
RESP. ENG.	Z. WANG	Wang, Zhenchuan	2025/10/06
LEAD DISC. ENG.	R. KORENIC	Korenic, Robyn	2025/10/06
ENG. MANAGER	F. VAN BILJON	[pp] Rutherford, Kevin	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ELECTRICAL
SINGLE LINE DIAGRAM PROPOSED

Ref Drawing No	-
DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

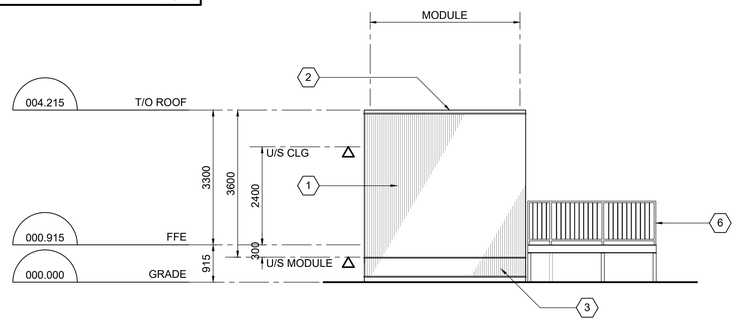
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DWG. No. H375313-1000-263-288-0002

REV E

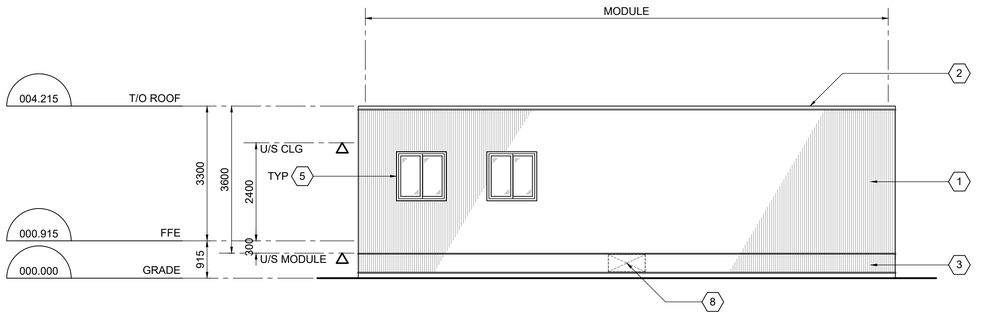
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DWG. No. H375313-1000-290-270-0005



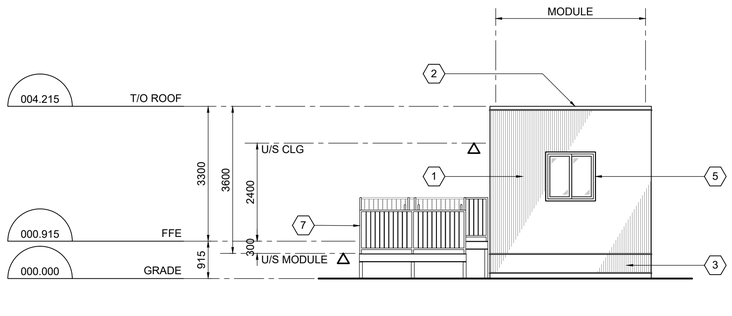
D - BUILDING ELEVATION D

SCALE: 1:75



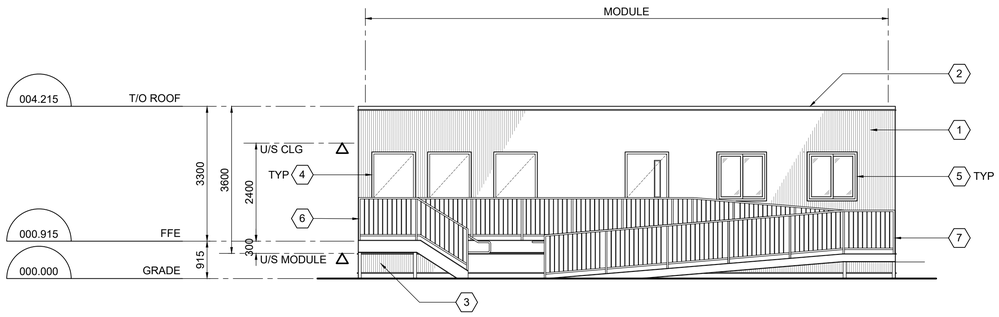
B - BUILDING ELEVATION B

SCALE: 1:75



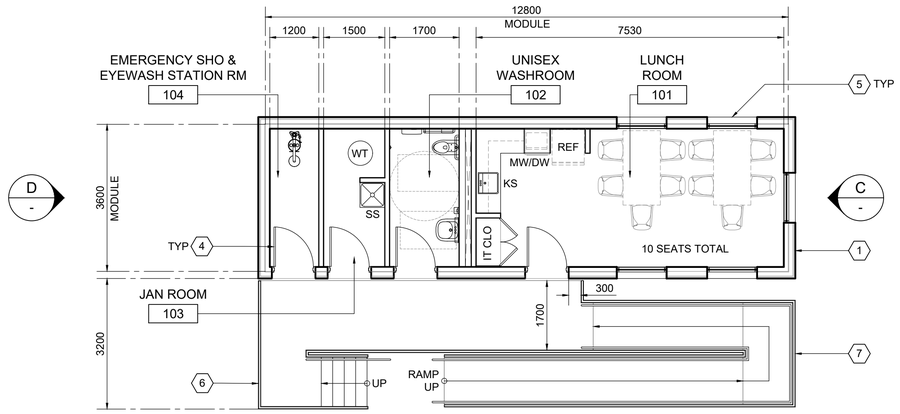
C - BUILDING ELEVATION C

SCALE: 1:75



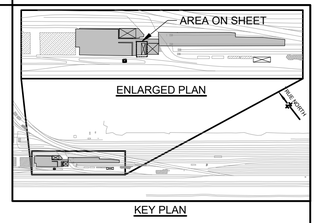
A - BUILDING ELEVATION A

SCALE: 1:75



1 - FLOOR PLAN

SCALE: 1:75

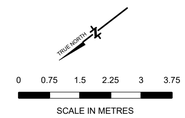


NOTES:

1. INSULATED EXTERIOR WALL ASSEMBLY C/W PRE-FINISHED METAL CORRUGATED CLADDING
2. INSULATED ROOF ASSEMBLY C/W MEMBRANE ROOFING AND PRE-FINISHED METAL FASCIA TO MATCH CLADDING COLOUR
3. SITE INSTALLED INSULATED SKIRTING, COLOUR TO MATCH CLADDING PANEL C/W SKIRT VENT AS REQUIRED
4. INSULATED HOLLOW METAL DOOR C/W GLASS VIEW PANEL WHERE SHOWN 965 mm WIDE x 2135 mm HIGH
5. VINYL FRAMED THERMALLY BROKEN OPERABLE WINDOW C/W TRIPLE GLAZED LOW E GLASS PANELS 1220 mm WIDE x 1200 mm HIGH
6. GALVANIZED STEEL STAIRS COMPLETE WITH GUARDRAIL AND HANDRAIL ON STEEL FRAMING
7. GALVANIZED STEEL BARRIER-FREE RAMP COMPLETE WITH GUARDRAIL AND HANDRAIL ON STEEL FRAMING
8. DASHED LINES DENOTES REMOVABLE SKIRT ACCESS PANEL

LEGEND:

DW	DISHWASHER
IT CLO	IT CLOSET
KS	KITCHEN SINK
MW	MICROWAVE
REF	REFRIGERATOR
SS	SLOP SINK
WT	WATER TANK



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ISSUED FOR TENDER

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HATCH

Ontario Northland

No.	DESCRIPTION	BY	CHK'D	DATE
E	ISSUED FOR TENDER	AA	XR	2025/10/06
D	ISSUED FOR 90% CLIENT REVIEW	AA	XR	2025/08/15
C	ISSUED FOR INTERNAL REVIEW	AA	XR	2025/06/09
B	ISSUED FOR 40% CLIENT REVIEW	MC	XR	2025/04/04
A	ISSUED FOR INTERNAL REVIEW	MC	XR	2025/03/24

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	A. ACLO		2025/10/06
DESIGNER	M. CAJULAO		2025/10/06
CHECKER	X. REN	Ren, Xiang (Larry)	2025/10/06
DESIGN COORD.	L. CAMPBELL	Digitally signed by: Campbell, Lyn	2025/10/06
RESP. ENG.	X. REN	Ren, Xiang (Larry)	2025/10/06
LEAD DISC. ENG.	H. IBRAHIM	Ibrahim, Hassan	2025/10/06
ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

ONTC
NORTH BAY RIP TRACK FACILITY

ARCHITECTURE
LUNCH ROOM, WASHROOM, & EMERGENCY SHOWER/EYEWASH BLDG
FLOOR PLAN & BUILDING ELEVATIONS

SCALE 1:75 OR AS NOTED

DWG. No. H375313-1000-290-270-0005

REV E

SHEET SIZE: A1

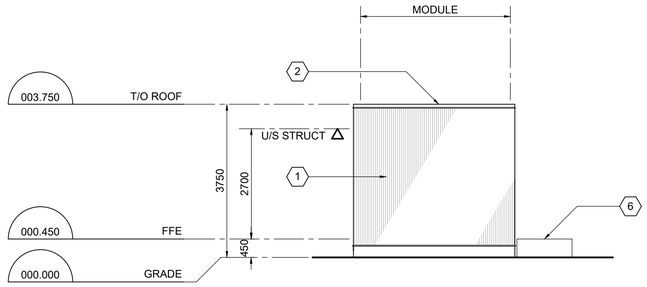
REFERENCE DRAWINGS

DRAWING No. | DRAWING TITLE

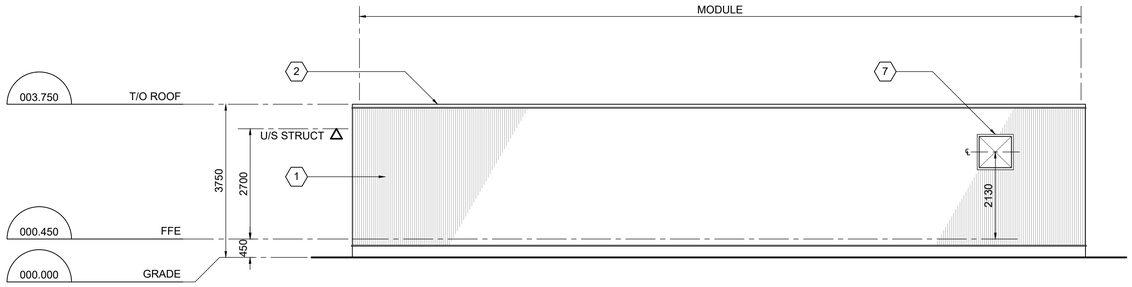
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REG. PROFESSIONAL

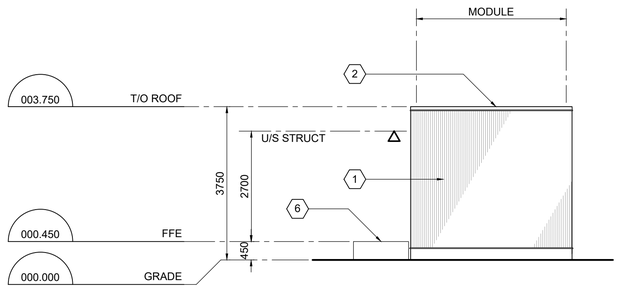
DWG. No. H375313-1000-290-270-0007



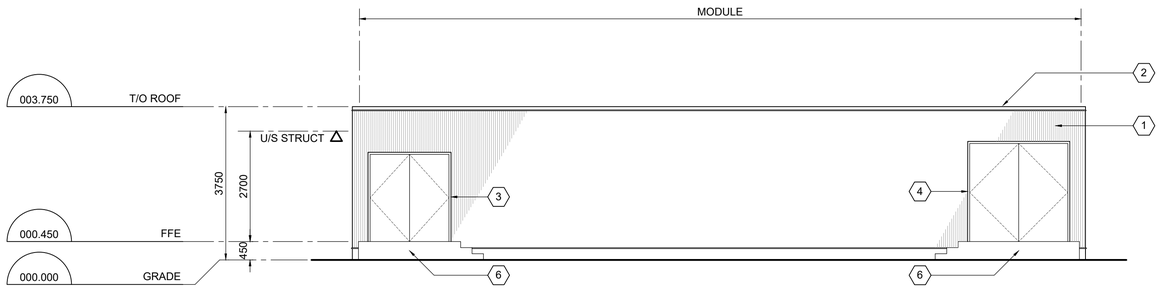
D
-
BUILDING ELEVATION D
SCALE: 1:75



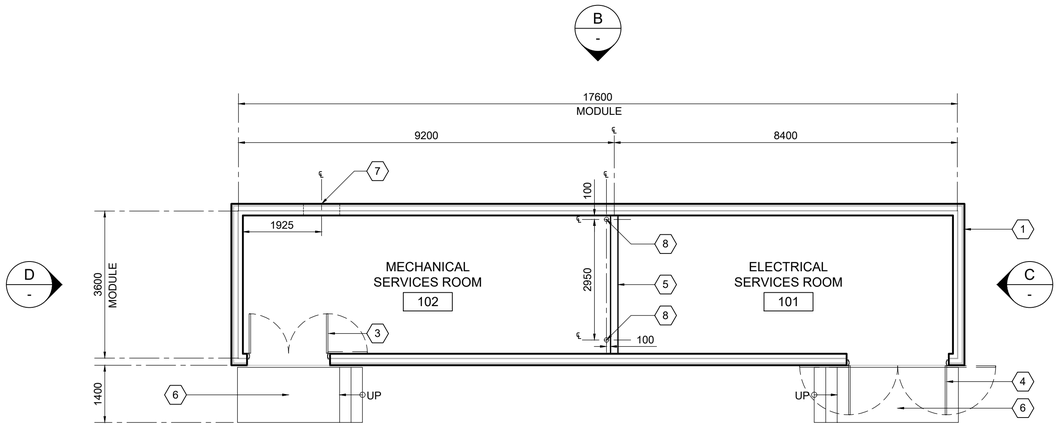
B
-
BUILDING ELEVATION B
SCALE: 1:75



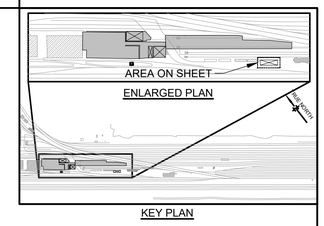
C
-
BUILDING ELEVATION C
SCALE: 1:75



A
-
BUILDING ELEVATION A
SCALE: 1:75

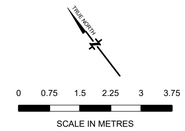


1
-
FLOOR PLAN
SCALE: 1:75



NOTES:

1. INSULATED EXTERIOR WALL ASSEMBLY C/W PRE-FINISHED METAL CORRUGATED CLADDIING
2. INSULATED ROOF ASSEMBLY C/W MEMBRANE ROOFING AND PRE-FINISHED METAL FASCIA TO MATCH CLADDING COLOUR
3. INSULATED HOLLOW METAL DOUBLE DOORS 1930 mm WIDE x 2135 mm HIGH
4. INSULATED HOLLOW METAL DOUBLE DOORS 2400 mm WIDE x 2400 mm HIGH
5. FIRE RATED PARTITION
6. CONCRETE PAD/STEPS
7. COMPRESSOR DUCT OPENING LOCATION 790 mm WIDE x 765 mm HIGH
8. FLOOR PIPE SLEEVE 110 mm Ø



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ENG. MANAGER	F. VAN BILJON	van Biljon, Fanus	2025/10/06
PROJ. MANAGER	H. SINGH	Singh, Harshdeep	2025/10/06

HATCH

Ontario Northland

ONTC
NORTH BAY RIP TRACK FACILITY

ARCHITECTURE
ELECTRICAL & MECHANICAL SERVICES BLDG
FLOOR PLAN & BUILDING ELEVATIONS

DRAWING No.	DRAWING TITLE
-	-

REFERENCE DRAWINGS

REG. PROFESSIONAL

REVISIONS

DRAWING APPROVAL STATUS: ISSUED FOR TENDER

SCALE 1:75 OR AS NOTED

DWG. No. H375313-1000-290-270-0007

REV E

SHEET SIZE: A1