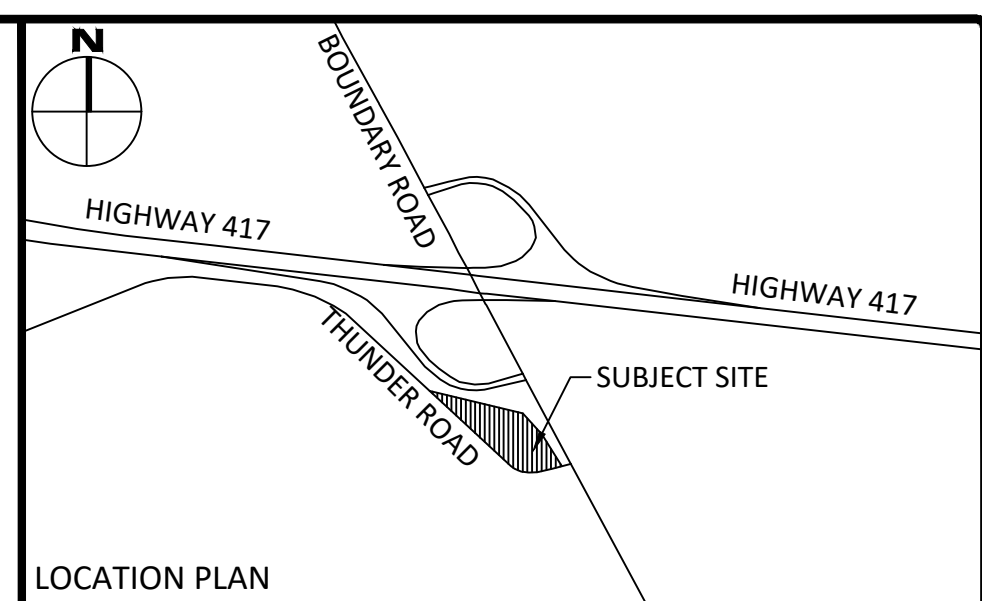
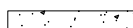
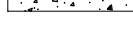
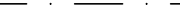
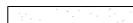
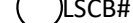
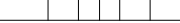
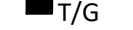
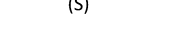
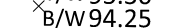
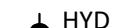




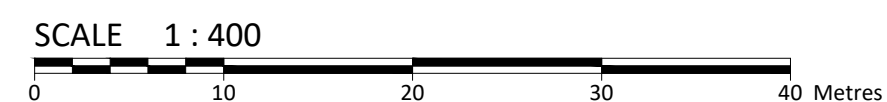
LEGEND

	CONCRETE BARRIER CURB		LIMIT OF CONSTRUCTION
	CONCRETE		PERFORATED PIPE SUBDRAIN
	PROPOSED ASPHALT		DRAINAGE SWALE
	PROPOSED GRAVEL		DRAINAGE DITCH
	LANDSCAPING CATCH-BASIN		SLOPING AT 3:1 UNLESS SPECIFIED
	CBM#H# T/G		SURFACE ELEVATION
	CBH# T/G		SWALE ELEVATION
	MH#A T/G		TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION
	HYD B/F		OVERLAND FLOW ROUTE
	WATER VALVE		SILT FENCE BARRIER
	WATER METER		STRAW BALE CHECK DAM
	REMOTE WATER METER		MUD MAT
	BOLLARD PER CITY STD F-4		TRENCH DRAIN

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

2	REISSUED FOR SITE PLAN CONTROL	OCT. 31, 2024
1	ISSUED FOR SITE PLAN CONTROL	MAY 14, 2024
No.	Revisions	Date

Check and verify all dimensions before proceeding with the work	Do not scale drawings
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Stamp:



Client: **BROFORT INC.**
2161 THURSTON DRIVE
OTTAWA, ON K1G 6C9

Project:

PROPOSED WAREHOUSE
6165 THUNDER ROAD

Drawing Title:

LOT GRADING, DRAINAGE,
EROSION & SEDIMENT CONTROL PLAN

Scale:	1:400	Project Number:	CCO-23-1882
Drawn By:	JH		
Checked By:	RF	Drawing Number:	C101
Designed By:	JH		

01	882	D07-12-XX-XXXX
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- ### GENERAL NOTES

1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURFACE DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED FROM INFORMATION SUPPLIED BY (OR SHOWN ON) FAIRHALL, MOFFATT & WOODLAND DRAWING #14 - S (OF) GP AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF ANY CURB OR CURBED DRIVEWAY SHALL BE DETERMINED BY AN UP-TO-DATE LAND TITLE SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
5. THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION, PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
7. EXCAVATE AND DISPOS OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 90% STANDARD PROCTOR DENSITY.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL AT TRAFFIC CONTROL AND SAFETY MEASURES THROUGHOUT THE CONSTRUCTION PERIOD, INCLUDING THE SIGNAGE, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
13. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS CONCERNING CONSTRUCTION OF ASPHALT AND TOPSOIL. ALL DIFFERENCES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - TELEPHONE SERVICE - HYDRO ONE
 - GAS SERVICE - ENBRIDGE
 - TELEPHONE SERVICE - BELL CANADA,
 - TELEVISION SERVICE - ROGERS.
16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE CITY.
17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURBS UNLESS OTHERWISE SPECIFIED.
19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION.

ROADWAY NOTES

1. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL, OR BETTER THAN EXISTING ROAD CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES.
2. CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SCL 31 (BARRIER CURB), SCL2 (SIDEWALK), AND SCL3 (CURB AND SIDEWALK). STANDARD SPECIFICATIONS AS NOTED. PROVISIONS SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS, DRIVEWAYS AND RAMP.
3. PROVIDE REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH THE DETAIL RPD AND OPSD 509,010, OPSD 310, AND SHALL BE REINSTATE PER THE DETAIL SHOWN ON THIS DRAWING.
4. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 150MM UNDER ALL STRUCTURES WITH PAVEMENT AREA.
5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPWD.
6. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
7. SUB- EXCAVATE SOFT AREAS AND FILL WITH GRANULAR "B" COMPACTED IN MAXIMUM 300MM LIFTS.
8. PAVEMENT STRUCTURE. REFER TO DETAIL.

EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND RECEIVING WATER BODY FROM EROSION AND SEDIMENTATION. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, TEMPORARY SEDIMENT CONTROL, GEOSOCKS USED WITH AN OVERLAY OF GEOTEXTILE, EROSION CONTROL IMPLEMENTED DURING CONSTRUCTION ON ALL PROPOSED ROAD AND LEACHWAYS, EROSION CONTROL MEASURES TO PREVENT MANHOLES AND OTHER SEDIMENT TRAPS, NO RECYCLED GEOSOCK MATERIAL SHALL BE PERMITTED FOR USE ON SITE. THE CONTRACTOR SHALL BE RESPONSIBLE THAT EROSION CONTROL MEASURES FOR EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
2. AT THE DISCRETION OF THE PROJECT MANAGER OR MUNICIPAL STAFF, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS.
3. FOR SILT FENCE BARBERS, USE OPSD 219.110, GEOTEXTILE FOR SILT FENCE AS PER OPSD 1860, TABLE 4.
4. EXCEPT AS PROVIDED IN PARAGRAPHS 4.1, AND 4.2, BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE CONSTRUCTION MEASURES TEMPORARILY OR PERMANENTLY CEASED.
- 4.1. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS NOT FEASIBLE, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS STABILIZATION MEASURES SHALL BE REQUIRED ON A PORTION OF THE SITE WITHIN 2 DAYS FROM WHEN ACTIVITIES CEASED, OR THE TOTAL TIME PERIOD FROM WHEN ACTIVITIES CEASED TEMPORARILY CEASES IS LESS THAN 24 DAYS) THEN STABILIZATION MEASURES SHALL BE INITIATED TO BE COMPLETED ON THAT PORTION OF SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASES.
5. SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS EROSION OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED TO THE LEVEL OF THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:
 - 5.1. FOR LIGHT DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSOR OF THE FOLLOWING:
 - 5.1.1. A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE.
 - 5.1.2. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
 - 5.2. FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.
 - 5.3. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
 - 5.4. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AT AN APPROPRIATE LOCATION.
6. ORDER THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A STORM EVENT.
7. DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEANING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE OR FLAKES/SOLIDS OF MAGNESIUM OR CALCIUM FLAKES/SOLUTION SHALL BE USED AS DUST SUPPLEMENTS AS PER OPSD 506. THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS TO THE RECEPTOR. THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOG AS SOON AS FEASIBLE, AS PER OPSD 570.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. STOPPED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES, AND DRAINAGE) SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS.
11. IF REQUIRED, DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 215.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. IN THE EVENT OF A STORM, THE BASINS SHALL NOT BE USED TO RECEIVE RUNOFF AND TEMPORARY WATERCROSSINGS CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY, THE CONTRACTOR SHALL REMOVE ANY STRANDED FISH TO THE OPEN PORTION OF THE WATERCOURSE WITHOUT HARM.
12. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE FOLLOWING:
 - 12.1. WHERE DETERMINATION IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSF 518.
 - 12.2. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R (OR EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

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