

SYMBOLS		
UTILITIES	EXISTING	PROPOSED
WATER - WATERMAIN	203mm WATERMAIN	203mm WM
PROFILE WATERMAIN		203mm WM (IN PROFILE)
VALVE BOX	⊗	⊗
VALVE CHAMBER	⊗	⊗
STAND PIPE	⊙	⊙
WATERMAIN LEADS	---	---
REDUCER	▶	▶
HYDRANT	◆	◆
BELL - UNDERGROUND BELL CABLE OR DUCT	100mm U/G BELL DUCT	100mm U/G BELL DUCT
OVERHEAD BELL LINE	O/H BELL	O/H BELL
BELL POLE	○B	●B
BELL MANHOLE	⊕	⊕
BELL POLE WITH GUY WIRE	○B	○B
TELEPHONE BOOTH	⊞	⊞
BELL PEDESTAL	⊞	⊞
HYDRO - UNDERGROUND HYDRO CABLE / DUCT	U/G HYDRO DUCT	U/G HYDRO CABLE
OVERHEAD HYDRO	O/H HYDRO	O/H HYDRO
HYDRO POLE	○H	●H
HYDRO POLE WITH GUY WIRE	○H	○H
HYDRO TOWER	⊞	⊞
HYDRO MANHOLE	⊕	⊕
LIGHT STANDARD	⊞	⊞
HYDRO PEDESTAL	⊞	⊞
GAS - GAS MAIN	100mm GAS	100mm GAS
GAS VALVE	⊙	⊙
GAS METER	⊙	⊙
CABLE - UNDERGROUND TV CABLE	CATL	CATL
UNDERGROUND ELECTRICAL	---	---
SEWERS		
SEWER PIPE - COMBINED SEWER	450mm COMBINED SEWER	450mm COMBINED SEWER
STORM SEWER LESS THAN 450mm	350mm STORM SEWER	350mm STORM SEWER
STORM SEWER GREATER THAN 450mm	600mm STORM SEWER	600mm STORM SEWER
SANITARY SEWER LESS THAN 450mm	350mm SANITARY SEWER	350mm SANITARY SEWER
SANITARY SEWER GREATER THAN 450mm	500mm SANITARY SEWER	500mm SANITARY SEWER
ABANDONED STORM SEWER	ABANDONED 300mm STORM	
ABANDONED SANITARY SEWER	ABANDONED 300mm SANITARY	
CB - EXISTING CATCH BASIN	□	■
In The Road Type Catchbasin	□ Exist. Edge of Pav't	■ PROPOSED EDGE OF PAV'T
Curb Type Catchbasin	□ Exist. Edge of Pav't	■ PROPOSED EDGE OF PAV'T
Double Road Type Catchbasin	□□ Exist. Edge of Pav't	■ PROPOSED EDGE OF PAV'T
Double Curb Type Catchbasin	□□ Exist. Edge of Pav't	■ PROPOSED EDGE OF PAV'T
MANHOLES - STORM MANHOLE	○	○
SANITARY MANHOLE	○	○
CATCH BASIN MANHOLE	□	□
CATCH BASIN	□	□
CULVERT	---	---
CULVERT WITH HEAD WALLS	---	---
CONCRETE CURB	---	ROAD OR PARKING SIDE
DITCHES AND CREEKS	---	---
DITCH	---	---
EDGE OF LAKE OR RIVER	---	---
SWAMP AND EDGE OF SWAMP	---	---

SYMBOLS		
MISCELLANEOUS	EXISTING	PROPOSED
ROCK SECTION IN PROFILE	▄▄▄▄▄▄	
GRADING		
ROAD CENTERLINE	---	
EDGE OF PAVEMENT		AS NOTED ON DRAWING
EDGE OF SHOULDER		AS NOTED ON DRAWING
RIGHT OF WAY	---	
GROUND ELEVATION	x113.34	113.34x
ASPHALT REINSTATEMENT		
CONCRETE REINSTATEMENT		
TOPSOIL AND SOD REINSTATEMENT		
REMOVALS		
ASPHALT REMOVAL		
CONCRETE REMOVAL		
LANDSCAPE REMOVAL		
SAWCUT	---	
TO BE REMOVED		○REM
TO BE ADJUSTED TO NEW ELEVATION		○ADJ
TO BE REMOVED AND RELOCATED		○REL

DRAWING INDEX	
OTT-00258780-A0-000	COVER SHEET
OTT-00258780-A0-001	INDEX, NOTES AND LEGEND
OTT-00258780-A0-002	EXISTING CONDITIONS AND REMOVALS
OTT-00258780-A0-003	GEOMETRY AND GENERAL LAYOUT
OTT-00258780-A0-004	PAVEMENT MARKINGS
OTT-00258780-A0-005	PAVEMENT ELEVATIONS
OTT-00258780-A0-006	TRAFFIC PLANT

GENERAL NOTES

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED. ALL DRAWINGS SHOULD NOT BE SCALED BY THE CONTRACTOR. ANY MISSING OR QUESTIONABLE DIMENSIONS ARE TO BE CONFIRMED WITH THE CONSULTANT IN WRITING.
- ALL TREES TO BE PROTECTED DURING CONSTRUCTION UNLESS OTHERWISE DIRECTED.
- CITY OF OTTAWA STANDARD TREE PROTECTION REQUIRED DURING CONSTRUCTION ACTIVITIES WITHIN THE CRITICAL ROOT ZONE OF ALL IMPACTED TREES.
- ALL BASE MAPPING IS REFERENCED TO MTM NAD83 ZONE 9.
- ALL CONSTRUCTION SIGNAGE AND TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL BOOK 7 "TEMPORARY CONDITIONS" OR AS DIRECTED BY CONTRACT ADMINISTRATOR.
- ALL WORK SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND IS TO FOLLOW BEST TRADES PRACTICES.
- THE LOCATION OF ALL UTILITIES IS APPROXIMATE ONLY. THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE AS WELL AS REPAIR OF DAMAGE THAT MAY OCCUR.
- CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION.
- CONTRACTOR TO PROTECT ALL SURVEY MONUMENTS.
- DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARD DRAWINGS WHERE APPLICABLE. ONTARIO PROVINCIAL STANDARDS SHALL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- ANY DISCREPANCIES, INTERPRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE CONTRACT ADMINISTRATOR, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION WORKS.
- ALL DISTURBED AREAS TO BE REINSTATED TO EQUAL OR BETTER CONDITION. ALL NEW WORK SHALL TIE INTO EXISTING.
- ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT.
- CONTRACTOR IS TO COMPLY WITH THE CITY OF OTTAWA REQUIREMENTS FOR TRAFFIC CONTROL WHEN WORKING ON CITY STREETS.
- THE CONTRACTOR SHALL COMPLETE ALL RESTORATION WITHIN CITY ROW'S TO A CONDITION AT LEAST EQUAL TO ORIGINAL AND TO THE SATISFACTION OF THE MUNICIPAL AUTHORITIES.
- PEDESTRIAN CONTROL WITHIN THE WORK ZONE IS THE RESPONSIBILITY OF THE CONTRACTOR.

SERVICES

- THE CONTRACTOR SHALL SCHEDULE AND CO-ORDINATE ALL WORKS WITH UTILITY COMPANIES, MUNICIPAL AUTHORITIES AND OTHER CONTRACTORS ON SITE.
- CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING SERVICES PRIOR TO ANY CONSTRUCTION. MINIMUM 0.3m VERTICAL CLEARANCE AND 1m HORIZONTAL SEPARATION REQUIRED BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION.
- ANY CROSSINGS OF HYDRO OTTAWA UNDERGROUND PLANT ARE TO BE CARRIED OUT IN CONJUNCTION WITH HYDRO OTTAWA ENGINEERING SPECIFICATION NO. USD0013.
- CONTRACTOR SHALL MAINTAIN MIN. 0.3m VERTICAL CLEARANCE TO BELL PLANT. WITHIN 1m HAND DIG WHEN CROSSING BELL PLANT. MAINTAIN EX. GRADE AROUND BELL MAINTENANCE HOLES. IF CONFLICT ARISES, AND/OR BELL RELOCATIONS OR ADJUSTMENTS CONTACT CHAD DOCKSTEADER AT (343) 540-9729.
- ALL CONSTRUCTION WITHIN 3.0m OF A NATURAL GAS PIPELINE MUST HAVE AN ENBRIDGE REPRESENTATIVE PRESENT PRIOR TO THE EXCAVATION OF THE MAIN AND PRIOR TO BACKFILLING. A REPRESENTATIVE OF THE SERVICE COMPANY MUST BE CONTACTED THREE (3) DAYS PRIOR TO THE COMMENCEMENT OF WORK.

ROADWAYS AND CURBS

- ASPHALT REINSTATEMENT AS PER CITY OF OTTAWA STANDARD DRAWING R10, OR AS SPECIFIED ELSEWHERE IN THE CONTRACT.
- CONCRETE ROAD BASE REPAIRS AT ANY LOCATION TO FOLLOW CITY OF OTTAWA STANDARD DETAILS.

SITE GRADING

- MATCH EXISTING GRADES UNLESS SHOW OTHERWISE.
- PROPERTY LINE SHALL BE MARKED (OR STAKED-OUT) BY AN ONTARIO LAND SURVEYOR AT ALL LOCATIONS WHERE NEW PLANT IS WITHIN 0.50m FROM THE PROPERTY LINE.
- CONTRACTOR SHALL ENSURE BARRIER FREE ACCESSIBILITY PEDESTRIAN SURFACE INCLUDING PEDESTRIAN ACCESS TO ALL BUILDINGS. STREET CROSSINGS MUST BE PROVIDED AND MAINTAINED IN A GOOD STATE OF REPAIR TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR THROUGH OR AROUND THE CONSTRUCTION SITE AT ALL TIMES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT GRADING AROUND HYDRANTS, TRANSFORMERS, AND UTILITY PEDESTALS, ETC., MEET CURRENT CITY OF OTTAWA, HYDRO AND UTILITY COMPANY REQUIREMENTS.
- ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
- CONCRETE CURBS ON SITE TO BE BARRIER TYPE CURB TO CITY OF OTTAWA STANDARDS, SC1.1 AND c/w DEPRESSIONS WHERE NOTED ON THE DRAWINGS.
- CONTRACTOR TO ADJUST EXISTING SEWER, WATER AND UTILITY STRUCTURES WHERE DISTURBED TO FINAL GRADE WHERE REQUIRED.
- GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT.
- GRADING IN GRASSED AREAS WILL BE AS PER CITY OF OTTAWA STANDARDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA.
- ALL PROPOSED GRADES ARE BASED ON EXISTING CURB ELEVATIONS. CONTRACTOR TO ENSURE POSITIVE DRAINAGE TO CATCHBASINS AT ALL TIMES.

SITE REMOVALS

- EXACT LIMITS OF REMOVALS TO BE DETERMINED ON SITE BY THE CONTRACT ADMINISTRATOR.
- EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
- ALL CURB AND SIDEWALK TO BE REMOVED SHALL BE SAWCUT TO THE NEAREST JOINT OR AS INSTRUCTED BY THE CONTRACT ADMINISTRATOR.
- ALL ASPHALT REMOVALS SHALL SAWCUT COMPLETE WITH 0.3m WIDE KEY OR AS NOTED. KEY SHALL BE FORMED BY GRINDING OF EXISTING ASPHALT.

EROSION AND SEDIMENT CONTROLS

- DURING ALL CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION SHALL BE CONTROLLED BY THE FOLLOWING TECHNIQUES:
- LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.
 - RE-VEGETATION OF EXPOSED AREAS AS SOON AS POSSIBLE.
 - MINIMIZATION OF AREA TO BE CLEARED AND DISRUPTION TO ADJACENT AREAS.
 - CONTRACTOR TO IMPLEMENT NECESSARY SEDIMENT CONTROL MEASURES (I.E. FILTER CLOTH ON ALL CATCH-BASINS AND MANHOLES, SEDIMENT CONTROLS AROUND DISTURBED AREAS).
 - A VISUAL INSPECTION SHALL BE COMPLETED DAILY ON SEDIMENT CONTROL DEVICES AND ANY DAMAGE REPAIRED IMMEDIATELY. CARE WILL BE TAKEN TO PREVENT DAMAGE DURING CONSTRUCTION OPERATIONS.
 - IN SOME CASES, SOME DEVICES MAY BE REMOVED TEMPORARILY TO ACCOMMODATE THE CONSTRUCTION OPERATIONS. THE AFFECTED DEVICES WILL BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED.
 - THE SEDIMENT CONTROL DEVICES WILL BE CLEANED OF ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OF AS PER THE REQUIREMENTS OF THE CONTRACT.
 - DURING CONSTRUCTION IF THE ENGINEER BELIEVES THAT ADDITIONAL PREVENTION METHODS ARE REQUIRED TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR WILL INSTALL ADDITIONAL METHODS AS REQUIRED TO THE SATISFACTION OF THE ENGINEER.
 - CONSTRUCTION AND MAINTENANCE REQUIREMENTS FOR EROSION AND SEDIMENT CONTROLS TO COMPLY WITH ONTARIO PROVINCIAL STANDARD SPECIFICATION (OPSS) 805, AND CITY OF OTTAWA SPECIFICATIONS.

ROAD MODIFICATIONS ECHOWOODS AVENUE			
INDEX, NOTES AND LEGEND		Contract No. OTT-00258780-A0	Dwg. No. 001
		Sheet No. 2 of 7	
Asset No. --		Asset Group ISD	
Stephen Willis, MCIP, RPP General Manager		Des. --	Chkd. BMT
		Dwn. SAB	Chkd. BMT
		Utility Circ. No. --	Index No. --
		Const. Inspector --	
		Scale: NOT TO SCALE	
NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.			
NO.	Description	By	Date (dd/mm/yy)
1	ISSUED FOR REVIEW	BMT	08/10/21