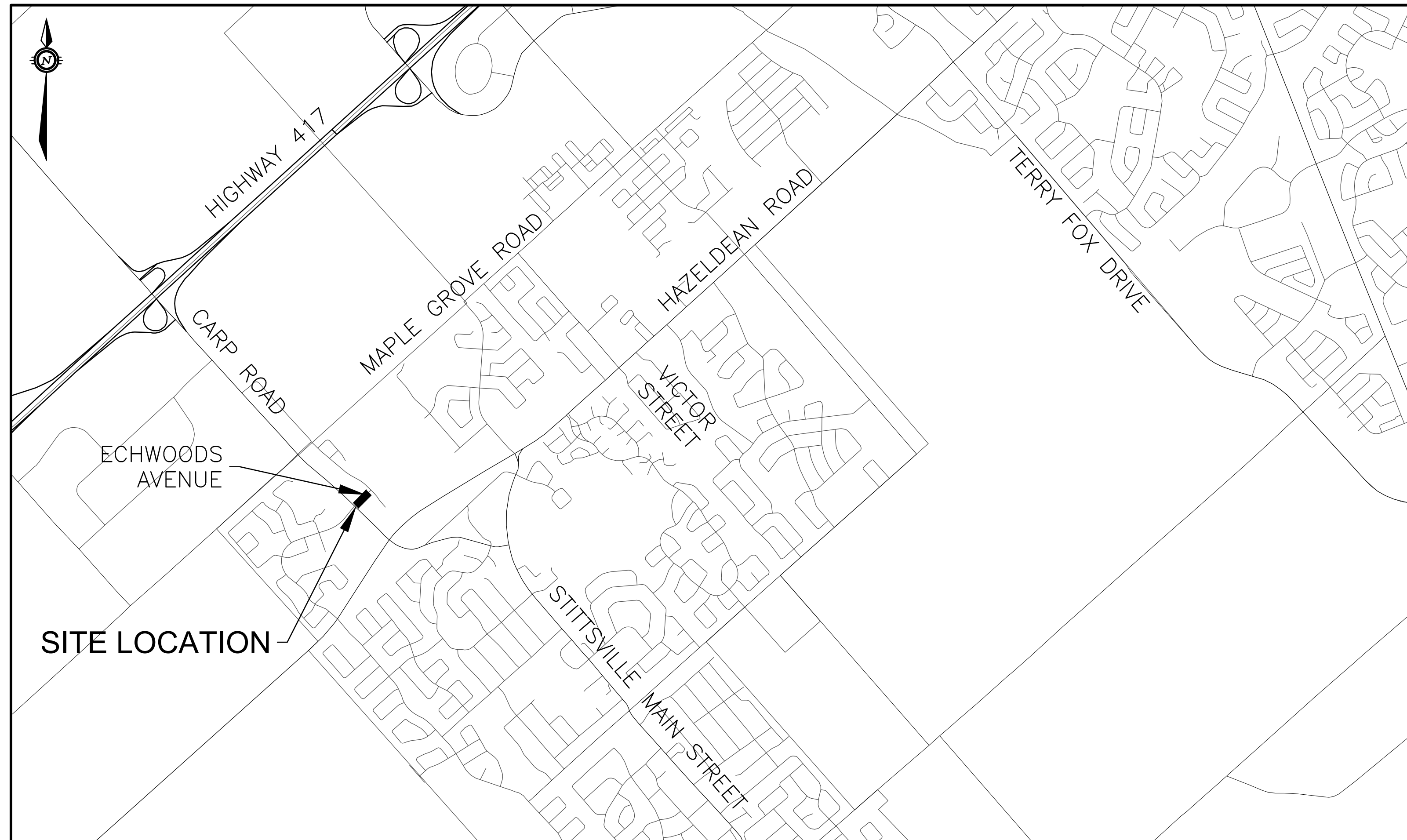




PLANNING, INFRASTRUCTURE AND ECONOMIC DEVELOPMENT

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ROADWAY MODIFICATIONS ECHOWOODS AVENUE

ISSUED FOR REVIEW
 OCTOBER 08, 2021

DRAWING FRAME: 760mm x 584mm City of Ottawa 2008

OTT-0022790-A0

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SYMBOLS		
UTILITIES	EXISTING	PROPOSED
WATER - WATERMAIN	<u>203mm WATERMAIN</u>	<u>203mm WM</u>
PROFILE WATERMAIN		203mm WM (IN PROFILE)
VALVE BOX		
VALVE CHAMBER		
STAND PIPE		
WATERMAIN LEADS		
REDUCER		
HYDRANT		
BELL - UNDERGROUND BELL CABLE OR DUCT	<u>100mm U/G BELL DUCT</u>	<u>100mm U/G BELL DUCT</u>
OVERHEAD BELL LINE	<u>O/H BELL</u>	<u>O/H BELL</u>
BELL POLE		
BELL MANHOLE		
BELL POLE WITH GUY WIRE		
TELEPHONE BOOTH		
BELL PEDESTAL		
HYDRO - UNDERGROUND HYDRO CABLE / DUCT	<u>U/G HYDRO DUCT</u>	<u>U/G HYDRO CABLE</u>
OVERHEAD HYDRO	<u>O/H HYDRO</u>	<u>O/H HYDRO</u>
HYDRO POLE		
HYDRO POLE WITH GUY WIRE		
HYDRO TOWER		
HYDRO MANHOLE		
LIGHT STANDARD		
HYDRO PEDESTAL		
GAS - GAS MAIN	<u>100mm GAS</u>	<u>100mm GAS</u>
GAS VALVE		
GAS METER		
CABLE - UNDERGROUND TV CABLE	<u>CATL</u>	<u>CATL</u>
UNDERGROUND ELECTRICAL		
SEWERS		
SEWER PIPE - COMBINED SEWER	<u>450mm COMBINED SEWER</u>	<u>450mm COMBINED SEWER</u>
STORM SEWER LESS THAN 450mm	<u>350mm STORM SEWER</u>	<u>350mm STORM SEWER</u>
STORM SEWER GREATER THAN 450mm	<u>600mm STORM SEWER</u>	<u>600mm STORM SEWER</u>
SANITARY SEWER LESS THAN 450mm	<u>350mm SANITARY SEWER</u>	<u>350mm SANITARY SEWER</u>
SANITARY SEWER GREATER THAN 450mm	<u>500mm SANITARY SEWER</u>	<u>500mm SANITARY SEWER</u>
ABANDONED STORM SEWER	<u>ABANDONED 300mm STORM</u>	
ABANDONED SANITARY SEWER	<u>ABANDONED 300mm SANITARY</u>	
CB - EXISTING CATCH BASIN		
In The Road Type Catchbasin		
Curb Type Catchbasin		
Double Road Type Catchbasin		
Double Curb Type Catchbasin		
MANHOLES - STORM MANHOLE		
SANITARY MANHOLE		
CATCH BASIN MANHOLE		
CATCH BASIN		
CULVERT		
CULVERT WITH HEAD WALLS		
CONCRETE CURB		
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		
EDGE OF SHOULDER		
RIGHT OF WAY		
GROUND ELEVATION	$x113.34$	$113.34 \times$
ASPHALT REINSTATEMENT		
CONCRETE REINSTATEMENT		
TOPSOIL AND SOD REINSTATEMENT		
REMOVALS		
ASPHALT REMOVAL		
CONCRETE REMOVAL		
LANDSCAPE REMOVAL		
SAWCUT		
TO BE REMOVED		
TO BE ADJUSTED TO NEW ELEVATION		
TO BE REMOVED AND RELOCATED		

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	
Des. --	Chkd. BMT
Dwn. SAB	Chkd. BMT
Utility Circ. No. --	Index No. --
Const. Inspector	
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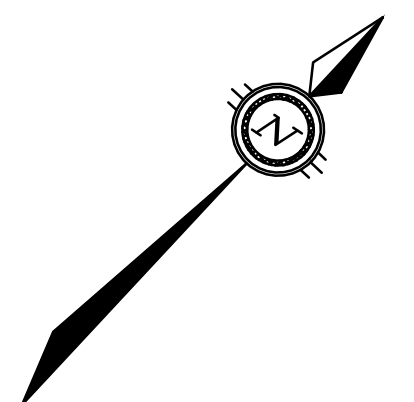
NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

NO.	Description	By	Date (dd/mm/yy)
1	ISSUED FOR REVIEW	BMT	08/10/21

ROAD MODIFICATIONS ECHOWOODS AVENUE

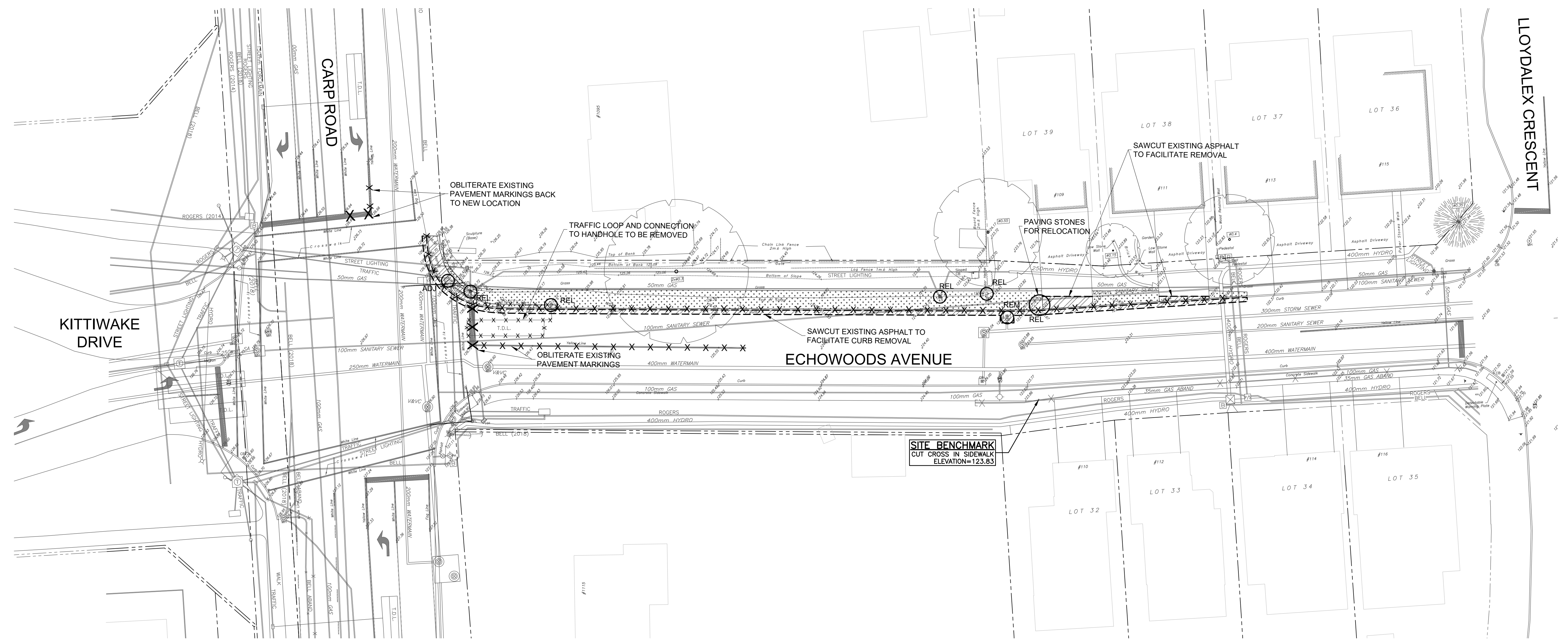


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Dwn. SAB	Chk'd. BMT
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Const. Inspector --	
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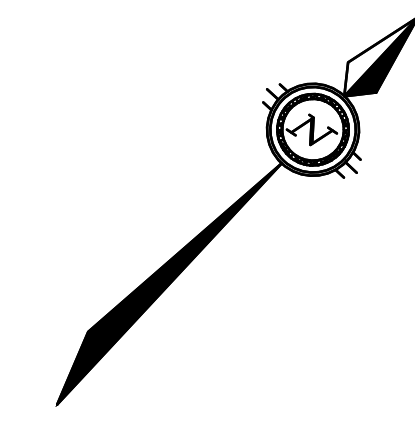
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NO.	Description	By	Date (dd/mm/yy)
1	ISSUED FOR REVIEW	BMT	08/10/21



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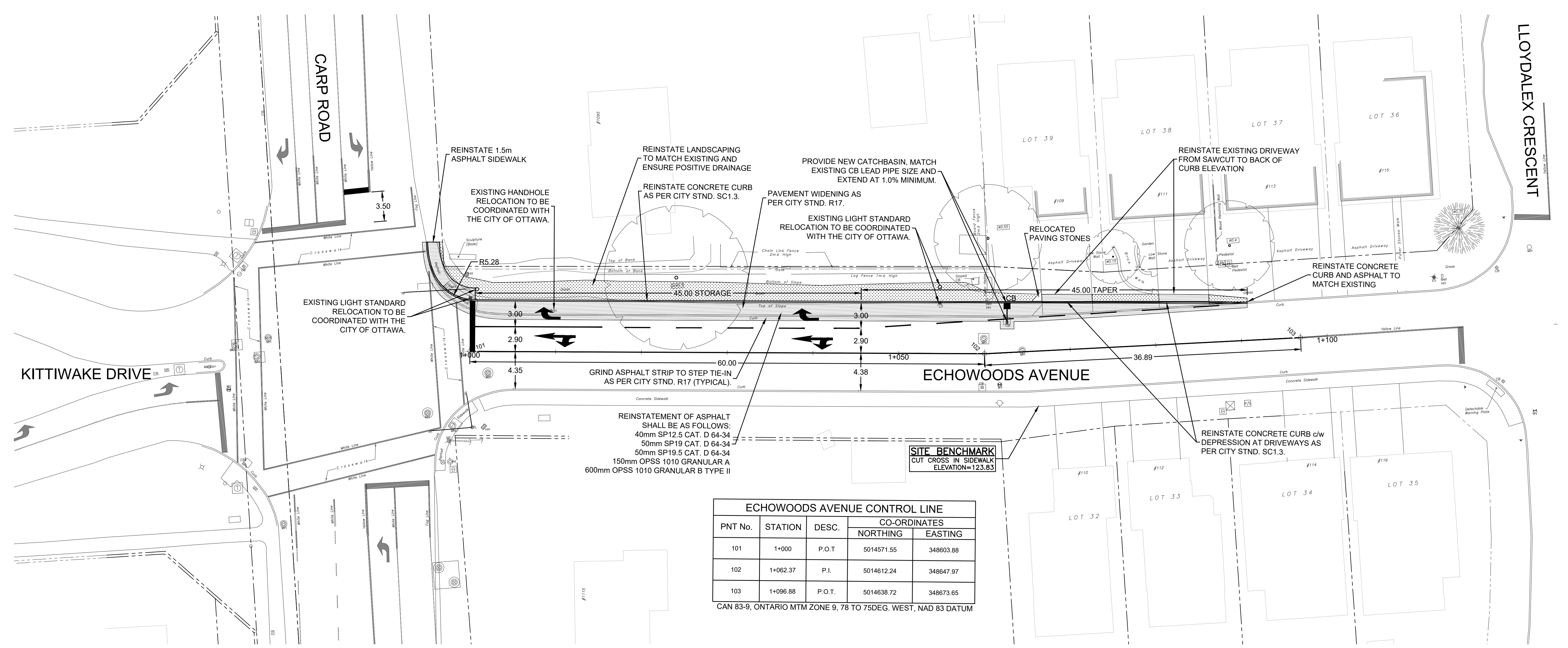
ROAD MODIFICATIONS
ECHOWOODS AVENUE



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Dwn.	Chkd. BMT		
Utility Circ. No.	Index No.		
Const. Inspector			
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NO.	Description	By	Date (dd/mm/yy)
1	ISSUED FOR REVIEW	BMT	08/10/21



ECHOWOODS AVENUE CONTROL LINE				
PNT No.	STATION	DESC.	CO-ORDINATES	
			NORTHING	EASTING
101	1+000	P.O.T	5014571.55	348603.88
102	1+062.37	P.I.	5014612.24	348647.97
103	1+096.88	P.O.T.	5014638.72	348673.65

CAN 83-9, ONTARIO MTM ZONE 9, 78 TO 75DEG. WEST, NAD 83 DATUM

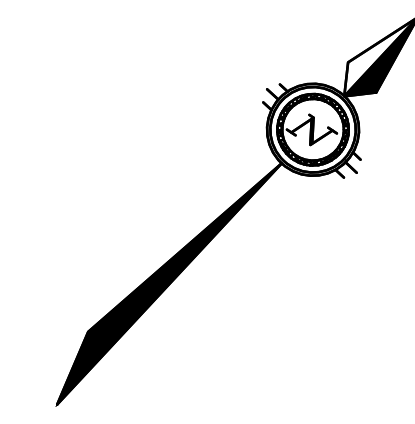
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ROAD MODIFICATIONS
ECHOWOODS AVENUE



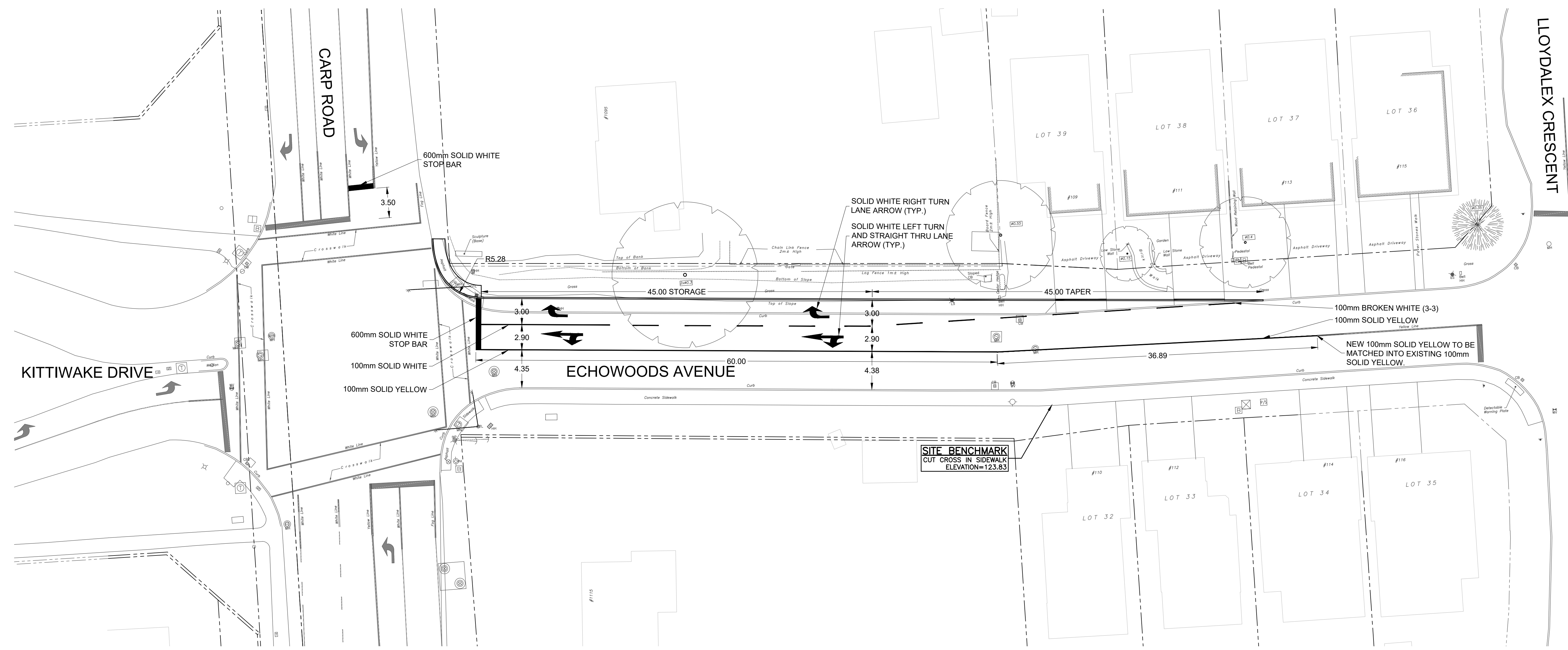
PAVEMENT MARKINGS

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Asset Group ISD	
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Dwn. SAB	Chk'd. BMT
Utility Circ. No. --	Index No.
Const. Inspector	
Scale: 0 2m 4m 10m HORIZONTAL 1:250	



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NO.	Description	By	Date (dd/mm/yy)
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