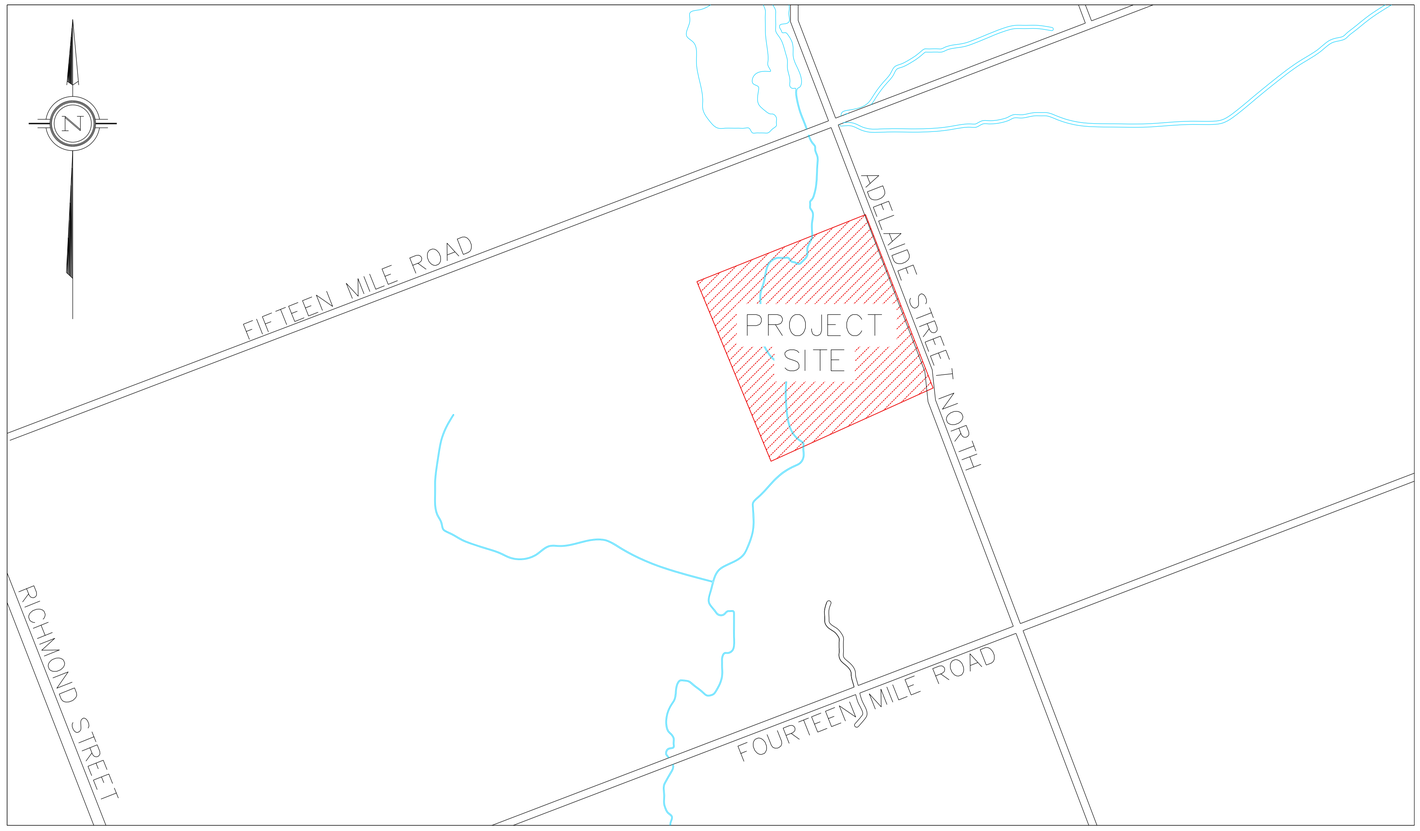
STANLEY PIT
NATURAL CHANNEL RELOCATION

PART LOT 13, CONCESSION 14, MUNICIPALITY OF MIDDLESEX CENTRE
(FORMERLY LONDON TOWNSHIP), MIDDLESEX COUNTY, ONTARIO



KEY MAP
(NOT TO SCALE)

INDEX TO DRAWINGS

SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE
1	GP	GENERAL PLAN, REMOVALS AND NOTES
2	ESC-1	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
3	ESC-2	EROSION AND SEDIMENT CONTROL STAGING PLAN
4	SP-1	SITE PLAN, PROFILE AND SECTIONS - STN. 0+000 TO 0+200
5	SP-2	SITE PLAN, PROFILE AND SECTIONS - STN. 0+200 TO 0+400
6	SP-3	SITE PLAN, PROFILE AND SECTIONS - STN. 0+400 TO 0+590
7	SGP	GENERAL SITE GRADING PLAN
8	CD	CONSTRUCTION DETAILS
9	RP	SITE RESTORATION PLAN

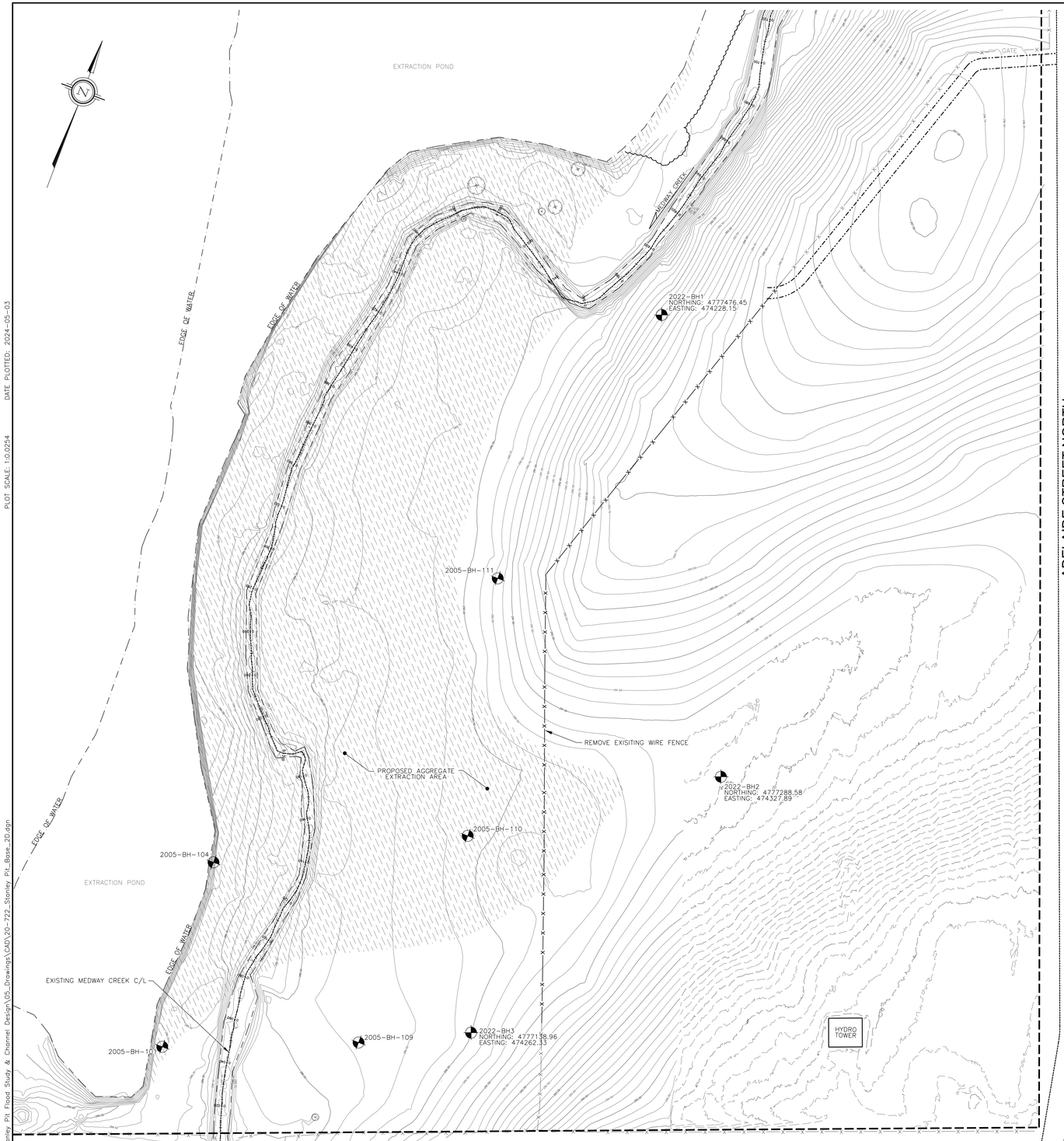
CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953
McCANN REDI-MIX
More Than Concrete

Greck

PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03

F:\Projects\2020\20-722 - Stanley Pit Flood Study & Channel Design\05_Drawings\CAD\20-722_Stanley Pit_Base_20.dgn



PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03

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GENERAL NOTES

1. THIS SET OF DRAWINGS IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING SPECIFICATIONS.
2. ALL DIMENSIONS ARE IN METRIC UNITS AND REFERENCED TO GEODETIC DATUM, UNLESS OTHERWISE SHOWN.
3. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE SITE ENGINEER.
4. SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT AND SURVEY CONTROL DURING CONSTRUCTION. THIS INCLUDES THE EXACT ROUTE FOR SITE ACCESS.
6. THE CONTRACTOR IS RESPONSIBLE FOR EXACTLY LOCATING ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO ENSURE ALL EXISTING INFRASTRUCTURE (IF APPLICABLE) IS PROTECTED FROM DAMAGES DURING CONSTRUCTION AND WILL BE HELD RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY DAMAGES INCURRED DUE TO CONSTRUCTION.
7. THE CONTRACTOR SHALL DELINEATE THE REQUIRED WORKING AREA ON-SITE PRIOR TO THE START OF WORK AND SHALL CONFINE OPERATIONS WITHIN THE DEFINED AREA.
8. WORKING AREA(S), ACCESS REQUIREMENTS, AND TEMPORARY MATERIAL STORAGE AREA(S) ARE TO BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR AT ALL TIMES. AREAS AFFECTED BY THE CONTRACTORS ACTIVITIES ARE TO BE REINSTATED TO EXISTING CONDITIONS OR BETTER.
9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROLS AS SHOWN IN DRAWING #ESC-2, IN GOOD REPAIR FOR THE DURATION OF CONSTRUCTION.
10. EQUIPMENT REFUELING AND MAINTENANCE TO BE COMPLETED ONLY IN DESIGNATED AREA.
11. ALL TREES TO BE REMOVED FOR PROPOSED WORKS AND SITE ACCESS ARE TO BE IDENTIFIED PRIOR TO CONSTRUCTION AND CONFIRMED WITH ENGINEER ON-SITE. TREE REMOVALS WILL ABIDE BY THE MIGRATORY BIRD WINDOW BETWEEN APRIL 1 AND AUGUST 31. SMALL TREES MAY BE SALVAGED AND REPLANTED ON SITE.
12. DISTURBANCE TO THE EXISTING VEGETATED FLOOD PLAIN AREA AND OR WOOD LOT SHOULD BE MINIMIZED. THE LIMITS OF DISTURBANCE ARE TO BE IDENTIFIED AND CLEARLY MARKED PRIOR TO CONSTRUCTION.
13. ALL GENERAL BACKFILL TO BE OF APPROVED MATERIAL AND COMPACTED TO A MINIMUM 95% PROCTOR DENSITY UNLESS OTHERWISE STATED.
14. ANY DAMAGES TO THE SITE ACCESS ROUTE IS TO RESTORED TO EXISTING CONDITIONS OR BETTER UPON COMPLETION OF WORKS. ALL EXPOSED SOIL AREAS ARE TO BE COVERED WITH NATIVE SEED MIX, SEE DRAWING #RP, UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND LEGAL DISPOSAL OF ALL DEBRIS AND EXCESS MATERIAL(S) AS PER OPSS180.
16. ALL INSTREAM WORKS ARE TO BE COMPLETED WITHIN A TIMING WINDOW OF JULY 15 TO MARCH 15, UNLESS OTHERWISE NOTED OR APPROVED WITH THE ASSOCIATED PERMIT(S). NO EQUIPMENT SHALL BE IN AN ACTIVE FLOWING WATERCOURSE.
17. CONSTRUCTION TO PROCEED AS PER GENERAL CONSTRUCTION PLAN SHOWN ON DRAWING #ESC-1, UNLESS OTHERWISE APPROVED BY SITE ENGINEER.
18. INCASE OF A SPILL THE CONTRACTOR IS NOTIFY THE MECP SPILL/SPILLS ACTION CENTRE (SAC) PHONE NUMBER AT 416-325-3000 OR 1-800-268-6060, THE SITE ENGINEER AND OWNER.
19. CONTRACTOR IS TO ENSURE ALL STONE WORKS ARE KEYED IN AND EMBEDDED INTO THE BANK.

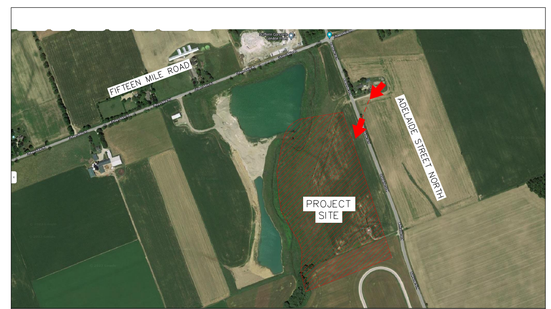
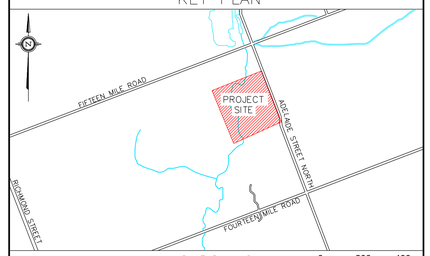


**IMAGE TAKEN FROM GOOGLE EARTH - 10/12/2020

KEY PLAN



NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. CONTOUR INTERVAL IS 0.25m.
3. TOPOGRAPHIC SURVEY INFORMATION:
   - COORDINATE SYSTEM: UTM ZONE 17 N (GRID)
   - HORIZONTAL DATUM: NAD83 (CSRS - 2010)
   - VERTICAL DATUM: CGQ2013
   - VERTICAL CONTROL: OBSERVED GPS ELEVATIONS
4. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE PROJECT ENGINEER.
5. ALL WORK SHALL BE N ACCORDANCE WITH CURRENT CITY OF LONDON STANDARD SPECIFICATIONS AND DRAWINGS UNLESS OTHERWISE NOTED HEREIN.
6. ORDER OF PRECEDENCE OF STANDARDS DRAWINGS IS FIRSTLY CITY OF LONDON AND SECONDLY ONTARIO PROVINCIAL STANDARDS (OPSD).
7. THE CONTRACTOR TO BE RESPONSIBLE FOR LOCATION OF ALL EXISTING U/G AND OVERHEAD UTILITIES. CONTRACTOR IS REQUIRED TO OBTAIN ALL LOCATIONS & NOTIFY THE VARIOUS UTILITY COMPANIES 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE MUNICIPALITY OF MIDDLESEX CENTRE AND CONSULTANT ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF EXISTING UTILITIES AS INDICATED ON THE DRAWING.

BENCHMARK

ELEVATIONS ARE BASED ON GPS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL CGG2013, AS SUPPLIED BY NATURAL RESOURCES CANADA.

CONTROL POINT 1:
ELEV: 292.56m
NORTHING: 4777805.8940
EASTING: 474206.5790
LOCATION: CROSS IN CONCRETE BY BRIDGE ON FIFTEEN MILE ROAD

COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- APPROXIMATE PARCEL FABRIC
- WATERLINE AT TIME OF SURVEY
- 292.00 CONTOUR MAJOR - 0.25m INTERVAL
- 292.25 CONTOUR MINOR - 0.25m INTERVAL
- -292.00- LIDAR CONTOUR MAJOR - 0.25m INTERVAL
- -292.25- LIDAR CONTOUR MINOR - 0.25m INTERVAL
- EXISTING WIRE FENCE
- EXISTING VEGETATION LINE
- 2005-BH-XXX 2005 BOREHOLE
- 2022-BH-X 2022 BOREHOLE
- EXISTING DECIDUOUS TREE
- SITE ACCESS ROUTE
- PROPOSED AGGREGATE EXTRACTION AREA

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

GENERAL PLAN, REMOVALS, AND NOTES

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.
SCALE: 1:1000 (0m 20m 40m)	DRAWING NO. GP	PROJECT NO. 20-722	
	SHEET NO. 1		

EROSION AND SEDIMENT CONTROL PLAN NOTES

SECTION 1: SITE MANAGEMENT

1. EROSION AND SEDIMENT CONTROL (ESC) MEASURES WILL BE IMPLEMENTED PRIOR TO, AND MAINTAINED DURING THE CONSTRUCTION PHASES, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 24 HOURS OF THE INSPECTION.
2. DISTURBED AREAS WILL BE MINIMIZED TO THE EXTENT POSSIBLE, AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES.
3. ALL IN-WATER AND NEAR WATER WORKS WILL BE CONDUCTED IN THE DRY WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS.
4. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREAS. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE, INCLUDING SEDIMENT, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS. THE REGULATING ENFORCEMENT OFFICER SHOULD BE IMMEDIATELY CONTACTED. ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND USED AS NECESSARY.
5. THE CONTRACTOR WILL ASSIGN A CAN-CISEC LEVEL III QUALIFIED PROFESSIONAL TO INSPECT ALL NEW CONTROLS, AS WELL AS ON A DAILY BASIS, OR FOLLOWING RAIN/SNOW MELT EVENT, TO MONITOR ALL WORKS, AND IN PARTICULAR WORKS RELATED TO EROSION AND SEDIMENT CONTROLS, DEWATERING OR UNWATERING, RESTORATION AND IN- OR NEAR- WATER WORKS. SHOULD CONCERNS ARISE ON SITE THE QUALIFIED PROFESSIONAL WILL CONTACT THE REGULATING ENFORCEMENT OFFICER AS WELL AS THE PROPONENT. THE CONTRACTOR IS TO PROVIDE DAILY EROSION AND SEDIMENT CONTROL INSPECTION RECORDS TO THE CONTRACT ADMINISTRATOR TO MEET REGULATORY MONITORING REQUIREMENTS.
6. ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER. VEHICULAR REFUELING AND MAINTENANCE WILL BE CONDUCTED A MINIMUM OF 30 METERS FROM THE WATER.
7. THE PROPONENT/CONTRACTOR SHALL MONITOR THE WEATHER SEVERAL DAYS IN ADVANCE OF THE ONSET OF CONSTRUCTION TO ENSURE THAT THE WORKS WILL BE CONDUCTED DURING LOW-WATER (I.E. NEAR BASEFLOW CONDITIONS). SHOULD A SIGNIFICANT STORM EVENT (>20MM OF RAIN IN 24 HRS) BE FORECAST, THE CONTRACTOR WILL REMOVE ALL UNFIXED ITEMS FROM THE CHANNEL AND REGIONAL STORM FLOOD PLAIN THAT WOULD HAVE THE POTENTIAL TO CAUSE A SPILL OR AN OBSTRUCTION TO FLOW, E.G., FUEL TANKS, PORTA-POTTIES, MACHINERY, EQUIPMENT, CONSTRUCTION MATERIALS, COFFERDAMS, ETC.
8. ALL DEWATERING/UNWATERING SHALL BE TREATED AND RELEASED TO THE ENVIRONMENT AT LEAST 30 METERS FROM A WATERCOURSE AND ALLOWED TO DRAIN THROUGH A WELL-VEGETATED AREA, IF FEASIBLE. NO DEWATERING EFFLUENT SHALL BE SENT DIRECTLY TO ANY WATERCOURSE OR FOREST, OR ALLOWED TO DRAIN ONTO DISTURBED SOILS WITHIN THE WORK AREA. THESE CONTROL MEASURES SHALL BE MONITORED FOR EFFECTIVENESS AND MAINTAINED OR REVISED TO MEET THE OBJECTIVE OF PREVENTING THE RELEASE OF SEDIMENT LADEN WATER.
9. ALL ACCESS TO THE WORK SITE SHALL BE FROM EITHER SIDE OF THE WATERCOURSE. NO EQUIPMENT OR VEHICLES ARE PERMITTED TO CROSS THROUGH AN ACTIVELY FLOWING WATERCOURSE UNLESS APPROVED BY CONTRACT ADMINISTRATOR.
10. THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL MEASURES, AS REQUIRED TO CONTROL THE DISCHARGE OF EXPOSED SOIL OR TEMPORARY PILE(S) OF EXCAVATED SOILS OR, SOILS AND GRANULAR MATERIAL TO BE USED DURING CONSTRUCTION. WHEN POSSIBLE BIODEGRADABLE ALTERNATIVES TO SILT FENCING SUCH AS BIOSOXX SHOULD BE CONSIDERED.
11. EROSION AND SEDIMENT CONTROL MEASURES ARE TO REMAIN IN PLACE AND IN WORKING ORDER UNTIL ALL ON-SITE CONSTRUCTION IS COMPLETED OR UNTIL ALL EXPOSED SOIL SURFACES HAVE BEEN STABILIZED. NEWLY CONSTRUCTED STREAM BANKS AND BEDS ARE TO BE STABILIZE IMMEDIATELY WITH EROSION CONTROL MEASURES (I.E., TARP OR ESC BLANKET) PRIOR TO ANY PRECIPITATION EVENTS.
12. AREAS WHICH REMAIN DISTURBED FOR MORE THAN 30 DAYS SHALL BE STABILIZED USING TERRASEED OR APPROVED EROSION CONTROL BLANKET OR SIMILAR. IF CONDITIONS AREN'T SUITABLE FOR SEED APPLICATION AN BIODEGRADABLE EROSION CONTROL MATTING WILL BE USED IN ITS PLACE.
13. ALL SLOPES SHALL BE STABILIZED USING MEASURES SUCH AS EROSION CONTROL BLANKET AS PER OPSS MUNI 804 AND 805 OR APPROVED EQUIVALENT. NO EROSION AND CONTROL MEASURE SHALL HAVE ANY PLASTIC, EVEN IF IT IS BIODEGRADABLE.
14. MUNICIPAL ROADS ARE TO BE KEPT CLEAR OF EXCESS SEDIMENT.
15. THE CONTRACTOR MUST HAVE SUITABLE PUMPING AND FLOW BYPASS CAPABILITIES ON SITE AT ALL TIMES TO FACILITATE CONSTRUCTION ACTIVITIES IN THE DRY.
16. WHERE PRACTICAL, WORKS SHOULD BE COMPLETED IN STAGES TO REDUCE THE DURATION OF DISTURBED AREAS.
17. CONTRACTOR CAN DISPOSE OF THE MATERIAL USED IN THE PEA GRAVEL METER BAGS INTO THE CHANNEL OR SURROUNDING AREA. ALL PEA GRAVEL BAG FABRICS ARE TO BE REMOVED OFF OF SITE.
18. REFER TO EROSION AND SEDIMENT CONTROL GUIDE FOR URBAN CONSTRUCTION, 2019 FOR FURTHER EROSION AND SEDIMENT CONTROL MEASURES FOR FURTHER EROSION AND SEDIMENT CONTROL INFORMATION.

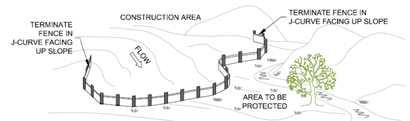
SECTION 2: CONSTRUCTION TIMING

ITEM	OPEN	END
TO PROTECT LOCAL FISH POPULATIONS DURING THEIR SPAWNING, NURSERY AND MIGRATORY PERIODS, IN-WATER/NEAR-WATER ACTIVITIES MAY ONLY OCCUR DURING THE TIME PERIOD OF:	JULY 15	MARCH 15

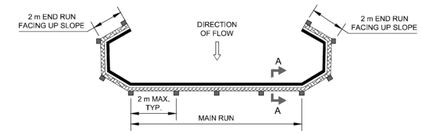
SECTION 3: FISH AND WILDLIFE RELOCATION

19. FISH AND WILDLIFE STRANDED WITHIN THE WORK AREA SHALL BE CAPTURED AND RELEASED LIVE IN SUITABLE HABITAT UPSTREAM OF THE WORK AREA UNDER THE SUPERVISION OF A QUALIFIED AQUATIC BIOLOGIST. A PERMIT FROM THE MINISTRY OF NATURAL RESOURCES AND FORESTRY IS REQUIRED.

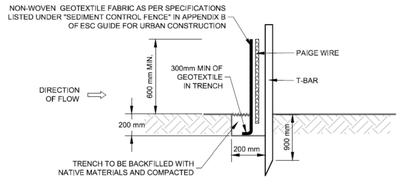
DETAIL 1 – SEDIMENT CONTROL FENCE (SINGLE ROW) N.T.S.



PERSPECTIVE VIEW



PLAN VIEW

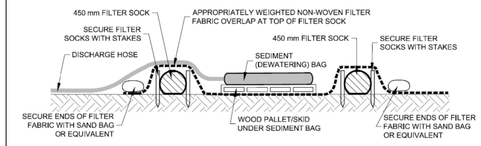


SECTION VIEW

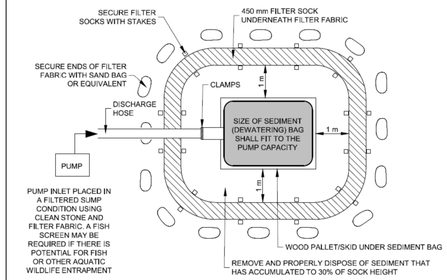
NOTES:

1. THIS DETAIL REPRESENTS AN IDEAL SCENARIO. SITE CONDITIONS VARY AND EROSION AND SEDIMENT MEASURES SHOULD BE TAILORED FOR EACH SITE AND PROEJCT.
2. SILT CONTROL FENCE SHOULD BE ALIGNED WITH CONTOURS FOR SHEET OVERLAND FLOW.
3. SILT/SEDIMENT CONTROL FENCE IS TO LOCATED IN AREAS OF LOW SEDIMENT YEILD.
4. SILT/SEDIMENT CONTROL FENCE SHALL BE INSTALLED WITH FILTER CLOTH TOED INTO THE SOIL A MIN. OF 200mm BY EITHER STATIC SLICING OR TRENCH METHODS WITH COMPACTION OF TRENCH MATERIAL MEETING 95% STANDARD PROCTOR DENSITY.
5. STEEL "T" BAR POSTS ARE TO BE SPACED MAX. 2m ON CENTER.
6. FILTER CLOTH TO BE CONNECTED TO THE FENCE AT 1m INTERVALS.
7. FROZEN GROUND CONDITIONS REQUIRE FILTER CLOTH TO BE BACKFILLED IN TRENCH WITH CLEAR STONE.
8. GEOTEXTILE FILTER CLOTH TO BE COMPRISED OF NON-WOVEN U.V. STABILIZED MATERIAL.
9. SILT FENCE AND STRAW BALE TO BE IN DIRECT CONTACT TO MAXIMIZE FENCE STABILITY

DETAIL 2 – DEWATERING TREATMENT TRAIN N.T.S.



SECTION VIEW

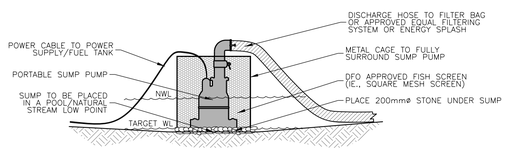


PLAN VIEW

NOTES:

1. PLACE FILTER BAG (3.5m X 5.0m TERRAFIX ENVIROBAG OR APPROVED EQUAL) ON A LEVEL STABILIZED AREA ABOVE THE VALLEY SLOPE. FILTREXX COTTON BIOSOXX (8"Ø GREEN WITH BLACK STRIPE) TO BE PLACE AROUND THE FILTER BAG.
2. TRENCH TO BE PUMPED AND DEWATERED INTO FILTER BAG
3. REPLACE UNIT WHEN HALF FULL OF SEDIMENT OR WHEN SEDIMENT HAS SIGNIFICANTLY REDUCED THE FLOW RATE OF PUMP DISCHARGE
4. ALLOW SEDIMENT BAG TO DRY IN DESIGNATED SEDIMENT DRYING AREA AND THEN DISPOSE OF THE UNIT AND SEDIMENT OFF SITE

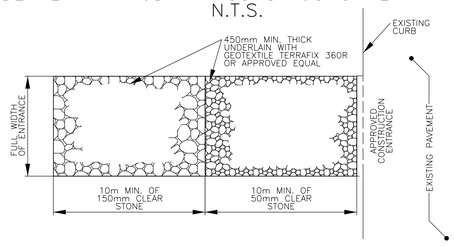
DETAIL 3 – INSTREAM DEWATERING PUMP N.T.S.



NOTES:

- REFER TO DFO INTERIM CODE OF PRACTICE: END-OF-PIPE FISH PROTECTION SCREENS FOR SMALL WATER INTAKES IN FRESHWATER. (HTTP://WWW.DFO-MPO.GC.CA/PNW-PPE/CODES/SCREEN-ECRAN-ENG.HTML)
- ONLY APPLICABLE FOR SMALL-SCALE WATER INTAKES, WHERE THE WATER INTAKE FLOW RATE IS UP TO 0.150m³/s, OR 150(L/S).
- SCREENS MUST BE DESIGNED TO MEET THE GUIDELINES ISSUED BY FISHERIES AND OCEANS CANADA.
- ENSURE THE DESIGN OPENING OF THE SCREEN MATERIAL DOES NOT EXCEED 2.54mm.
- ENSURE THERE ARE NO PROTRUSIONS ON THE SCREEN SURFACE OF SUPPORT STRUCTURES THAT COULD INJURE FISH.
- PROPERLY MAINTAIN CLEANING APPARATUSES, SEALS AND SCREENS.
- TURN OFF INTAKE PUMP PRIOR TO THE REMOVAL OF THE SCREEN FOR CLEANING AND/ OR MAINTENANCE.

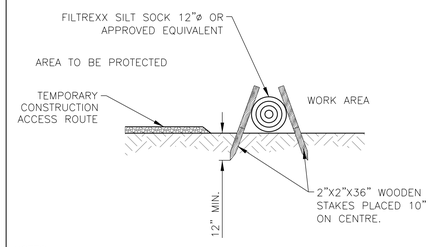
DETAIL 4 – MUD MAT CONSTRUCTION ENTRANCE N.T.S.



NOTES:

1. GRANULAR MATERIAL IS TO BE CLEAN APPROVED MATERIAL AND PLACED AT NOTED DIMENSIONS PRIOR TO LAND DISTURBANCE.
2. GEOTEXTILE IS TO BE UNDERLAIN OVER THE ENTIRE AREA PRIOR TO STONE PLACEMENT.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL REDUCE TRACKING OR FLOWING OF SEDIMENT ONTO R.O.W. AND GRANULAR MATERIAL IS TO BE REPLACED AS WARRANTED OR DIRECTED BY THE SITE ENGINEER.

DETAIL 5 – SILT SOCK INSTALLATION N.T.S.



NOTES:

1. ALL MATERIAL TO MEET MANUFACTURES SPECIFICATIONS.
2. SILT SOCK FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY SITE SUPERVISOR.

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.

SCALE:	DRAWING NO.	PROJECT NO.
	ESC-1	20-722

SHEET NO. 2

PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03

F:\Projects\2020\20-722 - Stanley Pit Flood Study & Channel Design\05_Drawings\CAD\20-722_Stanley Pit_Base_20.dgn

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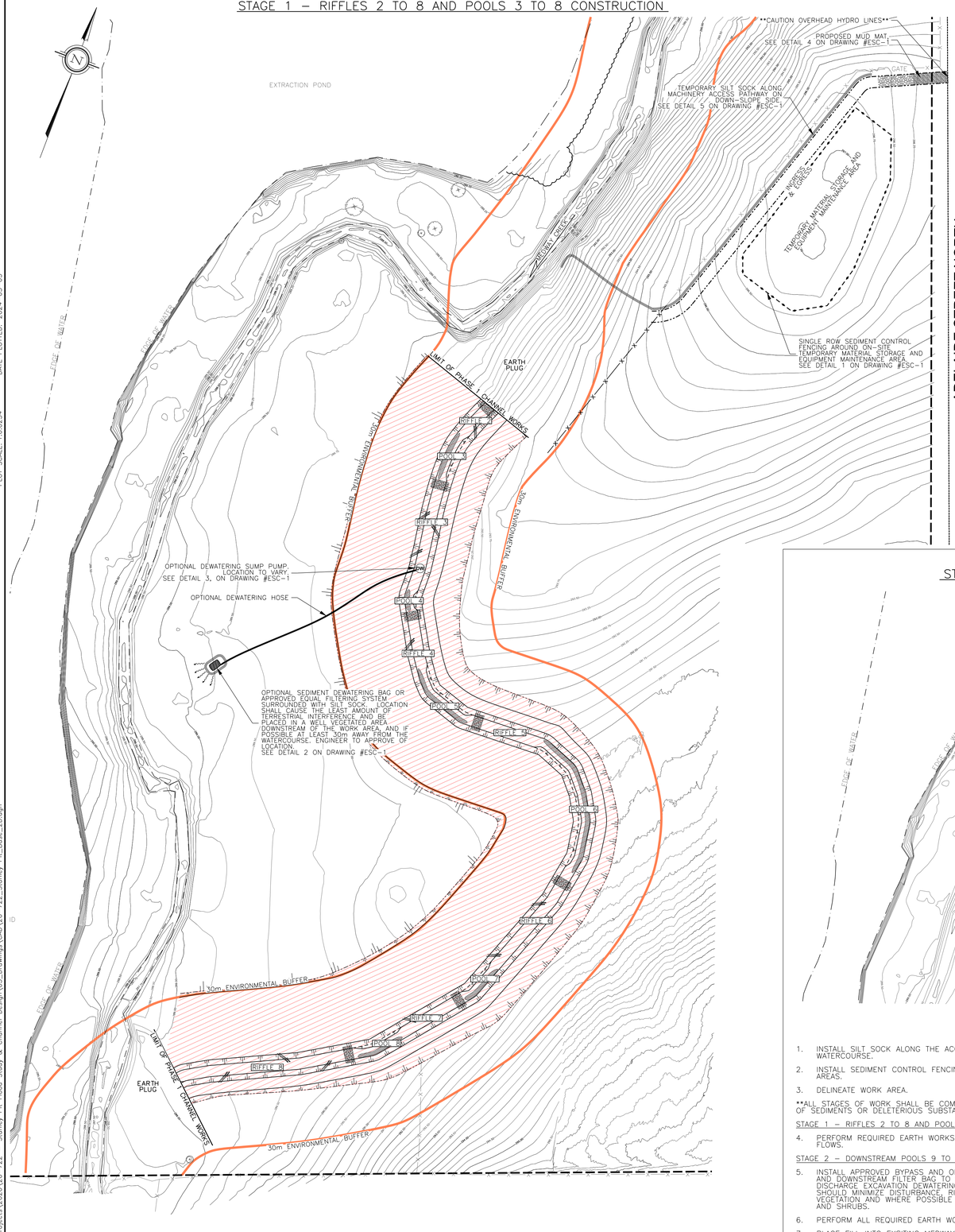
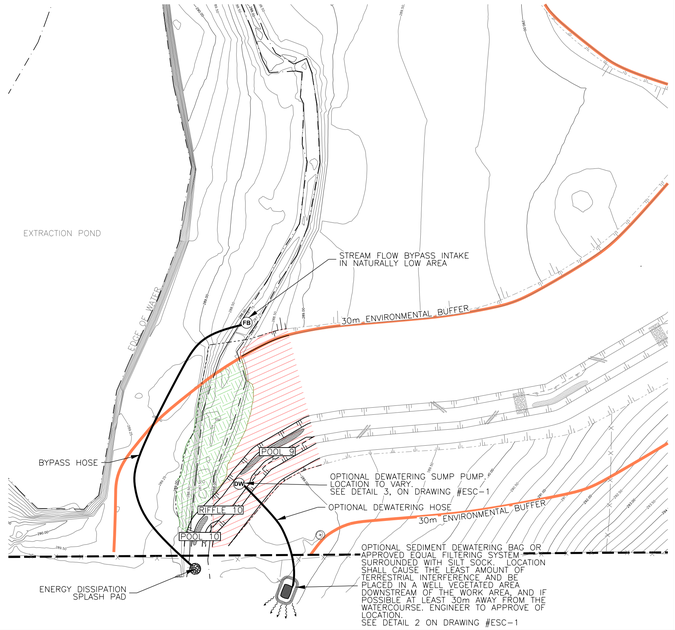
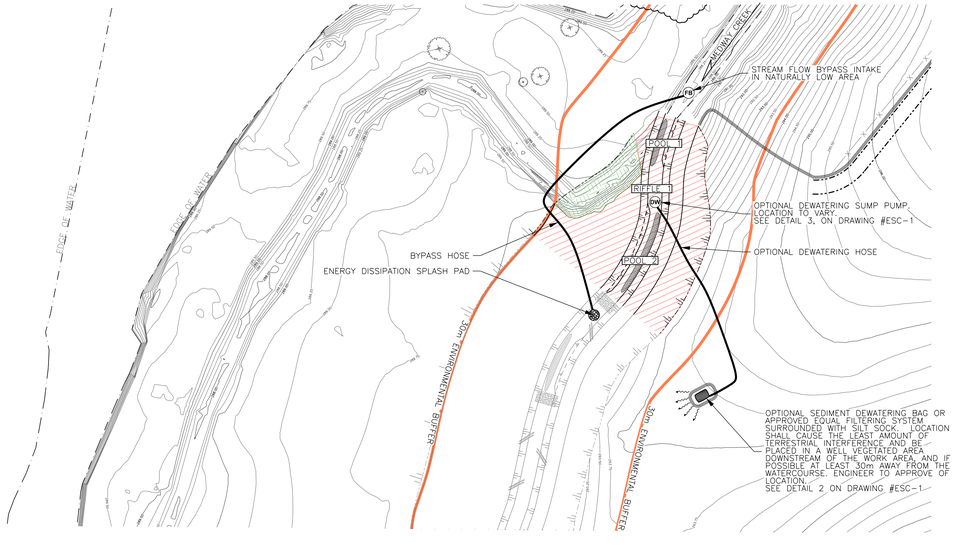
STAGE 1 – RIFFLES 2 TO 8 AND POOLS 3 TO 8 CONSTRUCTION



STAGE 2 – DOWNSTREAM POOLS 9 TO 10 AND RIFFLE 10 CONSTRUCTION



STAGE 3 – UPSTREAM POOLS 1 TO 2 AND RIFFLE 1 CONSTRUCTION



GENERAL CONSTRUCTION STAGING PLAN FOR EROSION CONTROL

1. INSTALL SILT SOCK ALONG THE ACCESS ROAD WHEN IT IS WITHIN 15m OF THE WATERCOURSE.
2. INSTALL SEDIMENT CONTROL FENCING AROUND THE MATERIAL STORAGE AND EQUIPMENT AREAS.
3. DELINEATE WORK AREA.

**ALL STAGES OF WORK SHALL BE COMPLETED IN A MANNER THAT MINIMIZES ANY RELEASE OF SEDIMENTS OR DELETERIOUS SUBSTANCES INTO THE WATERCOURSE.

STAGE 1 – RIFFLES 2 TO 8 AND POOLS 3 TO 8 CONSTRUCTION

4. PERFORM REQUIRED EARTH WORKS WITHOUT DISTURBING EXISTING MEDWAY CREEK FLOWS.

STAGE 2 – DOWNSTREAM POOLS 9 TO 10 AND RIFFLE 10 CONSTRUCTION

5. INSTALL APPROVED BYPASS AND OPTIONAL DEWATERING PUMPS, POWER GENERATOR AND DOWNSTREAM FILTER BAG TO SUIT STAGES OF WORKS TO COLLECT AND DISCHARGE EXCAVATION DEWATERING. THE LOCATION OF THE FILTER BAG SHOULD MINIMIZE DISTURBANCE, RILING AND EROSION TO THE SURROUNDING VEGETATION AND WHERE POSSIBLE BE LOCATED WITHIN AREAS VOID OF TREES AND SHRUBS.
6. PERFORM ALL REQUIRED EARTH WORKS.
7. PLACE FILL INTO EXSITING MEDWAY CREEK TO 30m BUFFER LIMIT TO ACT AS EARTH PLUG

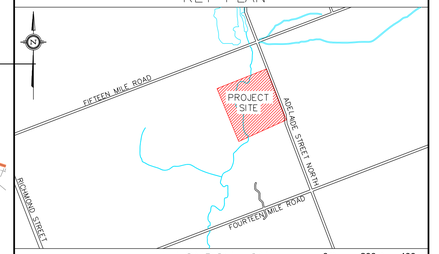
STAGE 3 – UPSTREAM POOLS 1 TO 2 AND RIFFLE 1 CONSTRUCTION

8. REPOSITION BYPASS, OPTIONAL DEWATERING PUMPS, POWER GENERATOR AND DOWNSTREAM FILTER BAG TO SUIT CURRENT STAGE OF WORKS
9. PERFORM ALL REQUIRED EARTH WORKS
10. PLACE FILL INTO EXSITING MEDWAY CREEK TO 30m BUFFER LIMIT TO ACT AS EARTH PLUG.
11. REMOVE ALL PUMPING MEASURES ONCE WORKS ARE COMPLETED.

COMPLETION AND REINSTATEMENT:

1. ALL DISTURBED AREAS TO BE SEEDED AND PROTECTED WITH APPROVED EROSION CONTROL BLANKETS (SC200B STRAW/COCONUT DOUBLE NET OR APPROVED EQUIVALENT) AT THE END OF EACH STAGE.
2. INSTALL LANDSCAPING MEASURES AS SHOWN ON DRAWINGS #RP.
3. REMOVE SEDIMENT CONTROL MEASURES.

KEY PLAN



LONDON, ON

0m 200m 400m

NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. CONTOUR INTERVAL IS 0.25m.
3. TOPOGRAPHIC SURVEY INFORMATION:
   COORDINATE SYSTEM: UTM ZONE 17 N (GRID)
   HORIZONTAL DATUM: NAD83 (CSRS – 2010)
   VERTICAL DATUM: CGQ2013
   VERTICAL CONTROL: OBSERVED GPS ELEVATIONS
4. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE PROJECT ENGINEER.
5. ALL WORK SHALL BE N ACCORDANCE WITH CURRENT CITY OF LONDON STANDARD SPECIFICATIONS AND DRAWINGS UNLESS OTHERWISE NOTED HEREIN.
6. ORDER OF PRECEDENCE OF STANDARDS DRAWINGS IS FIRSTLY CITY OF LONDON AND SECONDLY ONTARIO PROVINCIAL STANDARDS (OPSD).
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BENCHMARK

ELEVATIONS ARE BASED ON GPS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL CGG2013, AS SUPPLIED BY NATURAL RESOURCES CANADA.

CONTROL POINT 1:
ELEV: 292.56m
NORTHING: 4777805.8940
EASTING: 474206.5790
LOCATION: CROSS IN CONCRETE BY BRIDGE ON FIFTEEN MILE ROAD

COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- 292.00 CONTOUR MAJOR 0.25m INTERVAL
- 292.25 CONTOUR MINOR 0.25m INTERVAL
- 292.00 LIDAR CONTOUR MAJOR 0.25m INTERVAL
- 292.25 LIDAR CONTOUR MINOR 0.25m INTERVAL
- EXISTING DECIDUOUS TREE
- EXISTING WOODY FEATURE
- LIMIT OF EARTH WORKS
- SITE ACCESS ROUTE
- PROPOSED 30m ENVIRONMENTAL BUFFER
- PROPOSED RIFFLE
- PROPOSED POOL
- TEMPORARY MUD MAT
- DW TEMPORARY DEWATERING PUMP
- FB TEMPORARY FLOW BY-PASS PUMP
- TEMPORARY ENERGY DISSIPATION PAD
- TEMPORARY SEDIMENT DEWATERING BAG
- TEMPORARY SEDIMENT CONTROL FENCE
- TEMPORARY SILT SOCK
- PROPOSE FILL
- PROPOSED CUT

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

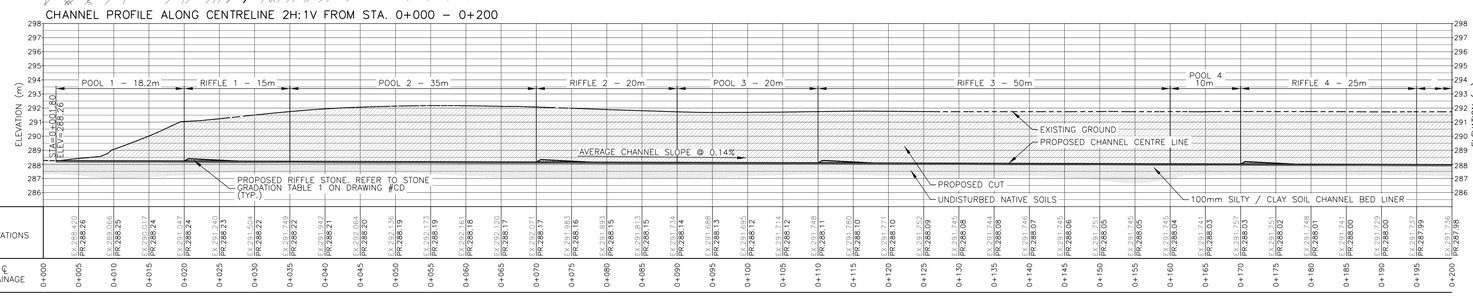
EROSION AND SEDIMENTS CONTROL STAGING PLAN

DATE: MAY 2024

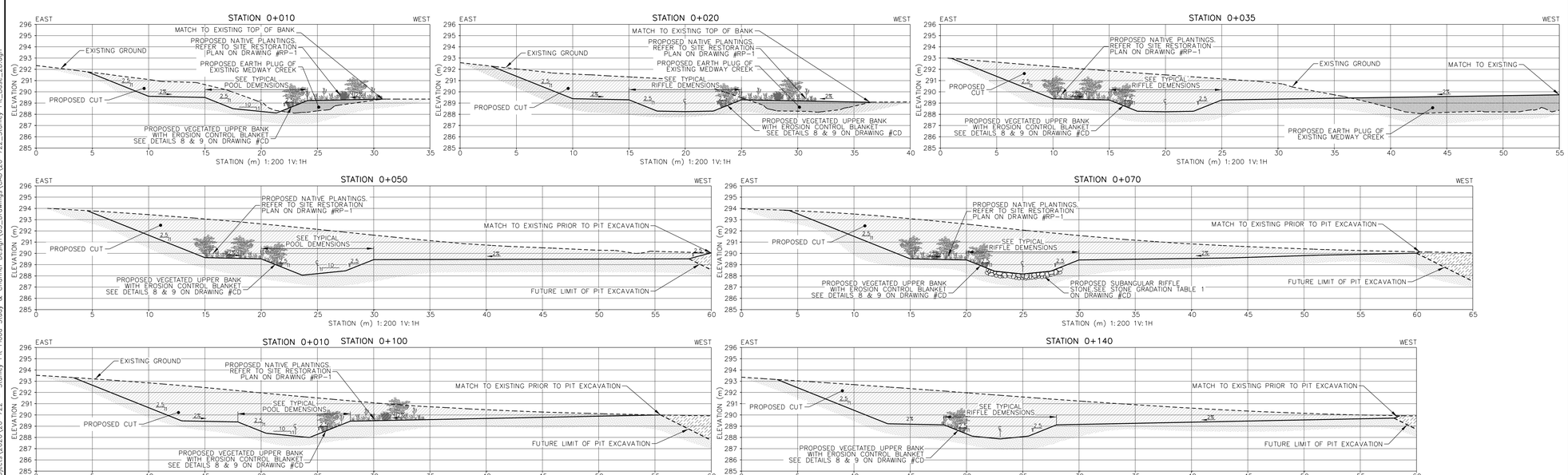
DESIGN BY	DWG. BY	APPD. BY
B.G.	P.G.	B.G.

SCALE: 1:1000
0m 20m 40m

DRAWING NO. ESC-2
PROJECT NO. 20-722
SHEET NO. 3



Station		Channel Section	Downstream direction
0+000	0+020	Pool	Right
0+020	0+025	Riffle	
0+035	0+065	Pool	Left
0+070	0+075	Riffle	
0+090	0+110	Pool	Right
0+110	0+115	Riffle	
0+160	0+170	Pool	Right
0+170	0+175	Riffle	
0+195	0+230	Pool	Right
0+230	0+235	Riffle	



KEY PLAN

NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. CONTOUR INTERVAL IS 0.25m.
3. TOPOGRAPHIC SURVEY INFORMATION:
   - COORDINATE SYSTEM: UTM ZONE 17 N (GRID)
   - HORIZONTAL DATUM: NAD83 (CSRS – 2010)
   - VERTICAL DATUM: CGQ2013
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BENCHMARK

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CONTROL POINT 1:
ELEV: 292.56m
NORTHING: 4777805.8940
EASTING: 474206.5790
LOCATION: CROSS IN CONCRETE BY BRIDGE ON FIFTEEN MILE ROAD

COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- WATERLINE AT TIME OF SURVEY
- 292.00 CONTOUR MAJOR – 0.25m INTERVAL
- 292.25 CONTOUR MINOR – 0.25m INTERVAL
- EXISTING DECIDUOUS TREE
- EXISTING WOODY FEATURE
- LIMIT OF EARTH WORKS
- PROPOSED NATIVE PLANTINGS
- PROPOSED 30m ENVIRONMENTAL BUFFER
- PROPOSED RIFFLE
- PROPOSED POOL
- PROPOSED AGGREGATE EXTRACTION AREA
- 2005-BH-XXX 2005 BOREHOLE
- 2022-BH-X 2022 BOREHOLE

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

SITE PLAN, PROFILE AND SECTIONS STA. 0+000 TO 0+200

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.
SCALE: AS SHOWN	DRAWING NO. SP-1	PROJECT NO. 20-722	
	SHEET NO. 4		

PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03
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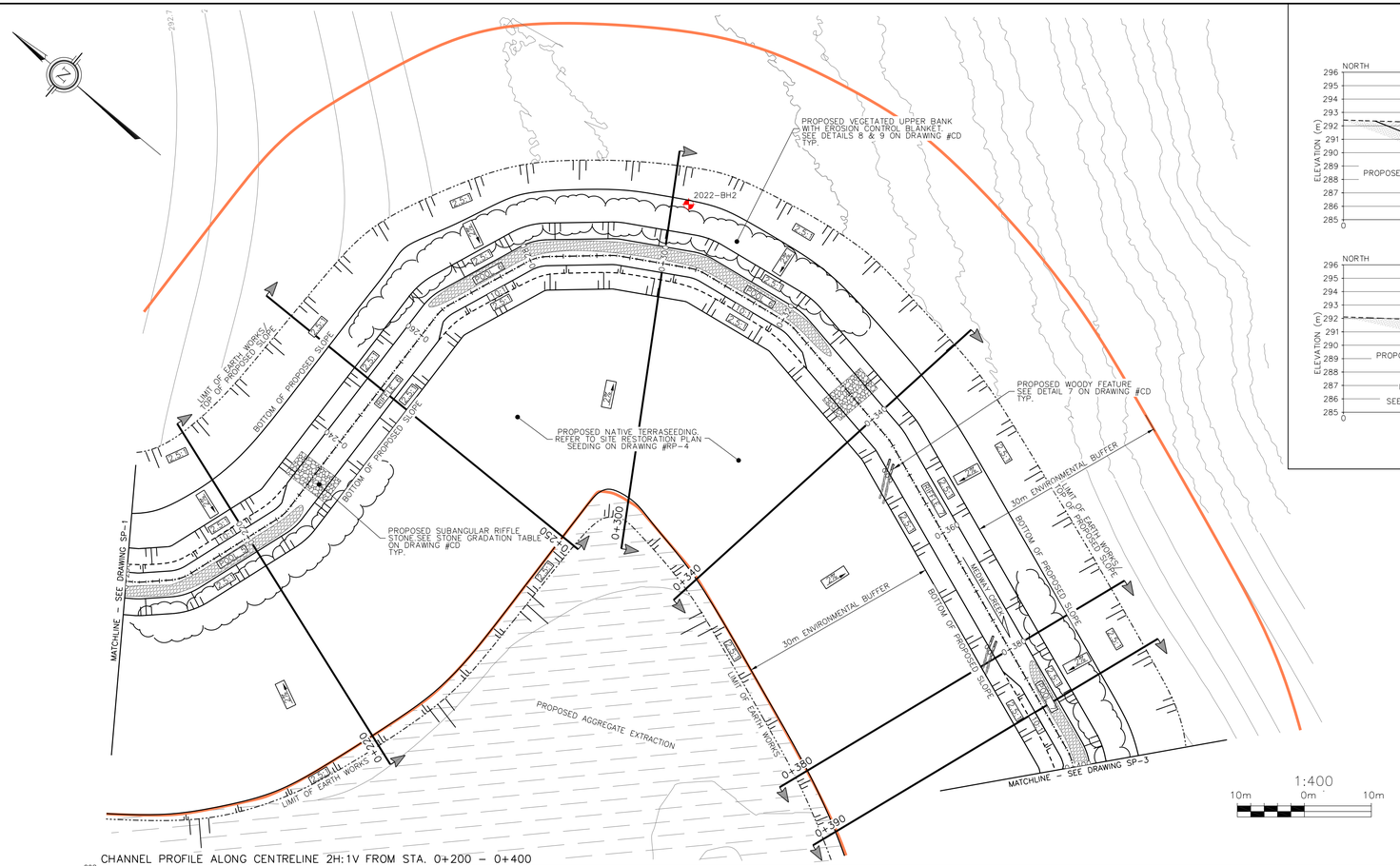
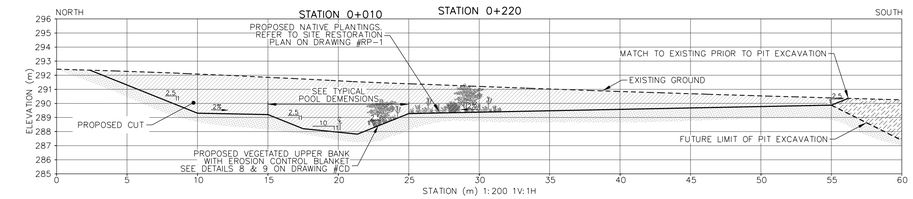
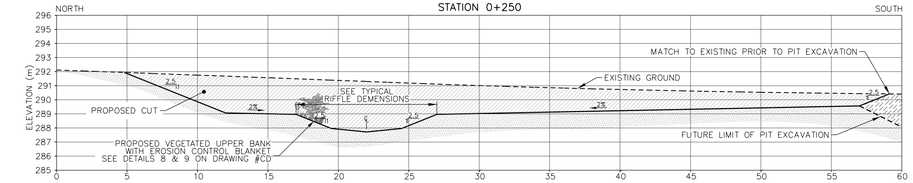
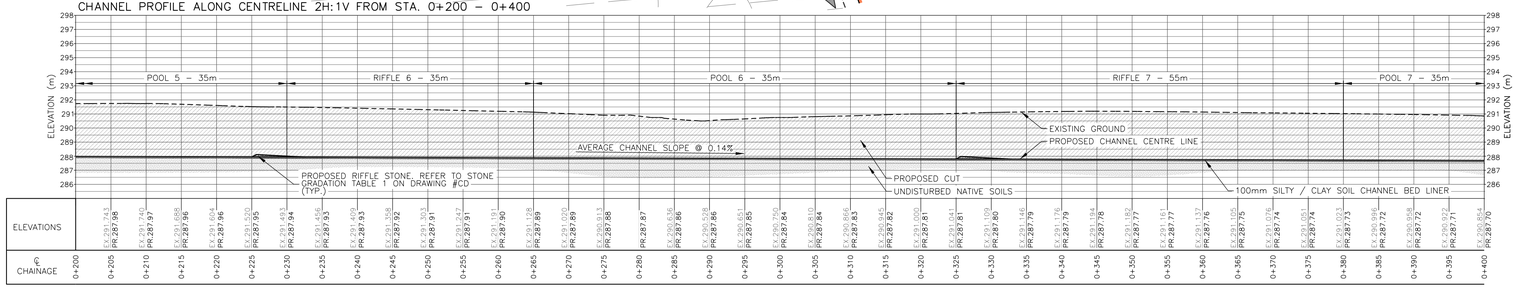
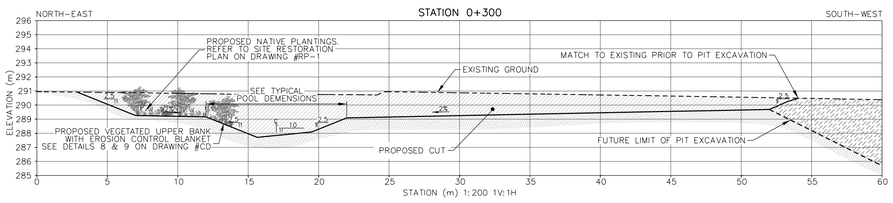


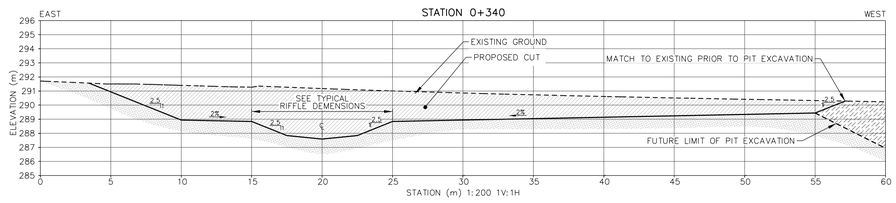


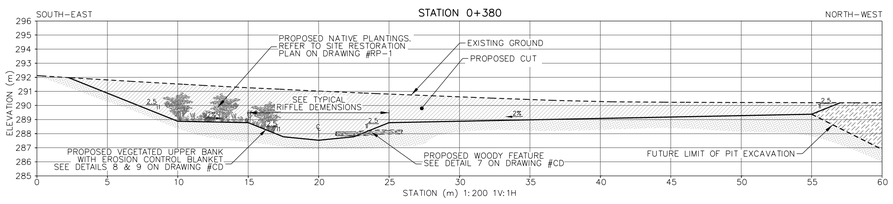


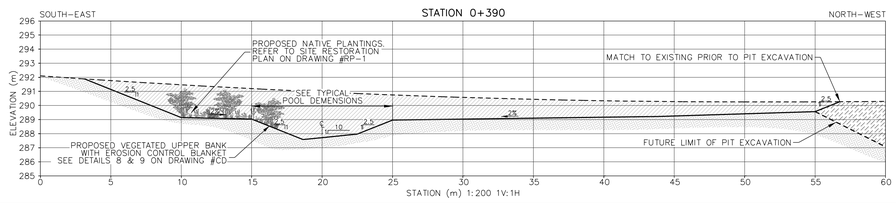


Station		Channel Section	Downstream direction
0+230	0+235	Riffle	
0+265	0+330	Pool	Left
0+335	0+340	Riffle	
0+385	0+405	Pool	Left









BENCHMARK

ELEVATIONS ARE BASED ON GPS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL CGG2013, AS SUPPLIED BY NATURAL RESOURCES CANADA.

CONTROL POINT 1:
ELEV: 292.56m
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EASTING: 474206.5790
LOCATION: CROSS IN CONCRETE BY BRIDGE ON FIFTEEN MILE ROAD

COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- 292.00 — CONTOUR MAJOR - 0.25m INTERVAL
- 292.25 — CONTOUR MINOR - 0.25m INTERVAL
- ~292.00~ — LIDAR CONTOUR MAJOR - 0.25m INTERVAL
- ~292.25~ — LIDAR CONTOUR MINOR - 0.25m INTERVAL
- EXISTING WOODY FEATURE
- LIMIT OF EARTH WORKS
- PROPOSED NATIVE PLANTINGS
- PROPOSED 30m ENVIRONMENTAL BUFFER
- PROPOSED RIFFLE
- PROPOSED POOL
- PROPOSED AGGREGATE EXTRACTION AREA
- 2022-BH-X — 2022 BOREHOLE

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

SITE PLAN, PROFILE AND SECTIONS STA. 0+200 TO 0+400

DATE: MAY 2024
SCALE: AS SHOWN
DESIGN BY: B.G.
DWG. BY: P.G.
APPD. BY: B.G.
DRAWING NO.: SP-2
PROJECT NO.: 20-722
SHEET NO. 5

PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03
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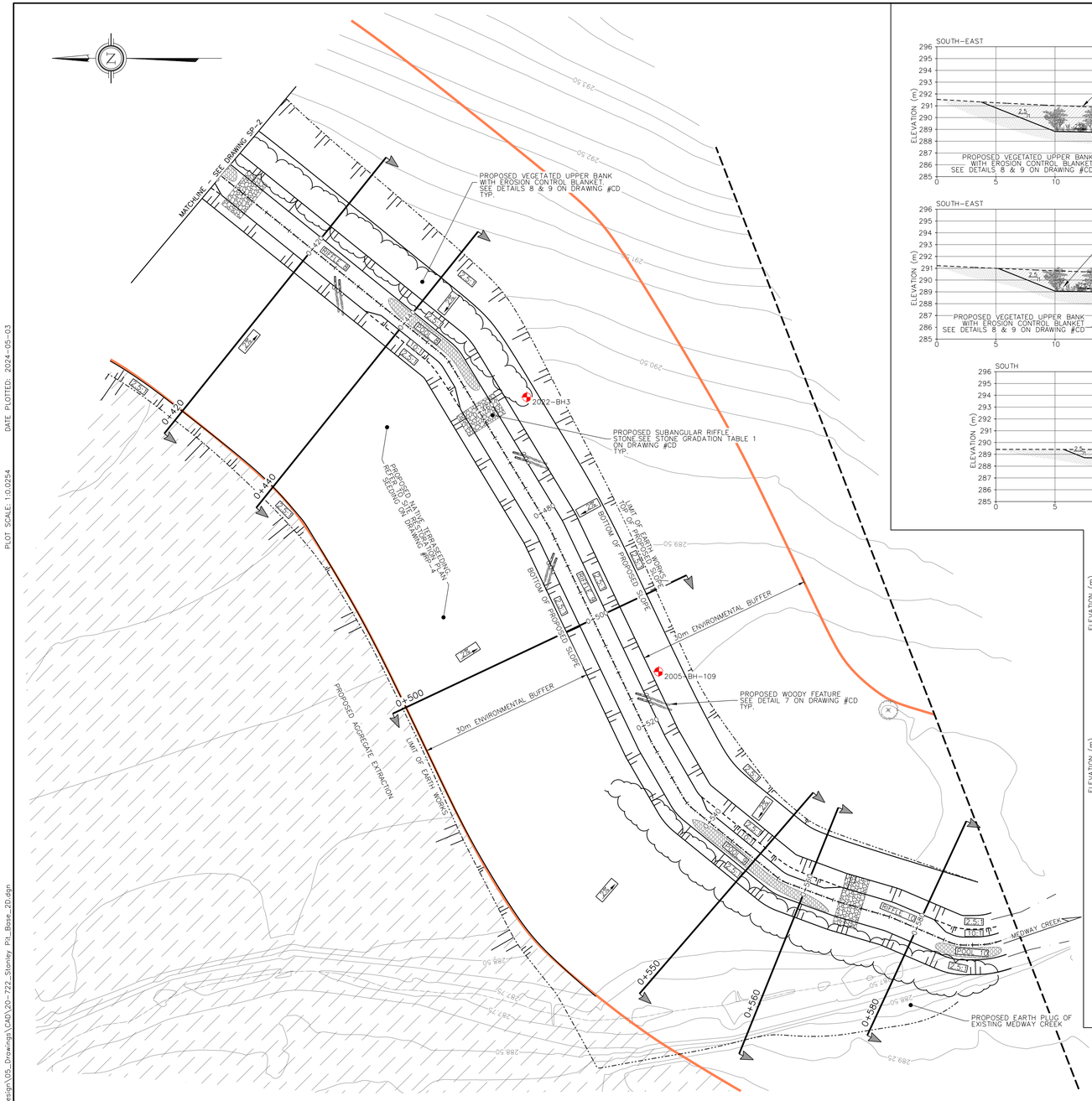
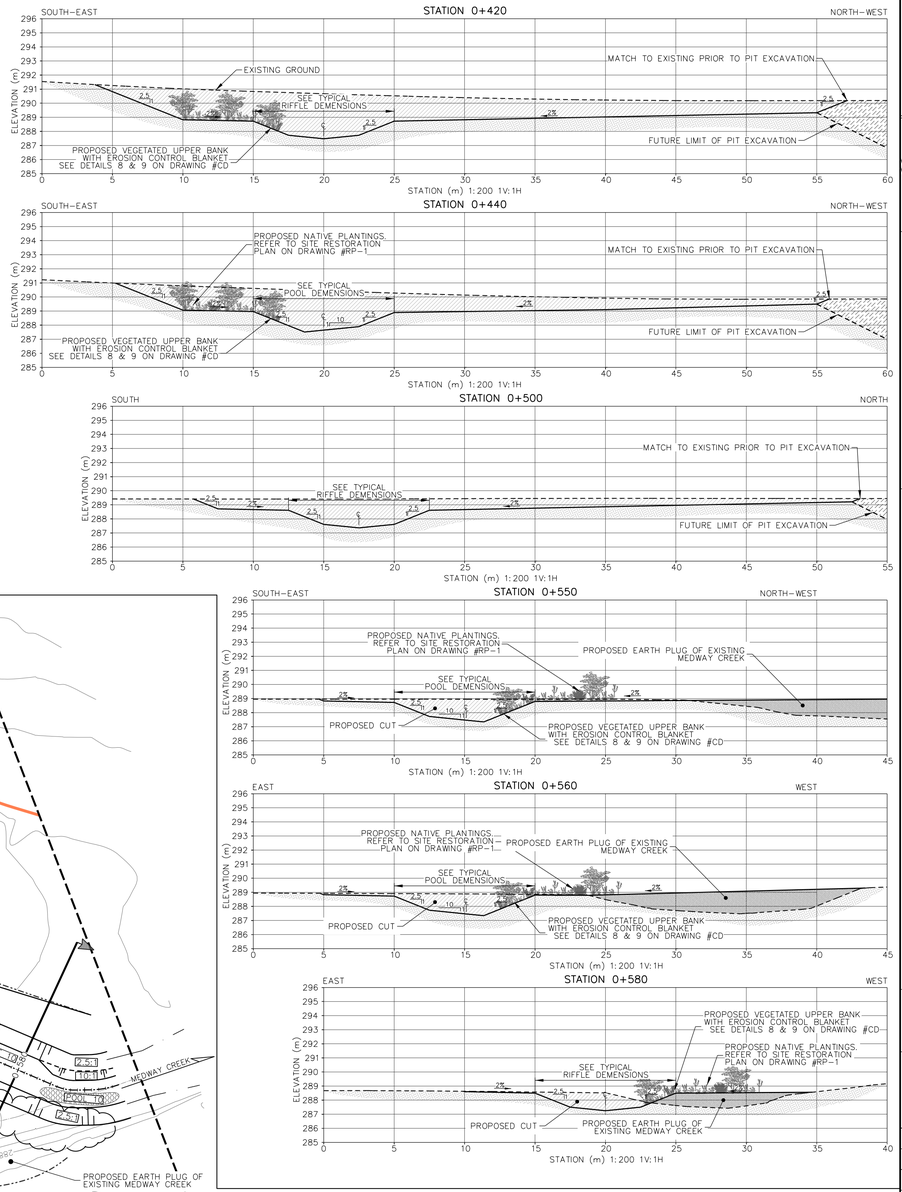
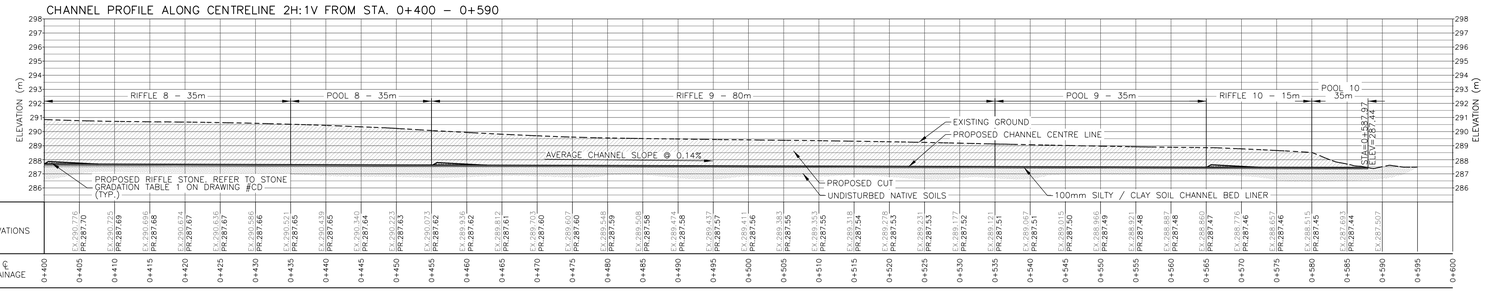
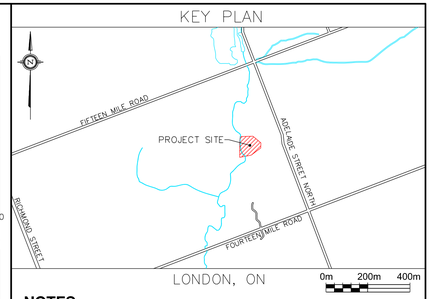






Station		Channel Section	Downstream direction
0+405	0+410	Riffle	
0+435	0+455	Pool	Left
0+460	0+465	Riffle	
0+535	0+565	Pool	Right
0+565	0+570	Riffle	



NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. CONTOUR INTERVAL IS 0.25m.
3. TOPOGRAPHIC SURVEY INFORMATION:
   COORDINATE SYSTEM: UTM ZONE 17 N (GRID)
   HORIZONTAL DATUM: NAD83 (CSRS - 2010)
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BENCHMARK

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CONTROL POINT 1:
ELEV: 292.56m
NORTHING: 4777805.8940
EASTING: 474206.5790
LOCATION: CROSS IN CONCRETE BY BRIDGE ON FIFTEEN MILE ROAD

COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- APPROXIMATE PARCEL FABRIC
- WATERLINE AT TIME OF SURVEY
- 292.00 CONTOUR MAJOR - 0.25m INTERVAL
- 292.25 CONTOUR MINOR - 0.25m INTERVAL
- EXISTING DECIDUOUS TREE
- EXISTING WOODY FEATURE
- LIMIT OF EARTH WORKS
- PROPOSED NATIVE PLANTINGS
- PROPOSED 30m ENVIRONMENTAL BUFFER
- PROPOSED RIFFLE
- PROPOSED POOL
- PROPOSED AGGREGATE EXTRACTION AREA
- 2005-BH-XXX 2005 BOREHOLE
- 2022-BH-X 2022 BOREHOLE

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
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DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

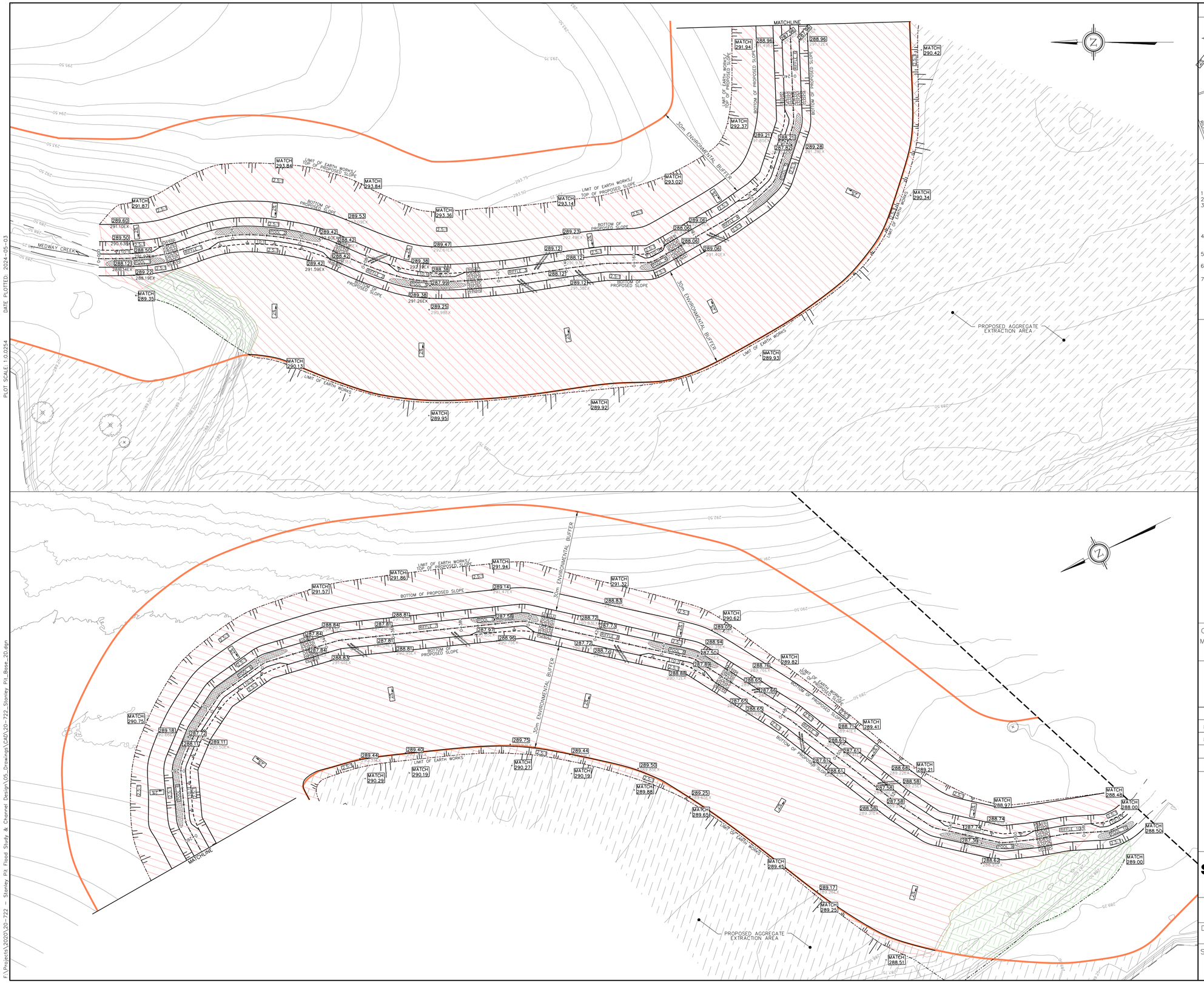
SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

SITE PLAN, PROFILE AND SECTIONS STA. 0+400 TO 0+590

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.
SCALE: AS SHOWN	DRAWING NO. SP-3	PROJECT NO. 20-722	
	SHEET NO. 6		

PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03
F:\Projects\2020\20-722 - Stanley Pit Flood Study & Channel Design\05_Drawings\CAD\20-722_Stanley Pit_Base_20.dgn



KEY PLAN

LONDON, ON

0m 200m 400m

NOTES

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BENCHMARK

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COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- WATERLINE AT TIME OF SURVEY
- 292.00 CONTOUR MAJOR – 0.25m INTERVAL
- 292.25 CONTOUR MINOR – 0.25m INTERVAL
- EXISTING DECIDUOUS TREE
- EXISTING WOODY FEATURE
- LIMIT OF EARTH WORKS
- PROPOSED 30m ENVIRONMENTAL BUFFER
- PROPOSED RIFFLE
- PROPOSED POOL
- PROPOSED AGGREGATE EXTRACTION AREA
- PROPOSED FILL – ~570m³
- PROPOSED CUT – ~46,560m³
- •290.49EX EXISTING ELEVATION
- •289.05 PROPOSED ELEVATION

CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1953 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

GENERAL SITE GRADING PLAN

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.
SCALE: 1:500 (0m 10m 20m)	DRAWING NO. SPG	PROJECT NO. 20-722	
	SHEET NO. 7		

PLOT SCALE: 1:0.0254
DATE PLOTTED: 2024-05-03
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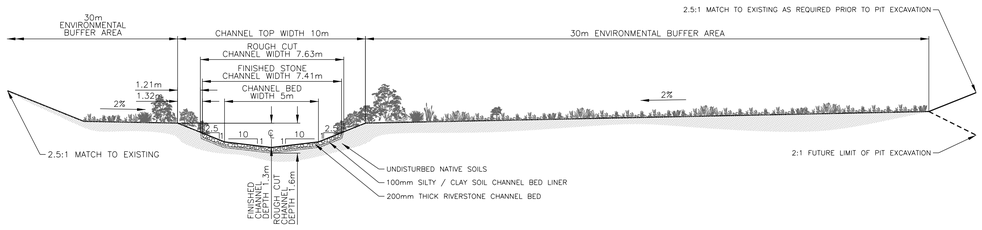
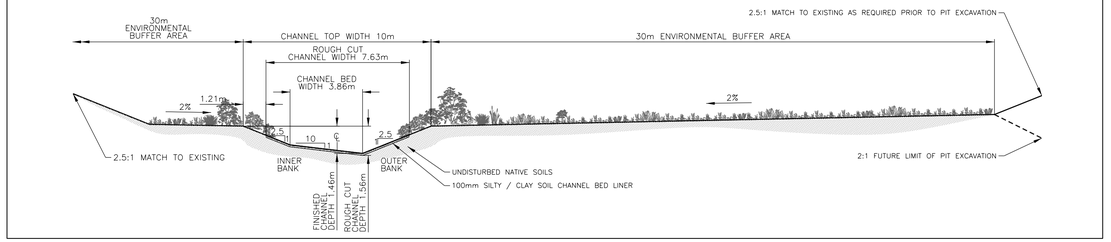
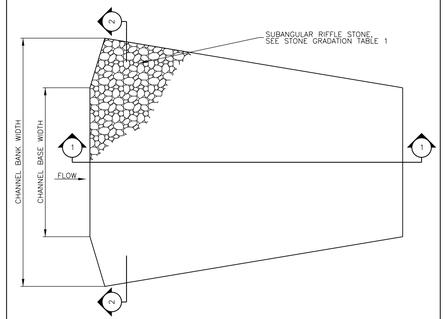
RIFFLE SECTION (TYPICAL)



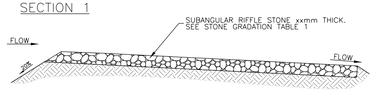
POOL SECTION (TYPICAL)



DETAIL 6 – RIFFLE STONE AND BANKS DESIGN N.T.S.



SECTION 1



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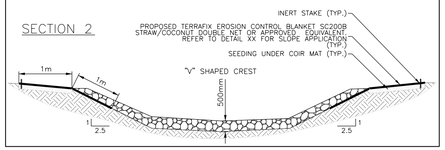
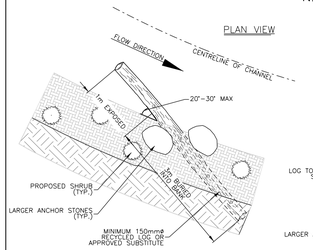
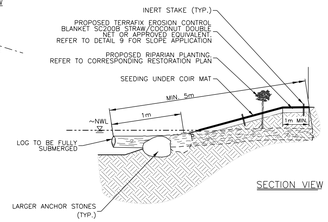


DETAIL 7 – WOODY FEATURE WITH LIVE STAKES AND EROSION CONTROL BLANKET N.T.S.

PLAN VIEW

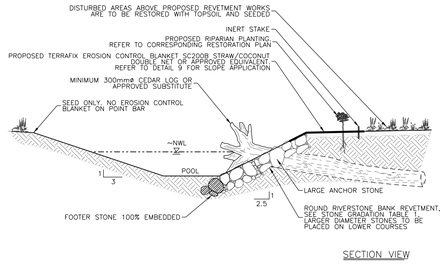


LOG



SECTION VIEW

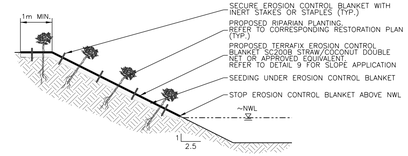
ROOTWAD



SECTION VIEW

NOTE:
- REFER TO CORRESPONDING SITE RESTORATION PLAN FOR PLANT AND SEEDING SPECIES

DETAIL 8 – VEGETATED BANK WITH EROSION CONTROL BLANKET N.T.S.



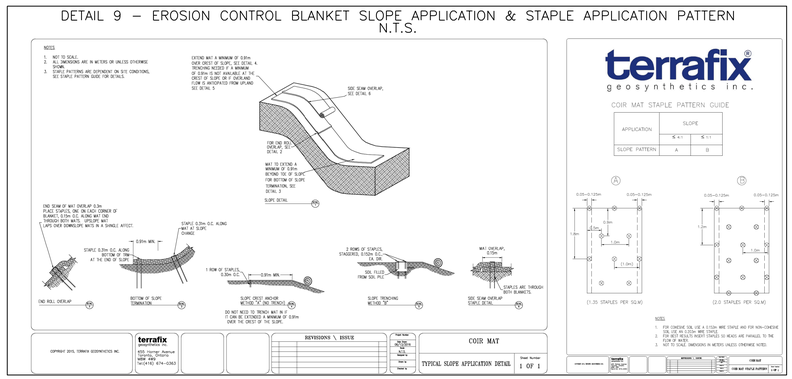
NOTES:
- NO EROSION CONTROL BLANKET ON SLOPES <4:1/25%
- POTTED PLANTS TO BE USED IF PLANTING IS OUTSIDE THE MONTHS OF MARCH AND APRIL
- REFER TO CORRESPONDING SITE RESTORATION PLAN FOR PLANT AND SEEDING SPECIES

STONE GRADATION TABLE 1

(ROUNDED STONE)

STONE SIZE (mm)	PERCENT BY VOLUME
75	20
150	60
300	20
STONE THICKNESS/DEPTH OF 300mm	

DETAIL 9 – EROSION CONTROL BLANKET SLOPE APPLICATION & STAPLE APPLICATION PATTERN N.T.S.



CLIENT NAME:
McCann Redi-Mix Inc.

Est. 1955 McCANN REDI-MIX More Than Concrete

Greck
5770 Highway 7, Unit 3, Woodbridge, Ontario L4L 1T8

DATE	REVISION	BY
MAY 29, 2023	30% DESIGN ISSUED FOR REVIEW	B.G.
MAY 03, 2024	ISSUED FOR APPROVALS	B.G.

SUBMISSION DRAWING
NOT FOR CONSTRUCTION

STANLEY PIT FLOOD STUDY & NATURAL CHANNEL DESIGN

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.
SCALE:	DRAWING NO. CD	PROJECT NO. 20-722	
	SHEET NO. 8		

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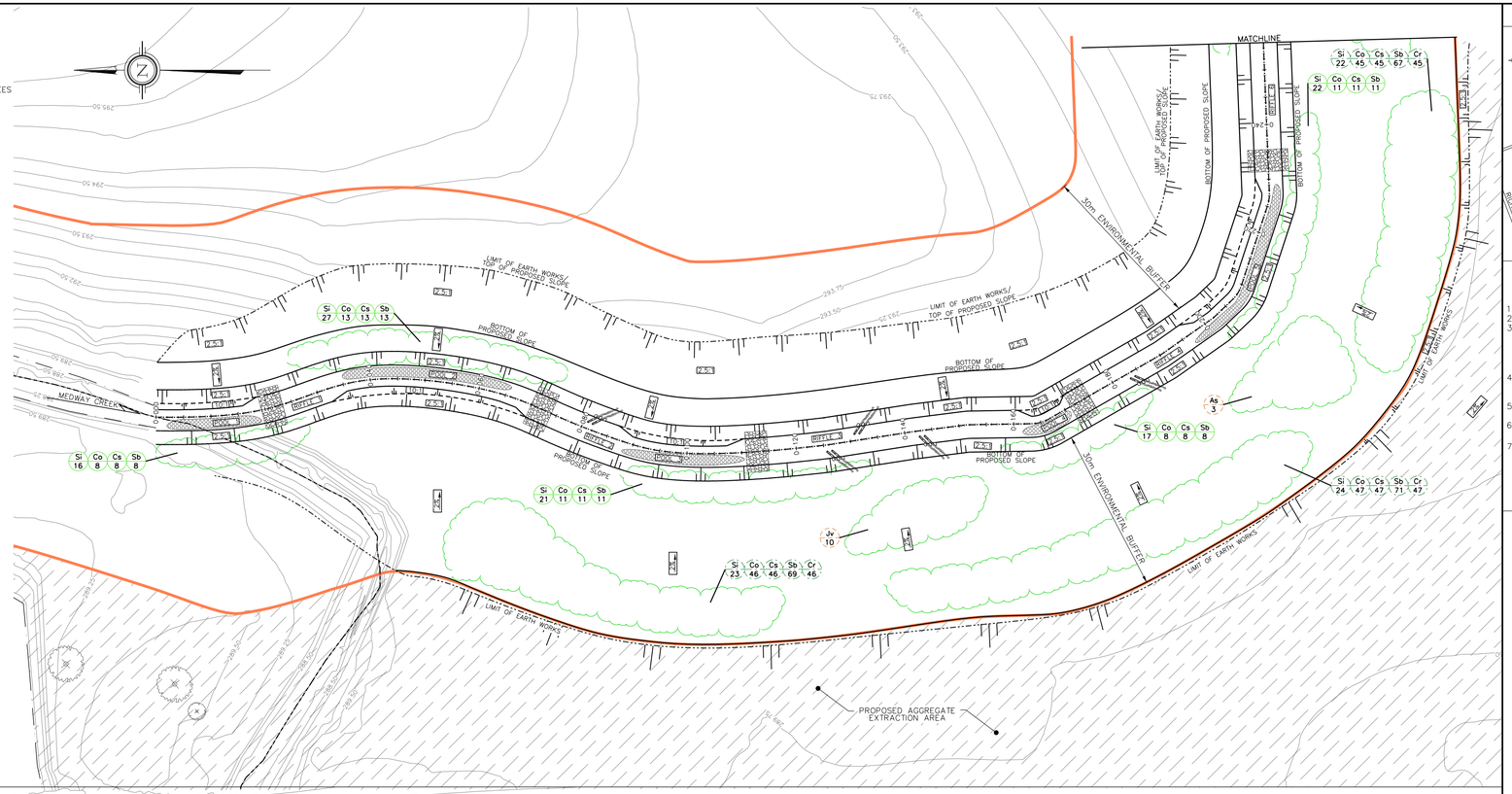
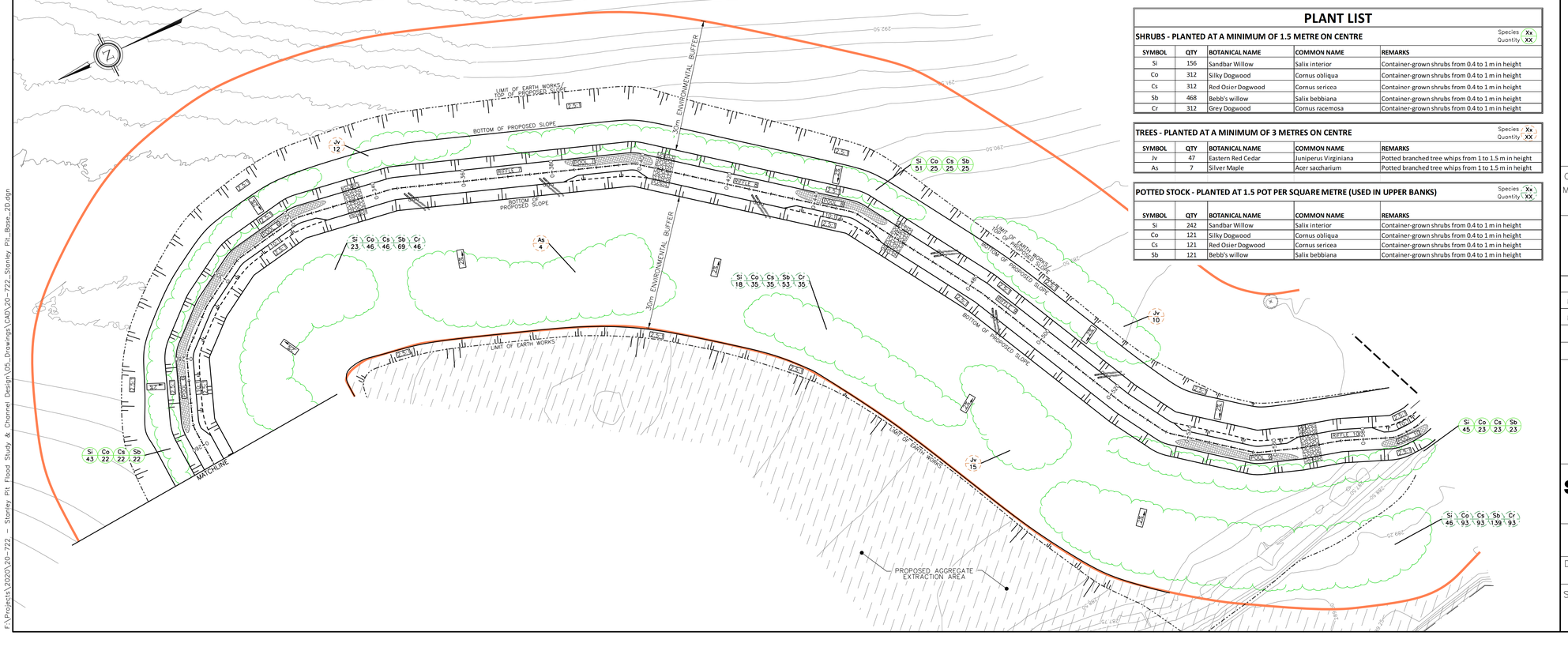
LANDSCAPING NOTES

1. DO NOT STOCKPILE TOPSOIL CONSTRUCTION MATERIALS OR DEBRIS WITHIN THE DRIP LINE OF EXISTING TREES TO REMAIN ON SITE. CONTRACTOR TO PROTECT EXISTING TREES TO REMAIN. THE ENGINEER MAY DIRECT THE CONTRACTOR TO MARK AND FENCE PARTICULAR EXISTING TREES PRIOR TO STOCKPILING MATERIALS.
2. IF SPECIFIED, ALL DORMANT MATERIAL SHALL BE INSTALLED IN THE SPRING (MARCH OR APRIL). IF INSTALLED OUTSIDE OF THIS WINDOW POTTED STOCK SHALL BE USED.
3. TREE REMOVAL – NO TREES SHALL BE REMOVED WITHOUT PRIOR APPROVAL FROM THE PROJECT COORDINATOR. ALL TREE REMOVALS TO BE COMPLETED IN ACCORDANCE WITH ACCEPTED FORESTRY PRACTICES AND WITHOUT IMPACT TO EXISTING TREES/VEGETATION TO REMAIN ON SITE.
4. ALL PLANT MATERIAL MUST BE GUARANTEED: PLANT MATERIAL THAT DOES NOT SURVIVE MUST BE REPLACED WITHIN ONE YEAR.
5. ALL EXPOSED SOILS OR AREAS IMPACTED BY CONSTRUCTION ARE TO BE SCARIFIED AND DECOMPACTED HAVING A MINIMUM 300mm DEPTH OF TOPSOIL AND SEEDED WITH A ONTARIO SEED COMPANY (OC) RURAL ONTARIO ROADSIDE NATIVE SEED MIXTURE 8145, SUPPLEMENT WITH 2% MILKWEED SPECIES AND A COVER CROP.
6. COVER CROP TO INCLUDE OAT (AVENA SATIVA) 40%, (HORDEUM VULGARE BARLEY) 45%, (ELYMUS CANADENSIS) CANADA WILD RYE 15%, DRY SEEDS AT 15KG/HA.
7. ALL SEEDED SURFACE WITH A GRADE >4:1 OR 25% ARE TO HAVE AN EROSION CONTROL BLANKET (TERRAFIX SC200B STRAW/COCONUT DOUBLE NET OR APPROVED EQUIVALENT) APPLIED.
8. WITH THE EXCEPTION TO SPECIFIC TREE PLANTING LOCATIONS ALL SHRUB PLANTINGS OR CLUSTERS OF TREE PLANTINGS ARE TO BE IN A RANDOM PATTERN WITH THE SPACING SPECIFIED. PLANTS ARE NOT TO BE INSTALLED IN PERFECT ROWS.





PLANT LIST

SHRUBS - PLANTED AT A MINIMUM OF 1.5 METRE ON CENTRE (Species Xx / Quantity XX)

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
Si	156	Sandbar Willow	Salix interior	Container-grown shrubs from 0.4 to 1 m in height
Co	312	Silky Dogwood	Cornus obliqua	Container-grown shrubs from 0.4 to 1 m in height
Cs	312	Red Osier Dogwood	Cornus sericea	Container-grown shrubs from 0.4 to 1 m in height
Sb	468	Bebb's willow	Salix bebbiana	Container-grown shrubs from 0.4 to 1 m in height
Cr	312	Grey Dogwood	Cornus racemosa	Container-grown shrubs from 0.4 to 1 m in height

TREES - PLANTED AT A MINIMUM OF 3 METRES ON CENTRE (Species Xx / Quantity XX)

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
Jv	47	Eastern Red Cedar	Juniperus Virginiana	Potted branched tree whips from 1 to 1.5 m in height
As	7	Silver Maple	Acer saccharium	Potted branched tree whips from 1 to 1.5 m in height

POTTED STOCK - PLANTED AT 1.5 POT PER SQUARE METRE (USED IN UPPER BANKS) (Species Xx / Quantity XX)

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
Si	242	Sandbar Willow	Salix interior	Container-grown shrubs from 0.4 to 1 m in height
Co	121	Silky Dogwood	Cornus obliqua	Container-grown shrubs from 0.4 to 1 m in height
Cs	121	Red Osier Dogwood	Cornus sericea	Container-grown shrubs from 0.4 to 1 m in height
Sb	121	Bebb's willow	Salix bebbiana	Container-grown shrubs from 0.4 to 1 m in height

KEY PLAN

LONDON, ON

0m 200m 400m

NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. CONTOUR INTERVAL IS 0.25m.
3. TOPOGRAPHIC SURVEY INFORMATION:
   - COORDINATE SYSTEM: UTM ZONE 17 N (GRID)
   - HORIZONTAL DATUM: NAD83 (CSRS – 2010)
   - VERTICAL DATUM: CGG2013
   - VERTICAL CONTROL: OBSERVED GPS ELEVATIONS
4. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE PROJECT ENGINEER.
5. ALL WORK SHALL BE N ACCORDANCE WITH CURRENT CITY OF LONDON STANDARD SPECIFICATIONS AND DRAWINGS UNLESS OTHERWISE NOTED HEREIN.
6. ORDER OF PRECEDENCE OF STANDARDS DRAWINGS IS FIRSTLY CITY OF LONDON AND SECONDLY ONTARIO PROVINCIAL STANDARDS (OPSD).
7. THE CONTRACTOR TO BE RESPONSIBLE FOR LOCATION OF ALL EXISTING U/G AND OVERHEAD UTILITIES. CONTRACTOR IS REQUIRED TO OBTAIN ALL LOCATIONS & NOTIFY THE VARIOUS UTILITY COMPANIES 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE MUNICIPALITY OF MIDDLESEX CENTRE AND CONSULTANT ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF EXISTING UTILITIES AS INDICATED ON THE DRAWING.

BENCHMARK

ELEVATIONS ARE BASED ON GPS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS–2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL CGG2013, AS SUPPLIED BY NATURAL RESOURCES CANADA.

CONTROL POINT 1:
ELEV: 292.56m
NORTHING: 4777805.8940
EASTING: 474206.5790
LOCATION: CROSS IN CONCRETE BY BRIDGE ON FIFTEEN MILE ROAD

COMPLETED BY:
GRECK AND ASSOCIATES LIMITED
SURVEY COMPLETED ON THE 4th & 5th DAYS OF NOVEMBER, 2020.

LEGEND

- WATERLINE AT TIME OF SURVEY
- 292.00 CONTOUR MAJOR – 0.25m INTERVAL
- 292.25 CONTOUR MINOR – 0.25m INTERVAL
- EXISTING DECIDUOUS TREE
- EXISTING WOODY FEATURE
- LIMIT OF EARTH WORKS
- PROPOSED 30m ENVIRONMENTAL BUFFER
- PROPOSED NATIVE PLANTINGS
- PROPOSED RIFFLE
- PROPOSED POOL
- PROPOSED AGGREGATE EXTRACTION AREA

CLIENT NAME:
McCann Redi-Mix Inc.

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GENERAL SITE GRADING PLAN

DATE:	DESIGN BY	DWG. BY	APPD. BY
MAY 2024	B.G.	P.G.	B.G.
SCALE: 1:500 (0m 10m 20m)	DRAWING NO. RP	PROJECT NO. 20-722	
	SHEET NO. 9		

PLOT SCALE: 1:0.0254 DATE PLOTTED: 2024-05-03

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