

PROFILE A -A' H = 1:100; V=1:10

WETLAND SEED MIX -VARIABLE WIDTH-—MIN. 1000 mm—— ■ MIN. 1000 mm— - LIVE STAKES (SEE DWG DET-1) HIGH WATER LEVEL 200 mm TOPSOIL 100% BIODEGRADABLE EROSION CONTROL BLANKET (BioNET NATIVE C125BN OR APPROVED 150 mm TOPSOIL MATERIAL EQUIVALENT), TOPSOIL, AND SEED 50 % TOPSOIL 50 % GRANULAR 'B' 40 % 175mm-250mm DIAMETER RIVERSTONE 30 % GRANULAR 'B' **CROSS SECTION** 30% NATIVE MATERIAL VARIABLE WIDTH 100% BIODEGRADABLE EROSION CONTROL BLANKET (BioNET C125BN OUTFALL (BY OTHERS) OR APPROVED EQUIVALENT), INV. 92.32 TOPSOIL, AND SEED HIGH WATER LEVEL _____ 200 mm TOPSOIL

PROFILE

STONE CORE WETLAND

LIVE STAKES (SEE DWG DET-1)

40 % 175mm-350mm DIAMETER RIVERSTONE

50 % TOPSOIL

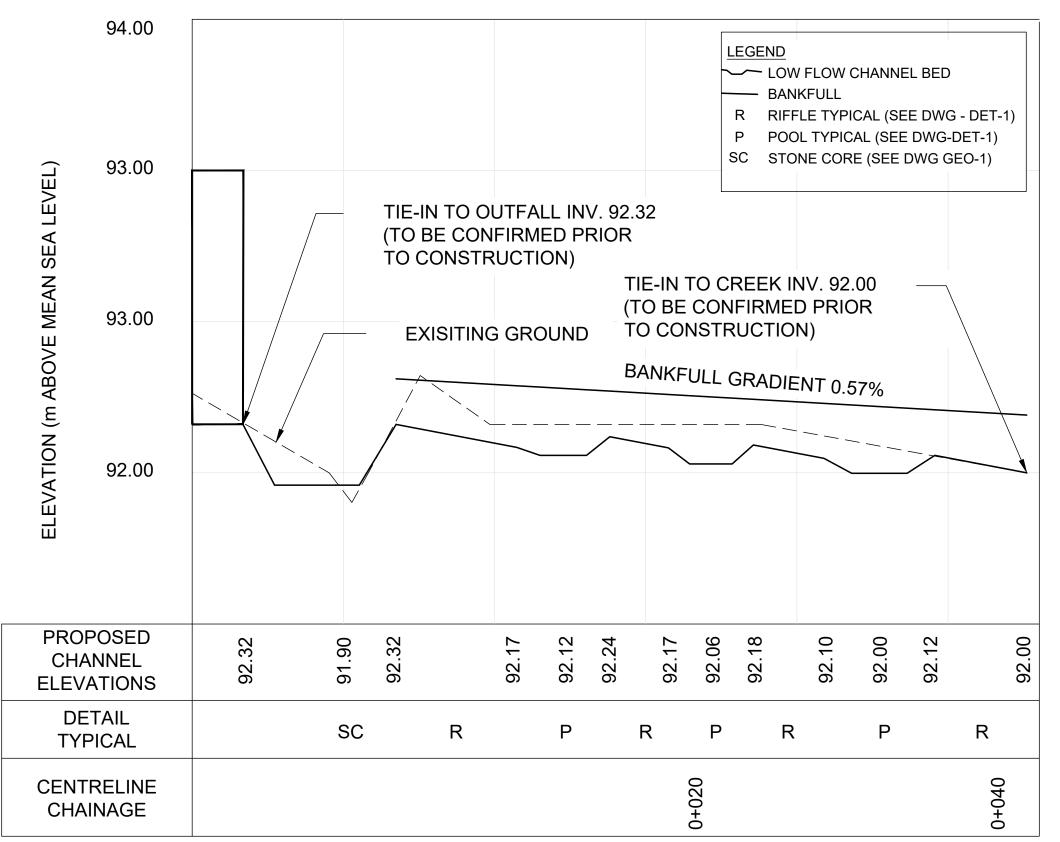
50 % GRANULAR 'B'

30 % GRANULAR 'B'

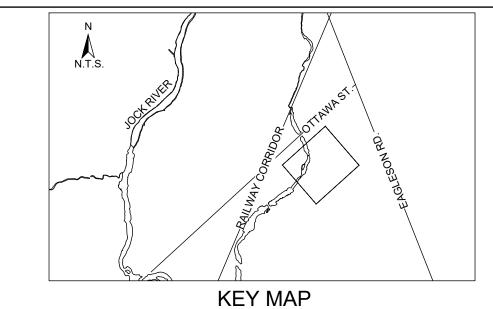
30% NATIVE MATERIAL

600 mm

150 mm TOPSOIL



PROFILE $H = \overline{1:250; V=1:25}$



- 1. THE ACCOMPANYING CHANNEL REALIGNMENT TECHNICAL DESIGN BRIEF PREPARED BY GEO MORPHIX LTD. (2025) PROVIDES ADDITIONAL DESIGN DETAILS AND DIRECTION FOR IMPLEMENTATION AND IS TO BE REVIEWED IN CONJUNCTION WITH THIS DRAWING SET.
- 2. ALL CONTRACT DRAWINGS, SPECIFICATIONS AND APPLICABLE PERMITS MUST BE KEPT ON SITE DURING CONSTRUCTION FOR REFERENCE.
- 3. THE CONTRACTOR MUST NOTIFY THE DESIGNER AND CONTRACT ADMINISTRATOR OF THE INTENT TO COMMENCE WORK AT LEAST 48 HOURS IN ADVANCE.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES. 5. LAYOUT MUST BE REVIEWED AND APPROVED BY THE DESIGNER / DESIGNER REPRESENTATIVE, DESIGNATED
- ENGINEER, AND THE CONTRACT ADMINISTRATOR.
- 6. CONSTRUCTION OBSERVATION IS TO BE PERFORMED BY A CERTIFIED FLUVIAL GEOMORPHOLOGIST OR EXPERIENCED ENVIRONMENTAL INSPECTOR UNDER DIRECTION FROM THE DESIGNER.
- 7. ON-SITE SUPPORT FROM PROJECT ENGINEER (E.G., GEOTECHNICAL, HYDROGEOLOGICAL, AND/OR WATER RESOURCES ENGINEER) REQUIRED TO ASSESS AND ENSURE FAVOURABLE SURFICIAL AND SUBSURFACE CONDITIONS TO SUPPORT CHANNEL REALIGNMENT CONSTRUCTION.
- 8. BE ADVISED THAT THE LOCAL REGULATORY BODY MAY, AT ANY TIME, WITHDRAW THIS PERMISSION, IF, IN THE OPINION OF THE AUTHORITY, THE CONDITIONS OF THE PERMIT ARE NOT BEING COMPLIED WITH. THIS APPROVAL DOES NOT EXEMPT THE PROPERTY OWNER/APPLICANT/AGENT FROM THE PROVISIONS OF ANY OTHER FEDERAL, PROVINCIAL OR MUNICIPAL STATUTES, REGULATIONS OR BY-LAWS, OR ANY RIGHTS UNDER COMMON LAW.

- WORKS SHALL BE COMPLETED DURING THE DESIGNATED IN-WATER WORKS WINDOW SET OUT BY MNR/DFO. TREE CLEARING IS TO BE COMPLETED OUTSIDE THE BIRD NESTING SEASON (APRIL 1ST TO AUGUST 31ST) AND THE BAT ROOSTING WINDOW (APRIL 1ST TO SEPTEMBER 30TH) TO COMPLY WITH THE FEDERAL MIGRATORY BIRDS CONVENTION ACT AND THE PROVINCIAL ENDANGERED SPECIES ACT. ANY TREES THAT REQUIRE REMOVAL OUTSIDE OF THIS TIMING WINDOW MUST FIRST BE INSPECTED BY A QUALIFIED BIOLOGIST TO DETERMINE THE
- 3. THE WEATHER FORECAST SHOULD BE CONTINUALLY MONITORED TO ENSURE THAT WORKS ARE UNDERTAKEN ONLY DURING FAVOURABLE WEATHER CONDITIONS.

4. COMPLETE THE WORKS WITH MINIMAL AVOIDABLE INTERRUPTIONS ONCE THEY COMMENCE. SITE AND MATERIAL MANAGEMENT

PRESENCE OF NESTING BIRDS OR BATS.

- 1. ALL CONSTRUCTION EQUIPMENT AND MATERIALS (IMPORTED OR EXCAVATED) MUST BE STORED AT LEAST 30 m AWAY FROM ANY WATERBODY IN A STABLE AREA ABOVE THE ACTIVE FLOODPLAIN, OR IN A DESIGNATED
- STAGING/STORAGE AREA. 2. IN THE EVENT OF AN UNEXPECTED STORM, ALL UNFIXED ITEMS THAT HAVE THE POTENTIAL TO CAUSE A SPILL OR AN OBSTRUCTION TO FLOW MUST BE MOVED A STABLE AREA ABOVE ACTIVE FLOODPLAIN.
- 3. STOCKPILES MUST BE LOCATED OUTSIDE THE ISOLATED WORK AREAS. 4. STABILIZE, TEMPORARILY OR PERMANENTLY, ANY DISTURBED AREAS AS WORK PROGRESSES, OR SOON AS
- 5. MINIMIZE THE AREA OF DISTURBANCE TO THE EXTENT POSSIBLE. ALL DISTURBED GROUND LEFT INACTIVE FOR
- MORE THAN 30 DAYS SHALL BE STABILIZED USING APPROPRIATE EROSION CONTROL MEASURES AND AN
- APPROPRIATE SEED MIX AS NOTED WITHIN THE FINAL APPROVED RESTORATION PLAN.
- 6. ALL VEGETATION, ADJACENT TO THE WORK AREA, MUST BE PROTECTED AND DELINEATED WITH CONSTRUCTION FENCING OR TREE PROTECTION BARRIERS.
- 7. ALL GRADES IN THE AREA REGULATED BY THE CONSERVATION AUTHORITY MUST BE MAINTAINED OR MATCHED,
- UNLESS OTHERWISE AUTHORIZED IN THE APPLICABLE PERMIT.
- 8. AN AFTER-HOURS CONTACT NUMBER IS TO BE VISIBLY POSTED ONSITE FOR EMERGENCIES. ALL THE PLANS SHOULD HAVE NAME AND CONTACT INFO OF THE PERSON RESPONSIBLE FOR ESC MEASURES.

1. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED PRIOR TO START OF WORKS.

EROSION AND SEDIMENT CONTROL

- 2. FOLLOWING INSTALLATION OF THE PROPOSED ESC MEASURES, A QUALIFIED AGENT OF THE PROPONENT (E.G. CAN-CISEC CERTIFIED MONITOR) WILL CONDUCT REGULAR SITE VISITS TO MONITOR ALL WORKS, PARTICULARLY THE CONDITION OF THE ESC MEASURES, DEWATERING, AND IN- OR NEAR-WATER WORKS. SHOULD CONCERNS ARISE; THE ENVIRONMENTAL MONITOR WILL CONTACT THE PROPONENT, THE CONSERVATION AUTHORITY, AND ANY OTHER APPROPRIATE PARTIES. 3. EROSION AND SEDIMENT CONTROLS MUST BE MAINTAINED DURING CONSTRUCTION, AND ANY REQUIRED REPAIRS
- OR REPLACEMENTS MUST BE COMPLETED WITHIN 24 HOURS AFTER THEY HAVE BEEN IDENTIFIED DURING THE 4. EROSION AND SEDIMENT CONTROLS MAY REQUIRE PERIODIC ADJUSTMENTS TO REFLECT CHANGING SITE
- CONDITIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR THESE ADJUSTMENTS TO ENSURE PROPER
- 5. ANY CHANGES TO THE EROSION AND SEDIMENT CONTROL PLAN BEYOND MINOR ADJUSTMENTS MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR.
- ADDITIONAL EROSION AND SEDIMENT CONTROL SUPPLIES MUST BE KEPT ON SITE IN ORDER TO FACILITATE IMMEDIATE REPAIRS AND/OR UPGRADES AS NEEDED. 7. ALL TEMPORARY SEDIMENT CONTROLS MUST BE REMOVED AFTER THE CONTRACT ADMINISTRATOR DEEMS THE
- SITE TO BE STABLE. 8. THE PROJECT PROPONENT OR THEIR REPRESENTATIVE IS ULTIMATELY RESPONSIBLE FOR CONTROLLING
- SEDIMENT AND EROSION WITHIN THE CONSTRUCTION SITE FOR THE TOTAL PERIOD OF THE CONSTRUCTION. 9. IF EXCESSIVE SILTATION RESULTS FROM THE CONSTRUCTION ACTIVITIES. THE ONSITE SUPERVISOR/INSPECTOR AND/OR THE LOCAL REGULATORY BODY RESERVE THE RIGHT TO REQUEST ADDITIONAL ESC MEASURES WHICH

DELETERIOUS SUBSTANCE CONTROL/SPILL MANAGEMENT

- 1. PREVENT THE RELEASE OF SEDIMENT. SEDIMENT-LADEN WATER. RAW CONCRETE, CONCRETE LEACHATE OR ANY OTHER DELETERIOUS SUBSTANCES INTO ANY WATERBODY, RAVINE OR STORM SEWER SYSTEM.
- ENSURE EQUIPMENT AND MACHINERY ARE IN GOOD OPERATING CONDITION (POWER WASHED), FREE OF LEAKS, EXCESS OIL, AND GREASE. 3. NO EQUIPMENT REFUELLING OR SERVICING SHOULD BE UNDERTAKEN WITHIN 30 m OF ANY WATERCOURSE OR
- SURFACE WATER DRAINAGE.

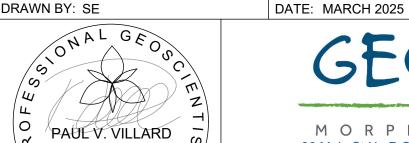
 4. A SPILL CONTAINMENT KIT MUST BE READILY ACCESSIBLE ON SITE IN THE EVENT OF A RELEASE OF A
- DELETERIOUS SUBSTANCE TO THE ENVIRONMENT. ONSITE STAFF MUST BE TRAINED IN ITS USE.
- THE CONTRACT ADMINISTRATOR MUST BE NOTIFIED IMMEDIATELY IN THE EVENT OF A SPILL OF DELETERIOUS SUBSTANCE. ANY SEDIMENT SPILL FROM THE SITE SHOULD BE REPORTED TO MINISTRY OF ENVIRONMENT (SPILL

WORK AREA ISOLATION

- 1. ALL WORK IN ISOLATED WORK AREAS MUST BE COMPLETED IN THE DRY, AN ADEQUATE NUMBER OF PUMPS MUST
- 2. CROSSING AN ACTIVE WATERCOURSE OR WETLAND BY EQUIPMENT, VEHICLES, PERSONNEL, ETC. IS NOT PERMITTED UNLESS APPROVED BY THE CONSERVATION AUTHORITY. ALL ACCESS TO WORK SITES SHALL BE FROM EITHER SIDES OF THE WATERCOURSE OR WETLAND.
- THE UNWATERING DISCHARGE LOCATION MUST BE LOCATED AT LEAST 30 m FROM ANY WATERCOURSE OR WETLAND IN AN AREA WITH DENSE VEGETATIVE GROUNDCOVER, AND WHERE THE DISCHARGE CAN RETURN TO THE WATERBODY DOWNSTREAM OF THE WORK AREA OVER THE GROUNDCOVER.
- FISH MUST BE REMOVED FROM THE WORK AREA ONCE ISOLATED. FISH SALVAGE MUST BE COMPLETED BY A QUALIFIED TECHNICIAN WITH A LICENSE FROM THE ONTARIO MINISTRY OF NATURAL RESOURCES.

25/03/07 FIRST SUBMISSION DETAILED DESIGN DATE REVISIONS

CHECKED BY: PV DESIGNED BY: LD



PRACTISING MEMBER ~

ONTARIO



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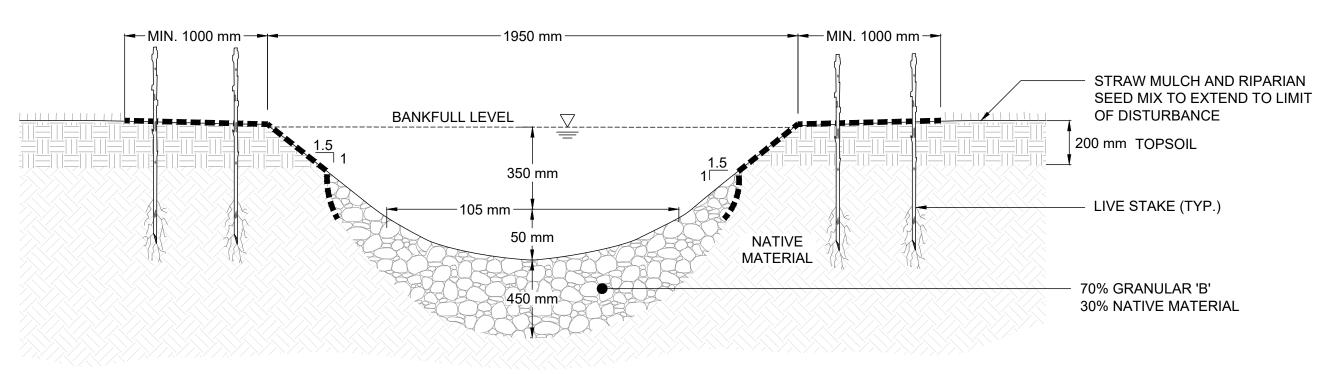
TAMARACK RICHMOND 6038 OTTAWA STREET RICHMOND, ON

MARLBOROUGH CREEK OUTFALL DESIGN PLANFORM AND PROFILE

PROJECT No.: PN25011 DRAWING No.: GEO-1 SCALE: AS NOTED

SCALED FOR PLOT ON 'ARCH D'

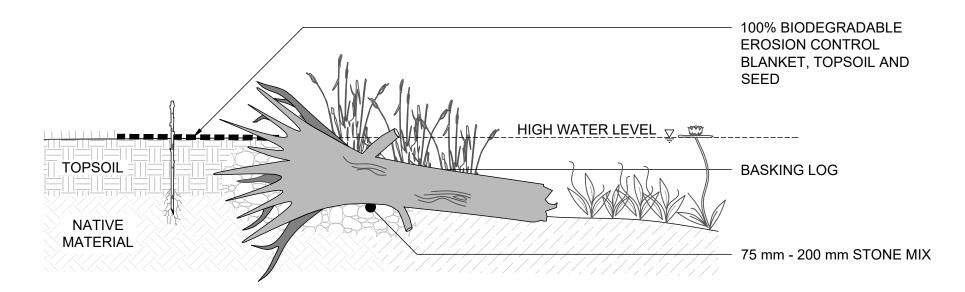
SHEET 1 OF 2



|**−** MIN. 1000 mm **−** – 2450 mm – ►|- MIN. 1000 mm --| STRAW MULCH AND RIPARIAN SEED MIX TO EXTEND TO LIMIT OF BANKFULL LEVEL DISTURBANCE 200 mm TOPSOIL - LIVE STAKE (TYP.) 500 mm MATERIAL 60% GRANULAR 'B' OUTSIDE BANK OF 40% NATIVE MATERIAL MEANDER BEND

TYPICAL RIFFLE

CHANNEL CROSS SECTIONS



- ANCHOR AND SUPPORT BASKING LOGS WITH 75 mm 200 mm STONE MIX.
- FIRMLY COMPACT STONE MIX TO PREVENT THROUGH FLOW.
- BURY 1/3 OF LOG INTO SOIL.
- LENGTH OF BASKING LOGS ARE TO BE INSTALLED 1000 1500 mm INTO WET AREA. BASKING LOGS TO BE A MINIMUM 500 mm IN DIAMETER AND 2000 - 2500 mm IN LENGTH.
- BASKING LOGS SHOULD BE ANGLED TO PROMOTE TURTLE BASKING.
- BASKING LOGS SHOULD BE A MIXTURE OF SUITABLE HARDWOOD AND SOFTWOOD

BASKING LOG

LIVE STAKE LIVE STAKE ONE OR TWO YEARS AFTER INSTALLATION SOIL SURFACE

SCIENTIFIC NAME	COMMON NAME	QTY	CONDITION
CORNUS STOLONIFERA	RED OSIER DOGWOOD	65	1 m, LIVE STAKE
SALIX BEBBIANA	BEBB'S WILLOW	65	1 m, LIVE STAKE
SALIX DISCOLOR	PUSSY WILLOW	65	1 m, LIVE STAKE
SALIX INTERIOR	SANDBAR WILLOW	65	1 m, LIVE STAKE
SALIX LUCIDA	SHINING WILLOW	65	1 m, LIVE STAKE

- QUANTITY TO BE DETERMINED BASED ON AREA OF DISTURBANCE TO BE RESTORED
- LIVE STAKES SHOULD BE FROM AT MINIMUM 2-YEAR OLD STOCK. LIVE STAKES ARE TO BE INSTALLED AT A DENSITY OF 3 STAKES PER SQUARE METRE.
- 4. LIVE STAKES SHOULD BE PRE-SOAKED (SUBMERGED IN WATER) FOR AT LEAST 24 HOURS AFTER HARVESTING AND IMMEDIATELY BEFORE INSTALLATION.
- 5. LIVE STAKES SHOULD NOT BE STORED FOR A PERIOD LONGER THAN 2 DAYS, UNLESS THEY ARE
- 6. THE CONTRACTOR SHALL PROTECT PLANT MATERIALS FROM DRYING FROM THE TIME OF
- LIVE STAKES ARE TO BE A MINIMUM OF 25 mm IN DIAMETER AND CUT TO A LENGTH OF 1000 mm. CUT ANGLE AT THE BOTTOM OF THE STAKE AND FLAT ON THE TOP.
- TRIM ALL SIDE BRANCHES WHILE TAKING CARE NOT TO DAMAGE THE BARK
- 10. INSTALL STAKES WITH BUDS POINTING UPWARDS AND THICKER STEM IN THE BED.
- 11. LIVE STAKES SHOULD BE INSTALLED USING A LARGE RUBBER MALLET.
- 12. 80% OF THE STAKE IS TO BE BELOW SURFACE.
- 13. TAMP THE LIVE STAKE INTO THE GROUND AT RIGHT ANGLE TO THE SURFACE. 14. IN COMPACT SOIL A PILOT HOLE SHOULD BE USED TO LIMIT DAMAGE TO THE STAKES.
- 15. IF USING A PILOT HOLE REPACK SOIL AROUND THE LIVE STAKE.
- 16. LIVE STAKES SHOULD STAND FIRM FROM THE SOIL FOLLOWING INSTALLATION.
- 17. ALL STAKES NOT PLANTED TO THE SPECIFICATIONS ABOVE WILL BE REPLACED AT THE
- CONTRACTOR'S EXPENSE.

LIVE STAKING

TYPICAL POOL

EROSION CONTROL BLANKET SPECIFICATIONS

- 1. A BIODEGRADABLE EROSION CONTROL BLANKET (ECB) SHALL BE INSTALLED ON ALL DISTURBED NATURAL SURFACES FOLLOWING THE PLACEMENT OF TOPSOIL AND APPLICATION OF THE NATIVE SEED MIX.
- 2. THE ECB MUST BE CONSTRUCTED OF 100% WOVEN COCONUT FIBRE (E.G., COIR) OR STRAW MAT WITHIN A GEOJUTE NETTING (TOP AND BOTTOM) WITH BIODEGRADABLE THREAD. NON-BIODEGRADABLE MATERIAL INCLUDING POLYPROPELENE OR PLASTICS WITH A BIODEGRADABLE RATING ARE NOT ACCEPTABLE. THE MINIMUM WEIGHT OF THE ECB MUST BE $400 \text{ g/m}^2 (12 \text{ oz./yd}^2).$
- 3. TO INSTALL, THE ECB MUST BE UNROLLED DOWNSLOPE OR IN DIRECTION OF WATER FLOW. ADJACENT ECBS SHOULD OVERLAP A MINIMUM OF 150 mm ALONG THE EDGES. AT THE END OF EACH ROLL, FOLD BACK 100 mm TO 200 mm OF THE ECB. OVERLAP THIS 100 mm TO 200 mm OVER THE START OF THE NEXT ROLL. SECURE THE TWO LAYERS TO THE GROUND SECURELY
- 4. BIODEGRADABLE OR TAPERED WOODEN STAKES SHALL BE USED TO SECURE THE BLANKET. STAKES SHALL BE INSTALLED AT THE SPACING RECOMMENDED BY THE ECB MANUFACTURER TO PREVENT SURFACE RUNOFF FROM ERODING THE UNDERLYING SOIL.

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE	
ASCLEPIAS INCARNATA	SWAMP MILKWEED	5	
CAREX BEBBI	BEBBS SEDGE	15	
CAREX LURIDA	LURID SEDGE	4	
CAREX SCOPARIA	BLUNT BROOM SEDGE	10	
CAREX VULPINOIDEA	FOX SEDGE	10	
ELYMUS VIRGINICUS	VIRIGINIA WILD RYE	15	
EUPATORIUM PERFOLIATUM	BONESET	2	
EUTROCHIUM MACULATUM	SPOTTED JOE PYE WEED	2	
GLYCERIA STRIATA	FOWL MANNA GRASS	5	
JUNCUS EFFUSUS	SOFT RUSH	5	
LOBELIA SIPHILITICA	BLUE LOBELIA	1	
MIMULUS RINGENS	MONKEY FLOWER	1	
SCIRPUS ATROVIRENS	DARK GREEN BULRUSH	5	
SCIRPUS CYPERINUS	WOOLGRASS	5	
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	2	
SYMPHYOTRICHUM PILOSUM	HEATH ASTER	2	
SYMPHYOTRICHUM PUNICEUM	PURPLE STEMMED ASTER	1	
VERBENA HASTATA	BLUE VERVAIN	10	

- 1. APPLY SEED MIX AT A RATE OF 30 kg PER HECTARE.
- 2. SEEDING SHALL OVERLAP ADJACENT GROUND COVER BY 300 mm. 3. SIMULTANEOUSLY APPLY A NURSE CROP OF ANNUAL OATS (AVENA SATIVA) AT A RATE OF
- 30 kg PER HECTARE.

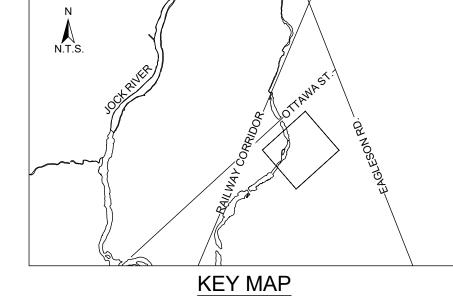
WETLAND SEED MIX

4. WATER SOIL AFTER SEED APPLICATION.

RIPARIAN SEED MIX

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE
ACORUS AMERICANUS	SWEET FLAG	10
ASCLEPIAS INCARNATA	SWAMP MILKWEED	10
CAREX SCOPARIA	BLUNT BROOM SEDGE	15
CAREX VULPINOIDEA	FOX SEDGE	15
ELYMUS VIRGINICUS	VIRIGINIA WILD RYE	15
EUPATORIUM MACULATUM	SPOTTED JOE PYE WEED	5
SCIRPUS ATROVIRENS	GREEN BULLRUSH	15
SYMPHYOTRICHUM PUNICEUM	PURPLE STEMMED ASTER	5
VERBENA HASTATA	BLUE VERVAIN	10
NOTES:		

- 1. APPLY SEED MIX AT A RATE OF 30 kg PER HECTARE.
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- 4. WATER SOIL AFTER SEED APPLICATION.



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- 7. ON-SITE SUPPORT FROM PROJECT ENGINEER (E.G., GEOTECHNICAL, HYDROGEOLOGICAL, AND/OR WATER RESOURCES ENGINEER) REQUIRED TO ASSESS AND ENSURE FAVOURABLE SURFICIAL AND SUBSURFACE

CONDITIONS TO SUPPORT CHANNEL REALIGNMENT CONSTRUCTION.

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- 3. THE WEATHER FORECAST SHOULD BE CONTINUALLY MONITORED TO ENSURE THAT WORKS ARE UNDERTAKEN ONLY DURING FAVOURABLE WEATHER CONDITIONS. 4. COMPLETE THE WORKS WITH MINIMAL AVOIDABLE INTERRUPTIONS ONCE THEY COMMENCE.

SITE AND MATERIAL MANAGEMENT

- 1. ALL CONSTRUCTION EQUIPMENT AND MATERIALS (IMPORTED OR EXCAVATED) MUST BE STORED AT LEAST 30 m AWAY FROM ANY WATERBODY IN A STABLE AREA ABOVE THE ACTIVE FLOODPLAIN, OR IN A DESIGNATED 2. IN THE EVENT OF AN UNEXPECTED STORM, ALL UNFIXED ITEMS THAT HAVE THE POTENTIAL TO CAUSE A SPILL OR
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- 5. MINIMIZE THE AREA OF DISTURBANCE TO THE EXTENT POSSIBLE. ALL DISTURBED GROUND LEFT INACTIVE FOR MORE THAN 30 DAYS SHALL BE STABILIZED USING APPROPRIATE EROSION CONTROL MEASURES AND AN
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 8. AN AFTER-HOURS CONTACT NUMBER IS TO BE VISIBLY POSTED ONSITE FOR EMERGENCIES. ALL THE PLANS
- SHOULD HAVE NAME AND CONTACT INFO OF THE PERSON RESPONSIBLE FOR ESC MEASURES. **EROSION AND SEDIMENT CONTROL**

2. FOLLOWING INSTALLATION OF THE PROPOSED ESC MEASURES, A QUALIFIED AGENT OF THE PROPONENT (E.G. CAN-CISEC CERTIFIED MONITOR) WILL CONDUCT REGULAR SITE VISITS TO MONITOR ALL WORKS, PARTICULARLY THE CONDITION OF THE ESC MEASURES. DEWATERING, AND IN- OR NEAR-WATER WORKS. SHOULD CONCERNS ARISE; THE ENVIRONMENTAL MONITOR WILL CONTACT THE PROPONENT, THE CONSERVATION AUTHORITY, AND ANY OTHER APPROPRIATE PARTIES.

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- 7. ALL TEMPORARY SEDIMENT CONTROLS MUST BE REMOVED AFTER THE CONTRACT ADMINISTRATOR DEEMS THE
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DELETERIOUS SUBSTANCE CONTROL/SPILL MANAGEMENT

EITHER SIDES OF THE WATERCOURSE OR WETLAND.

- 1. PREVENT THE RELEASE OF SEDIMENT, SEDIMENT-LADEN WATER, RAW CONCRETE, CONCRETE LEACHATE OR ANY OTHER DELETERIOUS SUBSTANCES INTO ANY WATERBODY, RAVINE OR STORM SEWER SYSTEM.
- ENSURE EQUIPMENT AND MACHINERY ARE IN GOOD OPERATING CONDITION (POWER WASHED), FREE OF LEAKS, EXCESS OIL. AND GREASE.
- 3. NO EQUIPMENT REFUELLING OR SERVICING SHOULD BE UNDERTAKEN WITHIN 30 m OF ANY WATERCOURSE OR SURFACE WATER DRAINAGE.

 4. A SPILL CONTAINMENT KIT MUST BE READILY ACCESSIBLE ON SITE IN THE EVENT OF A RELEASE OF A
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WORK AREA ISOLATION

- 1. ALL WORK IN ISOLATED WORK AREAS MUST BE COMPLETED IN THE DRY. AN ADEQUATE NUMBER OF PUMPS MUST 2. CROSSING AN ACTIVE WATERCOURSE OR WETLAND BY EQUIPMENT, VEHICLES, PERSONNEL, ETC. IS NOT PERMITTED UNLESS APPROVED BY THE CONSERVATION AUTHORITY. ALL ACCESS TO WORK SITES SHALL BE FROM
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- 4. FISH MUST BE REMOVED FROM THE WORK AREA ONCE ISOLATED. FISH SALVAGE MUST BE COMPLETED BY A QUALIFIED TECHNICIAN WITH A LICENSE FROM THE ONTARIO MINISTRY OF NATURAL RESOURCES.

1.	25/03/07	LD	FIRST SUBMISSION DETAILED DESIGN		
	DATE	BY	REVISIONS		
DESIGNED BY: LD		CHECKED BY: PV			
DRAWN BY: SE			DATE: MARCH 2025		
SONAL GEOSCO			GEO		





TAMARACK RICHMOND 6038 OTTAWA STREET RICHMOND, ON

MARLBOROUGH CREEK **OUTFALL DESIGN DETAILS**

PROJECT No.: PN25011 DRAWING No.: DET-1 SCALE: AS NOTED

SCALED FOR PLOT ON 'ARCH D'

SHEET 2 OF 2