APPENDIX M  (Cont'd)
Bid Package – Tamarack Creek
ROUGE RIVER AOC HABITAT PROJECT:
TAMARACK CREEK - STREAM AND WETLAND RESTORATION

SOUTHFIELD, MICHIGAN

GLRI EPA DESIGN AWARD NO. GL-00E02344
GLRI EPA IMPLEMENTATION AWARD NO. GL-00E02478

FOR BIDDING JANUARY 2021

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26. PROFILE (2/2)
27. DETAILS (1/2)
28. DETAILS (2/2)
EXISTING SITE CONDITIONS:

1. Contractor shall become familiar with all existing site conditions prior to starting work.
2. The contractor acknowledges and agrees that the performance of the work is required within the Rouge River System and floodplain and that the Rouge River water level fluctuates.
3. The contractor acknowledges and agrees that they have taken into account the potential for any water level changes that may occur in existing, surrounding, and nearby existing conditions.
4. The contractor shall ensure that the proposed work is consistent with all existing site conditions.
5. The contractor shall ensure that the proposed work is consistent with all existing wetland conditions.
6. The contractor acknowledges that delays in the start of or completion of work due to fluctuations in water levels throughout the duration of the project may cause a change in conditions or an unforeseen event.
7. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
8. The contractor acknowledges that the performance of work is subject to weather, flooding, or water levels.
9. All elevations shown are in NAVD88 datum.
10. Contractor to confirm existing conditions prior to starting such work.
11. Contractor shall understand the site conditions that will affect the cost, schedule, or performance of work in advance of starting such work.
12. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
13. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
14. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
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19. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
20. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
21. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
22. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
23. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
24. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
25. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
26. The contractor acknowledges that delays in the start of or completion of work due to weather, flooding, or water levels may cause a change in conditions.
BEFORE YOU DIG
CALL MISS DIG
0
20'
40'
80'
SCALE: 1" = 40' @ 22" x 34"
EXISTING CONDITIONS - ZONE A

EXISTING CONDITIONS - ZONE A
1.
SURVEY INFORMATION PROVIDED BY MIDWESTERN
CONSULTING, INC.
2.
SURVEY WAS CONDUCTED IN DECEMBER, 2018
3.
ALL ELEVATIONS SHOWN ARE IN NAVD88 DATUM
4.
CONTRACTOR TO CONFIRM EXISTING CONDITIONS
PRIOR TO CONSTRUCTION AS NEEDED
5.
SEE EXISTING CONDITIONS NOTES ON SHEET 2

BENCHMARK #1
TOP OF CONCRETE HEADWALL OVER 72" CULVERT
LOCATED +/-510' SOUTH OF THE C/L 10 MILE ROAD; +/- 55'
SOUTH OF SOUTHEAST CORNER OF BUILDING; +/- 35' EAST OF
TREE (TAG #1022, 15" BOX ELDER).
ELEVATION = 660.60 (NAVD 88 DATUM)

BENCHMARK #2
TOP OF SPIKE SET IN SOUTHEAST FACE OF TREE (TAG
#1278, 18" RED OAK); +/-47' NORTHEAST OF C.P. #3096; +/-31'
WEST OF THE CENTERLINE OF TAMARACK CREEK; +/-179'
SOUTH-SOUTHWEST OF C.P. #11.
ELEVATION = 660.92 (NAVD 88 DATUM)

NOTES:
1.
2.
3.
4.
5.
6.

[index map]
EXISTING CONDITIONS - ZONE B

1. SURVEY INFORMATION PROVIDED BY MIDWESTERN CONSULTING, INC.
2. SURVEY WAS CONDUCTED IN DECEMBER, 2018
3. ALL ELEVATIONS SHOWN ARE IN NAVD88 DATUM
4. CONTRACTOR TO CONFIRM EXISTING CONDITIONS PRIOR TO CONSTRUCTION AS NEEDED
5. SEE EXISTING CONDITIONS NOTES ON SHEET 2

BENCHMARK #1
TOP OF CONCRETE HEADWALL OVER 72" CULVERT LOCATED +/-510' SOUTH OF THE C/L 10 MILE ROAD; +/- 55' SOUTH OF SOUTHEAST CORNER OF BUILDING; +/- 35' EAST OF TREE (TAG #1022, 15" BOX ELDER). ELEVATION = 660.60 (NAVD 88 DATUM)

BENCHMARK #2
TOP OF SPIKE SET IN SOUTHEAST FACE OF TREE (TAG #1278, 18" RED OAK); +/-47' NORTHEAST OF C.P. #3096; +/-31' WEST OF THE CENTERLINE OF TAMARACK CREEK; +/-179' SOUTH-SOUTHWEST OF C.P. #11. ELEVATION = 660.92 (NAVD 88 DATUM)
TREES TO BE REMOVED

NOTE: THE LIST ABOVE INCLUDES ONLY TREES TO BE REMOVED.
A FULL TREE INVENTORY IS AVAILABLE UPON REQUEST.
1. **REMOVE CULVERT**
   - Remove 16 LF of existing culvert

2. **REMOVE FENCE**
   - Remove 800 LF of existing fence as necessary for grading

3. **REMOVE CROSSING**
   - 3 CMP culverts TII to be removed including bedding materials if present
   - 450 TONS of concrete rubble
   - 2000 CYDS fill

4. **REMOVE DRAIN TILE AS NEEDED**
   - Drain tile to be field located and removed only to the extent as necessary for proposed excavation and grading

5. **REMOVE BRIDGE ABUTMENTS**
   - 50 TONS reinforced concrete abutments and footings (~2 ton/cy)

**INDEX MAP**

**NOTE:** No demolition needed outside of these limits, with the exception of some tree and brush clearing for the access route. For tree removal list, see Sheet 7.

**SITE CLEARING NOTES:**
1. Total site clearing area: 8.0 acres

**SCHEDULING NOTES:**
1. Due to fish spawning and migration, no in-stream work shall occur between March 15 and June 15.

**TREE REMOVAL NOTES:**
1. Trees as designated on the list on Sheet 7 to be removed as part of this project.
2. All trees to be removed and all clearing to be field verified by engineer prior to normal activities.
3. Some trees may be salvaged for use in habitat structures as shown on Sheet 7. Trees to be cut only by engineers prior to salvage.
4. All excess woody debris to be disposed of legally.
5. For major tree salvage, trees, stumps and roots to be removed to a depth of 12 inches below final grade.
6. Holes and trenches remaining after grading to be graded or filled in.
7. Any merchantable timber may be considered property of the contractor.
8. ECT recommends that tree removals occur October 1 through March 31 when bats are not present. If these cutting restrictions cannot be met, potential bat roost surveys may be conducted and equipment access routes selected to avoid the identified potential roosts.

**EASTERN MASSASAUGA RATTLESNAKE (EMR) NOTES:**
1. Contractor to use wildlife-safe materials for erosion control and site restoration (materials that do not incorporate plastic-mesh or other similar material that could enshroud EMR).
2. Contractor and subcontractors on site shall check maps to identify potential EMR habitats and avoid these areas (see MAP 602). If there is any question about locations of wildlife, contact the MDNR at 800-354-1348.
3. Contractors must report any EMR observations or observations of any other listed threatened or endangered species during project implementation to engineer within 24 hours.
BEFORE YOU DIG
CALL MISS DIG
0
60'
120'
240'
SCALE: 1" = 120' @ 22" x 34"

PROPOSED PLAN - OVERVIEW

ECT PROJECT NUMBER
180611-0300
SHEET NUMBER
PROPOSED HABITAT STRUCTURES SCHEDULE

GENERAL CATCHMENT NOTES:
1. PROPOSED PLANNING OUTLINE IS BASED ON A BASE SURVEY CONDUCTED BY MIDWESTERN CONSULTING IN DECEMBER 2018.

SITE RESTORATION AND CLEANUP:
1. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS BUILT DOCUMENTS AT THE COMPLETION OF THE WORK. AS BUILT DRAWINGS SHALL INCLUDE 1 COPY OF MARKED UP FIELD PLANS AND 3 COPIES OF CERTIFIED AS-BUILT DRAWINGS AND 1 DIGITAL FILE CONTAINING AUTOCAD AS-BUILT INFORMATION. THE BASE SURVEY DRAWING WILL BE PROVIDED TO THE CONTRACTOR.

MATERIAL NOTES:
1. ALL MATERIALS SHALL CONFORM TO DETAILS AND SPECIFICATIONS IN THE DRAWINGS.

SUBMITTALS:
1. SUBMITTALS FOR APPROVAL BY ENGINEER ARE REQUIRED FOR ALL MATERIALS PRIOR TO MOBILIZATION. ALL EXPENSES INCURRED BY CONTRACTOR PRIOR TO ENGINEER'S APPROVAL SHALL NOT BE PAID BY OWNER.

POSSIBLE PERIOD:
1. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FOLLOWING THE APPROVAL OF CONSTRUCTION INSPECTION AT SUBSTANTIAL COMPLETION. THE CONTRACTOR SHALL RESPOND WITHIN TWO WEEKS OF WRITTEN REQUESTS BY THE OWNER FOR REPLACEMENT/REPAIR. IF THE CONTRACTOR FAILS TO RESPOND WITHIN THIS TIME, THE OWNER MAY PROCEED WITH REPLACEMENT WORK AND BILL THE CONTRACTOR.

2. CONTRACTOR SHALL PROVIDE GRADE VERIFICATION STAKES AT ALL PROPOSED SPOT ELEVATIONS SHOWN ON THE PLANS AND EVERY 50 FEET ALONG PROPOSED CONTOURS AS DIRECTED BY THE ENGINEER.

3. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING VEGETATION IN AREAS ADJACENT TO WORK AREAS. ALL DISTURBED AREAS SHALL BE REVEGETATED AND RESTORED TO EXISTING CONDITIONS.

4. ALL IMPORTED SOIL SOURCES SHALL BE APPROVED BY THE ENGINEER IN WRITING PRIOR TO DELIVERY TO THE PROJECT SITE.
EXISTING CONTOUR
EXIST STREAM CENTERLINE
EXIST PROPERTY LINE
EXIST STORM SEWER
EXIST CATCH BASIN/INFLEET END SECTION
CULVERT
EXIST FENCE
EXIST WETLAND
FEMA 100-YR FLOOD BOUNDARY
PR. STREAM CENTERLINE
PR. STREAM PROFILE
PR. TOP OF BANK
PR. BOTTOM OF BANK
PR. CONTOUR
PR. BASIN EXCAVATION AREA
PR. ACCESS ROUTE
PR. WETLAND

INDEX MAP

EXIST. CONTOUR
EXIST. STREAM CENTERLINE
EXIST. PROPERTY LINE
EXIST. STORM SEWER
EXIST. CATCH BASIN/INFLEET END SECTION
CULVERT
EXIST. FENCE
EXIST. WETLAND
FEMA 100-YR FLOOD BOUNDARY
PR. STREAM CENTERLINE
PR. STREAM PROFILE
PR. TOP OF BANK
PR. BOTTOM OF BANK
PR. CONTOUR
PR. BASIN EXCAVATION AREA
PR. ACCESS ROUTE
PR. WETLAND

LEGEND

LEGEND

EX. WETLAND 1
EX. WETLAND 2

SCALE: 1" = 40' @ 22" x 34"

EXIST. CONTOUR
EXIST. STREAM CENTERLINE
EXIST. PROPERTY LINE
EXIST. WETLAND

BEGIN STREAM REALIGNMENT STA. 4+27

DO NOT DISTURB EXIST. STREAM BANKS WITHIN BASIN
FOR STREAM PROFILE, SEE SHEETS 25 AND 26

DO NOT EXCAVATE IN AREAS WITH EXISTING TREES

EXISTING TELEPHONE LINE DO NOT DISTURB

BEGIN STREAM REALIGNMENT STA. 4+27

HERBICIDE SPOT TREATMENT OF PHRAGMITES AND CATTAILS EXCAVATION AREA AS NEEDED

EXIST. WETLAND

PHRAGMITES/CATTAILS EXCAVATION AREA - STROMWATER BASIN AREA: 2.33 AC AVERAGE DEPTH: 1 FT

BACKFILL EXCAVATED AREAS WITH 8" THICK OF SOIL MIX OF 50% TOPSOIL AND 50% SAND, WITH 4" OF TOPSOIL ON TOP TO MATCH EXISTING GRADES

EX. CONTOUR

EX. PROPERTY LINE

ROUGE RIVER AOC HABITAT PROJECT:
TAMARACK CREEK - STREAM AND WETLAND RESTORATION PROJECT
SOUTHFIELD, MICHIGAN

INDEX MAP

EXIST. CATCH BASIN OR INLET
EXIST. STORM SEWER
CULVERT

EXIST. WETLAND

FEMA 100-YR FLOOD BOUNDARY
PR. STREAM CENTERLINE
PR. STREAM PROFILE
PR. TOP OF BANK
PR. BOTTOM OF BANK
PR. CONTOUR
PR. BASIN EXCAVATION AREA
PR. ACCESS ROUTE
PR. WETLAND

PROPOSED PLAN - ZONE A

EXIST. WETLAND

PR. ACCESS ROUTE

SCALE: 1" = 40' @ 22" x 34"

EXIST. CONTOUR
EXIST. STREAM CENTERLINE
EXIST. PROPERTY LINE
EXIST. WETLAND

BEGIN STREAM REALIGNMENT STA. 4+27

HERBICIDE SPOT TREATMENT OF PHRAGMITES AND CATTAILS EXCAVATION AREA AS NEEDED

EXISTING TELEPHONE LINE DO NOT DISTURB

BEGIN STREAM REALIGNMENT STA. 4+27

HERBICIDE SPOT TREATMENT OF PHRAGMITES AND CATTAILS EXCAVATION AREA AS NEEDED

EXISTING TELEPHONE LINE DO NOT DISTURB

BEGIN STREAM REALIGNMENT STA. 4+27

HERBICIDE SPOT TREATMENT OF PHRAGMITES AND CATTAILS EXCAVATION AREA AS NEEDED

EXISTING TELEPHONE LINE DO NOT DISTURB

BEGIN STREAM REALIGNMENT STA. 4+27

HERBICIDE SPOT TREATMENT OF PHRAGMITES AND CATTAILS EXCAVATION AREA AS NEEDED

EXISTING TELEPHONE LINE DO NOT DISTURB
**PLANT LIST:** THIS SHEET FOR DETAILS

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<th>COMMON NAME</th>
<th>COMMON ELDERBERRY</th>
<th>SYCAMORE</th>
<th>SILVER MAPLE</th>
<th>RED MAPLE</th>
<th>AMERICAN HIGHBUSH CRANBERRY</th>
<th>AGED CRANBERY</th>
<th>SOFT MAPLE</th>
<th>HAMAMELIS VIRGINIANA</th>
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**SHRUBS PLANTED IN 12 PLANT CLUSTERS AS SHOWN**

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**REVEGETATION PLAN - ZONE A**

**LEGEND**

- **EXIST. CONTOUR**
- **EXIST. STREAM CENTERLINE**
- **EXIST. PROPERTY LINE**
- **EXIST. STORM SEWER**
- **EXIST. CATCH BASIN/DRY INLET**
- **EXIST. CULVERT**
- **EXIST. DRAIN**
- **EXIST. DRAIN**
- **EXIST. WRAP**
- **EXIST. WETLAND**
- **FEMA 100-YR FLOOD BOUNDARY**
- **EXIST. PROPERTY LINE**
- **EXIST. CATCH BASIN/DRY INLET**
- **EXIST. DRAIN**
- **EXIST. DRAIN**
- **EXIST. WRAP**
- **EXIST. WETLAND**

**INDEX MAP**

**LEGEND**

- **EXIST. WETLAND**
- **EXIST. CONTOUR**
- **EXIST. STREAM CENTERLINE**
- **EXIST. PROPERTY LINE**
- **EXIST. STORM SEWER**
- **EXIST. CATCH BASIN/DRY INLET**
- **EXIST. CULVERT**
- **EXIST. DRAIN**
- **EXIST. DRAIN**
- **EXIST. WRAP**
- **EXIST. WETLAND**

**PLANT LIST:** THIS SHEET FOR DETAILS

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**PROPOSED REVEGETATION PLAN - ZONE A**
PROPOSED REVEGETATION PLAN - ZONE C

MATCH LINE SEE SHEET 19

BASE SURVEY CONDUCTED BY MIDWESTERN CONSULTING IN DECEMBER 2018

SCALE: 1" = 20' @ 22" x 34"

PROPOSED REVEGETATION PLAN - ZONE C

SHRUBS PLANTED IN 12 PLANT CLUSTERS

PROPOSED TREE - TYPICAL

12 Hv

PROPOSED SHRUB - TYPICAL

12 Va

REFER TO PLANT LIST

12 Vt

12 Iv

12 Hv

12 Lb

12 Ca

15+00

13+00

1 ROW ON BENCH

PROPOSED LIVE STAKES AT BANKS

SAME SPECIES IN MINIMUM GROUPS OF 10.

2 ROWS OF LIVE STAKES AT 36" O.C., STAGGER ROWS ON BANKS.

REVEGETATION LEGEND

INDEX MAP

LIVE STAKES:

FLOODPLAIN SLOPES:

DISTURBED UPLAND:

ECB (S75BN, SEE ECB INSTALLATION NOTES)

- ECB TO BE INSTALLED PERPENDICULAR TO THE STREAM CHANNEL AND STAPLED PER THE MANUFACTURER'S RECOMMENDATIONS WITH STAPLE PATTERN "D" USE TIES

- B&B TREES

- STRAW MULCH BLANKET (S75BN, SEE STRAW MULCH INSTALLATION NOTES)

NATIVE CONNECTIONS FORESTED WETLAND SEED MIX

- NATIVE CONNECTIONS FIRE ECOSYSTEM WOODLAND SEED MIX

- NATIVE CONNECTION EMERGENT SEED MIX

- MDOT THM SEED MIX

- 3-5 GAL. CONTAINERIZED SHRUBS

- 6 IN. TOPSOIL

- 4 IN. TOPSOIL

- INDEX MAP

- FOR DETAILS

- CHANNEL AND STAPLED PER THE MANUFACTURER'S INSTALLATION NOTES

- ECB TO BE INSTALLED PERPENDICULAR TO THE STREAM CHANNEL AND STAPLED PER THE MANUFACTURER'S RECOMMENDATIONS WITH STAPLE PATTERN "D" USE TIES

- B&B TREES

- STRAW MULCH BLANKET (S75BN, SEE STRAW MULCH INSTALLATION NOTES)

- NATURE CONNECTIONS FORESTED WETLAND SEED MIX

- NATURE CONNECTIONS FIRE ECOSYSTEM WOODLAND SEED MIX

- NATURE CONNECTION EMERGENT SEED MIX

- MDOT THM SEED MIX

- 3-5 GAL. CONTAINERIZED SHRUBS

- 6 IN. TOPSOIL

- 4 IN. TOPSOIL

- INDEX MAP

- FOR DETAILS

- CHANNEL AND STAPLED PER THE MANUFACTURER'S INSTALLATION NOTES

- ECB TO BE INSTALLED PERPENDICULAR TO THE STREAM CHANNEL AND STAPLED PER THE MANUFACTURER'S RECOMMENDATIONS WITH STAPLE PATTERN "D" USE TIES

- B&B TREES

- STRAW MULCH BLANKET (S75BN, SEE STRAW MULCH INSTALLATION NOTES)

- NATURE CONNECTIONS FORESTED WETLAND SEED MIX

- NATURE CONNECTIONS FIRE ECOSYSTEM WOODLAND SEED MIX

- NATURE CONNECTION EMERGENT SEED MIX

- MDOT THM SEED MIX

- 3-5 GAL. CONTAINERIZED SHRUBS

- 6 IN. TOPSOIL

- 4 IN. TOPSOIL

- INDEX MAP

- FOR DETAILS
### Live Stake Installation

- Install in mild winter until zone A directs first dormant season following seeding.
- Install live stakes at right angles flush with the gravel. Secure dead girl hammer and pilot hole as necessary.

### Deciduous Tree Planting

- Tree trunk shall be bare or slightly higher relation to permanent grade. Neighbors.
- Prime only as directed except for removing dead or broken branches. Return main form. Do not cut branches.
- Prime only as directed except for removing dead or broken branches. Detach natural form 9" above.
- Prime only as directed except for removing dead or broken branches. Return main form. Do not cut branches.

### Slope Shrub Planting

- Plant shrubs with main leader perpendicular to ground surface.
- Plant shrubs with main leader perpendicular to ground surface.
- Plant shrubs with main leader perpendicular to ground surface.
- Plant shrubs with main leader perpendicular to ground surface.

### Stem Cutting Data

<table>
<thead>
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### Overall Plant List

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</table>

### Table 2: Overall Plant List

<table>
<thead>
<tr>
<th>Family</th>
<th>Genus</th>
<th>Species</th>
<th>Scientific Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poaceae</td>
<td>Setaria</td>
<td>viridis</td>
<td>Setaria viridis</td>
<td>500</td>
</tr>
<tr>
<td>Poaceae</td>
<td>Calamagrostis</td>
<td>acutiflora</td>
<td>Calamagrostis acutiflora</td>
<td>250</td>
</tr>
<tr>
<td>Poaceae</td>
<td>Monarda</td>
<td>didyma</td>
<td>Monarda didyma</td>
<td>100</td>
</tr>
<tr>
<td>Poaceae</td>
<td>Avena</td>
<td>fatua</td>
<td>Avena fatua</td>
<td>200</td>
</tr>
<tr>
<td>Poaceae</td>
<td>Pennisetum</td>
<td>setaceum</td>
<td>Pennisetum setaceum</td>
<td>150</td>
</tr>
</tbody>
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1. WARRANTY PERIOD: WARRANT THAT ALL TREES, SEEDING, AND LIVE STAKES INSTALLED UNDER THIS CONTRACT WILL BE HEALTHY PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE CONSULTANT DURING AND AT THE END OF THE REPLACEMENT WORK AND BILL THE CONTRACTOR. REPLACEMENT OR REPAIR. IF THE CONTRACTOR FAILS TO RESPOND WITHIN THIS TIME, THE OWNER MAY PROCEED WITH REVEGETATION NOTES:

OF FINAL ACCEPTANCE. THE CONTRACTOR SHALL RESPOND WITHIN TWO (2) WEEKS OF WRITTEN REQUESTS BY THE OWNER FOR

6. ALL PLANT STOCK SHALL BE WATERED BY THE CONTRACTOR TO ENSURE THE HEALTH AND VIGOR OF THE PLANTED MATERIALS.

2. ALL DELAYS IN COMPLETION OF PLANTING OPERATIONS WHICH EXTEND THE PLANTING INTO MORE THAN ONE PLANTING SEASON REQUIREMENTS OF ICBN AND ICNCP. PLANTS SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED NECESSARY TO STABILIZE THE SITE AT NO ADDITIONAL COST TO THE OWNER.

3. REPLACEMENTS: AS SOON AS WEATHER CONDITIONS PERMIT, REPLACE, WITHOUT COST TO OWNER, ALL DEAD PLANTS AND ALL INSECT INFESTATION AND DAMAGE.

CIRCLING OR GIRDLING TRUNK SURFACE AND CENTER ROOTS, AND SHALL NOT BE ROOT-BOUND. RESPECT MAXIMUM STORAGE TIMES FOR PLANT STOCK.

3. NATIVE PLANTING AREAS SHALL BE INSTALLED AFTER MAY 15 (WHEN SOIL IS FREE OF FROST AND IN WORKABLE CONDITION), BUT BEFORE JUNE 30 OR AFTER JUNE 1, BUT BEFORE OCTOBER 30 OR AS APPROVED BY THE ENGINEER.

5. NATIVE PLANTINGS TO BE INSTALLED PER DETAILS.

B. MICHIGAN PLANTS ARE ACQUIRED FROM A RECOGNIZED NURSERY THAT IS LOCATED BEFORE BRANCHING OUT TO OTHER NORTH CENTRAL STATES. NATIVE PLANTINGS INCLUDE ALL TREES AND LIVE STAKES INSTALLED AS PART OF THIS PROJECT.

3. SEEDING METHOD

5. DO NOT SOW SEED WHERE STANDING WATER IS PRESENT.

6. DO NOT SOW SEED WHERE WATER IS REQUIRED WITHIN A RIVER SYSTEM.

4. ROUGE RIVER/TAMARACK CREEK HAS A VERY SHORT RESPONSE TIME TO STORM RUNOFF.

6. SOW NATIVE SEED AT A SPECIES RATE OF POUNDS PER ACRE INDICATED ON THE DRAWING. LIGHTLY RAKE TO INCORPORATE SEED INTO SOIL. DO NOT COVER SEED MORE THAN 1/4 INCH WITH SOIL. SEED DRILLING IS ALSO ACCEPTABLE.

8. CONTRACTOR SHALL REPAIR DAMAGED VEGETATION AND AERATE SOIL OVER ROOT ZONE OF NEGATIVELY IMPACTED VEGETATION.

7. SOW NATIVE SEED AT A SPECIES RATE OF POUNDS PER ACRE INDICATED ON THE DRAWING. LIGHTLY RAKE TO INCORPORATE SEED INTO SOIL. DO NOT COVER SEED MORE THAN 1/4 INCH WITH SOIL. SEED DRILLING IS ALSO ACCEPTABLE.

5.  REMOVE ALL CONTAINERS AND PACKAGING MATERIAL AND DISPOSE OF LEGALLY OFF-SITE.

2. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND MUST MEET APPLICABLE REQUIREMENTS OF ICB AND ICN. PLANTS SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED NECESSARY TO STABILIZE THE SITE AT NO ADDITIONAL COST TO THE OWNER.

5.  CONTRACTOR SHALL BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS PRIOR TO STARTING WORK.

4. WHOLE PLANTS FOR INSECT INFESTATION AND DAMAGE.

8. CONTRACTOR SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS, OR LARVAE. PLANTS SHALL BE FREE OF KINKED, CATNIP, OR OTHER WEEDS AND HERBICIDE DAMAGE.

4. ROUGE RIVER/ TAMARACK CREEK HAS A VERY SHORT RESPONSE TIME TO STORM RUNOFF.

6.  SEED IMMEDIATE AFTER SCARIFYING. DO NOT FERTILIZE.

4. ROUGE RIVER/ TAMARACK CREEK HAS A VERY SHORT RESPONSE TIME TO STORM RUNOFF.

6.  DO NOT SOW SEED WHERE STANDING WATER IS PRESENT.

7.  SOW NATIVE SEED AT A SPECIES RATE OF POUNDS PER ACRE INDICATED ON THE DRAWING. LIGHTLY RAKE TO INCORPORATE SEED INTO SOIL. DO NOT COVER SEED MORE THAN 1/4 INCH WITH SOIL. SEED DRILLING IS ALSO ACCEPTABLE.

5.  CONTRACTOR SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS, OR LARVAE. PLANTS SHALL BE FREE OF KINKED, KNOTTY, OR OTHER WEEDS AND HERBICIDE DAMAGE.

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5.  REMOVE ALL CONTAINERS AND PACKAGING MATERIAL AND DISPOSE OF LEGALLY OFF-SITE.
EXCAVATE 1 FT TO REMOVE PHRAGMITES/CATTAILS. REPLACE WITH 8" OF A MIX OF 50% TOPSOIL AND 50% SAND WITH 4" TOPSOIL ON TOP TO MATCH EX. GRADES.

SEE SHEET 16 FOR PROPOSED REVEGETATION PLAN - ZONE A.
SEE SHEET 18 FOR PROPOSED REVEGETATION PLAN - ZONE C
SEE DETAILS 1/28 AND 2/28 FOR PROPOSED CHANNEL DIMENSIONS
PROPOSED MAINTENANCE ACCESS ROUTE
PROPERTY BOUNDARY
EXISTING GRADE
LEGEND
PROPOSED GRADE
PROPOSED EROSION CONTROL BLANKET
PROPOSED ACCESS ROUTE

ROUGE RIVER AOC HABITAT PROJECT:
TAMARACK CREEK - STREAM AND WETLAND RESTORATION PROJECT
SOUTHFIELD, MICHIGAN

PROPOSED WETLAND NOTES
1. PROPOSED WETLANDS TO BE AT LOCATIONS SHOWN ON SHEET 1A
2. ROUGH GRADES OF PROPOSED WETLANDS TO BE 6" BELOW ADJACENT GRADES, +/- 3 INCHES

CROSS-SECTION - STA. 11+39
CROSS-SECTION - STA. 13+79
CROSS-SECTION - STA. 16+12

HORIZONTAL SCALE: 1" = 10' @ 22" x 34"
VERTICAL SCALE: 1" = 5' @ 22" x 34"
PROPOSED STREAM PROFILE - STA. 0+00 TO 5+50

PROPOSED STREAM PROFILE - STA. 5+50 TO 11+00

PROPOSED STREAM PROFILE - STA. 11+00 TO 16+50
PROPOSED FLOOD TERRACE ELEVATION
MAX DEPTH: 2.5'
1:2
4.4'
TOE IN ECB MIN 12" TYP.

PROPOSED GRADE
TOE IN ECB MIN 12" TYP.

PROPOSED LIVE STAKES
REVEGETATION PER SHEET 15

APPROX. 100'
APPROX. 30'
APPROX. 7'
1:6
18" 4-8" LIMESTONE

18" 1X3 LIMESTONE

8" 1X3 LIMESTONE

24" CORRUGATED METAL PIPE

MATCH EXISTING GRADES
NOTE: PLACE GEOTEXTILE BELOW COMPACTED GRAVEL IN LOWER AREAS AS NEEDED TO PROVIDE A STABLE ACCESS ROUTE.

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