



Plan Prepared
and Reviewed by:
Ram Gupta, Ph.D, PE

AS SPECIFIED IN THE
DEC 17 2015
JAN 3 2016
NO CHANGES ALLOWED
APPROVED PLANS MUST

RAM GUPTA
14-0110
APPROVAL
CONSTRUCTION SITE

**Proposed Restoration Plan
Existing Conditions
Melville Park Pond #8**

Portsmouth, RI
Prepared for:
Melville Park Committee
12/2/14; REV 8/25/15; 12/11/15 KA

FOR ILLUSTRATIVE PURPOSES ONLY
NOT A SURVEY PLAN



Sheet 1 of 4



Natural Resource Services, Inc.
PO Box 311
180 Tinkham Lane
Harrisville, RI 02830
(401) 566-7390
(401) 566-7490
(c) RIGIS

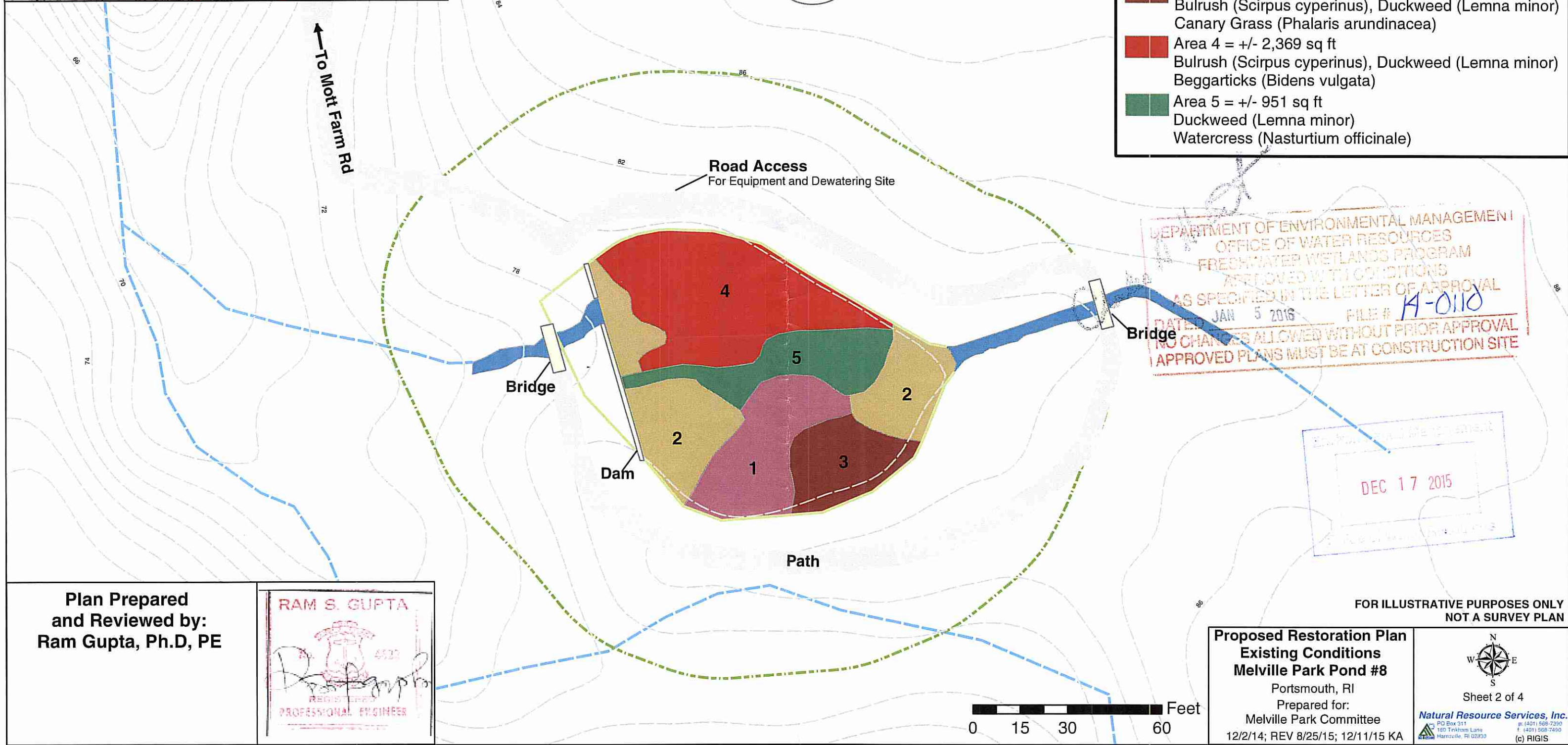


Legend

- Approximate Stream Locations
- Approximate 50' Perimeter Wetland
- RIGIS LIDAR Data
- Approximate Stream Banks

Existing Habitats

- Area 1 = +/- 1,234 sq ft
Cattail (*Typha latifolia*), Bulrush (*Scirpus cyperinus*)
Duckweed (*Lemna minor*), Lamp Rush (*Juncus effusus*)
- Area 2 = +/- 1,947 sq ft
Duckweed (*Lemna minor*)
- Area 3 = +/- 849 sq ft
Bulrush (*Scirpus cyperinus*), Duckweed (*Lemna minor*)
Canary Grass (*Phalaris arundinacea*)
- Area 4 = +/- 2,369 sq ft
Bulrush (*Scirpus cyperinus*), Duckweed (*Lemna minor*)
Beggarticks (*Bidens vulgata*)
- Area 5 = +/- 951 sq ft
Duckweed (*Lemna minor*)
Watercress (*Nasturtium officinale*)



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATE: JAN 5 2016 FILE # A-0110
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

DEC 17 2015

FOR ILLUSTRATIVE PURPOSES ONLY
 NOT A SURVEY PLAN

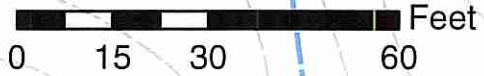
Plan Prepared
 and Reviewed by:
 Ram Gupta, Ph.D, PE

RAM S. GUPTA

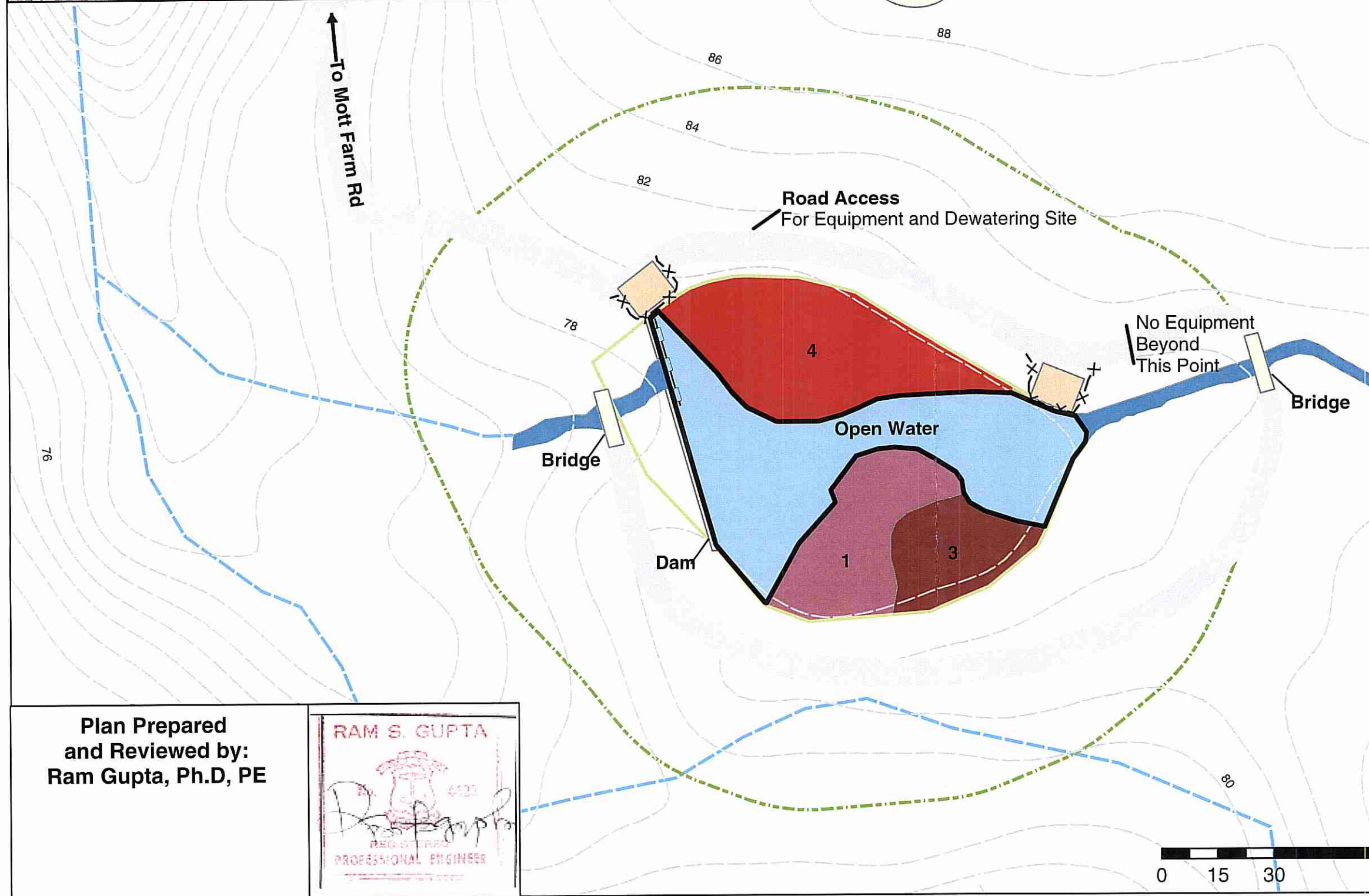
 REGISTERED
 PROFESSIONAL ENGINEER

Proposed Restoration Plan
Existing Conditions
Melville Park Pond #8
 Portsmouth, RI
 Prepared for:
 Melville Park Committee
 12/2/14; REV 8/25/15; 12/11/15 KA

Natural Resource Services, Inc.
 180 Trinkham Lane
 Harrisville, RI 02830
 p. (401) 568-7390
 f. (401) 568-7490
 (c) RIGIS



Sheet 2 of 4



Legend

- Approximate Stream Locations
- Approximate 50' Perimeter Wetland
- RIGIS LIDAR Data
- Limit of Disturbance
- X- Haybales or Straw Wattles
- |- Silt Curtain Location
- 10' x 12' Dredge Staging Area
- Approximate Stream Banks

Existing Habitats

- Area 1
Cattail (*Typha latifolia*), Bulrush (*Scirpus cyperinus*)
Duckweed (*Lemna minor*), Lamp Rush (*Juncus effusus*)
- Area 2
Duckweed (*Lemna minor*)
- Area 3
Bulrush (*Scirpus cyperinus*), Duckweed (*Lemna minor*)
Canary Grass (*Phalaris arundinacea*)
- Area 4
Bulrush (*Scirpus cyperinus*), Duckweed (*Lemna minor*)
Beggarticks (*Bidens vulgata*)
- Proposed Open Water Area = +/- 3,100 sq ft

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 RIVER WETLANDS PROGRAM
 PERMIT CONDITIONS
 AS SET FORTH IN THE LETTER OF APPROVAL
 DATED JAN 5 2015 FILE # 19-0110
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

DEC 17 2015
 OFFICE OF WATER RESOURCES

Plan Prepared
and Reviewed by:
Ram Gupta, Ph.D, PE

RAM S. GUPTA

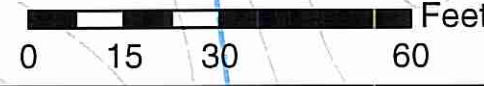
 REGISTERED
PROFESSIONAL ENGINEER

FOR ILLUSTRATIVE PURPOSES ONLY
NOT A SURVEY PLAN

Proposed Restoration Plan
Restored Conditions
Melville Park Pond #8
 Portsmouth, RI
 Prepared for:
 Melville Park Committee
 12/2/14; REV 8/25/15; 12/11/15 KA

Sheet 3 of 4

Natural Resource Services, Inc.
 PO Box 311
 185 Tenham Lane
 Hamsville, RI 02830
 p (401) 588-7250
 f (401) 588-7490
 (c) RIGIS

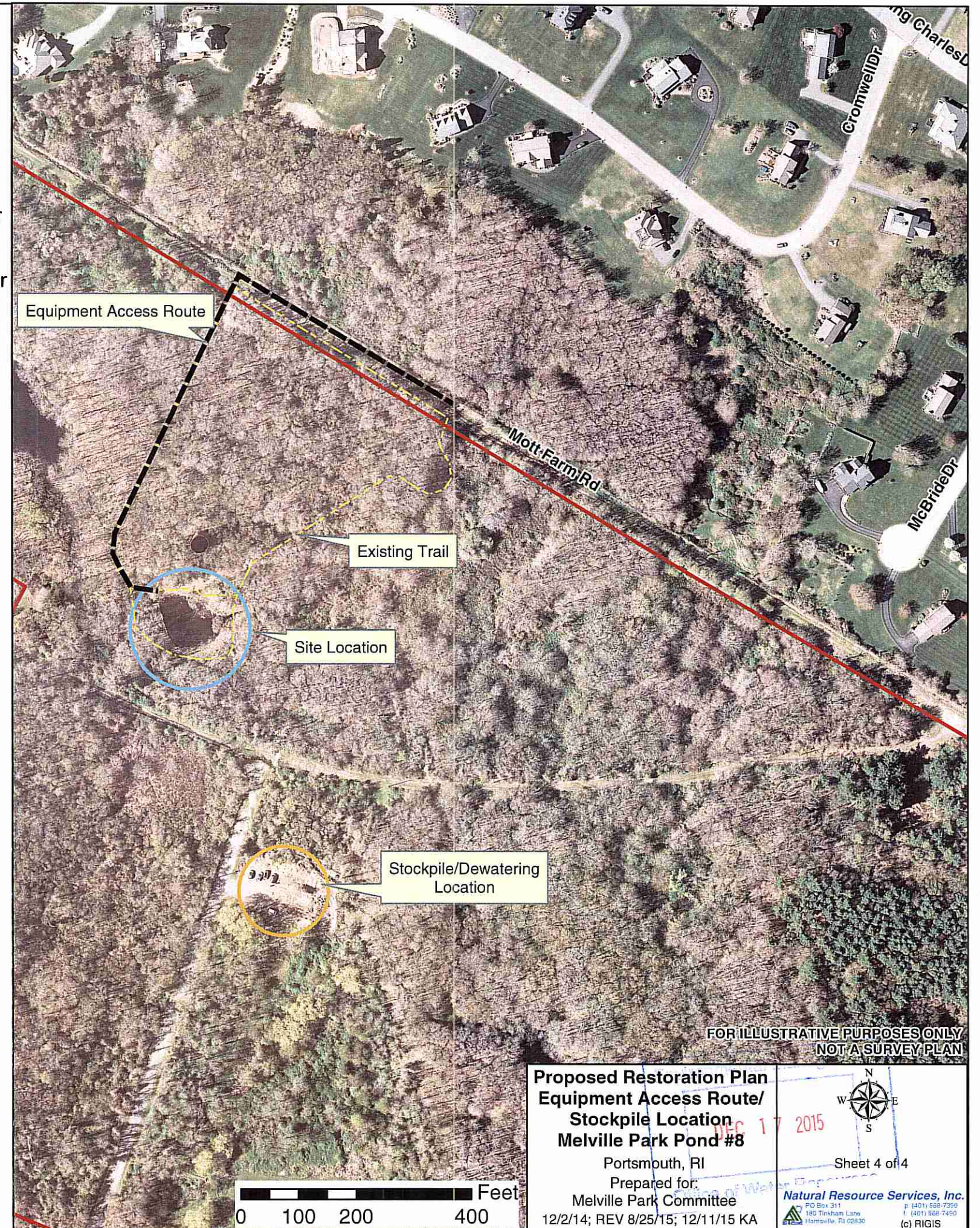


Notes for Restoration

- 1) Restoration/dredge shall take place during historic low groundwater period of July 1 – October 31 of any calendar year.
- 2) All work shall be monitored by a wetland scientist or other environmental professional experienced in construction projects in aquatic environments.
- ~~3) The DEM, OWR shall be notified 45 days prior to the start of work of the environmental monitor to be chosen for the project.~~
- 4) The DEM, OWR shall be notified of the start of work by the chosen monitor 5 business days prior to commencement.
- 5) The erosion controls shall be installed around each staging area. Vegetation shall be cut to ground level, but no grubbing shall take place.
- 6) The siltation curtain shall be installed across the dam opening.
- 7) All dredging shall be performed using an excavator or backhoe equipped with an extension arm allowing a minimum 45 foot reach or with a drag line.
- 8) All dredging material shall be loaded into lined 10 wheel dump trucks for transport to the dewatering/stockpile area located outside of any state jurisdictional freshwater wetland.
- 9) Restoration activities will remove organic material and sediment to achieve a 3-4 foot depth.
- 10) The staging areas shall be allowed to revegetate naturally. All erosion controls to be removed upon completion of dredge.
- 11) Silt depth within the open water restoration area shall be monitored annually. The town shall remove any silt accumulations of 3 inches or more as required. The same staging areas and restoration protocols shall be used for this annual or biannual maintenance.
- 12) The ^{applicant} ~~monitor~~ shall notify the DEM, OWR immediately upon project completion. ~~A monitoring report shall be submitted within 30 days of project completion.~~

Notes Modified per RIDEM

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 WETLANDS PROGRAM
 APPROVAL CONDITIONS
 DATE: JAN 5 2016 FILE # 14-0110
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



FOR ILLUSTRATIVE PURPOSES ONLY
 NOT A SURVEY PLAN

**Proposed Restoration Plan
 Equipment Access Route/
 Stockpile Location
 Melville Park Pond #8**
 Portsmouth, RI
 Prepared for:
 Melville Park Committee

DEC 17 2015

Sheet 4 of 4

12/2/14; REV 8/25/15; 12/11/15 KA

Natural Resource Services, Inc.
 PO Box 311
 180 Tinkham Lane
 Harrisville, RI 02830
 P (401) 568-7350
 F (401) 568-7450
 (c) RIGIS