O'Reilly, Talbot & Okun
[ASSOCIATES]
ENGINEERING
EnvironmentalSafetyHealthGeotechnical

19 W. Main Street
Suite 205
Westborough, MA 01581
Tel 508 366 6409
Fax 508 366 9826
www.oto-env.com

May 11, 2011
J0022–01–01

Terry Maitland, Chair
Acton Conservation Commission
Acton Town Hall
472 Main Street
Acton, MA 01720

Re: Notice of Intent (NOI)
Town of Acton
Caouette Property – 2 Stow Street
Acton, MA
Supplementary Notice of Intent Data Filing

Dear Members of the Commission:

On behalf of the Town of Acton, O'Reilly, Talbot & Okun Associates, Inc. (OTO) is submitting this supplementary Notice of Intent (NOI) data filing in response to comments issued by the Acton Conservation Commission (ConCom) at the public hearing on May 4, 2011. The comments were issued in response to a Notice of Intent (NOI) filed on April 21, 2011 for work associated with the remediation of contaminated soils at the Caouette property in Acton, Massachusetts (the "Site"). Our understanding of each of the comments from the ConCom provided during the public hearing is summarized below:

1. Provide a summary of Best Management Practices (BMPs).

2. Provide a narrative description of the construction sequence and delineate the Limits of work on the Soil Removal Areas Plan.

3. Identify the truck travel route with a description of anticipated number of trips.

4. Show the location of the truck wheel wash station on the Soil Removal Areas Plan (out of the buffer zone) and provide a narrative description.

5. Show the location of sediment and erosion control devices on Soil Removal Areas Plan and describe in narrative.

6. Show equipment staging area on Soil Removal Areas Plan (out of the buffer zone) and describe in narrative.

7. Review the extent of the planned excavation in area of Wetland Flag F-2. If consistent with remedial objectives, revise extent of excavation to eliminate excavation in the wetlands. Show any change on the plan and describe the change in the narrative.

8. Show the location of a possible soil stockpile (outside of the buffer zone) on the Soil Removal Areas Plan. Provide a narrative description of the soil stockpile management.

9. Provide a supplemental narrative summary and table that identifies the reduction in impacts to BLSF and 100 foot Buffer Zone.

10. Provide a narrative description of grading within the 100 foot Buffer Zone and Bordering Land Subject to Flooding (BLSF). There will be no net filling within either resource area.

11. Provide a planting plan and a table summarizing the type and number of plants to be used, their height, and the planned density/spacing interval.

12. Add *Celastrus orbiculatus* (oriental bittersweet) to the list of invasive species to be monitored for.

Responses to each of the ConCom comments is provided below:

ConCom Comment No. 1. Provide a summary of Best Management Practices (BMPs).

Best Management Practices (BMPs) including erosion and sedimentation controls will be implemented before construction begins in accordance with the Site-specific BMP plan (see attached Soil Removal Areas Plan) and as discussed in this supplementary narrative.

Indirect impacts to wetland resources will be mitigated by using BMPs to limit or eliminate the amount of erosion and sedimentation affecting onsite wetlands during construction. Standard BMPs including Straw Wattles will be installed before construction begins (see attached Soil Removal Areas Plan and Response No. 5).

Temporary devices and structures to control erosion of soils in and around wetland resources will be properly maintained at all times. Soils collected by these devices will be removed in a manner that prevents its erosion and transport to adjacent resource areas. Although biodegradable, the wattles can be removed once construction is complete and soils are well established with vegetation.

Soil stockpiling, truck loading, and equipment staging/refueling will be conducted outside of the 100 foot Buffer Zone (see attached Soil Removal Areas Plan). Should the need arise, exposed soils will be stabilized and covered with plastic sheeting as described in Response No. 8.

ConCom Comment No. 2. Provide a narrative description of the construction sequence and delineate the Limits of Work on the Soil Removal Areas Plan.

OTO Response:

The Limits of the Work area are shown on the Soil Removal Areas Plan. We anticipate that the construction sequence will be as follows:

- Installation of sediment and erosion control devices;
- Removal of vegetation necessary to perform work – we anticipate that trees and shrubs from the excavation area will be "chipped" and left on-site;
- Soils associated with root systems will be removed by mechanical means prior to chipping of tree roots. Small root systems will likely be disposed with impacted soil;
- Soils will be excavated to depths of approximately two feet below grade in the areas delineated on the Soil Removal Areas Plan. If visually impacted soils extend to depths greater then two feet below grade, the excavation depth will be extended to the bottom of the visually impacted soils. (Explorations performed at the Site suggests contamination does not extend farther than two feet below grade). The excavation work will follow the General Construction Requirements outlined in Section 4.2 of the NOI;
- Excavated soils will be either "live loaded" directly into trucks for off-site transport and disposal, or temporarily stockpiled prior to loading and off-site transport and disposal;
- Large boulders and/or concrete foundation pieces will be managed within the Limits of the Work area and placed back in the excavation at completion;
- Confirmation sampling of the limits of the excavation will be performed for the Contaminants of Concern (polycyclic aromatic hydrocarbons – or PAHs, arsenic and lead);
- If confirmation soil sampling indicates the Massachusetts Contingency Plan (MCP) Method 1 standards have been met, restoration of the Site will be performed as outlined in Section 5.0 of the NOI;
- If confirmation soil sampling indicates MCP Method 1 standards have not been met, additional excavation will be performed until "clean" soils are reached. However, the excavation will not be extended into the wetland, as described in the response to ConCom comment No. 6.

ConCom Comment No. 3. Identify truck travel route with a description of anticipated number of trips.

OTO Response:

The truck travel route is shown on the Soil Removal Areas Plan. An estimated total of approximately 614 cubic yards of impacted soils to be excavated were initially identified at the

Site. This estimate has been revised downward to approximately 584 cubic yards[1] as described in the response to ConCom comment No. 6. and No. 8. As described in the response to ConCom comment No. 1, the actual final volume of soil to be excavated will be based on confirmation sampling.

Assuming approximately 15 cubic yards of soil can be removed per truck load (22.5 tons per truckload at 1.5 tons per cubic yard), approximately 40 truck loads of impacted soil will be needed to remove the impacted soil.

ConCom Comment No. 4. Show the location of the truck wheel wash station on the Soil Removal Areas Plan (out of the buffer zone) and provide a narrative description.

OTO Response:

The proposed truck wheel wash station location (out of the buffer zone) has been added to the Soil Removal Areas Plan.

Trucks will not be entering the remediation area, and therefore will not come into contact with "dirty" soils. For this reason, we anticipate that the truck wheel washing station will consist of a crushed stone or gravel "pad". A 6 millimeter polyethylene liner will not be required. Wheel washing will be performed either with a high pressure hose (power washer) or if a source of running water is not available, with buckets and long handled brushes.

As described in Section 4.2 of the NOI, trucks will be loaded outside of the limits of excavation, so that soils on the truck tires will be natural soils from the Site, not impacted soils.

ConCom Comment No. 5. Show location of sediment and erosion control devices on Soil Removal Areas Plan and describe in narrative.

OTO Response:

The sediment and erosion control devices have been added to the Soil Removal Areas Plan.

Given the gradual topography, sediment and erosion control devices will consist of Straw Wattles™, which are especially appropriate for projects conducted on flat or gradually sloping sites. According to the manufacturer, Straw Wattles are tubes of rice straw that are used for erosion control, sediment control, and stormwater runoff control. Each wattle measures 8–9 inches in diameter; is 25 feet long; and weighs approximately 40 pounds. Like other forms of sediment and erosion control, they are held in place with grade stakes inserted into the ground.

[1] A total of 566 cubic yards from within the buffer zone and BLSF, and an additional 18 cubic yards (total 584 cubic yards) from outside these resource areas.

Straw Wattles can be made with either ultraviolet (UV) degradable plastic netting for longevity, or with 100% bio-degradable burlap for sensitive sites. Wattles made with the plastic netting will last for approximately 3 – 5 years. The bio-degradable wattles will only last for a single season to a year due to the fairly rapid break-down of the burlap covering. The rice straw itself will biodegrade into mulch after approximately 3–5 years. The Straw Wattles will be doubled up in erosion-prone areas.

ConCom Comment No. 6. Show equipment staging area on Soil Removal Areas Plan (out of buffer zone) and describe in narrative.

OTO Response:

The equipment staging area (out of the buffer zone) has been added to the Soil Removal Areas Plan.

It is anticipated that this will be the location for overnight parking of certain construction vehicles. Excavation equipment in direct contact with the impacted soil will likely remain at the excavation location to limit potential spreading of the impacted soil. No further modification (such as addition of a crushed stone or gravel pad) in the equipment staging area is contemplated.

ConCom Comment No. 7. Review extent of planned excavation in area of Wetland Flag F-2. If consistent with remedial objectives, revise extent of excavation to eliminate excavation in the wetlands. Show any change on the plan and describe the change in the narrative.

OTO Response:

The approximate boundary of the planned excavation in the area of Wetland Flag F-2 has been reviewed, and has been revised accordingly as depicted on the Soil Removal Areas Plan.

The approximate boundary of the planned excavation was interpolated from two data points (one "clean" sample and one "dirty" sample). The approximate boundary of the area to be excavated was conservatively assumed to be up to the "clean" sample. The actual limit of excavation will be determined based on field observation and confirmatory sampling, but in no case will the excavation be extended beyond wetland flag F-2 into the wetland.

ConCom Comment No. 8. Show location of a possible soil stockpile (outside of buffer zone) on the Soil Removal Areas Plan. Provide a narrative description of the soil stockpile management.

OTO Response:

The possible soil stockpile location (out of the buffer zone) has been added to the Soil Removal Areas Plan.

As described in the response to ConCom comment No. 1, it is hoped that soil can be "live loaded" directly into trucks for off-site transport and disposal. Similarly, it is hoped that backfill soils can be placed directly from trucks into the excavation. Live loading and direct placement of the back fill have the advantage of moving the associated soils only once, thus saving time and equipment use. If temporary stockpiling is needed, impacted soils will be placed on plastic sheeting and covered with plastic sheeting if overnight storage is needed. Plastic sheeting covering the soil stock pile will be weighted.

ConCom Comment No. 9. Provide a supplemental narrative summary and table that identifies the reduction in impacts to BLSF and 100 foot Buffer Zone.

Due to the modification of the limits of excavation as previously described, the amount of temporary impacts to BLSF and the 100 foot buffer zone were reduced by approximately 400 ft^2. A summary of the reduction is provided in Table 1.

Table 1. Summary of temporary resource area impacts.

Area	Affected Parcel	Temporary Impacts (ft^2)	Temporary Impacts (yd^3)
Wetland Area E	2 Stow Street	0	0
Wetland Area F	2 Stow Street	0	0
Area of Soil Remediation	2 Stow Street	BLSF = 3,572 100 foot Buffer Zone = 3,572 +4,082 = 7,654	BLSF = 264 100 foot Buffer Zone = 264+302 = 566
TOTALS		7,654	566

ConCom Comment No. 10. Provide a planting plan and a table summarizing the type and number of plants to be used, their height, and the planned density/spacing interval.

OTO Response:

The planting plan showing the locations of proposed species has been attached.

Following grading, the new soils will be seeded with an appropriate seed mix. In this regard, the New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites available from New England Wetland plants will be applied to exposed soils. Plant species in this mix include: sensitive fern; New England aster; and little bluestem amongst others. The manufacturer's recommended application rate is 35 lbs/acre (1,250 ft^2/lb). Given an area of 7,654ft^2, approximately six lbs will be required to cover the disturbed area, with an additional one pound of seed required for over-seeding.

In combination with the wetland seed mix, trees and shrubs will be added to the restoration plan. Tree species will include *Acer rubrum* (red maple) and shrub species will consist of *Cornus racemosa* (gray dogwood) and *Amelanchier canadensis* (serviceberry) (Table 2). Within the remediation area,

shrubs and trees will be spaced at intervals of 10 feet on center for a total of 58 individuals. It is proposed that the shrubs (3'-4') and trees (3'-4') be purchased from New England Wetland Plants (NEWP) located in Amherst, Massachusetts.

Table 2. Proposed tree and shrub species.

Species	NEWP Comments	Wetland Indicator Status	Light Requirements	Habitat Preference	Height	Spacing	Number
Acer rubrum (red maple)	Seed, sap, and buds serve as food for wildlife.	FAC	Full sun to full shade	Shore edges, wet meadows, forests	3'-4'	10' on center	29
Amelanchier canadensis (serviceberry)	Berries eaten by birds. Good wetland buffer zone shrub.	FAC	Partial shade	Shores, forests, drier sites	3'-4'	10' on center	15
Cornus racemosa (gray dogwood)	White fruit is eaten by birds in fall.	FAC	Full sun to full shade	Forested areas, drier sites	3'-4'	10' on center	14

ConCom Comment No. 11. Add *Celastrus orbiculatus* (oriental bittersweet) to the list of invasive species to be monitored for.

OTO Response:

Celastrus orbiculatus (oriental bittersweet) has been added to the list of invasive species that will be monitored by OTO during the two year restoration monitoring effort.

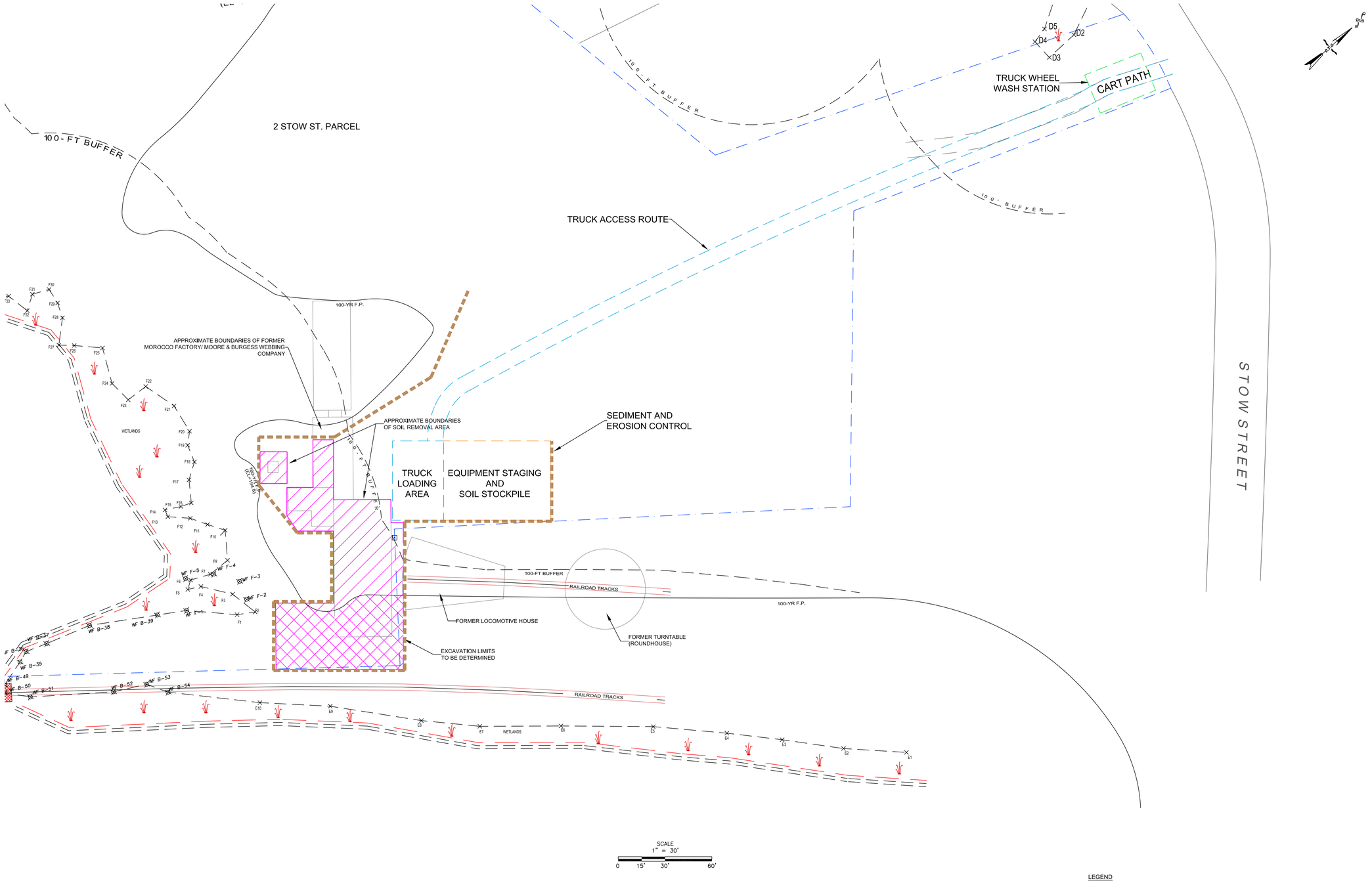
Thank you for taking the time to review this information. If you have any questions upon completing your review, please do not hesitate to contact either Jeff or Jim at (508) 366–6409.

Sincerely,
O'Reilly, Talbot & Okun Associates, Inc.

Jeffrey J. Park
Senior Ecologist

James D. Okun
Managing Principal

Attachments: Soil Removal Areas Plan
Planting Plan



NOTES:
SITE PLAN DEVELOPED FROM A 9/14/09 PLOT PLAN OF THE PROPERTY BY FORESITE ENGINEERING, DATED 9/14/09; FROM A PROGRESS PRINT OF THE PROPERTY BY STAMSKI AND MCNARY, INC., DATED 5/19/10; FROM ONLINE ASSESSORS MAPS, FROM HISTORIC SANBORN FIRE INSURANCE MAPS AND FROM TAPED FIELD MEASUREMENTS.

LEGEND

- PROPERTY LINE
- 100' WETLAND BUFFER ZONE
- 100 YEAR FLOODPLAIN
- APPROXIMATE BOUNDARIES OF SOIL REMOVAL AREA (TOTAL REMOVAL AREA APPROX. 7,887 SQ. FT. / 584 CU. YD.)
- APPROXIMATE BOUNDARIES OF SOIL REMOVAL AREA WITHIN 100' BUFFER ZONE (APPROX. AREA 7,654 SQ. FT. / 566 CU. YD.)
- APPROXIMATE BOUNDARIES OF SOIL REMOVAL AREA WITHIN BOTH 100' BUFFER ZONE AND 100 YEAR FLOODPLAIN (APPROX. AREA 3,572 SQ. FT. / 264 CU. YD.)
- SEDIMENT AND EROSION CONTROL

O'REILLY, TALBOT & OKUN [ASSOCIATES]

- PROJECT MANAGEMENT
- ENVIRONMENTAL ENGINEERING
- GEOTECHNICAL ENGINEERING
- ASBESTOS PLANNING & MANAGEMENT
- RISK ASSESSMENT
- CORPORATE CAD

19 WEST MAIN STREET
SUITE 205
WESTBOROUGH, MA 01581

PHONE:
(508) 366-6409

EMAIL:
OFFICE@OTO-ENV.COM

SCALE: 1" = 30'
PROJ. NO: J0022-23-04
DRAWN: APR/CDA
CHECKED: JJP/BHN
DATE: MAY 10, 2011

PROJECT TITLE:

CAOUETTE PROPERTY

2 STOW STREET
ACTON, MA

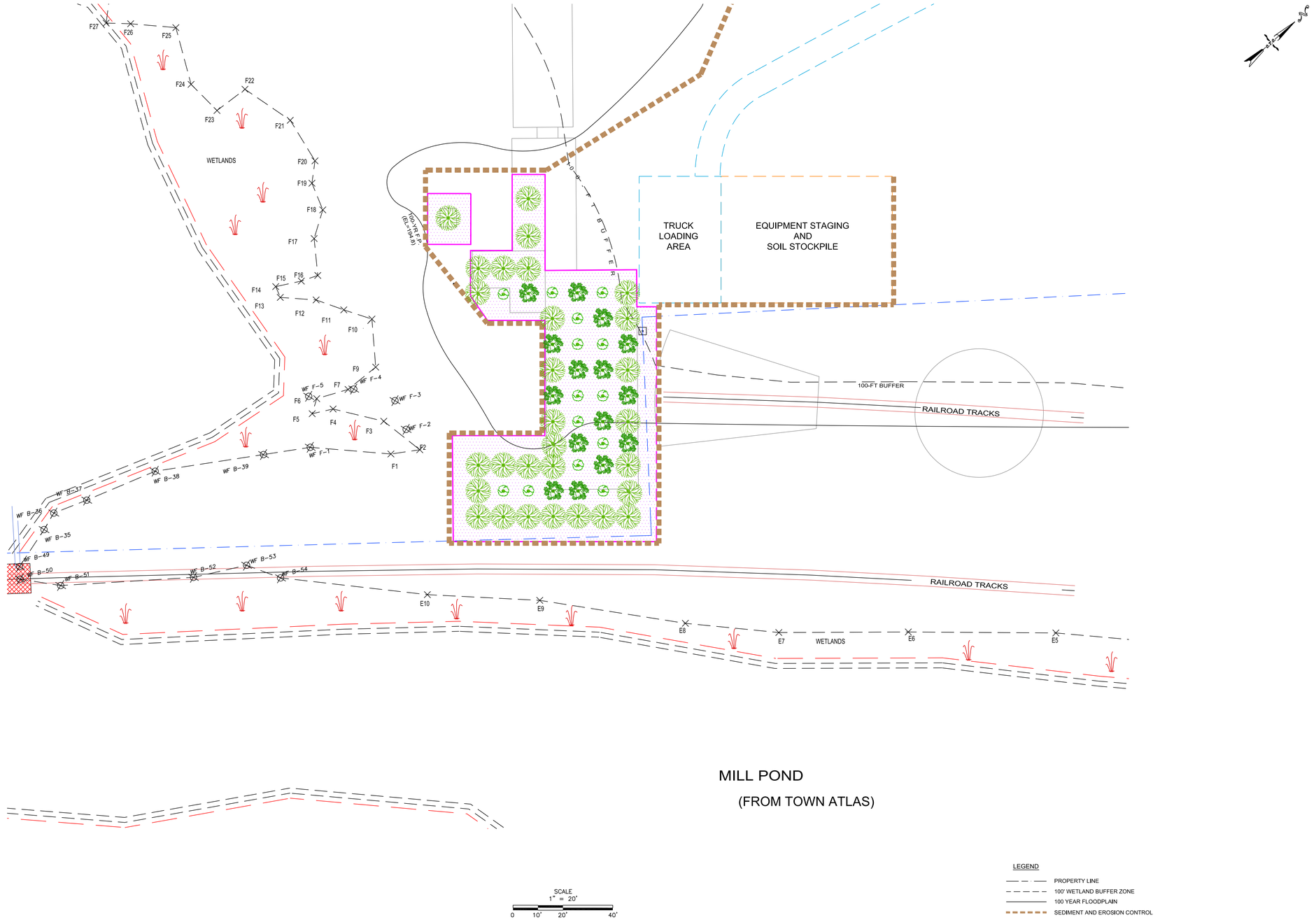
DRAWING TITLE:

SOIL REMOVAL AREAS

DRAWING NO.:

1-2

O:\J0022\23 Town of Acton\23 Caouette Property\02 MCP Project\FIGURES\Acton_MA_MCP.dwg



NOTES:
SITE PLAN DEVELOPED FROM A 9/14/09 PLOT PLAN OF THE PROPERTY BY FORESITE ENGINEERING, DATED 9/14/09; FROM A PROGRESS PRINT OF THE PROPERTY BY STAMSKI AND MCNARY, INC., DATED 5/19/10; FROM ONLINE ASSESSORS MAPS, FROM HISTORIC SANBORN FIRE INSURANCE MAPS AND FROM TAPED FIELD MEASUREMENTS.

LEGEND

- PROPERTY LINE
- 100' WETLAND BUFFER ZONE
- 100 YEAR FLOODPLAIN
- SEDIMENT AND EROSION CONTROL
- WETLAND SEED MIX
- ACER RUBUM (RED MAPLE) (29 QTY.)
- CORNUS RACEMOSA (GRAY DOGWOOD) (15 QTY.)
- AMELANCHIER CANADENSIS (SERVICEBERRY) (14 QTY.)

O'REILLY, TALBOT & OKUN [ASSOCIATES]

- PROJECT MANAGEMENT
- ENVIRONMENTAL ENGINEERING
- GEOTECHNICAL ENGINEERING
- ASBESTOS PLANNING & MANAGEMENT
- RISK ASSESSMENT
- CORPORATE CAD

19 WEST MAIN STREET
SUITE 205
WESTBOROUGH, MA 01581

PHONE:
(508) 366-6409

EMAIL:
OFFICE@OTO-ENV.COM

SCALE: 1" = 20'
PROJ. NO: J0022-23-04
DRAWN: APR/CDA
CHECKED: JJP/BHN
DATE: MAY 10, 2011

PROJECT TITLE:

CAOUETTE PROPERTY

2 STOW STREET
ACTON, MA

DRAWING TITLE:

PLANTING PLAN

DRAWING NO.:

2-2

O:\J0022\23 Town of Acton\25 Caouette Property\02 MCP Project\Fig\SitePlan\Acton_MA_MCP.dwg