

Southern Auto Sales, Inc.

File No.: 199700775

City and State: East Windsor, CT

General Impacts: 3.8 acres forested

Functions and Values Lost: (From EA/SOF)
Wildlife Habitat

Year(s) Mitigation Constructed: April 2000

Size and Type of Mitigation as Proposed: 8.4 acres forested created off site

Proposed Functions and Values of Mitigation: (From Database)
Sediment/Toxicant Retention
Nutrient Removal
Wildlife Habitat

Mitigation Special Condition(s):

5. Except where modified by the Special Conditions herein, the mitigation shall be performed in accordance with the attachment mitigation plan entitled "Wetlands Mitigation Plan, Trombley Road, East Windsor, Connecticut" and dated "August 21, 1998". To the extent practicable, all plantings shall be done in accordance with the planting plan. During planting, the mitigation specialist cited in the plan, or other as approved by the Corps, may relocate up to 50% of the plantings, if the "as built" site conditions pose an unreasonable threat to their survival. The plantings shall be relocated to locations with suitable hydrology, soil, and where appropriate structural context with other plantings can be maintained.

6. The mitigation site shall be monitored for a period of three years after construction of the mitigation area is complete.

7. Mitigation projects will not use plant materials that are not native and indigenous to the region.

8. Soils containing the living roots of *Typha* spp., *Phragmites australis* or *Lythrum salicaria* shall not be used in the mitigation area. The following species shall be excluded from all project landscaping plans for areas within 100 feet of the proposed mitigation site:

Herbs

Echinochloa crusgalli

Lythrum salicaria

Phragmites australis

Typha latifolia
T. glauca
T. angustifolia
Glyceria maxima
Phalaris arundinacea
Polygonum cuspidatum

Woody Plants

Ailanthus altissima
Berberis thunbergii
B. vulgaris
Euonymus alatus
Ligustrum obtusifolium
L. vulgare
Lonicera tartarica
L. morrowii
L. xylosteum
Populus alba
Robinia pseudoacacia
Celastrus orbiculatus
Eleagnus angustifolia
E. umbellata
Juniperus virginiana
Wisteria floribunda
Rhamnus cathartica
R. frangula
Rosa multiflora

9. To enhance habitat and avoid disruption of many specialized plant and animal cycles, an adequate supply of dead and dying woody debris shall be left on the ground within the mitigation site after the completion of construction of the mitigation site. As much as possible, these materials should also be in various stages of decomposition and salvaged from natural areas cleared for the other elements of the project.

10. If the plantings are not successful by November 1 of any year during the three year monitoring period, the permittee shall develop and implement a remedial plan to meet the planting success criteria listed below. The remedial plan may include, but is not limited to: removal of debris; replanting, biological-, herbicidal-, or mechanical control of invasive plant species; regarding the site; application of additional topsoil or soil amendments; or adjustments to the hydrology of the site.

11. The mitigation site shall have at least 75% species survival. Percent species survival is the number of surviving plants on the site divided by the number of plants originally planted, multiplied by 100. NOTE: In some circumstances, herbaceous cover may obscure direct observation and tally. In these cases, quadrat samples may be substituted for direct measures.

12. All mitigation sites shall have at least 80% areal cover by noninvasive hydrophytes. For the purpose of this performance standard, invasive species of hydrophytes are:

- Purple Loosestrife – *Lythrum salicari*;
- Cattails – *Typhlatifolia*, *T. angustifolia*, *T. glauca*;
- Common Reed – *Phragmites australis*; and
- Reed Canary Grass – *Phalaris arundinacea*.

13. For the first three full years following construction, monitoring reports should be prepared at the end of each full growing season. Reports are due not later than December 15 of the year being monitored. These report shall be submitted to the Chief, Policy Analysis and Technical Support Section, Regulatory Branch, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, Massachusetts 01742 for review and inclusion in the permit file. “Permit number 199700775” shall be referenced on all submissions.

14. The following are the minimal components of the annual wetland mitigation monitoring reports:

- a. A summary of the monitoring inspections that occurred since the last report.
- b. A checklist of the success standards that indicate which standards were attained and which were not met during the monitoring year.
- c. A concise description of any remedial actions done during the monitoring year in order to meet the success standards. These activities may include, but are not limited to, removal of debris; replanting; biological-, herbicidal-, or mechanical control of invasive plant species; regarding the site; application of additional topsoil or soil amendments; or adjustments to the hydrology of the site.
- d. A concise description of other remedial actions done during the monitoring year in order to improve the success potential of the mitigation sites.
- e. Recommendations for future remedial activities.
- f. Vegetation Cover Percentages:
 - (1) A visual estimate of total percent cover for each mitigation site.
 - (2) A visual estimate of the percent cover of *Lythrum salicaria*, *Phragmites australis*, *Typha latifolia*, *T. Angustifolia*, *F. glauca*, and *Phalaris arundinacea* in each mitigation site.
- g. A description of the general health and vigor of the surviving plants and a prognosis for their future survival.
- h. A diagnosis of the cause(s) of morbidity or mortality on the site.
- i. Percent Species Survival – expressed as 100 multiplied by the number of surviving plants divided by the number of plants that were originally planted.

j. APPENDICES:

Appendix A – A copy of this special condition for mitigation.

Appendix B – An “as-built” landscaping plan identifying the location and extent of the designed plant community types (e.g., shrub swamp). Within each community type, the plan should identify the location and the individual plant species.

Appendix C – Representative photos of each mitigation site taken from the same locations for each monitoring event.

15. A post construction assessment shall be completed after the first five full growing seasons. The report should present conclusions and evidence relating to the overall success of the mitigation project. A basic premise of the permit is that mitigation is “successful” if the designed features persist.

16. This assessment shall consider the condition of the wetland mitigation sites after the first five full growing seasons following the completion of the construction of the mitigation sites. To ensure objectivity, the persons who prepared the annual monitoring reports shall not prepare this overall appraisal of mitigation unless prior written approval is granted by the Corps.

17. The post-construction assessment for this project shall include at least the following components:

a. **GOALS:** Summarize the original or modified mitigation goals and discuss the level of attainment of these goals at the mitigation site.

b. **LESSONS LEARNED:** As “lessons learned” provide a brief summary of any significant problems that were encountered or solutions that were developed during the construction and maintenance periods.

c. **IMPEDIMENTS:** Identify any departmental or agency procedures or policies that may have encumbered the implementation of the mitigation designs. Specifically note procedures or policies that contributed to less success or less effectiveness than anticipated in the Corps Environmental Assessment for the project.

d. **RECOMMENDATIONS:** Provide recommendations to improve the efficiency, reduce the cost, or improve the effectiveness of similar projects in the future.

e. **APPENDICES:**

Appendix A – Summary of the results of a functions and values assessment of the mitigation sites using the same methodology as was used to determine the functions and values for the impacted wetland(s).

Appendix B – Calculation of the area of wetlands in each mitigation site using the delineation method employed by the Corps of Engineers. Supporting documents will include: a scaled drawing illustrating the wetland boundaries and at least two representative transects with corresponding data points where Wetland Delineation data sheets are prepared.

Appendix C – Comparison of the measured areas of the delineated wetland area(s) with those area(s) proposed in the mitigation plan. This comparison can be made on a scaled drawing or as an overlay to the as-built plan. This plan should also illustrate the major vegetation community types.

Appendix D – Photos of the mitigation site taken from the same fixed locations as the monitoring photos.

18. The permittee shall execute and record the attached “CONSERVATION and HISTORIAL PRESERVATION EASEMENTS” with the attachments referenced in the “CONSERVATION and HISTORICAL PRESERVATION EASEMENTS” as Exhibit A for Parcels I and Parcel II, with revisions on Parcel I of 2-12-99 and on Parcel II 1-22-99, with the registry of deeds for the Town of East Windsor and the State of Connecticut.

These documents shall be registered within 90 days of the date of this permit. A copy of the executed and recorded document **must** be sent to this office within 30 days of the date it was recorded.

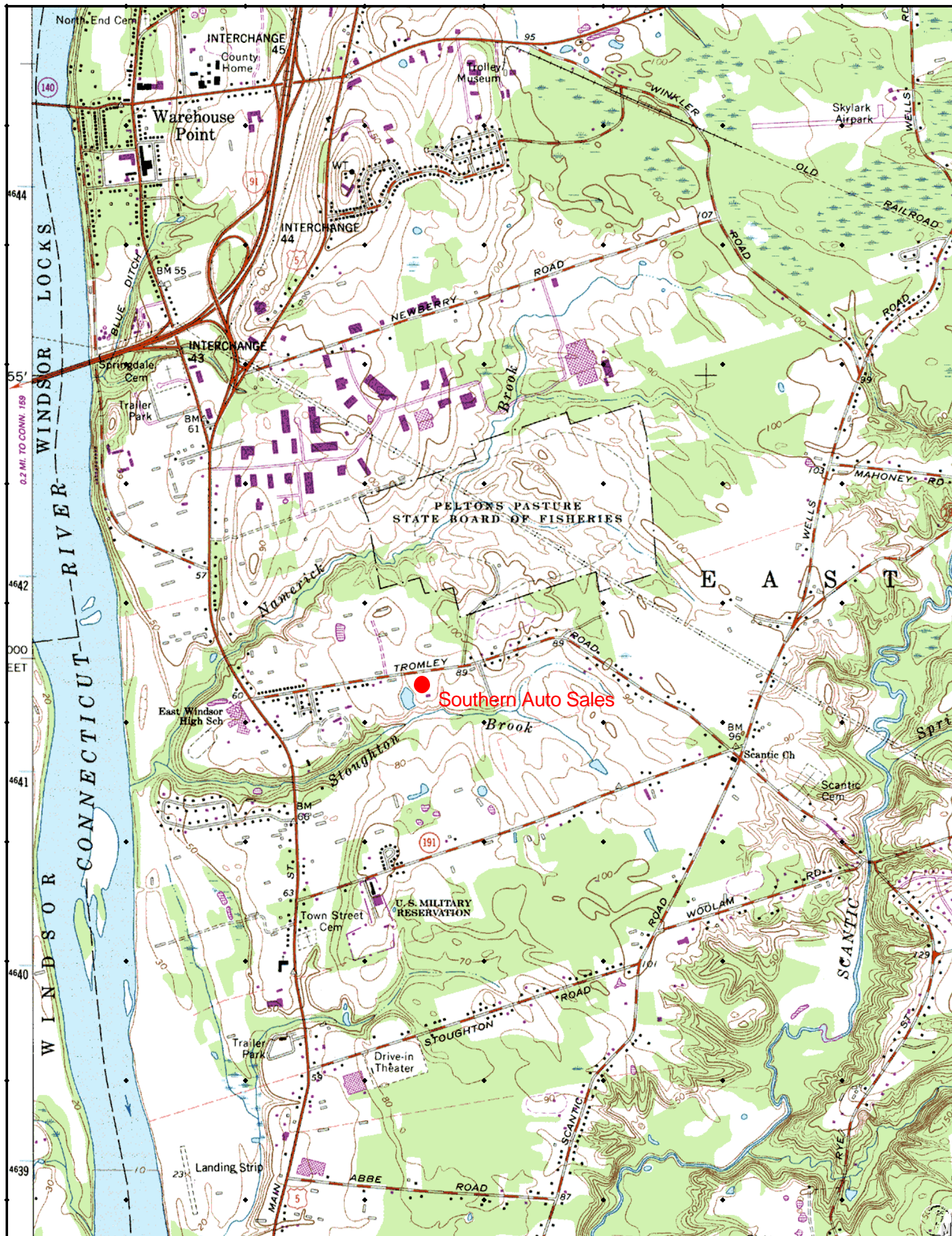
Remarks:

None

Directions:

Take 95/128 south toward Dedham/Providence, RI. Take exit 25, I-90/Mass Pike. Go west toward New York/Springfield/Framingham. Take I-84 west to Route 291. Take Route 5 exit, and go north to Tromley Road on the right. The site is on the right behind and to the right of an old tobacco barn. There is a CT DEP sign marking the site. Site is across the street from an unnamed road or long driveway.





MITIGATION SITE FIELD DATA FORM

Site Name: Southern Auto Sales File No. 199700775

City/Town: East Windsor State: CT Waterbody: _____

Monitor(s): Keith Wright Date: 8-23-02

Was site constructed? yes

Is site wetland? yes

Size of proposed wetland: 8.4 acres

Actual size of wetland: much less than 8 acres

Landscape position: TBD

Lat/Long Points: 41.90267N 72.59749W

Saved GPS Waypoint name: SAS

GPS Tracking Log Name: N/A

Perimeter: TBD

Surrounding land use:

Residential, forest

Is wetland function compromised by
surrounding land use?

No

Plant health:

Good

Invasive species:

Lythrum salicaria, Typha latifolia

Wildlife use:

Birds, frogs, butterfly; cattails eaten

Plants:

Acer rubrum

Alisma sp.

Alnus rugosa

Betula populifolia

Carex lurida

Carex sp. (ovales)

Carex spp.

Carex vulpinoidea

Cornus amomum

Cyperus strigosus

Eupatorium perfoliatum

Juncus effusus

Lythrum salicaria

Phalaris arundinacea

Poaceae spp.

Rosa sp.

Rubus sp.

Sagittaria latifolia

Scirpus atrovirens

Scirpus cyperinus

Scirpus validus

Solidago sp.

Sparganium sp.

Typha latifolia

Verbena hastata

Soils Data:

Soil analysis in the dry meadow revealed the following:

DEPTH	HORIZON	MATRIX	REDOX	COMMENTS
0 - 10"	A	10YR 5/3		silt loam
10+	AB	10 YR 4/3	30% 10Y 8/1 15% 5YR 6/8	

Sketch approximate mitigation site, noting areas and types of wetlands, waters, other features, landscape position, landmarks, etc., and data and photo point(s)

See file.

Overall Description of site:

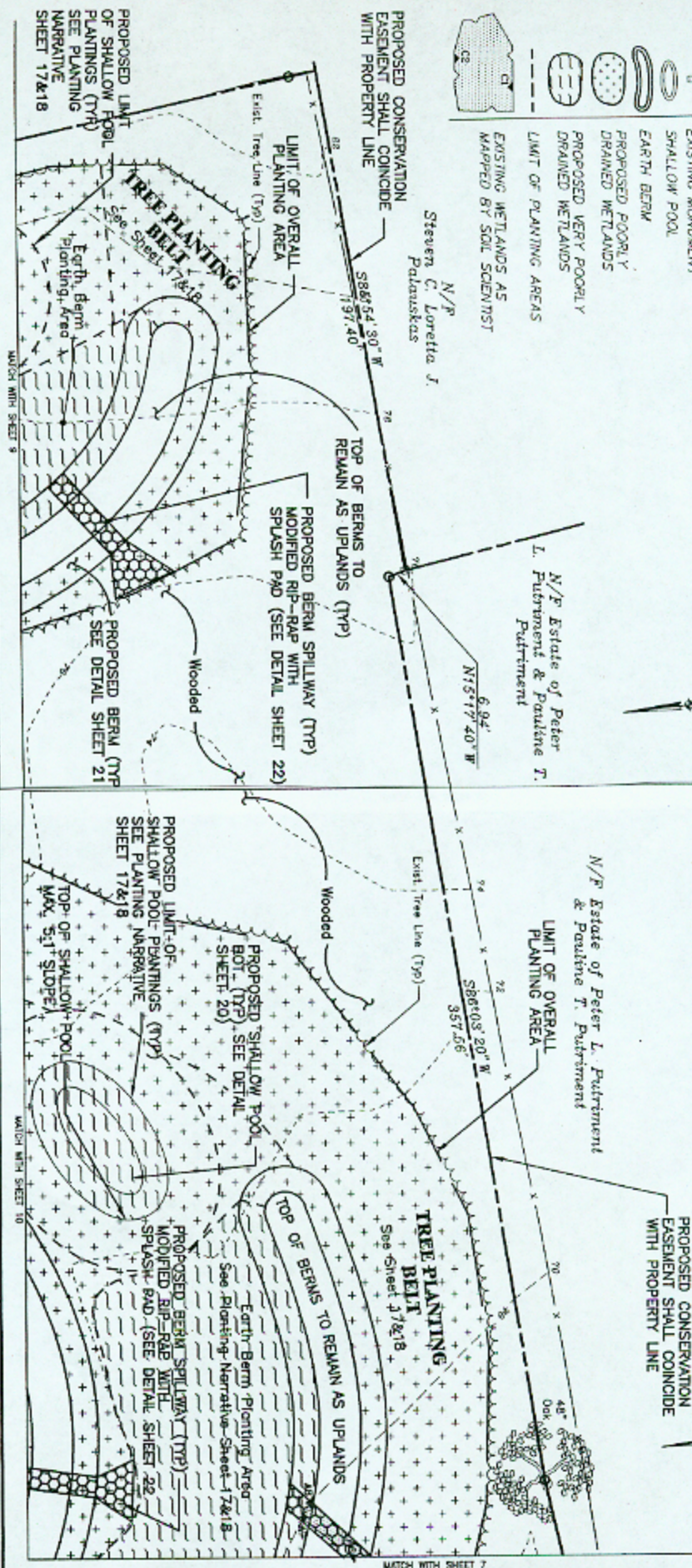
This site consists of a large ponded area dominated by *Typha latifolia* and several smaller ponded sections with similar vegetation. These areas are 1-2' lower than surrounding upland and hold water. Some of the *Scirpus validus* and *Sagittaria latifolia* was larger than at any other site visited at heights of 7-8' and 3', respectively. Several of the cattail basins had duckweed in the water. Most of the vegetative diversity was at the edge of the cattail ponds. Each of the ponds was surrounded primarily by dry meadow, though there were pockets of wet meadow. Dry meadow vegetation consisted of *Daucus carota*, several grass species, and a *Solidago* sp., as well as the tree species noted under "other plants".

Comments, problems, recommendations:

This site is out of compliance. The permit states that invasive plants need to be removed and this has not been done; they now dominate the site. The site is supposed to be an 8-acre forested wetland, but does not have the hydrology or the vegetation to fit this description. Monitoring reports have not been submitted for this mitigation site.

○ UTILITY POLE
 □ EXISTING MANHOLE
 ▣ EXISTING CATCH BASIN
 ▨ EXISTING STORM SEWER
 --- EXISTING CONTOUR
 - - - EXISTING SPOT GRADE
 ● EXISTING I/P
 ○ EXISTING MONUMENT
 SHALLOW POOL
 EARTH BERM
 PROPOSED POORLY
 DRAINED WETLANDS
 PROPOSED VERY POORLY
 DRAINED WETLANDS
 LIMIT OF PLANNING AREAS
 EXISTING WETLANDS AS
 MAPPED BY SOIL SCIENTIST
 N/R

UTILITY POLE
EXISTING MANHOLE
EXISTING CATCH BASIN
EXISTING STORM SEWER
EXISTING CONTOUR
EXISTING SPOT GRADE
EXISTING I.P.
EXISTING MONUMENT
SHALLOW POOL
EARTH BERM
PROPOSED POORLY
DRAINED WETLANDS
PROPOSED VERY POORLY
DRAINED WETLANDS
LIMIT OF PLANTING AREAS
EXISTING WETLANDS AS
MAAPPED BY SOIL SCIENTIST



WETLANDS MITIGATION PLAN
COMLEY ROAD, EAST WINDSOR, CT

J.R. RUSSO & ASSOCIATES
1 SHOHAM ROAD
EAST WINDSOR, CT 06028

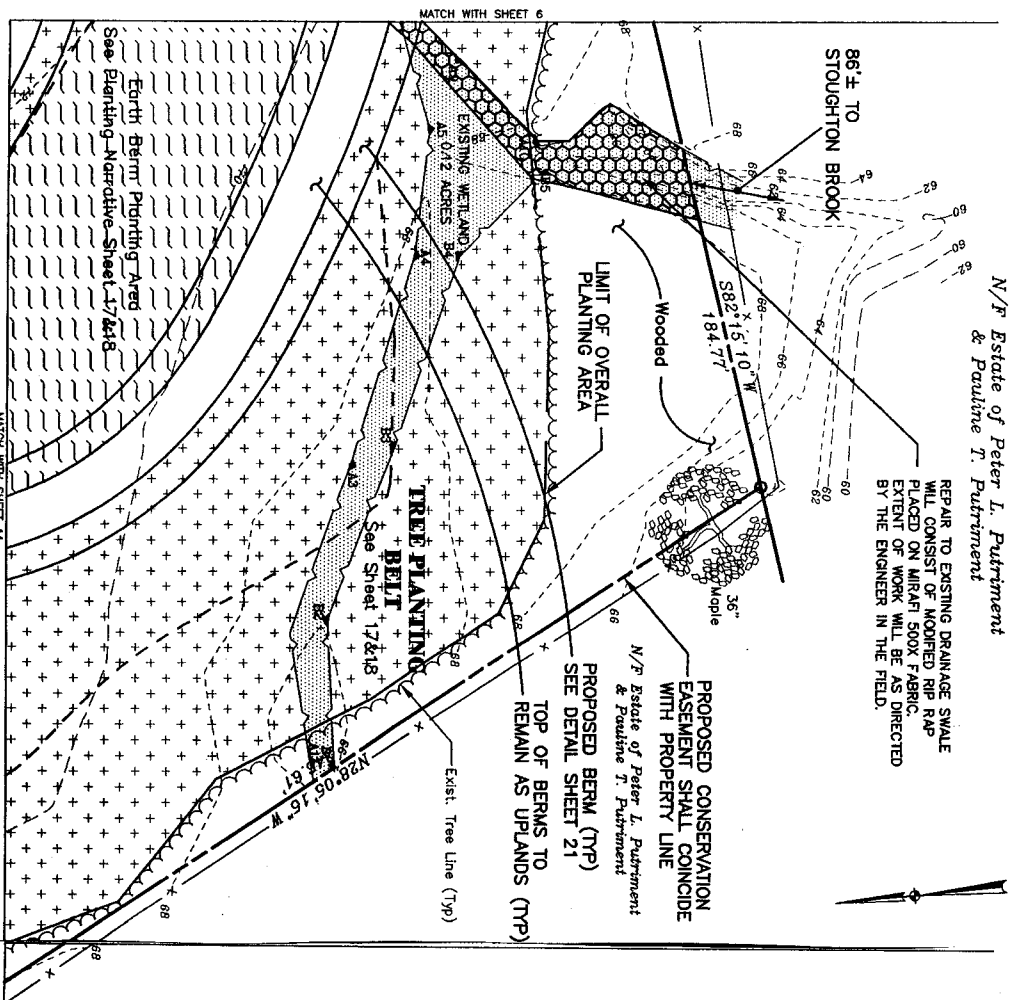
1 inch = 40 ft

WETLANDS MITIGATION PLAN
PROMLEY ROAD, EAST WINDSOR, CT

APPLICATION #1997-00775
SOUTHERN AUTO SALES, INC.
161 SOUTH MAIN STREET
EAST WINDSOR, CT 06088
DATE: JULY 15, 1998
REV: AUGUST 21, 1998
SHEET 6

N/F Estate of Peter L. Putnam
& Pauline T. Putnam

REPAIR TO EXISTING DRAINAGE SWALE
WILL CONSIST OF MODIFIED RIP RAP
PLACED ON MIRAFI 500X FABRIC.
EXTENT OF WORK WILL BE AS DIRECTED
BY THE ENGINEER IN THE FIELD.



N/F Estate of Peter L. Putnam
& Pauline T. Putnam

Notes:

1. Elevations based on C.G.S. Datum.
2. Bearings refer to the reference map.
3. Underground utility, structure and facility locations noted hereon have been compiled, in part, from record maps supplied by the respective utility companies or governmental agencies. From these sources, and from other sources, these locations must be considered as approximate in nature. Additionally, other such features may exist on the site, the existence of which are unknown to J.R. Russo & Associates. The size, location and existence of all such features must be field determined and verified by the appropriate authorities prior to construction. Call Before You Dig 1-800-922-4455.
4. For specific plant species and planting densities, please refer to Mitigation Construction Sequence And Planting Narrative, sheets 17 & 18.

Reference Map:

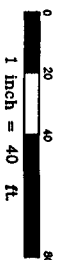
"Original Survey For Pauline T. Putnam South Side Of Tromley Road East Windsor, Connecticut" 1"=50'
October 20, 1997 Class A-2 by G.F. Richard, L.S.

WETLANDS MITIGATION PLAN

TROMLEY ROAD, EAST WINDSOR, CT

J.R. RUSSO & ASSOCIATES
1 SHOHAM ROAD
EAST WINDSOR, CT 06088

SITE PLAN



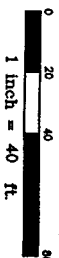
APPLICATION #1997-0077
SOUTHERN AUTO SALES, INC.
161 SOUTH MAIN STREET
EAST WINDSOR, CT 06088
DATE: JULY 15, 1998
REV: AUGUST 21, 1998
SHEET 7

WETLANDS MITIGATION PLAN

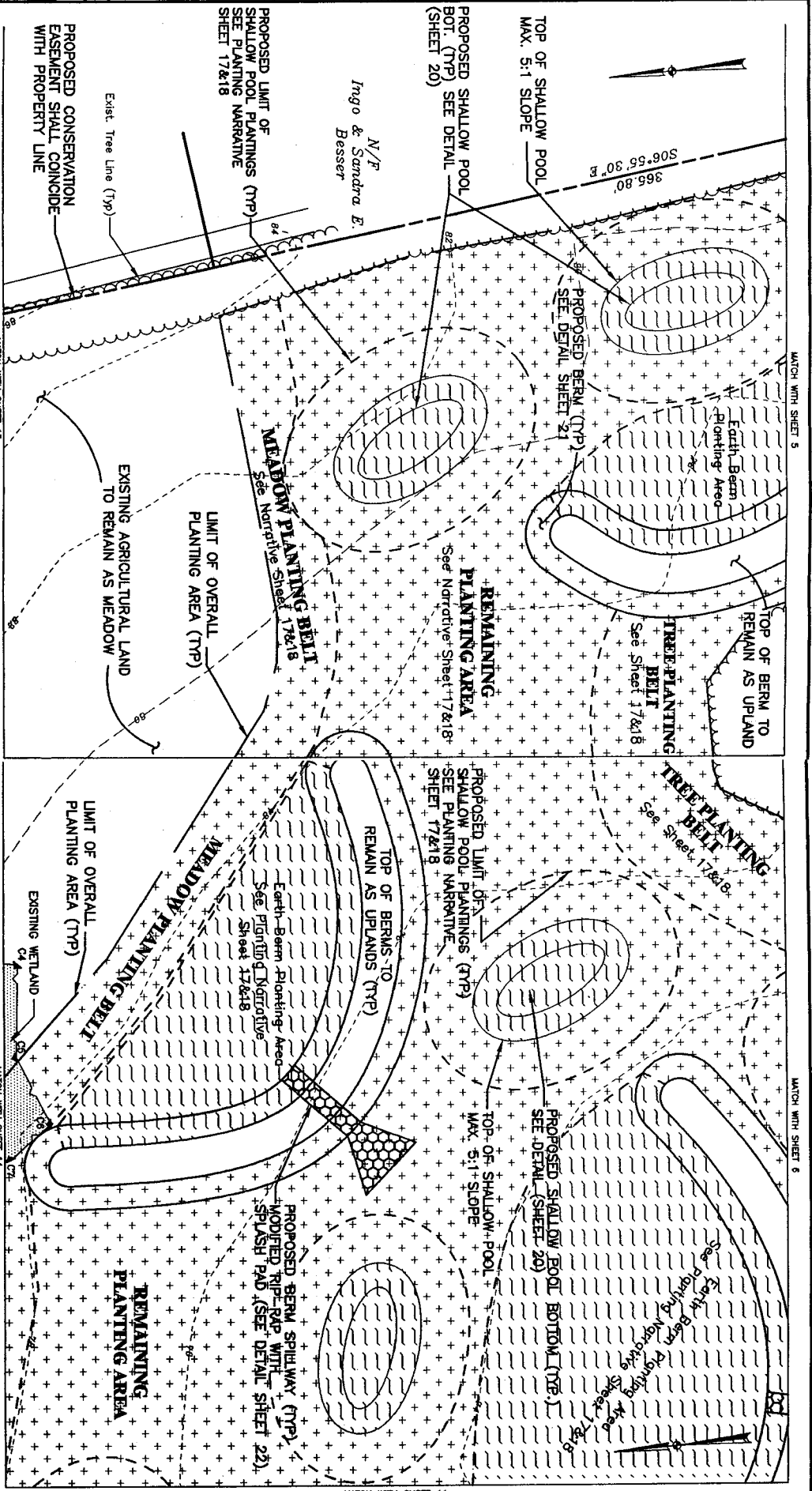
TROMLEY ROAD, EAST WINDSOR, CT

J.R. RUSSO & ASSOCIATES
1 SHOHAM ROAD
EAST WINDSOR, CT 06088

SITE PLAN

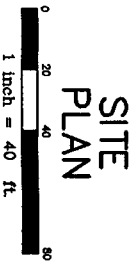


APPLICATION #1997-00775
SOUTHERN AUTO SALES, INC.
161 SOUTH MAIN STREET
EAST WINDSOR, CT 06088
DATE: JULY 15, 1998
REV: AUGUST 21, 1998
SHEET 8



WETLANDS MITIGATION PLAN
TROWLEY ROAD, EAST WINDSOR, CT

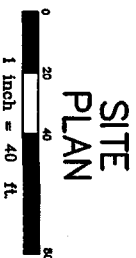
J.R. RUSSO & ASSOCIATES
1 SHOHAM ROAD
EAST WINDSOR, CT 06088



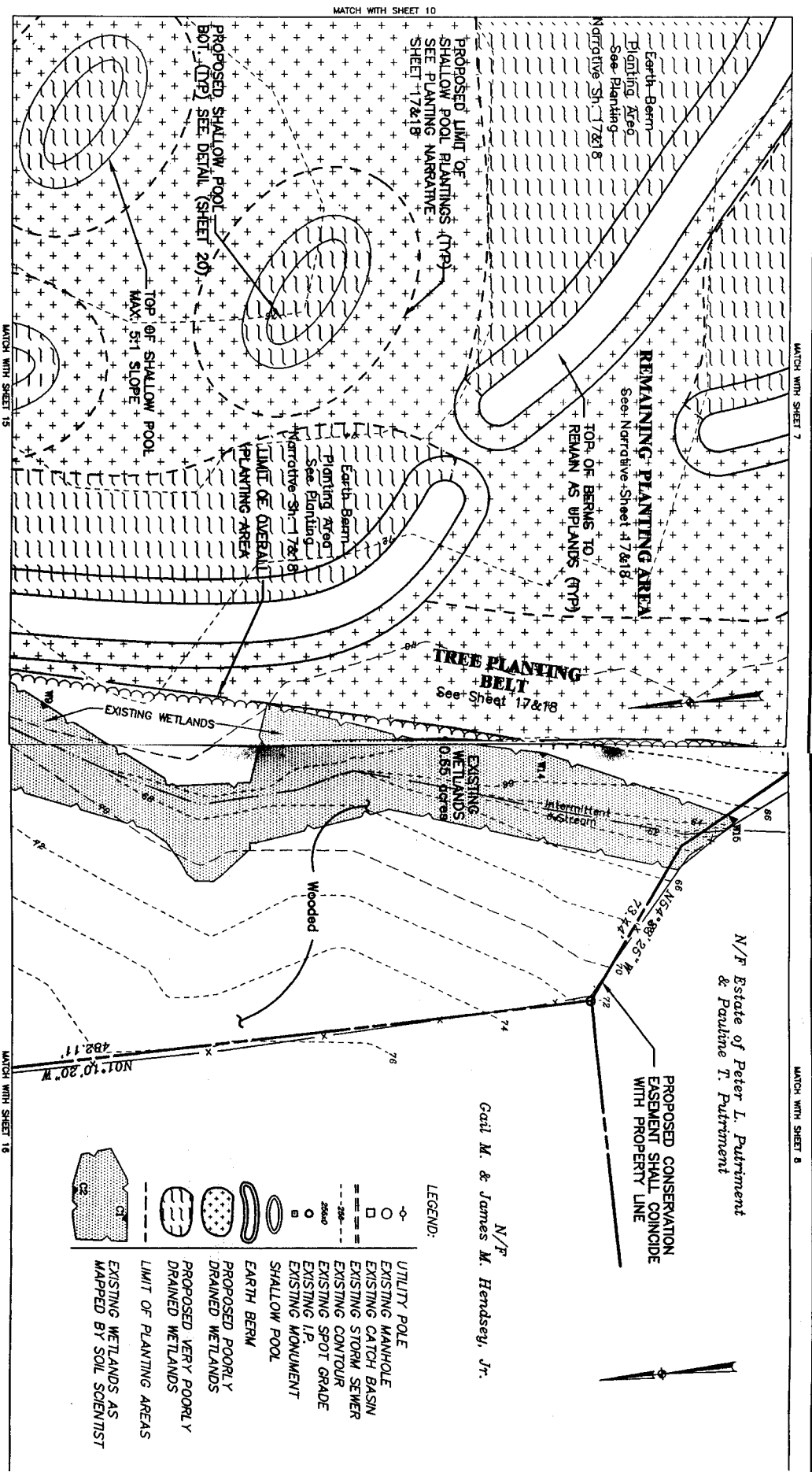
APPLICATION #1997-00775
SOUTHERN AUTO SALES, INC.
161 SOUTH MAIN STREET
EAST WINDSOR, CT 06088
DATE: JULY 15, 1998
REV: AUGUST 21, 1998
SHEET 9

WETLANDS MITIGATION PLAN
TROWLEY ROAD, EAST WINDSOR, CT

J.R. RUSSO & ASSOCIATES
1 SHOHAM ROAD
EAST WINDSOR, CT 06088



APPLICATION #1997-00775
SOUTHERN AUTO SALES, INC.
161 SOUTH MAIN STREET
EAST WINDSOR, CT 06088
DATE: JULY 15, 1998
REV: AUGUST 21, 1998
SHEET 10



- LEGEND:
- UTILITY POLE
 - EXISTING MANHOLE
 - EXISTING CATCH BASIN
 - EXISTING STORM SEWER
 - EXISTING CONTOUR
 - EXISTING SPOT GRADE
 - EXISTING I.P.
 - EXISTING MOVEMENT
 - SHALLOW POOL
 - EARTH BERM
 - PROPOSED POORLY DRAINED WETLANDS
 - PROPOSED VERY POORLY DRAINED WETLANDS
 - LIMIT OF PLANTING AREAS
 - EXISTING WETLANDS AS MAPPED BY SOIL SCIENTIST

<p>WETLANDS MITIGATION PLAN</p> <p>TROMLEY ROAD, EAST WINDSOR, CT</p> <p>J.R. RUSSO & ASSOCIATES 1 SHOHAM ROAD EAST WINDSOR, CT 06088</p>	<p>SITE PLAN</p> <p>0 20 40 80 1 inch = 40 ft.</p>	<p>APPLICATION #1997-00775</p> <p>SOUTHERN AUTO SALES, INC. 161 SOUTH MAIN STREET EAST WINDSOR, CT 06088 DATE: JULY 15, 1998 REV: AUGUST 21, 1998 SHEET 11</p>	<p>WETLANDS MITIGATION PLAN</p> <p>TROMLEY ROAD, EAST WINDSOR, CT</p> <p>J.R. RUSSO & ASSOCIATES 1 SHOHAM ROAD EAST WINDSOR, CT 06088</p>	<p>SITE PLAN</p> <p>0 20 40 80 1 inch = 40 ft.</p>	<p>APPLICATION #1997-00775</p> <p>SOUTHERN AUTO SALES, INC. 161 SOUTH MAIN STREET EAST WINDSOR, CT 06088 DATE: JULY 15, 1998 REV: AUGUST 21, 1998 SHEET 12</p>
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N/F
Cecil M. & James M. Hendsey, Jr.

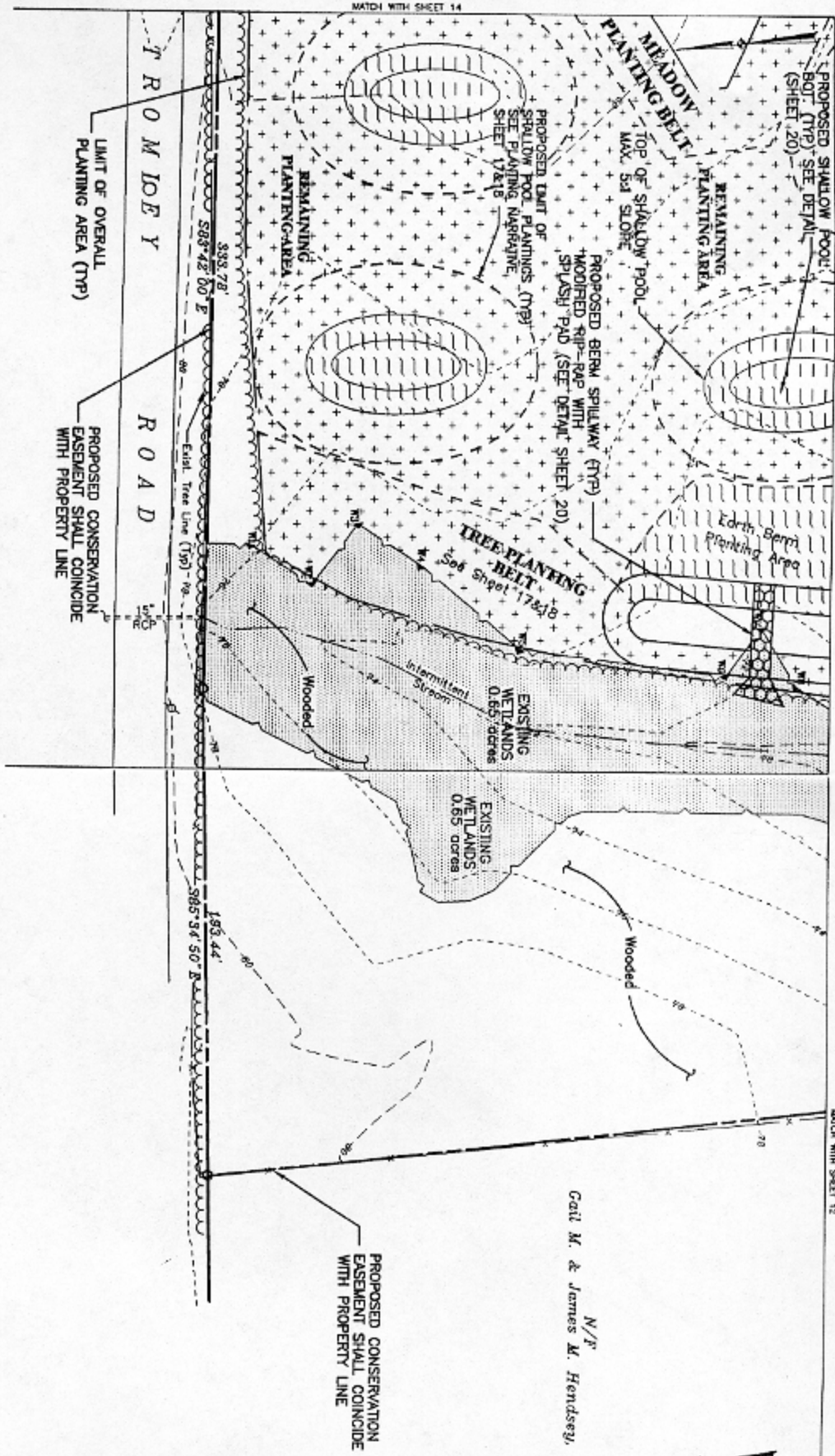
N/F Estate of Peter L. Putniment
& Pauline T. Putniment

PROPOSED CONSERVATION
EASEMENT SHALL COINCIDE
WITH PROPERTY LINE



MATCH WITH SHEET 11

MATCH WITH SHEET 12



WETLANDS MITIGATION PLAN
 IRMALEY ROAD EAST WINDSOR, CT

J.R. RUSSO & ASSOCIATES
 1 SHOHAM ROAD
 EAST WINDSOR, CT 06086

SITE
 PLAN

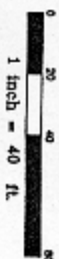


APPLICATION #1997-00775
 SOUTHERN AUTO SALES, INC.
 161 SOUTH MAIN STREET
 EAST WINDSOR, CT 06086
 DATE: JULY 15, 1998
 REV: AUGUST 21, 1998
 SHEET 15

WETLANDS MITIGATION PLAN
 IRMALEY ROAD, EAST WINDSOR, CT

J.R. RUSSO & ASSOCIATES
 1 SHOHAM ROAD
 EAST WINDSOR, CT 06086

SITE
 PLAN















APPLICATION #1997-00775
 SOUTHERN AUTO SALES, INC.
 161 SOUTH MAIN STREET
 EAST WINDSOR, CT 06086
 DATE: JULY 15, 1998
 REV: AUGUST 21, 1998
 SHEET 16

Wetland Function-Value Evaluation Form

Total area of wetland 8.4 ac Human made? yes Is wetland part of a wildlife corridor? no or a "habitat island"? no
 Adjacent land use residential, forest Distance to nearest roadway or other development 100 feet
 Dominant wetland systems present POW, PEM Contiguous undeveloped buffer zone present 60%
 Is the wetland a separate hydraulic system? yes If not, where does the wetland lie in the drainage basin? n/a
 How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Southern Auto Sales
 Wetland I.D. 199700775
 Latitude N41.90267 Longitude W72.59749
 Prepared by: RL PM Date 5/14/03
 Wetland Impact:
 Type _____ Area _____
 Evaluation based on:
 Office X Field _____
 Corps manual wetland delineation
 completed? Y _____ N X

Function/Value	Suitability Y N		Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge		X			clay substrate
 Floodflow Alteration		X			
 Fish and Shellfish Habitat		X			
 Sediment/Toxicant Retention	X				dense vegetation however little opportunity to perform function
 Nutrient Removal	X				dense vegetation however little opportunity to perform function
 Production Export		X			
 Sediment/Shoreline Stabilization		X			
 Wildlife Habitat	X			X	birds, frogs, butterflies, muskrats observed
 Recreation		X			fenced off along road
 Educational/Scientific Value		X			
 Uniqueness/Heritage		X			
 Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			none known
Other					

Notes:

* Refer to backup list of numbered considerations.

199700775
Southern Auto Sales
East Windsor, CT
8/23/02



Looking southerly from the northern side of the site. The site ends at the treeline in the distance.

USGS 8 km NE of Windsor, Connecticut, United States 23 Apr 1990



0 200M

0 200yd

Image courtesy of the U.S. Geological Survey
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