ME DOT
Biddeford Connector

File No.: 198700216

City and State: Biddeford, ME

General Impacts:

0.35 acre non-tidal open water
0.16 acre non-tidal emergent
2.59 acres non-tidal scrub-shrub

Functions and Values Lost: Unable to tell from file.

Year(s) Mitigation Constructed: June 1989

Size and Type of Mitigation as Proposed: 2.3 acres non-tidal emergent

Proposed Functions and Values of Mitigation: (From Mitigation Plan)

Floodflow Alteration
Sediment Retention
Wildlife Habitat

Mitigation Special Condition(s):

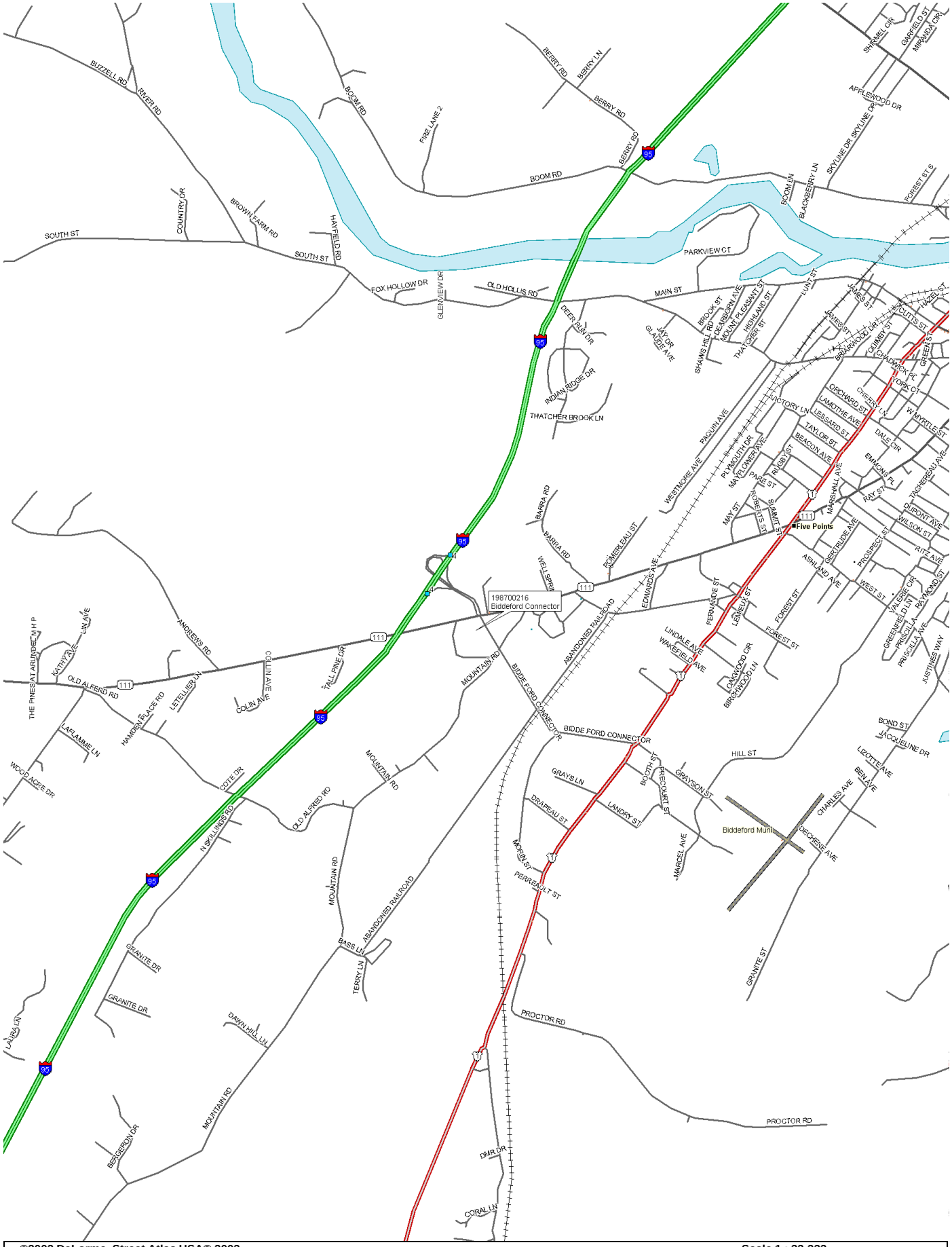
2. The applicant will provide a detailed mitigation plan to address the project's net loss of 2.4 acres of wetlands. This will be submitted by October 16, 1987 for corps of Engineers and federal resource agency review and approval. The goal of the plan is 1:1 mitigation for wetland values lost.

Remarks:

None

Directions:

Take 128/95 north towards Peabody/Portsmouth, NH. When road splits, bear right onto Route 95 north. Take exit 4, ME-111 towards Biddeford. ME-111 becomes Alfred Street.

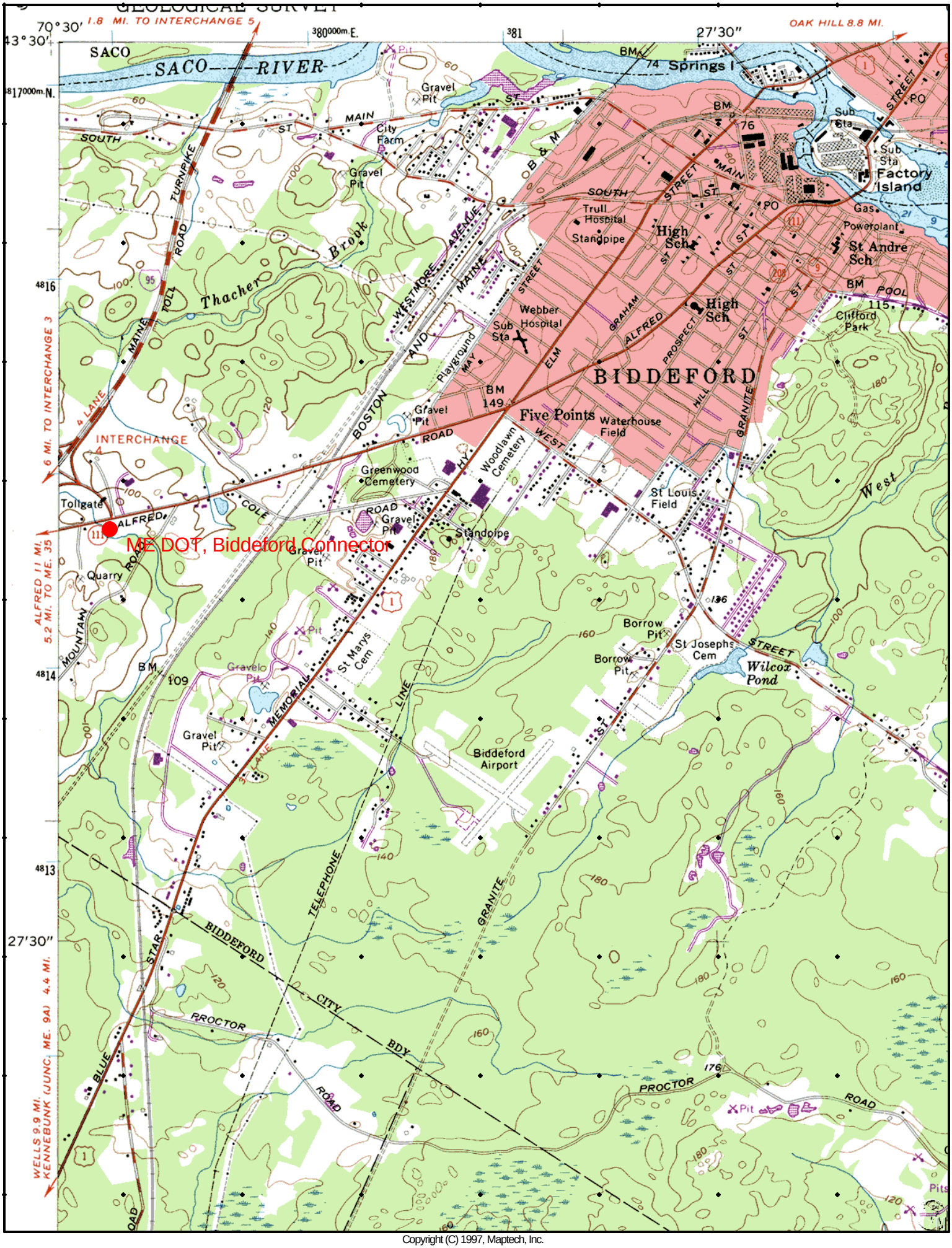


TN
MN (16.5°W)

Scale 1 : 33,333

0 1000 2000 3000 4000 5000 ft
0 200 400 600 800 1000 m

1" = 2780 ft



MITIGATION SITE FIELD DATA FORM

Site Name: Biddeford Connector **File No.** 198700216

City/Town: Biddeford **State:** ME **Waterbody:** n/a

Monitor(s): Tischbein, Wright, Minkin, McKee, Clement **Date:** 7-30-02

Was site constructed? yes

Is site wetland? yes

Size of proposed wetland: 2.3 acres

Actual size of wetland: less – Basin 3 is dry

Landscape position: middle – below highway, above Richardson brook.

Lat/Long Points: 43.47277N 70.49258W

Saved GPS Waypoint name: Bidde, BID

GPS Tracking Log Name: N/A

Perimeter: TBD

Surrounding land use: N/A

Is wetland function compromised by surrounding land use?
No, drainage from road is diverted from wetland and some basins surrounded by berms.

Plant health:
Good

Invasive species:
Lythrum salicaria, Phalaris arundinacea, Typha latifolia

Wildlife use:
Goldfinch, red-winged black bird

Plants:

Basin 4 edge
- *Acer rubrum*
- *Alnus rugosa*
- *Carex* sp.
- *Cornus* sp.
- *Galium* sp.
- *Juncus tenuis*
- *Lythrum salicaria*
- *Malus* sp.
- *Onoclea sensibilis*
- *Phalaris arundinacea*
- *Pinus strobus*
- *Potentilla* sp.
- *Rubus* sp.
- *Scirpus atrovirens*
- *Solidago* sp.
- *Viburnum dentatum*

Basin 4 wetter area
- *Carex crinita*
- *Carex* sp.
- *Carex vulpinoidea*
- *Cicuta maculata* (water hemlock)
- *Galium* sp.
- *Glyceria* sp.
- *Impatiens capensis* (jewelweed)
- *Juncus effusus*
- *Lysimachia terrestris* (yellow loosestrife)
- *Lythrum salicaria*
- *Phalaris arundinacea*
- *Scirpus atrovirens*
- *Scirpus cyperinus*
- *Solanum dulcamara* (bittersweet nightshade)
- *Sparganium* sp.
- *Typha latifolia*

Basin 1
- *Acer rubrum*
- *Cornus stolonifera*
- *Juncus effusus*
- *Polygonum sagittatum*
- *Salix* sp.
- *Scirpus cyperinus* (approx 10%)
- *Sparganium* sp. (approx 80-90%)
- *Typha latifolia*

Basin 2
- *Acer rubrum*
- *Alisma* sp.
- *Carex stricta*
- *Cornus stolonifera*
- *Fraxinus pennsylvanica*
- *Juncus effusus*
- *Lythrum salicaria* (trace)
- *Populus tremuloides*
- *Scirpus cyperinus*
- *Sparganium* sp.
- *Spiraea latifolia*
- *Typha latifolia*

Basin 6
- *Carex lurida*
- *Carex* sp. (ovales)
- *Carex stricta*
- *Cornus amomum*
- *Equisetum sp.*
- *Eupatorium maculatum*
- *Euthamia graminifolia*
- *Galium* sp.
- *Juncus effusus*
- *Lysimachia terrestris*
- *Mentha piperita*
- *Polygonum sagittatum*
- *Prunella vulgaris* (heal-all)
- *Salix discolor*
- *Scirpus microcarpus*
- *Solidago* spp.
- *Spiraea latifolia*
- *Spiraea tomentosa*

Basin 8
- *Carex lurida*
- *Cicuta maculata*
- *Equisetum* sp.
- *Juncus effusus*
- *Ludwigia palustris*
- *Lythrum salicaria*
- *Phragmites australis* (not much)
- *Potamogeton* sp. on water
- *Scirpus atrovirens*
- *Scirpus cyperinus*
- *Sparganium* sp.
- *Typha latifolia*

Basin 7
- *Alnus rugosa*
- *Juncus effusus*
- *Salix* sp.
- *Scirpus atrovirens*
- *Sparganium* sp.
- *Typha latifolia (*few)

Basin 3
- *Agropyron* sp.
- *Cornus stolonifera*
- *Fraxinus pennsylvanica*
- *Populus deltoides*

Basin 5
- *Alisma* sp.
- *Carex crinita*
- *Cicuta maculata*
- *Cornus amomum*
- *Eleocharis* sp.
- *Juncus effusus*
- *Juncus* sp.
- *Lysimachia terrestris*
- *Lythrum salicaria*
- *Scirpus validus*
- *Sparganium* sp.
- *Typha latifolia (*dominant)

Soils Data:
Soils data not collected at this site.

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:
Tischbein and Clement: "Thalweg channel put in brook to support fish during low water. Different top dressings (6 inches) were put into different basins (see map) as an experiment. SE basins (6,7,8) hydrologically challenged (well-drained). Richardson brook: 100-year floodplain. Wetland cells are detention basins. Was supposed to be mosaic of wetland pockets intermittent with upland. Basins are clay lined."

Basin 3 is dry –see photo.
Basin 4 has stained leaves, hummocky.

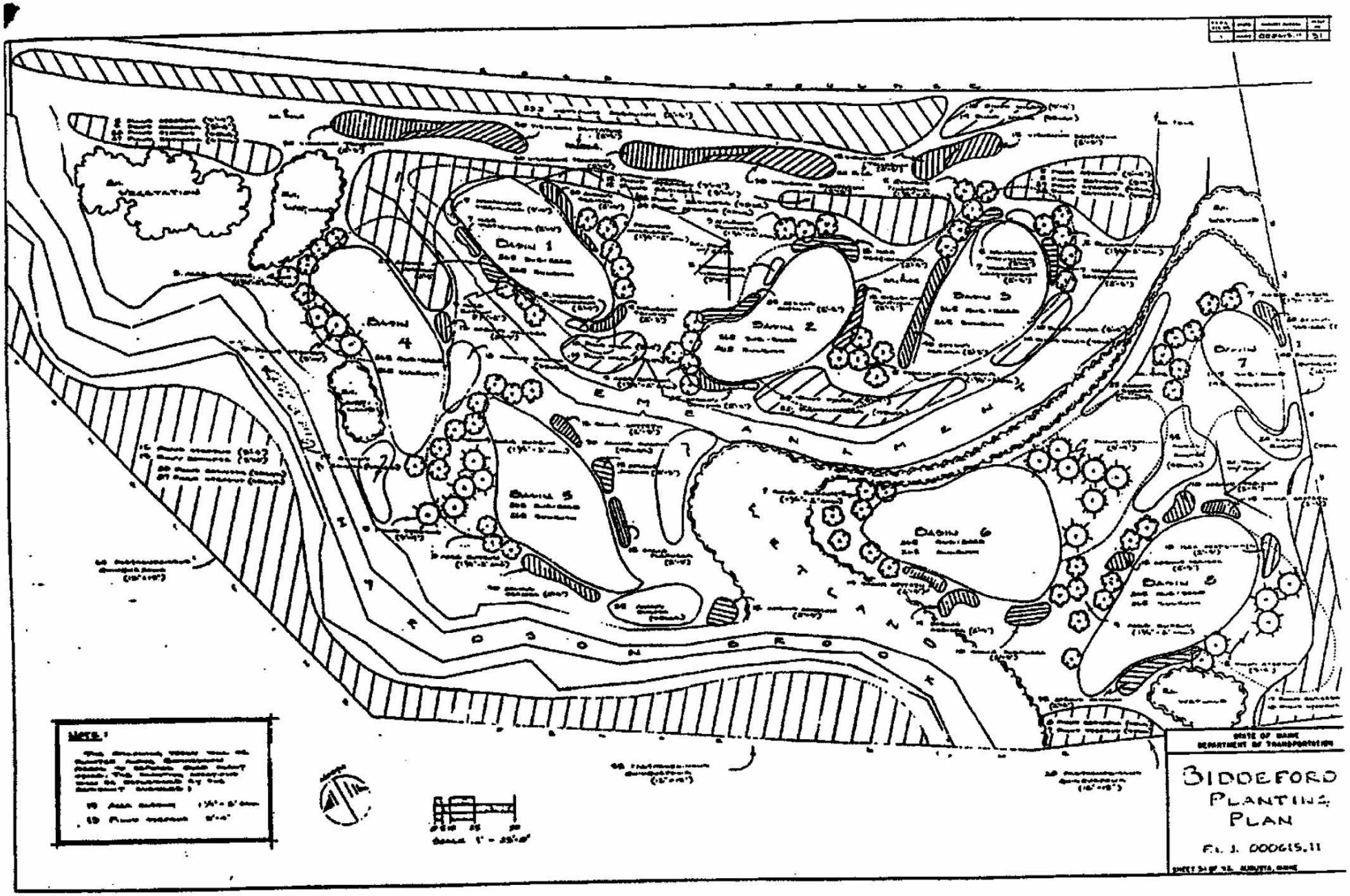
Highway runoff doesn't go into most of these; they're isolated due to berms.

Cattails, reed canary grass (for nesting and escape cover for birds and small mammals), red osier dogwood, streamco willow, bankers willow, *Viburnum* sp., and alder were planted (according to the mitigation plan).

Monitoring was for 3 years during which soil moisture and vegetation replacement was to have taken place.

Monitoring reports were to have come in each year 91-94. 3 came in 93, 1 came in 95, 1 came in 97.

Comments, problems, recommendations:
Because project is old, reports were thrown away. Only photos and plans in the file.


Basin 1
Basin 2
Basin 3
Basin 4
Basin 5
Basin 6
Basin 7
Basin 8
EMBANKMENT
FILL
EXCAVATION
NOTES:
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
BIDDEFORD
PLANTING
PLAN
F. A. D00615.11

Wetland Function-Value Evaluation Form

ME DOT – Biddeford

Total area of wetland <2.3 ac Human made? yes Is wetland part of a wildlife corridor? no or a "habitat island"?

Wetland I.D. Connector 198700216

Latitude N43.47277 Longitude W70.49258

Adjacent land use highway, brook, upland Distance to nearest roadway or other development 50 feet

Prepared by: KM KW PM Date 7/30/02

Dominant wetland systems present PEM Contiguous undeveloped buffer zone present no

Wetland Impact:
Type Area

Is the wetland a separate hydraulic system? yes If not, where does the wetland lie in the drainage basin?

Evaluation based on:
Office Field X

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Corps manual wetland delineation completed? Y N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	X		4,5,6		recharge
Floodflow Alteration		X			
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention		X			
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat	X			X	
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			
Other					

Notes:

* Refer to backup list of numbered considerations.

198700216
MEDOT Biddeford Connector
Biddeford, ME
7/30/02

Entrance – facing SE

Basin 2

Basin 3 - Dry

Basin 4

Basin 5

Basin 6

Basin 7

Basin 8

TerraServer Image Courtesy of the USGS

USGS **Biddeford, Maine, United States** 29 Apr 1998

Image courtesy of the U.S. Geological Survey