



DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 11-114907-WG
Project Name/Address: Vaddadi Dock and Boatlift
3026 West Lake Sammamish Parkway SE
Planner: Kevin LeClair
Phone Number: 425-452-2928
Minimum Comment Period: July 11, 2011

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other:

ENVIRONMENTAL CHECKLIST

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4) Our TTY number is 425-452-4636.

Background Information

Bellevue File
11-114907-WG

Reviewed by:
Kevin LeClair

Property Owner: **Phani K. Vaddadi and Seeta Vaddadi**

Proponent: **Gregory W. Ashley - Ashley Shoreline Design & Permitting**

Contact Person: **Gregory W. Ashley - Ashley Shoreline Design & Permitting**
(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: **16412 NE 10th Pl.**
Bellevue, WA 98008-3707
Phone: **(425) 957-9381**

Proposal Title: **Vaddadi pier & boatlift**

Proposed Location: **3026 W Lk. Samm. Pkwy. SE**
(Street address and nearest cross street or intersection) Provide a legal description if available.

Please attach an 8 1/2" x 11" vicinity map that accurately locates the proposed site.

Give an accurate, brief description of the proposal's scope and nature.

General description: **Build new 479 SF fixed pile pier and install a free standing portable boatlift.**

1. Acreage of site: **31,000 SF**
2. Number of dwelling units/buildings to be demolished: **None, does not apply**
3. Number of dwelling units/buildings to be constructed: **None, does not apply**
4. Square footage of buildings to be demolished: **None, does not apply**
5. Square footage of buildings to be constructed: **None, does not apply**
6. Quantity of earth movement (in cubic yards): **None, does not apply**
7. Proposed land use: **Private single-family residence**
8. Design features, including building height, number of stories and proposed exterior materials: **Does not apply**

REVIEWED

By Kevin LeClair at 12:39 pm, Jun 09, 2011

9. Other: **Does not apply**

Estimated date of completion of the proposed timing of phasing: **Construction to be carried out during the timing window of July 16 through Dec. 31**

Do you have any plans for future additions, expansions, or further activity related or connected with this proposal? If yes, explain. **No**

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. **A shoreline planting plan (SPP) to be prepared by EcoPacific Environmental Services**

Do you know whether applications are pending for government approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known? **No**

Please provide one or more of the following exhibits, if applicable to your proposal.
(Please check appropriate box(es) for exhibits submitted with your proposal)

- Land Use Reclassification (rezone) Map of existing and proposed zoning.
- Preliminary Plat or Planned Unit Development
Preliminary plat map
- Clearing & Grading Permit
Plan of existing and proposed grading
Development plans
- Building Permit (or Design Review)
Site Plan
Clearing & Grading Plan

A single-family addition building permit is required for dock construction

- Shoreline Management Permit
Site Plan

A - ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site (circle one): flat; rolling; hilly; steep slopes; mountainous; other:

b. What is the steepest slope on the site (approximately percent slope)? **< 1%**

REVIEWED
By Kevin LeClair at 12:39 pm, Jun 09, 2011

c. What general types of soils are found on the site (for example, clay, sand gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Sand & gravel

d. Are there surface indicators or history of unstable soils in the immediate vicinity? If so, describe.

No

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

None, does not apply

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No, does not apply

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None, does not apply

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

None, does not apply

A sediment curtain will be required around the work area during dock construction to prevent suspended sediment from leaving work area per BCC 23.76

2. **AIR**

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

None, does not apply

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No, does not apply

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None, does not apply

3. **WATER**

a. **Surface**

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes, Lake Sammamish

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, build new pier and install boatlift.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None, does not apply

4) Will the proposal required surface water withdrawals or diversions? Give general description,

REVIEWED

By Kevin LeClair at 12:40 pm, Jun 09, 2011

purpose and approximate quantities if known.
No, does not apply

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.
Yes

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
No, does not apply

b. Ground

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximately quantities if known.
No, does not apply

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals, agriculture; etc.).
None, does not apply

3) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
None, does not apply

c. Water Runoff (including storm water)

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow? Will this water flow into other waters? If so, describe.
None, does not apply

2) Could waste materials enter ground or surface waters? If so, generally describe.
No, does not apply

A turbidity monitoring plan will be required in advance of the building permit and turbidity will be monitored during construction.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
None, does not apply

A sediment curtain will be required around the work area during dock construction to prevent suspended sediment from leaving work area per BCC 23.76

4. PLANTS

a. Check the types of vegetation found on the site:

Deciduous tree: Alder, Maple, Aspen, other

Evergreen tree: Fir, Cedar, Pine, other

Shrubs

Grass

Pasture

Crop or grain

There is a willow shrub at the shoreline/water interface that will remain.

Wet soil plants: Cattail, Buttercup, Bulrush, Skunk Cabbage, other

Water plants: Water Lily, Eelgrass, Milfoil, other

Other types of vegetation

REVIEWED

By Kevin LeClair at 12:41 pm, Jun 09, 2011

- b. What kind and amount of vegetation will be removed or altered?
None
- c. List threatened or endangered species known to be on or near the site.
Salmon
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
Native vegetation to be planted along the shore. Scope of planting to be determined by EcoPacific Environmental Services

5. **ANIMALS**

- a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:
 - Birds:** Hawk, Heron, Eagle, Songbirds, other: Eagles utilize the lakeshore for foraging. No nests are in the vicinity.
 - Mammals:** Deer, Bear, Elk, Beaver, other:
 - Fish:** Bass, Salmon, Trout, Herring, Shellfish, other:
- b. List any threatened or endangered species known to be on or near the site.
Salmon
- c. Is the site part of a migration route? If so, explain
Possibly a Salmon outmigration rout
- d. Proposed measures to preserve or enhance wildlife, if any:
Adhere to all regulations and guidelines

6. **ENERGY AND NATURAL RESOURCES**

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
None, does not apply
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No, does not apply
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
None, does not apply

7. **ENVIRONMENTAL HEALTH**

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.
No
 - 1) Describe special emergency services that might be required.
None, does not apply

REVIEWED

By Kevin LeClair at 12:43 pm, Jun 09, 2011

- 2) Proposed measures to reduce or control environmental health hazards, if any:
None, does not apply

b. **Noise**

- 1) What type of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None, does not apply

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction, Monday through Friday, 8:00 A.M. to 4:30 P.M.

- 3) Proposed measures to reduce or control noise impacts, if any:

Limit time of construction to M-F, 8:00 A.M to 4:30 P.M.

Sound attenuation devices shall be used during pile driving to minimize negative impacts.

8. **LAND USE AND SHORELINE USE**

- a. What is the current use of the site and adjacent properties?
Private single-family residence
- b. Has the site been used for agriculture? If so, describe.
No
- c. Describe any structures on the site.
Private single-family residence
- d. Will any structures be demolished? If so, what?
No
- e. What is the current zoning designation of the site?
R-5
- f. What is the current comprehensive plan designation of the site?
- g. If applicable, what is the current Shoreline Master Program designation of the site (check with City Planning staff)?
- h. Has any part of the site been classified an "environmentally sensitive" area? If so, specify.
Yes, the shoreline
- i. Approximately how many people would reside or work in the completed project?
None, does not apply
- j. Approximately how many people would the completed project displace?
None, does not apply
- k. Proposed measures to avoid or reduce displacement impacts, if any?
None, does not apply
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
Adhere to all regulations and guidelines

REVIEWED

By Kevin LeClair at 12:44 pm, Jun 09, 2011

9. **HOUSING**

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None, does not apply
- b. Approximately how many units, if any, would be eliminated? Indicate whether high-, middle-, or low-income housing.
None, does not apply
- c. Proposed measures to reduce or control housing impacts, if any:
None, does not apply

10. **AESTHETICS**

- a. What is the tallest height of any proposed structures(s), not including antenna; what is the principal exterior building material(s) proposed?
Approximately 36" above the OHWM, wood
- b. What views in the immediate vicinity would be altered or obstructed?
None
- c. Proposed measures to reduce or control aesthetic impacts, if any:
None

11. **LIGHT AND GLARE**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
None, does not apply
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
No, does not apply
- c. What existing off-site sources of light or glare may affect your proposal?
None, does not apply
- d. Proposed measures to reduce or control light and glare impacts, if any:
None, does not apply

No dock lighting is proposed. No canopy is proposed over the boatlift.

12. **RECREATION**

- a. What designated and informal recreational opportunities are in the immediate vicinity?
Water sports
- b. Would the proposed project displace any existing recreational uses? If so, describe.
No
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project of applicant, if any:
None

REVIEWED

By Kevin LeClair at 12:46 pm, Jun 09, 2011

13. HISTORICAL AND CULTURAL PRESERVATION

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
None known
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None known
- c. Proposed measures to reduce or control impacts, if any:
None

14. TRANSPORTATION

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on-site plans, if any.
Does not apply
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
Does not apply
- c. How many parking spaces would the completed project have? How many would the project eliminate?
None, does not apply
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
No, does not apply
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No, does not apply
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
None, does not apply
- g. Proposed measures to reduce or control transportation impacts, if any:
None, does not apply

15. PUBLIC SERVICES

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No, does not apply
- b. Proposed measures to reduce or control direct impacts on public services, if any.
None, does not apply

16. UTILITIES

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
Does not apply

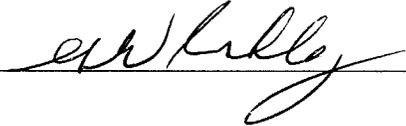
REVIEWED

By Kevin LeClair at 12:46 pm, Jun 09, 2011

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.
None, does not apply

SIGNATURE

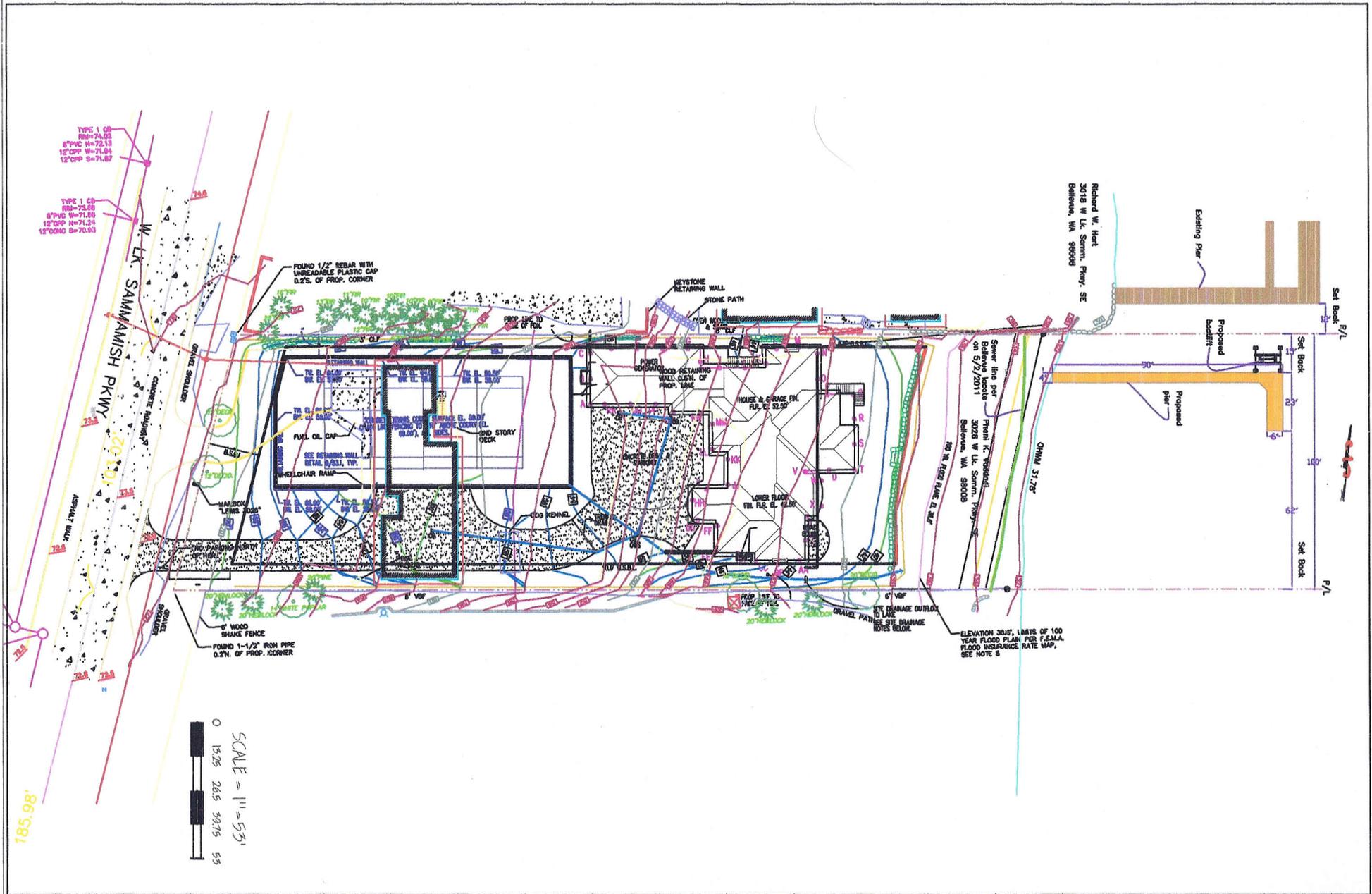
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:  _____

Date Submitted: 6/3/2011

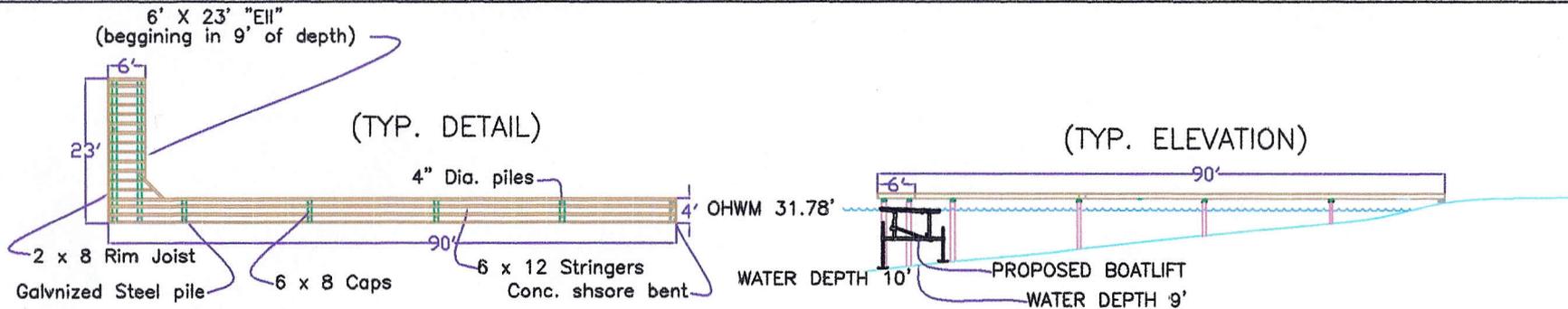
REVIEWED

By Kevin LeClair at 12:46 pm, Jun 09, 2011



SCALE = 1" = 55'
 0 15.25 26.5 39.75 55

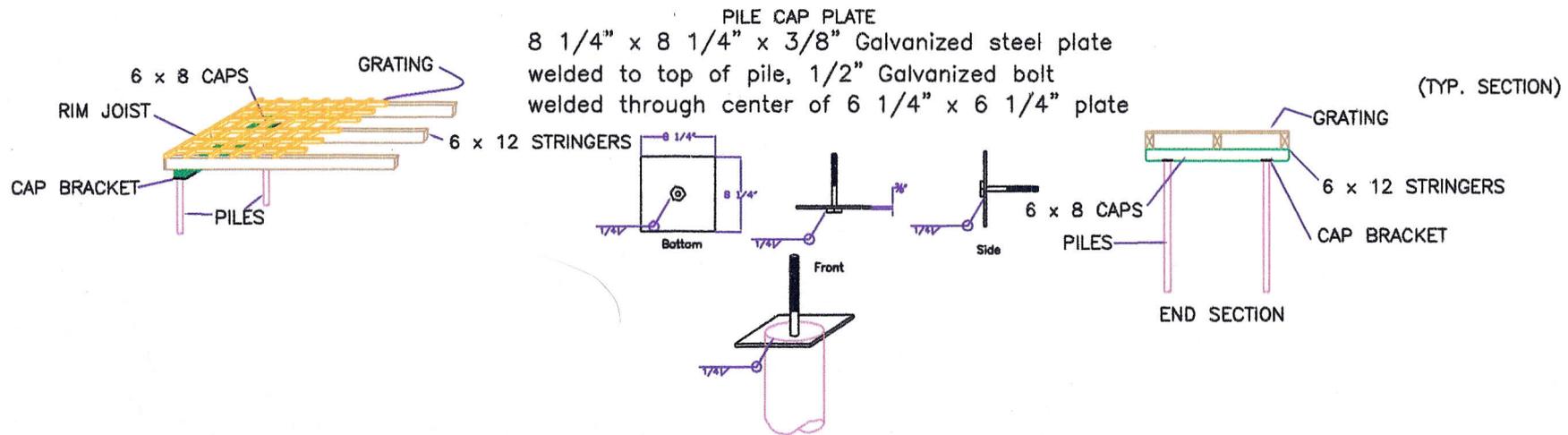
SHORELINE PROJECT FOR : PAGE: 2 of 3	Phani K. Vaddadi 3026 W L. Samm. Pkwy. SE Bellevue, WA 98008	LOCATION: Lake Sammamish DATUM: NAVD 1988 LAT: 47° 34' 58" North LONG: 122° 06' 40" West LENGTH FROM OHWM: 90' SQ. FT. : 579	PROJECT DESCRIPTION: Build new fixed pile pier & install free standing portable boatlift DATE: 5/29/2011
---	--	---	---

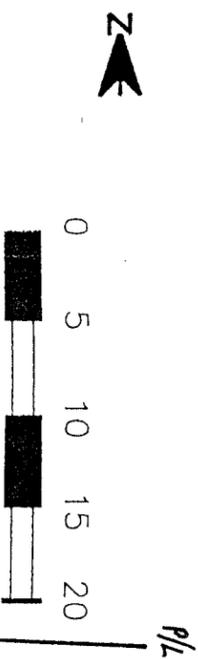
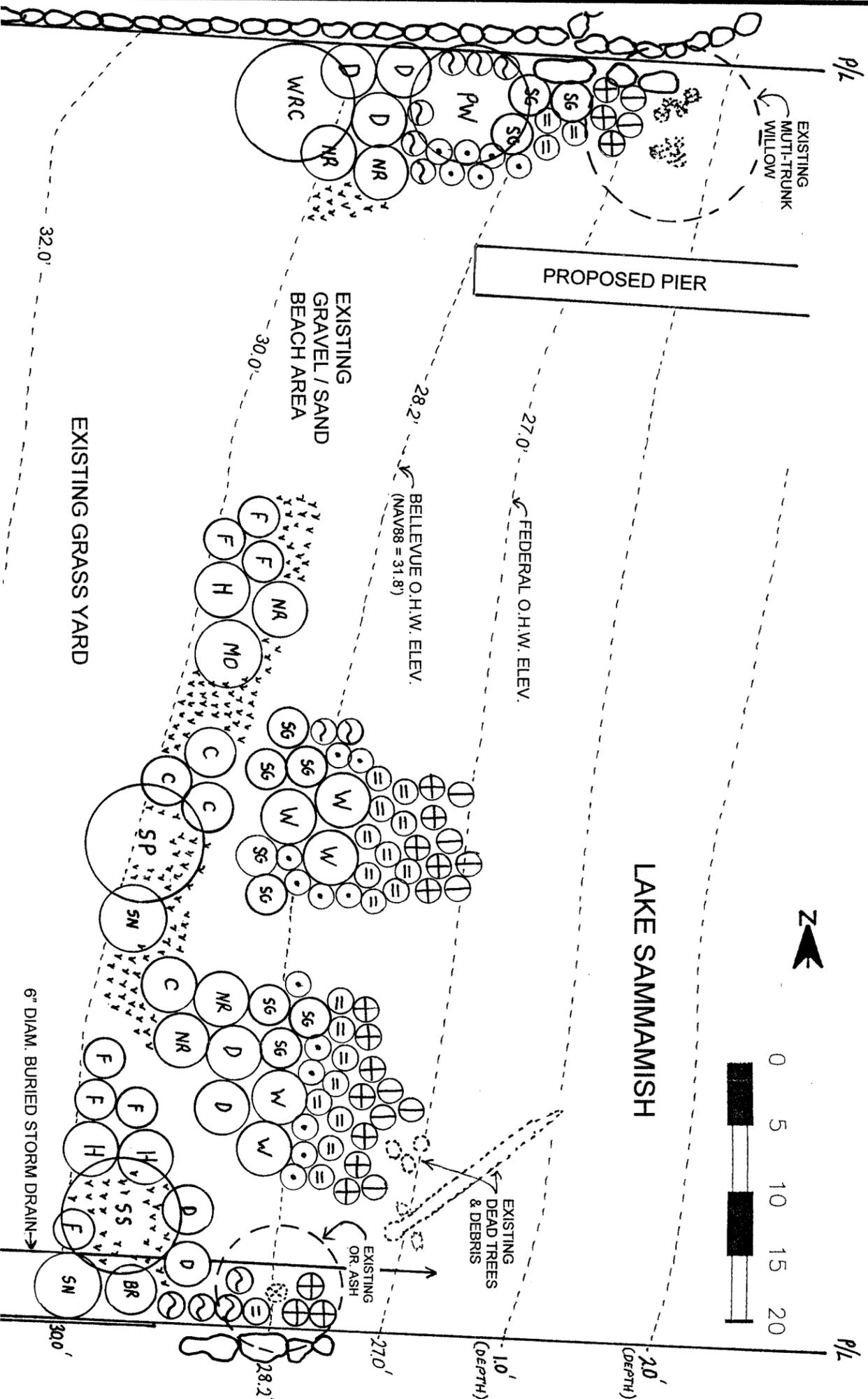


1. FIRST PILE BENT TO SPAN 18' MINIMUM
2. PILE BENTS TO SPAN 20' MAXIMUM
3. PILES TO BE 4" TO 6" DIA. STANDARD WALL STEEL
4. CAPS ATTACHED PILINGS WITH GALV. CAP BRACKETS & 1/2" X 14" GALV. CARRIAGE BOLTS
5. STRINGERS TO BE MAXIMUM 1'-6" O.C.
6. STRINGERS TO BE ATTACHED TO CAPS WITH 20" X 1/2" GALV. CARRIAGE BOLTS
7. DECKING ATTACHED TO STRINGERS WITH S.S. SCREWS

NOTES:

- ALL PILINGS TO BE GALVANIZED STANDARD WALL STEEL CASING
- ALL PILINGS DRIVEN TO REFUSAL
- CAP MATERIAL TO BE DOUGLAS FIR # 2 OR BETTER --- ACZA TREATED TO .60 OR REFUSAL
- STRINGER MATERIAL TO BE DOUGLAS FIR # 2 OR BETTER --- ACZA TREATED TO .40 OR REFUSAL
- DECKING TO BE THRU-FLOW GRATING





PROPOSED REVEGETATION
(>1,000 SQ. FT. NEW NATIVE PLANTINGS)

SHORELINE PLANT SCHEDULE - Vaddadi Residence

Sym.	Qty.	Scientific Name / Common Name	Cond.	Size	Spacing
WRC	1	Thuja plicata / Western red cedar	5 gal.	6-8'	as shown
SS	1	Picea sitchensis / Sitka spruce	5 gal.	6-8'	as shown
SP	1	Pinus contorta var. contorta / Shore pine	5 gal.	6-8'	as shown
PW	1	Salix lasiandra / Pacific willow	5 gal.	6-8'	as shown

Sym	Qty	Scientific Name / Common Name	Cond.	Size	Spacing
W	5	Salixitchensis / Sitka willow	cutting	4'	as shown (3/symbol)
D	7	Cornus sericea / Red osier dogwood	cutting	3-4'	4' o.c. (3/symbol)
SN	2	Snowberry / Symphoricarpos albus	2 gal.	30-36"	as shown
NO	1	Philadelphus lewisii / Mock orange	2 gal.	30-36"	as shown
BR	1	Rosa gymnocarpa / Baldhip rose	2 gal.	30-36"	as shown
NR	5	Rosa nutkana / Nootka rose	2 gal.	30-36"	as shown
C	4	Ribes sanguineum / Red-flowering currant	2 gal.	30-36"	3' o.c.
H	3	Vaccinium ovatum / Evergreen huckleberry	2 gal.	30-36"	as shown
SG	11	Myrica gale / Sweet gale	1 gal.	12-18"	as shown
F	7	Polystichum munitum / Sword fern	1 gal.	8-12"	as shown
	70-75 (total)	Mixture (roughly equal numbers) of: Fragaria chiloensis / Wild strawberry; Sisyrinchium idahoensis / Blue-eyed grass; Sisyrinchium californicum / Golden-eyed grass	4" pot	2-4"	1' o.c.
	12(48)	Juncus effusus / Common rush	plugs	8-10"	1.5' o.c. (4/symbol)
	18(72)	Carex obnupta / Slough sedge	plugs	8-10"	1.5' o.c. (4/symbol)
	22(88)	Juncus ensifolius / Daggerleaf rush	plugs	8-10"	1.5' o.c. (4/symbol)
	18(72)	S. microcarpus / Sm. fruited bulrush	plugs	10"	1.5' o.c. (4/symbol)
	10(40)	Scirpus acutus / Hardstem bulrush	plugs	10"	1.5' o.c. (4/symbol)

Vertical Datum: 1929 NGVD (Bellevue/NAV88 -3.58)
Topography: D.R. Strong Consulting Engineers (10/26/2010)
Bathymetry: EcoPacific Environmental Services (3/17/2011)

SHORELINE PLANTING PLAN (FOR AGENCY REVIEW)
Vaddadi Pier Project - 3026 W. Lake Samm. Parkway SE, Bellevue, WA

SCALE: 1" = 10'	APPROVED BY:	DRAWN BY: T.M.
DATE: 05/16/11		REVISED: 05/26/11

EcoPacific Environmental Services
9215 156th Place NE Redmond, WA 98052
Phone (425) 417-3785 Email: ecopacific@seanet.com

JUN 09 2011



DRAWING NUMBER: P11111111
SHEET 1 of 2

SHORELINE PLANTING PLAN (SPP) NOTES AND SPECIFICATIONS (05/26/2011)

Objectives

The purpose of the SPP is to make environmental and aesthetic improvements on 100 feet of Lake Sammamish shoreline at 3026 West Lake Sammamish Parkway SE in Bellevue, WA. These improvements are intended to act as impact reduction and conservation measures for a proposal to construct a new residential recreational pier at the site. The SPP involves removal of non-native and invasive plants and replacement with over 1,000 sq. feet. of native shoreline species. New plantings include a mix of riparian trees, shrubs, groundcover, and emergents.

Primary environmental benefits of the SPP are as follows:

- Provide a natural buffer (runoff treatment and wildlife habitat) between the property and the lake.
- Increase shading of the shallow littoral fringe with overhanging vegetation.
- Increase inputs of leaf litter, small woody debris, and detritus to the lake.
- Increase allochthonous inputs of insects to the lake.

Responsibilities

Landscape planting elements (plant removal and replacement) shall be implemented by a landscape contractor experienced with shoreline planting projects. Overall supervision of the SPP shall be carried out by the owner or a designated restoration ecologist (e.g. EcoPacific). Upon installation of new plantings, the site shall be inspected by the consulting ecologist and the SPP adjusted as necessary. The ecologist shall also be responsible for completion of routine site monitoring reports.

In the event the property is sold, the owner/seller shall ensure this SPP and all associated requirements are fully disclosed in the Washington Seller Disclosure Statement (Form 17). Thus, all owner responsibilities would be passed on to the buyer/new owner.

Landscape Planting Procedure

1. Install reinforced silt fencing along all portions of the shoreline to be disturbed. The fence shall be located at least 2' inland of the water's edge (at time of construction) and remain in place until landward plantings are installed and exposed soil areas are stabilized.
2. All non-native and invasive vegetation in the new planting areas shall be removed (without use of herbicides) for offsite disposal. Care shall be taken to prevent invasive plant material from entering the lake.
3. Digging of planting holes should not result in the need for importing topsoil. If a small amount of imported soil is required, it shall be aged, weed free, and contain 10-20% organic matter by volume. Where possible, native soil shall be used for backfilling the bottom half of planting holes. Any compacted soils in the planting area shall be loosened.
4. Install plantings as per Sheet 1, preferably during the fall (Oct. 15 – Dec. 15) or a frost-free period within the dormant season (Nov.-March). Bare root specimens may be used during the dormant season if properly handled. Container or balled-in burlap specimens shall be used for planting during the growing season.
5. Plant materials shall be local genetic stock (western WA), healthy, bushy, and true to size, name, and variety (nomenclature from *Flora of the Pacific Northwest* by Hitchcock and Cronquist, UW Press, 1973 and/or *A Field Guide to the Common Wetland Plants of Western Washington & Northwestern Oregon*, ed. Sarah Spear Cooke, Seattle Audubon Society, 1997). All plants shall be free of damage and disease and shall be habituated to local outdoor conditions. Plants in leaf shall be well foliated and of good color. Root systems shall be fibrous and free of dead or tightly balled roots.
6. Cuttings shall only be planted from Dec. through March. In other months, live rooted or container saplings shall be substituted. Cuttings shall be at least .5" in diameter and have a minimum of 4 lateral buds above ground after planting. Cuttings must be fresh (<24 hrs. from cutting), kept moist, and have side branches cleanly removed and bark intact. Butt ends shall be cleanly cut at an angle for easy insertion and dipped in a plant rooting hormone prior to planting. A pilot hole of at least 18" shall be made prior to planting in dense and gravelly soils. Cuttings shall be inserted to a depth of at least 18", leaving a minimum of 30" extending above ground.
7. Plant spacing for listed species shall be somewhat random (naturalistic) and not in a regular grid pattern. On-center spacing in the plant list indicates the "average" spacing distance. Where groundcover species mixtures are specified, conspecifics should be planted in clusters of >5 plants to facilitate easy identification and weeding.

8. Where possible, emergent plugs shall be planted above the current level of lake inundation. If in-water planting is attempted, protective measures must be used to ensure the plugs are not destroyed by wave action and stems (if plant is non-dormant) must extend above the water surface by at least 6". Plugs shall have healthy rhizomes and tops and apparent growing buds. Weeds in the plugs shall be removed by hand. Leaves and stems shall be clipped a small amount prior to planting to encourage root production.

9. Install a biodegradable, non-floating erosion control material such as a coir blanket in all areas of exposed soil from 28' to 31' NGVD elevation. Use 6" sod stakes on 1.5' centers. Holes will be cut as necessary in this fabric to accommodate new plantings.

10. A 4" layer of wood chip mulch (not sawdust or coarse hog fuel) shall be placed around the base of each tree (36" diameter ring) and shrub (12" diameter ring) for erosion, weed control, and moisture retention. This only applies to plantings above 29' NGVD.

11. Temporary fencing, mesh cylinders, or plastic tree guards shall be installed around new vegetation susceptible to physical damage or feeding by animals such as dogs, beavers, geese, and ducks. The owner or consulting ecologist shall remove protective materials when appropriate (after one or two growing seasons).

12. The owner or landscape contractor shall have discretion to substitute alternative planting methods or materials (size, condition, spacing, etc.) following assessment of site-specific conditions. Substitution of different species, smaller size, or greater spacing shall not be allowed without prior approval of the consulting ecologist (e.g. EcoPacific). Substantive changes shall be recorded upon completion of work.

13. The landscape contractor shall guarantee survival of all plant materials for one growing season. However, he / she shall not be responsible for mortality or damage caused by high wave action, unusual inundation (above 28.2' NGVD), unavoidable destruction by animal pests, or lack of proper maintenance (see below).

Maintenance and Monitoring

Maintenance and monitoring shall be the responsibility of the owner and/or his designated representative. Performance goals for new plantings shall be 100% survival for the first year and 80% survival (or native understory aerial cover) in subsequent years. Ongoing maintenance and monitoring shall include the following:

- Care not to use chemical pesticides or phosphorus (P) fertilizer in the shoreline planting area. If fertilizer is required, it shall be used at least one year after planting and should be a P-free, organic formulation such as "Lake Whatcom Blend" (Whatcom Farmers Coop.) or Scott's "Turf Builder - Phosphorus Free".
- Regular watering with care not to over water and cause soil erosion. The watering protocol shall provide a minimum of 1-inch of water a week to installed plantings from July 1 to October 15 during the first two years following plant installation. Irrigation rates shall be increased as necessary during periods of prolonged hot, dry weather to prevent plant mortality. Once plants are established (after two full growing seasons), little or no watering should be required.
- Weeding (at least twice yearly) to remove non-native and invasive species (aerial cover shall not exceed 15%). Over the long term, allow natural colonization of other native species if such growth is not highly invasive. Native volunteer species may count towards performance standards.
- Regular inspection and repair of erosion control materials and wildlife protection features until they are no longer needed.
- Replacement of plants as required once the obligation of the landscape contractor is over. The site is known to be subject to occasional unusual high wave action. If this results in repeated destruction of low elevation plantings (i.e., emergents), the owner / ecologist can discontinue replacement planting at his /her discretion and note this in the monitoring record.
- Submission of a "Status Report for Impact Reduction Construction" within one year of USACE permit issuance (see *Appendix D of Proposed USACE Regional General Permit 3, March 2005*).
- Submission of a "Mitigation Planting Monitoring Report" annually for five years following USACE acceptance of the "Status Report" (see *Appendix E of Proposed USACE Regional General Permit 3, March 2005*). Note: Clear photographs of the entire shoreline area shall be taken before work occurs, immediately after project installation, and at least once each year for five years.
- If there is difficulty meeting performance standards, a contingency plan will be developed by the consulting ecologist and implemented. Contingency plans can include, but are not limited to: soil amendment; additional plant installation; and plant substitutions of type, size, quantity, and location.
- During the monitoring period, the owner shall allow periodic site inspections by NMF/S/USACE or qualified individuals specified by these agencies. Agency monitors shall notify the applicant at least one week prior to the inspection.