A.C. & H. CIVIL ENGINEERS, INC.

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2443 ASH STREET PALO ALTO, CALIF. 94306
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Job No. 5-62
September 20, 2005

Redwood City Planning Department
1017 Middlefield Road
Redswood City, CA 94063

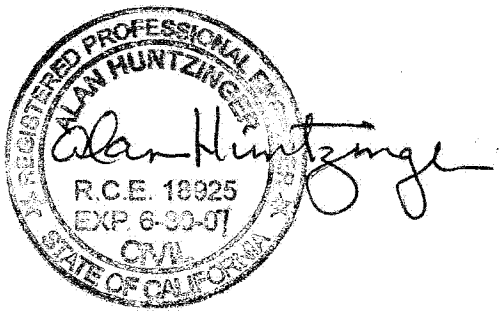
Re: BIAC
1450 Maple St

COST ESTIMATE FOR PARKING LOT

Asphalt pavement	270 s.y.	x 20	=	5,400
Base rock	270 s.y.	x 20	=	5,400
wheel stops	9 each	x 100	=	900
Concrete edging	160 l.f.	x 32	=	5,120
Grass-crete valley	160 s.f.	x 25	=	4,000
Paint parking stalls	lump sum		=	300
Catch Basin over pipe	lump sum		=	3,000
Signs	3 each	x 200	=	600
Bicycle rack	1 each	x 280	=	280
Clear, erosion control, grub	lump sum		=	5,000
Construction total				30,000

Sincerely,

Alan Huntzinger
Civil Engineer



City of Redwood City
Stormwater Pollution Prevention Program

NPDES Permit Compliance Checklist

I. PROJECT DATA

PROJECT NAME/ADDRESS: 1450 MAPLE ST BAIR ISLAND **APN NO:** 52-392-160

APPLICANT NAME: AQUATIC CENTER **ADDRESS:** 1450 MAPLE ST

- **TYPE OF DEVELOPMENT**
  - ☐ Residential
  - ☐ Industrial
  - ☒ Commercial REPAVE OVER EXISTING
  - ☐ Combined Residential & Commercial

- **IMPERVIOUS SURFACE WORKSHEET**[1]
  - Site Area: 23,330 (SF)
  - Existing Impervious Surface 19700 (SF)
  - ~~New~~ Impervious Surface 1365 (SF)
  - Percent ~~Increase~~ DECREASE: 1.3 %

- Is any part of the project located in a Sensitive Area?[2] ☒ Yes ☐ No

II. REQUIREMENTS FOR ALL PROJECTS

Refer to "Blueprint for A Clean Bay" and Construction Best Management Practices (BMPs).

1. Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
2. Control and prevent the discharge of all potential pollutants, including solid wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses.
2. Use sediment controls or filtration to remove sediment from dewatering effluent.
3. Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area in which runoff is contained and treated.
4. Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses with field markers.
5. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
6. Perform clearing and earth moving activities only during dry weather.
7. Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
8. Limit construction access routes and stabilize designated access points.
9. Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.

III. EROSION AND SEDIMENT CONTROLS PLANS

Refer to the California Construction BMP Handbook (1993), ABAG Manual of Standards for Erosion and Sediment Control Measures (1995), or San Francisco Bay Regional Board Erosion and Sediment Control Field Manual. Requirements include the following:

☒ 1. Stabilize all denuded areas and install and maintain all temporary erosion and sediment controls continuously between October 15 and April 5 of each year, until permanent erosion controls have been established.

☒ 2. Provisions for preventing erosion and trapping sediment on-site, such as sediment basins or traps, earthen dikes or berms, silt fences, straw bale dikes, check dams, storm drain inlet protection, soil blankets or mats, covers for soil stock piles, and/or other measures.

☒ 3. Provisions for vegetative cover in disturbed areas, including areas to be seeded, planted, and/or mulched, and types of vegetation proposed.

☒ 4. Provisions for diverting on-site runoff around exposed areas and diverting off-site runoff around the site (e.g., swales and dikes).

☒ 5. Provide notes, specifications, or attachments describing the following:

- Construction, operation and maintenance of erosion and sediment control measures, including inspection frequency;
- Methods and schedule for grading, excavation, filing, clearing of vegetation, and storage and disposal of excavated or cleared material;
- Specifications for vegetative cover and mulch, including methods and schedules for planting and fertilization;
- Provisions for temporary and/or permanent irrigation.

IV. PROJECTS WITH ≥ 1 ACRE OR MORE OF IMPERVIOUS[1] AREA

N.A. — The following requirements apply to all projects with 1 acre or more of impervious area, which must file a Notice of Intent (NOI) with the State Water Resources Control Board to obtain coverage under the State General Construction Activity NPDES Permit, and must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). **Note: Completion of this checklist does not imply certification of the adequacy of the SWPPP by the local agency.**

☐ 1. A copy of the project's NOI and SWPPP shall be submitted to the Engineering Department prior to issuance of a grading permit.

☐ 2. A copy of the project's NOI and SWPPP shall be kept on-site and made available for review by the City upon request.

☐ 3. Erosion control plans, per requirements of Section III, include a plan showing BMPs for storage of soils, wastes, and other construction materials.

☐ 4. Plans for permanent stormwater control measures as shown in Part VI.

☐ 5. A stormwater monitoring program including site inspections prior to and immediately after storm events.

☐ 6. An Operations and Maintenance Agreement for permanent stormwater controls. (See City Engineer for form of Agreement).

☐ 7. Approval from the San Mateo County Mosquito Abatement District.

V. PROJECTS IN SENSITIVE AREAS — The following requirements apply to any sized project that is located within 200 feet from a wetland, dam, lake, pond, river, or bay.

☒ 1. Provide Erosion Control Measures and permanent source control measures as outlined in Part IV, and VI.

☐ 2. Provide water quality monitoring. (Contact the Regional Water Quality Control Board for guidance).

VI. PERMANENT STORMWATER CONTROL MEASURES

POLLUTANT SOURCE CONTROL LIST[3]

- ☐ A. Landscape & Pesticide Reduction Controls
- ☐ B. Labeling Storm Drain Inlets
- ☐ C. Parking Facilities Controls
- ☐ D. Pool & Spa Controls
- ☐ E. Food Service Equipment Controls
- ☐ F. Trash Areas Controls
- ☐ G. Outdoor Process Controls
- ☐ H. Outdoor Storage Controls
- ☐ I. Outdoor Cleaning and Maintenance Facilities Controls
- ☐ J. Vehicle Cleaning Controls
- ☐ K. Fuel Dispensing controls
- ☐ L. Loading Dock Controls
- ☐ M. Miscellaneous Drains
- ☐ N. Marina Controls

STORMWATER VOLUME TREATMENT CONTROLS DEVICES[4]

- ☐ Roof Downspout System
- ☐ Vegetated Swales[5]
- ☒ Grass Filter
- ☐ Sand Rock Filter
- ☐ Hydrodynamic Device
- ☐ Micro-detention Device
- ☐ Other (See "Site Design Techniques")
- ☐ Cisterns
- ☐ Subsurface Detention Facility

VII. PLAN APPROVAL BY SAN MATEO COUNTY MOSQUITO ABATEMENT DISTRICT

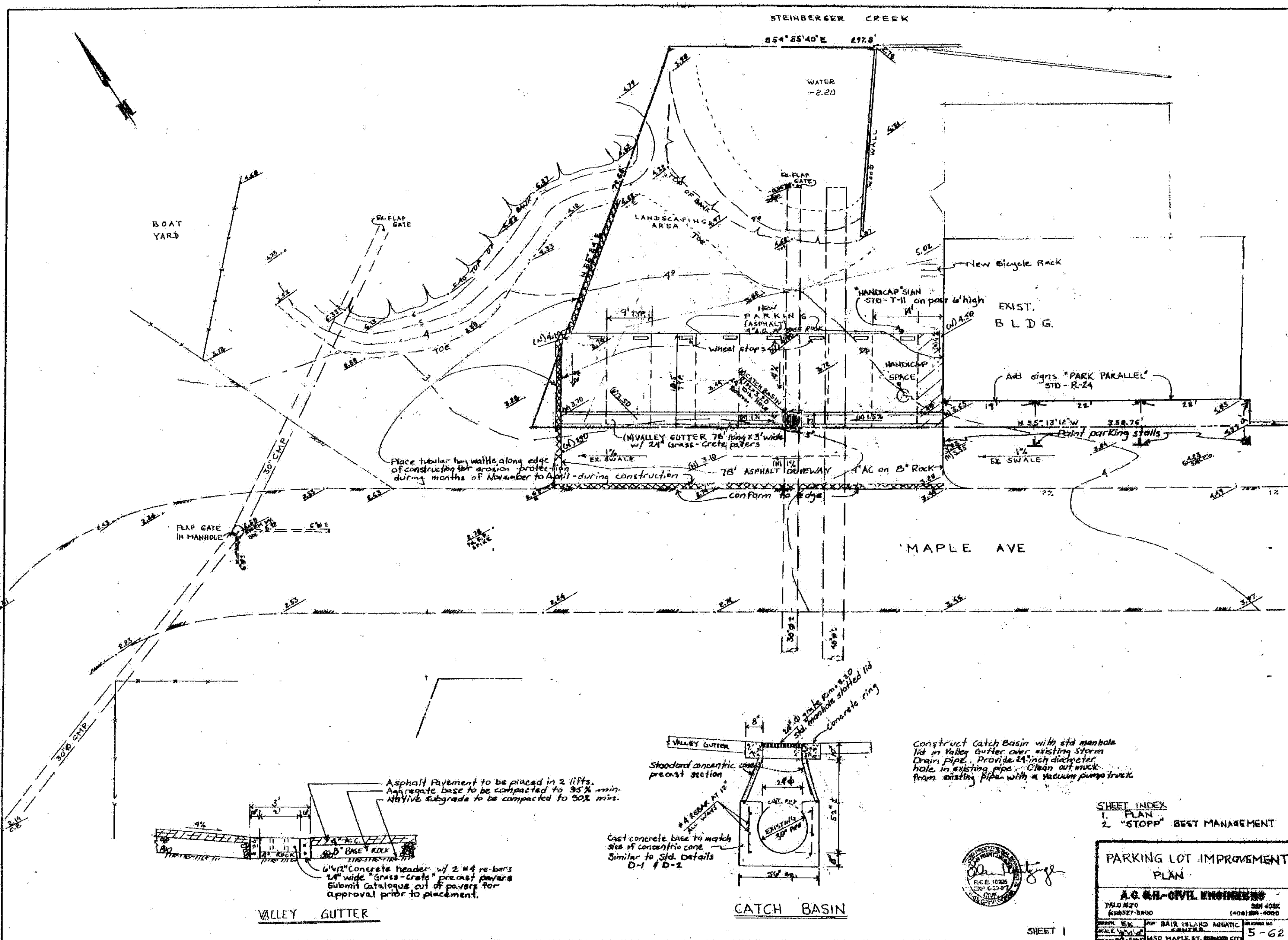
N. A.

☐ Permanent Stormwater Control Measures require plan approval by the San Mateo County Mosquito Abatement District (http://www.mosquitoes.org).

☐ Refer to San Mateo County's Vector Control Plan for further guidance on how to address potential mosquito breeding habitat.

NOTES:

1. Impervious area is defined as the area covered by pavement (including walkways, patios, driveways), building roofs, and other impervious surfaces, which drain.
2. A project is located in a sensitive area if the limit of impervious area will be located less than 200 feet away from a water quality resource, including a wetland, stream, pond, lake, river, or bay.
3. Select from the Redwood City's "Model List of Source Control Measures" for other suggested Source Control Measures.
4. See "Using Site Design Techniques to Meet Development Standards for Stormwater Quality," published by Bay Area Stormwater Management Agencies Association.
5. See Redwood City's "Design Guidelines for Grassy Vegetated Swales."


STEINBERGER CREEK
S 54° 55' 40" E 297.8'
WATER -2.20
WOOD WALL
BOAT YARD
LANDSCAPING AREA
TOE
TOP OF BANK
N 55° 24' E 79.68'
NEW PARKING (ASPHALT) 4" A.C. 8" BASE ROCK
9' TYP.
Wheel stops
"HANDICAP" SIGN STD-T-11 on post 6' high
14'
HANDICAP SPACE
EXIST. BLDG.
New Bicycle Rack
Add signs "PARK PARALLEL" STD-R-24
N 55° 13' 12" W 358.76'
Paint parking stalls
(N) VALLEY GUTTER 78' long x 3' wide w/ 24" Grass-Crete pavers
Place tubular hay wattle along edge of construction for erosion protection during months of November to April - during construction
EX. SWALE
78' ASPHALT DRIVEWAY
4" AC on 8" Rack
Conform to edge
MAPLE AVE
FLAP GATE IN MANHOLE
30" CMP
30" Ø CMP
30" Ø ±
48" Ø ±
Asphalt Pavement to be placed in 2 lifts.
Aggregate base to be compacted to 95% min.
Native subgrade to be compacted to 90% min.
6"x12" Concrete header w/ 2 #4 re-bars
24" wide "Grass-Crete" precast pavers
Submit Catalogue cut of pavers for approval prior to placement.
VALLEY GUTTER
VALLEY GUTTER
Standard concentric cone precast section
24" Ø grate Rim = 3.20
Std. manhole slotted lid
Concrete ring
#4 REBAR AT 12" ALL WAYS
Cast concrete base to match size of concentric cone.
Similar to Std. Details D-1 & D-2
EXISTING 30" PIPE
CATCH BASIN
Construct Catch Basin with std manhole lid in Valley Gutter over existing Storm Drain pipe. Provide 24 inch diameter hole in existing pipe. Clean out muck from existing pipe with a vacuum pump truck.
SHEET INDEX
1. PLAN
2. "STOPP" BEST MANAGEMENT
PARKING LOT IMPROVEMENT PLAN
PALO ALTO
BAIR ISLAND AQUATIC CENTER
1450 MAPLE ST. REDWOOD CITY
5-62
SHEET 1