



**JOINT WATER POLLUTION CONTROL PLANT
MARSHLAND ENHANCEMENT PROJECT
CONCEPTUAL DESIGN PLAN**

SEPTEMBER 2004



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NOTICE OF INTENT TO ADOPT NEGATIVE DECLARATION

Name of Project: Joint Water Pollution Control Plant Marshland Enhancement Project

Project Location: The project is located at the District's Joint Water Pollution Control Plant (JWPCP) at 24501 S. Figueroa Street, Carson, California.

Entity or Person Undertaking Project: County Sanitation District No. 2 of Los Angeles County

Project Description: The proposed project consists of the restoration and improvement of an approximately 17 acre degraded marshland. The site hydrology will be reestablished; invasive non-native plant species will be removed and controlled; and native vegetation will be restored to provided habitat for birds, fish, and animals. In addition, two viewing areas will be added, one of which will be accessed by crossing a bridge over a portion of the marshland, and the second of which will be located along the east side of the marshland at a higher elevation. A parking lot will be constructed to provide for approximately 20 cars and 2 buses to accommodate visitors to the site.

NOTICE IS HEREBY GIVEN THAT County Sanitation District No. 2 of Los Angeles County proposes to issue a Negative Declaration for the project. Such Negative Declaration is based upon a finding that the project will not have a significant effect on the environment. The reasons to support such finding are documented by an Initial Study prepared by the District. Copies of the Initial Study and the proposed Negative Declaration may be obtained from:

NAME: David Pendley

TITLE: Project Engineer
Planning Section

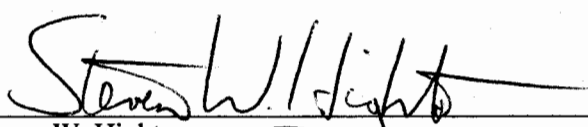
ADDRESS: County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

FILED

MAY 26 2005
 CONNY B. McZORHACK, COUNTY CLERK
 A. Salazar DEPUTY

In accordance with the State Guidelines for the Implementation of the California Environmental Quality Act, any comments concerning the finding of the proposed Negative Declaration must be received by the District by June 24, 2005, in order to be considered prior to the District Board's final determination on the project. Please send your comments, if any, to the address shown above.

Date: May 25, 2005


 Steven W. Highter
 Supervising Engineer
 Planning Section

THIS NOTICE WAS POSTED
 ON MAY 26 2005
 UNTIL JUN 27 2005
 REGISTRAR-RECORDER/COUNTY CLERK

05 0015247



NEGATIVE DECLARATION

PROPOSED

FINAL

Name of Project: Joint Water Pollution Control Plant Marshland Enhancement Project

Project Location: The project is located at the District's Joint Water Pollution Control Plant (JWPCP) at 24501 S. Figueroa Street, Carson, California.

Entity or Person Undertaking Project: County Sanitation District No. 2 of Los Angeles County

Project Description: The proposed project consists of the restoration and improvement of an approximately 17 acre degraded marshland. The site hydrology will be reestablished; invasive non-native plant species will be removed and controlled; and native vegetation will be restored to provided habitat for birds, fish, and animals. In addition, two viewing areas will be added, one of which will be accessed by crossing a bridge over a portion of the marshland, and the second of which will be located along the east side of the marshland at a higher elevation. A parking lot will be constructed to provide for approximately 20 cars and 2 buses to accommodate visitors to the site.

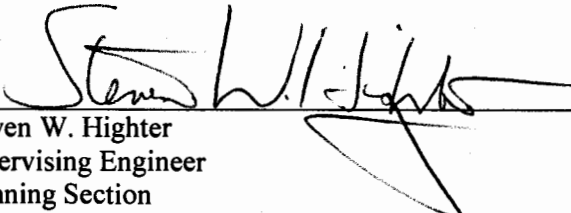
Findings: It is hereby found that the project will not have a significant effect on the environment and having considered the record as a whole, there is no evidence that the proposed project will individually or cumulatively have potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depends. These findings are based upon the independent judgment of County Sanitation District No. 2 of Los Angeles County.

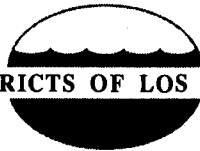
Initial Study: An Initial Study of this project was undertaken and prepared in accordance with the Local Procedures Implementing the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether this project might have a significant effect on the environment. A copy of such Initial Study is attached hereto and by reference incorporated herein. The Initial Study documents the reasons supporting the above findings.

Mitigation Measures: The following mitigation measures have been included in the project to avoid potentially significant effects:

No mitigation measures are required for this project.

Date: May 25, 2005

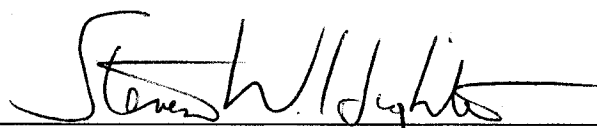

Steven W. Highter
Supervising Engineer
Planning Section



ENVIRONMENTAL IMPACT ASSESSMENT

- Name of Project:** Joint Water Pollution Control Plant Marshland Enhancement Project
- Project Location:** The project is located at the District's Joint Water Pollution Control Plant (JWPCP) at 24501 S. Figueroa Street, Carson, California.
- Entity or Person Undertaking Project:** County Sanitation District No. 2 of Los Angeles County
- Project Description:** The proposed project consists of the restoration and improvement of an approximately 17 acre degraded marshland. The site hydrology will be reestablished; invasive non-native plant species will be removed and controlled; and native vegetation will be restored to provided habitat for birds, fish, and animals. In addition, two viewing areas will be added, one of which will be accessed by crossing a bridge over a portion of the marshland, and the second of which will be located along the east side of the marshland at a higher elevation. A parking lot will be constructed to provide for approximately 20 cars and 2 buses to accommodate visitors to the site.
- Staff Determination:** The District's staff, having undertaken and completed an Initial Study of this project in accordance with the Local Procedures Implementing the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether the proposed project might have a significant effect on the environment, has reached the following conclusion:
- 1. The project will not have a significant effect on the environment; therefore, a Negative Declaration should be prepared.
 - 2. The project, modified in accordance with certain mitigation measures set forth in the Initial Study, will not have a significant effect on the environment; therefore, a Mitigated Negative Declaration should be prepared.
 - 3. The project may have a significant effect on the environment; therefore, an Environmental Impact Report should be prepared.

Date: May 25, 2005



Steven W. Highter
Supervising Engineer
Planning Section



INITIAL STUDY

This Initial Study has been prepared pursuant to the Local Procedures Implementing the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County.

- 1. Project Title** **Joint Water Pollution Control Plant Marshland Enhancement Project**

- 2. Description of Project** The proposed project consists of the restoration and improvement of an approximately 17 acre degraded marshland. The site hydrology will be reestablished; invasive non-native plant species will be removed and controlled; and native vegetation will be restored to provided habitat for birds, fish, and animals. In addition, two viewing areas will be added, one of which will be accessed by crossing a bridge over a portion of the marshland, and the second of which will be located along the east side of the marshland at a higher elevation. A parking lot will be constructed to provide for approximately 20 cars and 2 buses to accommodate visitors to the site.

- 3. Lead Agency Name and Address** County Sanitation District No. 2 of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

- 4. Contact Person and Phone Number** David Pendley
(562) 699-7411, extension 2765

- 5. Zoning** The project is consistent with local zoning and general plans of the area.

- 6. Project Location** The project is located at the District's Joint Water Pollution Control Plant (JWPCP) at 24501 S. Figueroa Street, Carson, California.

- 7. Surrounding Land Uses and Setting** The project is located in an isolated marshland surrounded by industrial development.

- 8. Public Agencies Which Must Approve or Give a Permit for the Project** City of Carson, Los Angeles County Department of Public Works, California Department of Fish and Game, U.S. Army Corps of Engineers, and Los Angeles Regional Water Quality Control Board

- 9. Other Organizations for Distribution or Review** JWPCP Citizens Advisory Council

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

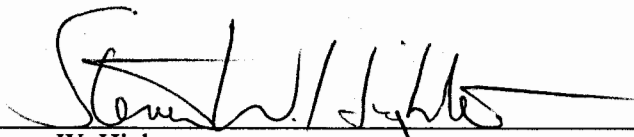
- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Transportation / Traffic |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities / Service Systems |
| <input type="checkbox"/> Energy Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Mandatory Findings of Significance |
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STAFF DETERMINATION:

The District's staff, having undertaken and completed an Initial Study of this proposed project in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether the proposed project might have a significant effect on the environment, has reached the following conclusion:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed on the proposed project, nothing further is required.

Date: May 25, 2005



Steven W. Highter
Supervising Engineer
Planning Section

EVALUATION OF ENVIRONMENTAL IMPACTS:

CLASSIFICATION OF ENVIRONMENTAL IMPACTS

Potentially Significant Impact: There is substantial evidence that an effect is significant. An Environmental Impact Report is required. Significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself is not considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. (§15382 CEQA Guidelines)

Potentially Significant Unless Mitigation Incorporated: This classification applies where the incorporation of mitigation measures has reduced an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact."

Less Than Significant Impact: Less Than Significant effect on the environment means an effect which is not significant as defined by §15382 of the CEQA Guidelines.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

- a – b. The proposed project is not located near any scenic vistas or scenic resources.
- c. The proposed project is located in an undeveloped and unpopulated area surrounded by industrial facilities and a freeway. The area is not open to the public and not visible from local streets or businesses. The marshland is degraded and overrun by non-native vegetation, so the existing visual character is limited. Construction will include earthwork and the removal of non-native vegetation, which will result in a temporary less than significant aesthetic impact at the site. Once completed, the project will greatly improve the visual character of the site.
- d. No light or glare impacts will occur as a result of the proposed project or of its construction, which will be restricted to daytime hours.

- II. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

a - c. The proposed project would not convert any Farmland to non-agricultural use, nor would it be a conflict to existing zoning for agricultural use.

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutants concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

- a. The proposed project will not conflict with or obstruct the implementation of any air quality plans.
- b. The proposed project will comply with all applicable air quality standards and will not produce significant quantities of pollutants.
- c. The proposed project is located in the South Coast Air Basin, which is classified as a severe non-attainment area for ozone and non-attainment area for PM₁₀ and CO. The proposed project is anticipated to generate minor amounts of NOX, CO, SO₂, ROG, and PM₁₀, which are below the South Coast Air Quality Management District construction significance thresholds. Therefore, the proposed project will not result in a cumulatively considerable net increase of any criteria pollutant.
- d - e. The proposed construction is located in an undeveloped and unpopulated area surrounded by industrial facilities such that any odors or emissions will not affect the local populace.

POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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IV. BIOLOGICAL RESOURCES. Would the project:

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|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

EXPLANATION:

a - c. The proposed project includes the enhancement of approximately 15 acres of an existing marshland. Wetland Research Associates conducted a biological impact assessment for the proposed project location, which is summarized below.

Approximately 2.8 acres of the project site is categorized as emergent marsh that is healthy and dominated by California tule (*Scirpus californicus*). A riparian corridor is located along the eastern edge of the site. Willow trees were the dominant native species observed in the riparian corridor with Goodding willow (*Salix gooddingii*) and arroyo willow (*Salix lasiolepis*) being the most common. Non-native trees such as eucalyptus (*Eucalyptus* sp.), Peruvian pepper tree (*Schinus molle*), fan palm (*Washingtonia* sp.), and date palm (*Phoenix* sp.) were also common. Upland habitat occupies most of the site and consists of several different vegetation types including non-native annual grassland, ruderal areas dominated by weedy or non-native upland herbs, small areas of native coastal sage scrub, and unvegetated areas. Twenty-six special status plant species have been documented to occur in the general vicinity of the JWPCP marshland. Most of these (21 species) are found in habitats or soil types which do not exist within the marshland (e.g., coastal dune, coastal bluff, salt marsh, playa, chenopod scrub, chaparral, vernal pools, woodland, and forested habitats). Marginally suitable habitat is present for five special status plant species: southern tarplant (*Centromadia parryi* ssp. *australis*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), spreading navarretia prostrate (*Navarretia prostrate*), Lyon's pentachaeta (*Pentachaeta lyonii*), and San Bernardino aster (*Symphotrichum defoliatum*).

POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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However, none of these species is expected to occur in the JWPCP marshland due to competition with dense perennial marsh vegetation (tules) in the emergent marsh, competition with non-native species in most other habitats, and/or the lack of an available seed source.

Forty special status species of wildlife have been documented in the general vicinity of the JWPCP marshland. Most of these (31 species) are found in habitats dissimilar to existing habitats of the marshland (e.g., coastal dune, lagoon, coastal bluff, salt marsh, perennial stream, perennial lake or pond, chaparral, desert, woodland, and forested habitats). On-site habitats are marginally suitable for five other species: western spadefoot toad, San Diego horned lizard, California coastal gnatcatcher, Least Bell's vireo, and burrowing owl. However, the JWPCP marshland is not likely to actually support these species due to the limited extent (e.g., patches of coastal sage do not constitute sufficient habits), poor quality (e.g., grassland dominated by non-native plant species), and/or isolated nature of available on-site habitats. No federal or state listed wildlife species have ever been observed at the JWPCP marshland, and none are thought to be present due to the unsuitability of the habitat and/or urbanization surrounding the marshland which would form a barrier to dispersion. No non-listed special status wildlife species have been observed at the JWPCP marshland. However, the marsh provides marginally to moderately suitable habitat for four avian species of concern, including white-tailed kite, northern harrier, Cooper's hawk, and tricolored blackbird.

Overall, the proposed project will restore an existing deteriorated marshland that is considered a federally-protected wetland defined by Section 404 of the Clean Water Act. The marshland currently does not supply suitable habitat to support special status plant or animal species. A primary goal of the proposed project is to maintain and enhance the vegetation and wildlife habitat of the JWPCP marshland. However, temporary impacts to the marshland are required to achieve this goal. Prior to construction nesting bird surveys will be conducted to minimize impact to birds and during critical phases of construction a qualified biologist will be on-site to ensure that biological impacts are minimized to the extent feasible. Additionally, all necessary permits will be obtain prior to construction and will be coordinated with the proper permitting agencies. Upon completion of the proposed project, there will be a net increase of approximately 1.3 acres of vegetated wetland, 2.2 acres of open water, and over 600 native trees and shrubs. Therefore, the proposed project will have a less than significant impact on sensitive species, sensitive habitats, and wetlands.

- d. The proposed project will not interfere with any migratory movement or corridor, nor will it impede the use of native wildlife nursery sites.
- e - f. The proposed project will not conflict with any local policies or ordinances protecting biological resources, nor will it conflict with and Habitat Conservation Plan or Natural Community Conservation Plan.

V. CULTURAL RESOURCES. Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

- a - d. Because the proposed project is located in areas that have already been disturbed, it will not result in any of the above impacts.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
VI. ENERGY RESOURCES. Would the project:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Use non-renewable resources in a wasteful and inefficient manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

a - b. Construction and operation of the proposed project will not require significant amounts of energy and would not conflict with adopted energy conservation plans or use non-renewable resources in a wasteful manner.

VII. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

a. According to the Uniform Building Code, the coastal areas of Los Angeles County are located in Seismic Risk Zone IV, and the Palos Verdes Fault is in the proximity of the project site. At minimum, all structures associated with the proposed project will be built in compliance with the seismic standards adopted by the State of California. These standards were developed to minimize exposure of people, structures, and property to

POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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geological and seismic hazards. Therefore, impacts associated with seismic activity will be less than significant.

- b. The proposed project will not result in substantial soil erosion or the loss of topsoil.
- c. The proposed project has been designed to accommodate the needs of the marshland and prevent any geological problems on the surrounding structures or facilities. Therefore, the proposed project will not result in unstable conditions leading to geological problems.
- d. The project site is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code.
- e. The soils in the project area are capable of supporting the proposed project.

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

POTENTIALLY
SIGNIFICANT
IMPACT

LESS THAN
SIGNIFICANT
WITH MITIGATION
INCORPORATED

LESS THAN
SIGNIFICANT
IMPACT

NO
IMPACT

EXPLANATION:

- a. The proposed project will not involve the transport, use, or disposal of hazardous materials.
- b. The proposed project will not create a hazard by releasing hazardous materials into the environment.
- c. The proposed project will not emit hazardous emissions or handle hazardous materials.
- d. The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.
- e – f. The project is not located within the vicinity of a public or private airstrip.
- g. The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- h. The project will not expose people or structures to a risk of wildland fires.

IX. HYDROLOGY AND WATER QUALITY. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

- a. As is the current condition, water will be diverted from the adjacent Wilmington Drain to provide the hydrological conditions to sustain the marshland. The proposed project will not violate any water quality standards or waste discharge requirements.
- b. The proposed project will not result in a depletion of groundwater or prevent groundwater recharge. The proposed project will restore an existing marshland and will continue to provide minimal amounts of incidental groundwater recharge.
- c – d. The proposed project will restore an existing isolated marshland. As part of the proposed project, a meandering stream will be redirected to improve the flow to vegetation and improve the functionality of the marshland. However, these modifications to the marshland are designed to control the flow of water within the site and will not result in siltation, runoff, or flooding off-site.
- e. Best Management Practices (BMPs) will be implemented to minimize storm water runoff and protect water quality standards.
- f. The proposed project will not degrade water quality.
- g – i. The proposed project will not place structures or housing within a 100-year flood hazard area or expose people or structures to the risk of flooding.
- j. There is no risk of inundation by seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

EXPLANATION:

- a – b. The proposed project does not conflict with the current land use plans and is consistent with existing zoning for the area. The project will not change land use, zoning, or the physical arrangement of the community.
- c. No habitat conservation plan or natural community conservation plan applies to the site.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

a – b. The proposed project would not involve the use or depletion of any mineral resources in the area.

XII. NOISE. Would the proposal result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of people to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

a – b. Noise and/or vibration will be limited to grading and activities involving construction of the viewing areas. Due to the fact the project site is in an isolated location, the exposure of noise and/or vibration to people will be less than significant.

c – d. Upon completion of the proposed project, the project site will be a natural area. As such, no noise is anticipated to be generated from the site.

e – f. The project is not located within the vicinity of a public or private airstrip.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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XIII. POPULATION AND HOUSING. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

EXPLANATION:

- a. The proposed project will restore a natural area that will be used as an educational site. The proposed project will not induce population growth in the area, directly or indirectly.
- b – c. The proposed project, which is located on undeveloped area, will not displace any existing or planned housing.

XIV. PUBLIC SERVICES.

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
- | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| i) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| v) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

EXPLANATION:

- a. This project will not result in a need for any additional public services.

XV. RECREATION.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATION:

- a - b. The project will not affect any existing recreational opportunities nor will it create a demand for additional recreational facilities. The project will create a new educational facility that will be used by the public to learn more about wetlands and their benefits to the environment. The construction and operation of the educational facility will have a less than significant impact on the environment.

XVI. TRANSPORTATION/TRAFFIC. Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

- a - b. During construction, the project may cause a minor increase in vehicle trips and some traffic congestion. However, the project related traffic impact will not increase the level of service of the impacted streets. Project related traffic will be limited to off-peak commute hours to the extent feasible and any needed control measures such as a Construction Traffic Management Plan will be coordinated with the responsible agencies. Alternate access to adjoining properties will be maintained at all times. Therefore, the traffic-related impacts will be less than significant.
- c. No air traffic patterns will be affected by the proposed project.
- d. No road or design hazards are associated with the proposed sewer project.
- e. The proposed project will not result in inadequate emergency access.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
f. The proposed project will not result in inadequate parking capacity.				
g. The proposed project will not conflict with adopted policies, plans, or programs supporting alternative transportation.				

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATION:

a – g. The proposed project does not create the need for any additions or alterations to any of the above systems.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

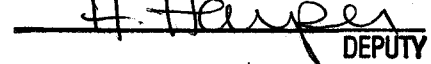
MITIGATION

No mitigation measures are required for this project.

9/10/05
FILED

AUG 26 2005

CONNOR B. MCCORMACK, COUNTY CLERK


DEPUTY

H. HARPER

SANITATION DISTRICTS OF LOS ANGELES COUNTY



County Sanitation District No. 2 of
Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

NOTICE OF DETERMINATION

THIS NOTICE WAS POSTED

ON ~~AUG 26 2005~~
UNTIL ~~SEP 26 2005~~
REGISTRAR-RECORDER/COUNTY CLERK

To: County Clerk, County of Los Angeles
12400 East Imperial Highway
Room 2001
Norwalk, CA 92650

Subject: Filing of Notice of Determination in Compliance with Section 21152 of the Public Resources Code

Project Title: Joint Water Pollution Control Plant Marshland Enhancement Project

Project Location: The project is located at the District's Joint Water Pollution Control Plant (JWPCP) at 24501 S. Figueroa Street, Carson, California.

Project Description: The proposed project consists of the restoration and improvement of an approximately 17 acre degraded marshland. The site hydrology will be reestablished; invasive non-native plant species will be removed and controlled; and native vegetation will be restored to provided habitat for birds, fish, and animals. In addition, two viewing areas will be added, one of which will be accessed by crossing a bridge over a portion of the marshland, and the second of which will be located along the east side of the marshland at a higher elevation. A parking lot will be constructed to provide for approximately 20 cars and 2 buses to accommodate visitors to the site.

Contact Person: David Pendley


Telephone (562) 699-7411, extension 2765

This is to advise that on August 24, 2005, the Board of Directors of County Sanitation District No. 2 of Los Angeles County approved the above project and made the following determinations regarding the project:

1. The project will not have a significant effect on the environment, and that there is no evidence that the proposed project will individually or cumulatively have potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depends.
2. A Negative Declaration, which reflects the independent judgment of County Sanitation District No. 2 of Los Angeles County, was prepared for this project pursuant to the provisions of the California Environmental Quality Act.

The Negative Declaration and record of project approval may be examined at the District Office, 1955 Workman Mill Road, Whittier, California 90601.

Date: August 25, 2005


James F. Stahl
Chief Engineer and General Manager

05 0016585



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
VENTURA FIELD OFFICE
2151 ALESSANDRU DRIVE, SUITE 110
VENTURA, CALIFORNIA 93001

November 17, 2005

REPLY TO

ATTENTION OF:

Office of the Chief
Regulatory Branch

DEPARTMENT OF THE ARMY NATIONWIDE PERMIT AUTHORIZATION

L.A. County Sanitation District
Attention: Steve Hightler
1955 Workman Mill Road
Whittier, California 90601-1415

Alt
↳ PENOLEY

Dear Mr. Hightler:

Reference is made to your request (No. 200501524-HW) dated June 1, 2005, for Department of the Army authorization to regrade 9 of the 17.5 acre marshland to reestablish site hydrology and to create habitat features, including ponds, islands, a sediment basin, and edged slopes in accordance with the Joint Water Pollution Control Plant Marshland Enhancement project dated June 1, 2005 in the City of Carson, Los Angeles County, California. The activities will result in a net increase of approximately 1.3 acres of vegetated wetland, 2.2 acres of open water habitat and 600 native riparian trees.

The Corps of Engineers has determined your proposed activity complies with the terms and conditions of Nationwide Permit Number 27: *Stream and Wetland Restoration Activities* and Nationwide Permit Number 33: *Temporary Construction, Access and Dewatering* (Sections 10 and 404) as described in enclosure 1. Furthermore you must comply with the following nondiscretionary special conditions:

1. The permittee shall retain a qualified biologist to review grading plans, oversee all aspects of construction monitoring that pertain to biological resource protection, ensure compliance with the mitigation measures, and implement and monitor the wetlands restoration program.
2. The permittee shall employ all standard Best Management Practices to ensure that toxic materials, silt, debris, or excessive erosion do not enter the existing wetlands or Wilmington Drain during project construction.
3. The permittee shall ensure that all vehicle maintenance, staging, storage, and dispensing of fuel occurs in designated upland areas. The permittee shall ensure that these designated upland areas are located in such a manner as to prevent any runoff from entering waters of the United States.

This letter of verification is valid through March 19, 2007. All nationwide permits expire on March 19, 2007. If you either contract the work or begin construction on or before March 19, 2007 you will have an additional 12 months to complete the activity under the attached nationwide permit terms and conditions. If the work is not under construction or contract by

-2-

March 19, 2007 the work will be subject to regulations in effect at the time when you re-apply for a permit. It is incumbent upon you to remain informed of changes to the nationwide permits. If the Corps of Engineers modifies, reissues, or revokes any nationwide permit at an earlier date, we will issue a public notice announcing the changes.

A nationwide permit does not grant any property rights or exclusive privileges. Also, it does not authorize any injury to the property or rights of others or authorize interference with any existing or proposed federal project. Furthermore, it does not obviate the need to obtain other Federal, state, or local authorizations required by law.

Thank you for participating in our regulatory program. If you have any questions, please contact Heather Wylie of my staff at (805) 585-2140.

Sincerely,



Antal Szijj
Acting Chief, North Coast Section
Regulatory Branch

Enclosure

heather.a.wylie@usace.
army.mil

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

CERTIFICATION OF COMPLIANCE WITH
DEPARTMENT OF THE ARMY NATIONWIDE PERMIT

Permit Number: 200501524-HW
Name of Permittee: L.A. County Sanitation District
Date of Issuance: November 17, 2005

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S Army Corps of Engineers
Regulatory Branch
ATTN: CESPL-CO-R-200501524-IHW
2151 Alessandro Drive, Suite 110
Ventura, California 93001

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this nationwide permit you may be subject to permit suspension, modification, or revocation procedures as contained in 33 CFR 330.5 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit condition(s).

Signature of Permittee

Date

NATIONWIDE PERMIT NUMBER 27 and 33 TERMS AND CONDITIONS

1. Nationwide Permit 27 and 33 Terms:

Your activity is authorized under Nationwide Permit Number 27 and 33 subject to the following terms:

Nationwide Permit Number 27. Stream and Wetland Restoration Activities. Activities in waters of the US associated with the restoration of former waters, the enhancement of degraded tidal and non-tidal wetlands and riparian areas, the creation of tidal and non-tidal wetlands and riparian areas, and the restoration and enhancement of non-tidal streams and non-tidal open water areas as follows:

(a) The activity is conducted on:

(1) Non Federal public lands and private lands, in accordance with the terms and conditions of a binding wetland enhancement, restoration, or creation agreement between the landowner and the U.S. Fish and Wildlife Service (FWS) or the Natural Resources Conservation Service (NRCS), the National Marine Fisheries Service, the National Ocean Service, or voluntary wetland restoration, enhancement, and creation actions documented by the NRCS pursuant to NRCS regulations; or

(2) Reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the OSM or the applicable state agency (the future reversion does not apply to streams or wetlands created, restored, or enhanced as mitigation for the mining impacts, nor naturally due to hydrologic or topographic features, nor for a mitigation bank); or

(3) Any other public, private or tribal lands;

(b) Notification: For activities on any public or private land that are not described by paragraphs (a)(1) or (a)(7) above, the permittee must notify the District Engineer in accordance with General Condition 13; and

(c) Planting of only native species should occur on the site.

Activities authorized by this NWP include, to the extent that a Corps permit is required, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or creation of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or create stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; activities needed to reestablish vegetation, including plowing or disking for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non native invasive, exotic or nuisance vegetation; and other related activities.

This NWP does not authorize the conversion of a stream to another aquatic use, such as the creation of an impoundment for waterfowl habitat. This NWP does not authorize stream channelization. This NWP does not authorize the conversion of natural wetlands to another aquatic use, such as creation of waterfowl impoundments where a forested wetland previously existed. However, this NWP authorizes the relocation of non tidal waters, including non-tidal wetlands, on the project site provided there are net gains in aquatic resource functions and values. For example, this NWP may authorize the creation of an open water impoundment in a non tidal emergent wetland, provided the non-tidal emergent wetland is replaced by creating that wetland type on the project site. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Reversion. For enhancement, restoration, and creation projects conducted under paragraphs (a)(3), this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion. For restoration, enhancement, and creation projects conducted under paragraphs (a)(1) and (a)(2), this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or creation activities). The reversion must occur within five years after expiration of a limited term wetland restoration or creation agreement or permit, even if the discharge occurs after this NWP expires. This NWP also authorizes the reversion of wetlands that were restored, enhanced, or created on prior-converted cropland that has not been abandoned, in accordance with a binding agreement between the landowner and NRCS or FWS (even though the restoration, enhancement, or creation activity did not require a Section 404 permit). The five-year reversion limit does not apply to agreements without time limits reached under paragraph (a)(1). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before any reversion activity the permittee or the appropriate Federal or state agency must notify the District Engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements will be at that future date. (Sections 10 and 404)

Note: Compensatory mitigation is not required for activities authorized by this NWP, provided the authorized work results in a net increase in aquatic resource functions and values in the project area. This NWP can be used to authorize compensatory mitigation projects, including mitigation banks, provided the permittee notifies the District Engineer in accordance with General Condition 13, and the project includes compensatory mitigation for impacts to waters of the US caused by the authorized work. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition. NWP 27 can be used to authorize impacts at a mitigation bank, but only in circumstances where it has been approved under the Interagency Federal Mitigation Bank Guidelines.

Nationwide Permit Number 33: Temporary Construction, Access and Dewatering. Temporary structures, work and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites; provided that the associated primary activity is authorized by the Corps of Engineers or the USCG, or for other construction activities not subject to the Corps or USCG regulations. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must be of materials, and placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if it is determined by the District Engineer that it will not cause more than minimal adverse effects on aquatic resources. Temporary fill must be entirely removed to upland areas, or dredged material returned to its original location, following completion of the construction activity, and the affected areas must be restored to the pre-project conditions. Cofferdams cannot be used to dewater wetlands or other aquatic areas to change their use. Structures left in place after cofferdams are removed require a Section 10 permit if located in navigable waters of the U.S. (See 33 CFR part 322). The permittee must notify the District Engineer in accordance with the "Notification" General Condition. The notification must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources. The District Engineer will add special conditions, where necessary, to ensure environmental adverse effects is minimal. Such conditions may include: limiting the temporary work to the minimum necessary; requiring seasonal restrictions; modifying the restoration plan; and requiring alternative construction methods (e.g. construction mats in wetlands where practicable.). (Sections 10 and 404)

2. Nationwide Permit General Conditions:

The following general conditions must be followed in order for any authorization by an NWP to be valid:

1. **Navigation.** No activity may cause more than a minimal adverse effect on navigation.
2. **Proper Maintenance.** Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
4. *Aquatic Life Movements.* No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
5. *Equipment.* Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.
6. *Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)). Additionally, any case specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality Certification and Coastal Zone Management Act consistency determination.
7. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
8. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
9. *Water Quality.* (a) In certain states and tribal lands an individual 401 Water Quality Certification must be obtained or waived (See 33 CFR 330.4(c)).

(b) For NWP's 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the state or tribal 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (refer to General Condition 21 for stormwater management requirements). Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams (refer to General Condition 19 for vegetated buffer requirements for the NWP's).

This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures or to require monitoring.

10. *Coastal Zone Management.* In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see Section 330.4(d)).
11. *Endangered Species.* (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the

designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS the District Engineer may add species-specific regional endangered species conditions to the NWP.

(b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/r9endspp/endspp.html> and http://www.nfms.gov/prot_res/csa/home.html respectively.

12. *Historic Properties.* No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. *Notification.*

(a) *Timing:* where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the notification is complete within 30 days of the date of receipt and can request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:

- (1) Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or
- (2) If notified in writing by the District or Division Engineer that an Individual Permit is required; or
- (3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Notification:* The notification must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 41, 42, and 43, the PCN must also include a

- delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));
- (5) For NWP 7 (Outfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed;
 - (6) For NWP 14 (Linear Transportation Crossings), The PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses of waters of the US will be minimized to the maximum extent practicable;
 - (7) For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;
 - (8) For NWP 27 (Stream and Wetland Restoration), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee;
 - (9) For NWP 29 (Single-Family Housing), the PCN must also include:
 - (i) Any past use of this NWP by the Individual Permittee and/or the permittee's spouse;
 - (ii) A statement that the single-family housing activity is for a personal residence of the permittee;
 - (iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring ¼-acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than ¼-acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));
 - (iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;
 - (10) For NWP 31 (Maintenance of Existing Flood Control Projects), the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:
 - (i) Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;
 - (ii) A delineation of any affected special aquatic sites, including wetlands; and,
 - (iii) Location of the dredged material disposal site;
 - (11) For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;
 - (12) For NWPs 39, 43 and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US

- were achieved on the project site;
- (13) For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal to offset losses of waters of the US or justification explaining why compensatory mitigation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;
 - (14) For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the US. This NWP does not authorize the relocation of greater than 300 linear-feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent non-tidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;
 - (15) For NWP 43 (Stormwater Management Facilities), the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with state and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the US. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;
 - (16) For NWP 44 (Mining Activities), the PCN must include a description of all waters of the US adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the US, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for all aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities);
 - (17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and
 - (18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(c) *Form of Notification:* The standard Individual Permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.

(d) *District Engineer's Decision:* In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District

Engineer will notify the permittee and include any conditions the District Engineer deems necessary. The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either: (1) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.

(e) *Agency Coordination*: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than ½-acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) *Wetland Delineations*: Wetland delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than ¼-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. *Compliance Certification*. Every permittee who has received NWP verification from the Corps will

submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:

- (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

15. *Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre).
16. *Water Supply Intakes.* No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.
17. *Shellfish Beds.* No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.
18. *Suitable Material.* No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the CWA).
19. *Mitigation.* The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.
 - (a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the US to the maximum extent practicable at the project site (i.e., on site).
 - (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
 - (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.
 - (d) Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWPs. For example, 1/4-acre of wetlands cannot be created to change a 3/4-acre loss of wetlands to a 1/2-acre loss associated with NWP 39 verification. However, 1/2-acre of created wetlands can be used to reduce the impacts of a 1/2-acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWPs.
 - (e) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.
 - (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers

will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineers may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

(g) Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.

(h) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. *Spawning Areas.* Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.
21. *Management of Water Flows.* To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

22. *Adverse Effects From Impoundments.* If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the US, or discharges of dredged or fill material.
23. *Waterfowl Breeding Areas.* Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
24. *Removal of Temporary Fills.* Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.
25. *Designated Critical Resource Waters.* Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having

particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWP's in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWP's only after it is determined that the impacts to the critical resource waters will be no more than minimal.

26. *Fills Within 100-Year Floodplains.* For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) *Discharges in Floodplain; Below Headwaters.* Discharges of dredged or fill material into waters of the US within the mapped 100-year floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWP's 39, 40, 42, 43, and 44.

(b) *Discharges in Floodway; Above Headwaters.* Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWP's 39, 40, 42, and 44.

(c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

27. *Construction Period.* For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12-months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps.

For projects that have been verified by the Corps, an extension of a Corps approved completion date may be requested. This request must be submitted at least one month before the previously approved completion date.

3. Regional Conditions for the Los Angeles District

In accordance with General Condition Number 6, "Regional and Case-by-Case Conditions," the following Regional Conditions, as added by the Division Engineer, must be met in order for an authorization by any Nationwide to be valid:

1. For coastal watersheds from the southern reach of the Santa Monica Mountains in Los Angeles County to the San Luis Obispo County/Monterey County boundary, all road crossings must employ a bridge crossing design that ensures passage and/or spawning of steelhead (*Oncorhynchus mykiss*) is not hindered in any way. In these areas, bridge designs that span the stream or river, including designs for pier- or pile-supported spans, or designs based on use of a bottomless arch culvert simulating the natural stream bed (i.e., substrate and streamflow conditions in the culvert are similar to undisturbed stream bed channel conditions) shall be employed unless it can be

demonstrated the stream or river does not support resources conducive to the recovery of federally listed *Anadromous salmonids*, including migration of adults and smolts, or rearing and spawning. This proposal also excludes approach embankments into the channel unless they are determined to have no detectable effect on steelhead.

2. For the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), no nationwide permit, except Nationwide Permits 1 (Aids to Navigation), 2 (Structures in Artificial Canals), 3 (Maintenance), 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities), 5 (Scientific Measurement Devices), 6 (Survey Activities), 9 (Structures in Fleeting and Anchorage Areas), 10 (Mooring Buoys), 11 (Temporary Recreational Structures), 20 (Oil Spill Cleanup), 22 (Removal of Vessels), 27 (Stream and Wetland Restoration Activities), 30 (Moist Soil Management for Wildlife), 31 (Maintenance of Existing Flood Control Projects), 32 (Completed Enforcement Actions), 35 (Maintenance Dredging of Existing Basins), 37 (Emergency Watershed Protection and Rehabilitation), and 38 (Cleanup of Hazardous and Toxic Waste), or other nationwide or regional general permits that specifically authorize maintenance of previously authorized structures or fill, can be used to authorize the discharge of dredged or fill material into a jurisdictional special aquatic site as defined at 40 CFR Part 230.40-45 (sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle-and-pool complexes).
3. For all projects proposed for authorization by nationwide or regional general permits where prior notification to the District Engineer is required, applicants must provide color photographs or color photocopies of the project area taken from representative points documented on a site map. Pre-project photographs and the site map would be provided with the permit application. Photographs should represent conditions typical or indicative of the resources before impacts.
4. Notification pursuant to general condition 13 shall be required for projects in all special aquatic sites as defined at 40 CFR Part 230.40-45 (sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle-and-pool complexes), and in all perennial watercourses or waterbodies in the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), excluding the Colorado River from Davis Dam downstream to the north end of Topock and downstream of Imperial Dam.
5. Notification pursuant to general condition 13 shall be required for projects in all areas designated as Essential Fish Habitat by the Pacific Fishery Management Council (i.e., all tidally influenced areas).
6. Notification pursuant to general condition 13 shall be required for projects in all watersheds in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and Pacific Ocean on the south.
7. Individual permits shall be required for all jurisdictional vernal pools.
8. Individual permits shall be required in Murrieta Creek and Temecula Creek watersheds in Riverside County for new permanent fills in perennial and intermittent watercourses otherwise authorized under NWP's 39, 42 and 43, and in ephemeral watercourses for these NWP's for projects that impact greater than 0.1 acre.
9. Individual permits shall be required in San Luis Obispo Creek and Santa Rosa Creek in San Luis

Obispo County for bank stabilization projects, and in Gaviota Creek, Mission Creek and Carpinteria Creek in Santa Barbara County for bank stabilization projects and grade control structures.

4. Further information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
2. Limits of this authorization.
 - (a) This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - (b) This permit does not grant any property rights or exclusive privileges.
 - (c) This permit does not authorize any injury to the property or rights of others.
 - (d) This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - (a) Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - (b) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - (c) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - (d) Design or construction deficiencies associated with the permitted work.
 - (e) Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - (a) You fail to comply with the terms and conditions of this permit.
 - (b) The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - (c) Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 330.5 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.
6. This letter of verification is valid for a period not to exceed two years unless the nationwide permit is modified, reissued, revoked, or expires before that time.
7. You must maintain the activity authorized by this permit in good condition and in conformance

with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition H below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

8. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.



DEPARTMENT OF FISH AND GAME

http://www.dfg.ca.gov
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201



November 01, 2005

Los Angeles County Sanitation District Number 2
Attn: Steve Highter
1955 Workman Mill Road
Whittier, CA 90601

Dear Mr. Highter:

Enclosed is Streambed Alteration Agreement #1600-2005-0406-R5 that authorizes work on the Joint Water Pollution Control Marshland Enhancement project impacting Joint Water Pollution Control Plant Drainage, tributary to Wilmington Drain in Los Angeles County. This action is authorized under Section 1600 of the Fish and Game Code and has been approved by the California Department of Fish and Game. Pursuant to the requirements of the California Environmental Quality Act (CEQA), the Department filed a Notice of Determination (NOD) on the project on 11/2/05. Under CEQA regulations, the project has a 30-day statute of limitations on court challenges of the Department's approval under CEQA.

The Department believes that the project fully meets the requirements of the Fish and Game Code and CEQA. However, if court challenges on the NOD are received during the 30-day period, then an additional review or even modification of the project may be required. If no comments are received during the 30-day period, then any subsequent comments need not be responded to. This information is provided to you so that if you choose to undertake the project prior to the close of the 30-day period, you do so with the knowledge that additional actions may be required based on the results of any court challenges that are filed during that period.

Please contact Ronnie Glick at (805) 557-0598 if you have any questions regarding the Streambed Alteration Agreement.

Sincerely,

Michael J. Mulligan
Deputy Regional Manager

Enclosure

cc: Ronnie Glick

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CALIFORNIA DEPARTMENT OF FISH AND GAME

4949 Viewridge Avenue
San Diego, CA 92123

October 17, 2005

Notification No. 1600-2005-0406-R5 Revision 1

Page 1 of 14

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department, and the, Los Angeles County Sanitation District Number 2, 1955 Workman Mill Road, Whittier, CA 90601, Represented by Steve Highter, Supervising Engineer (562) 699-7411 X 2711, hereinafter called the Operator, is as follows:

WHEREAS, pursuant to Section 1602 of the California Fish and Game Code, the Operator, on the 9th day of June, 2005, notified the Department that they intend to divert or obstruct the natural flow of, or change the bed, channel, or bank of, or use material from the streambed(s) of the following water(s): Joint Water Pollution Control Plant drainage, tributary to Wilmington Drain in the Los Angeles River watershed, Los Angeles County, California.

WHEREAS, the Department (represented by Ronnie Glick) has made an inspection of the subject area on the 22nd day of July, 2005, and has determined that such operations may substantially adversely affect existing fish and wildlife resources including: fishes (), amphibians (western toad, pacific treefrog), reptiles (western fence lizard), songbirds (mallard, mourning dove, Anna's hummingbird, western scrub jay, marsh wren, bushtit, northern mockingbird, California towhee, song sparrow, common yellowthroat, Bullock's oriole, house finch, American goldfinch, belted kingfisher), raptors (kestrel, Cooper's hawk), mammals (Botta's pocket gopher), native plants (), non-native plants (), and other aquatic and wildlife resources in the area.

THEREFORE, the Department hereby proposes measures to protect fish and wildlife resources during the Operator's work. The Operator hereby agrees to accept the following measures/conditions as part of the proposed work.

If the Operator's work changes from that stated in the notification specified above, this Agreement is no longer valid and a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this Agreement and with other pertinent code sections, including but not limited to Fish and Game Code Sections 5650, 5652, 5901, 5931, 5937, and 5948, may result in prosecution.

Nothing in this Agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of responsibility for compliance with applicable federal, state, or local laws or ordinances. A consummated Agreement does not constitute Department of Fish and Game endorsement of the proposed operation, or assure the Department's concurrence with permits required from other agencies.

This Agreement becomes **effective the date of the Department's signature** and the construction portion **terminates on 12/31/2007**. This Agreement shall remain in effect to satisfy the terms/conditions of this Agreement. Any provisions of the agreement may be amended at any time provided such amendment is agreed to in writing by both parties. Mutually approved amendments become part of the original agreement and are subject to all previously negotiated

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provisions.

1. The following provisions constitute the limit of activities agreed to and resolved by this Agreement. The signing of this Agreement does not imply that the Operator is precluded from doing other activities at the site. However, activities not specifically agreed to and resolved by this Agreement, shall be subject to separate notification pursuant to Fish and Game Code Sections 1600 et seq.
2. The Operator proposes to alter the streambed to implement the Joint Water Pollution Control Plant Marshland Enhancement in the City of Carson, Los Angeles County. The site consists of a 2.8 acre emergent marsh dominated by tules and cattails, riparian habitat with a willow and mulefat canopy, and upland sites that are dominated by non-native shrubs and trees. The project will result in grading of approximately 9.1 acres of the 17.4 acre site. The project will impact up to .3 acres of the emergent wetland and produce a net gain of 1.3 acres of emergent wetland habitat. Approximately 115 native trees and 25 native shrubs will be removed and replaced with approximately 221 native riparian trees and 588 native riparian shrubs. The project will also include the installation of an additional 496 native upland trees and shrubs to provide screening and a habitat buffer for the marshland. The project will install 2.2 acres of open water habitat and approximately 1,850 linear feet of stream channel. The project also includes trails and interpretive exhibits. This project increases the habitat diversity at the site to support a greater diversity of wildlife. Target communities include emergent marsh, seasonal marsh, riparian, coastal sage scrub, native grassland, and upland habitats with a native tree canopy.
3. The agreed work includes activities associated with No. 2 above. The project area is located in **Los Angeles County** (Thomas Guide Page 794 B 2 and 3). Specific work areas and mitigation measures are described on/in the plans and documents submitted by the Operator including the June 2005 Pre-Construction Notification for Nationwide Permit 27 for the JWPCP Marshland Enhancement and the August 2005 Wildlife Habitat Assessment for the JWPCP Marshland Enhancement Project, the Tree and Shrub Planting Plans dated October 27, 2005 (sheets E-4 A and B, M 5 A and B, and M 6 A and B), and the August 8, 2005 Addendum to Streambed Alteration Agreement 1600-2005-0406-R5 and shall be implemented as proposed, unless directed differently by this agreement. **Contact: Steve Highter at Phone: (562) 699-7411, extension 2711** for additional information.
4. **COPIES OF THIS AGREEMENT AND ALL REQUIRED PERMITS AND SUPPORTING DOCUMENTS, PROVIDED WITH NOTIFICATION OR REQUIRED BY THIS AGREEMENT SHALL BE READILY AVAILABLE AT WORK SITES AT ALL TIMES DURING PERIODS OF ACTIVE WORK.**
5. The Operator shall request an extension of this agreement prior to its termination. One extension may be granted for up to five years from the date of termination of the agreement and are subject to Departmental approval. The extension request and fees shall be submitted to the Department's Region 5 Office at the above address. If the Operator fails to request the extension prior to the agreement's termination, then the Operator shall submit a new notification with fees and required information to the Department. Any activities conducted under an expired agreement are a violation of Fish and Game Code Section 1600 et. seq.

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6. The Operator certifies by signing this agreement that the project site has been surveyed and shall not impact any rare, threatened or endangered species; or the Operator certifies that such a survey is not required for the proposed project. If rare, threatened or endangered species occur within the proposed work area, or could be impacted by the work proposed, the Operator shall consult with the Department and obtain any required State and/or Federal permits.

<<LONG-TERM MANAGEMENT>>

7. Within sixty (60) days of signing this agreement, Operator shall submit for Department review and approval a Long-Term Management Plan for this restoration site. The document shall include specific details on operation of the water pump from Wilmington Drain (flow regimes, seasonal variation, maintenance periods); management of visitors (including trail management, trash management, and restrictions on domestic pets); and invasive plant and animal control.

<<WORK AREAS AND VEGETATION REMOVAL>>

8. Disturbance or removal of vegetation shall not exceed the limits approved by the Department. The disturbed portions of any stream channel or lake margin, within the high water mark of the stream or lake, shall be restored to their original condition under the direction of the Department.

9. Restoration shall include the revegetation of stripped or exposed work and/or mitigation areas with vegetation native to the area and watershed.

10. Operator shall fence all native habitat areas that are not identified for removal to clearly delineate the approved construction impact areas. Vegetation shall not be removed or intentionally damaged beyond these limits.

11. In **areas of temporary disturbance**, where vegetation must be removed, native trees and shrubs, with Diameter at Breast Height (DBHs) of 2 ½ inches or less, shall be cut to ground level with hand operated power tools rather than by grading.

12. Vegetation removed from the stream shall not be stockpiled in the stream bed or on its bank. The sites selected on which to push this material out of the stream should be selected in compliance with the other provisions of this Agreement. Where possible brush piles shall be left outside the channel in upland areas to provide wildlife habitat.

13. No living native vegetation shall be removed from the channel, bed, or banks of the stream, except as otherwise provided for in this agreement.

14. No equipment shall be operated within the dripline of oaks. Protective devices shall be placed around the dripline of oaks to prevent compaction of the root zone.

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<<EQUIPMENT AND ACCESS>>

15. Staging/storage areas for equipment and materials shall be located outside of the stream/lake.

16. Vehicles shall not be driven or equipment operated in water covered portions of a stream or lake, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the Agreement and as necessary to complete authorized work.

17. To the extent feasible, access to the work site shall be via existing roads and access ramps.

<<FILL AND SPOIL>>

18. Fill shall be limited to the minimal amount necessary to accomplish the agreed activities.

19. All fill materials shall be weed free.

20. To facilitate restoration, the Operator shall salvage native topsoil (the top 6 to 12 inch deep layer containing organic material) from the worksite prior to construction. Following construction, salvaged topsoil shall be returned to the work area/placed in the restoration site. To reduce the spread of weeds, soil from the areas dominated by non-native vegetation (castor bean or poison hemlock) shall not be salvaged as described in this condition.

21. The Department recommends the following methods for salvaging, stockpiling, and replacing topsoil: Salvaged topsoil material should be stockpiled in a location where it is unlikely to be disturbed during construction in piles which do not exceed 8 feet in height (3 feet if stored more than one year); The soil should be maintained in a weed-free condition during storage; Following completion of construction, the topsoil should be tested to determine if it is suitable for restoration, and amended if necessary to encourage growth; Graded slopes should be maintained in a weed free state prior to revegetation; Construction areas should be prepared in a manner so as to prevent soil compaction in the upper 1-2 feet; A minimum 4 inch deep layer of topsoil should be distributed in the area to be revegetated; and the area should be rolled with a sheepsfoot roller to bind the soil layers.

22. Spoil storage sites shall not be located within a stream/lake, where spoil can be washed back into a stream/lake, or where it will cover aquatic or riparian vegetation.

<<STRUCTURES>>

23. This Agreement does not authorize the construction of any temporary or permanent dam, structure, flow restriction or fill except as described in the Operator's notification.

<<CLEAN UP>>

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24. Any materials placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life shall be removed from the project site prior to inundation by high flows.

25. Areas of disturbed soils with slopes toward a stream or lake shall be stabilized to reduce erosion potential. Planting, seeding and mulching is conditionally acceptable. Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, shall be used for such stabilization. Any installation of non-erodible materials not described in the original project description shall be coordinated with the Department. Coordination may include the negotiation of additional Agreement provisions for this activity.

<<POLLUTION, SEDIMENTATION, AND LITTER>>

26. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, construction waste, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake. Fish and Game Code Sections 5650 and 5652 prohibit any waste from being deposited within 150 feet from any waters of the state, at any time, even after this Agreement has expired.

27. The Operator shall comply with all litter and pollution laws. All contractors, subcontractors and employees shall also obey these laws and it shall be the responsibility of the operator to insure compliance.

28. Any equipment or vehicles driven and/or operated within or adjacent to the stream/lake shall be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.

29. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream/lake shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.

30. No equipment maintenance shall be done within or near any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas under any flow.

31. The clean-up of all spills shall begin immediately. The Department shall be notified immediately by the Operator of any spills and shall be consulted regarding clean-up procedures.

32. Raw cement/concrete or washings thereof, asphalt, paint, construction waste, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed

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within or where they may enter a stream or lake, by the Operator or any party working under contract, or with the permission of the Operator, shall be removed immediately.

33. Equipment shall not be operated in wetted areas (including but not limited to ponded, flowing, or wetland areas) without the prior written approval of the Department.

34. Precautions to minimize turbidity/siltation shall be taken into account during project planning and shall be installed **prior** to construction. This may require that the work site be isolated and that water be diverted around the work area by means of a barrier, temporary culvert, new channel, or other means approved by the Department. Precautions may also include placement of silt fencing, straw bales, sand bags, and/or the construction of silt catchment basins, so that silt or other deleterious materials are not allowed to pass to downstream reaches. The method used to prevent siltation shall be monitored and cleaned/repared weekly. The placement of any structure or materials in the stream for this purpose, not included in the original project description, or Department approved water pollution/water diversion plan shall be coordinated with the Department. Coordination shall include the negotiation of additional Agreement provisions.

35. When work in a flowing stream is unavoidable, the entire stream flow shall be diverted around the work area by a barrier, temporary culvert, new channel, or other means approved by the Department. Location of the upstream and downstream diversion points shall be approved by the Department. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. **Diversion berms shall be constructed of onsite alluvium of low silt content, inflatable dams, sand bags, or other approved materials.** Channel banks or barriers shall not be made of earth or other substances subject to erosion unless first enclosed by sheet piling, rock rip-rap, or other protective material. The enclosure and the supportive material shall be removed when the work is completed and removal shall normally proceed from downstream in an upstream direction. The Operator shall obtain all written approvals from the Department prior to initiation of construction activities.

36. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and which shall provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Said flows shall be sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.

37. Silty/turbid water from dewatering or other activities shall not be discharged into the stream. Such water shall be settled, filtered, or otherwise treated prior to discharge. The Operator's ability to minimize turbidity/siltation shall be the subject of pre-construction planning and feature implementation.

38. Upon Department determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation, shall be halted until effective Department approved control devices are installed, or abatement procedures are initiated.

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39. Prior to commencing construction, the Operator shall submit to the Department for review and approval, the proposed water diversion/storm water pollution prevention plan for this project. The plan shall be consistent with the terms and conditions of this Agreement and the requirements of the U.S. Army Corps of Engineers and Regional Water Quality Control Board. Any terms and conditions in the final Agency approved water diversion/water pollution plan which are more restrictive than in this agreement shall be a part of this Agreement and shall be enforceable by the Department. Any changes in the original project description or Department approved water pollution/water diversion plan shall be coordinated with the Department. Coordination shall include the negotiation of additional Agreement provisions.

40. Temporary fills shall be constructed of non-erodible materials and shall be removed immediately upon work completion, and shall be approved by the Department prior to implementation.

41. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.

42. If an off-stream siltation pond/s is/are used to control sediment, pond/s shall be constructed in a location, or shall be designed, such that potential spills into the stream/lake during periods of high water levels/flow are precluded.

43. Silt settling basins shall be located away from the stream or lake to prevent discolored, silt-bearing water from reaching the stream or lake during any flow regime.

44. When operations require moving of equipment across a flowing stream, such operations shall be conducted without increasing stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or rock-fill crossing as specified in comments below, and approved by the Department prior to placement.

45. Rock, gravel, and/or other materials shall not be imported to, taken from or moved within the bed or banks of the stream, except as otherwise addressed in this Agreement.

<<RESTORATION/MITIGATION>>

46. MITIGATION FOR AREAS OF TEMPORARY DISTURBANCE--No more than 0.83 acres of habitat within the banks, bed, and channel of the stream and/or riparian habitat shall be temporarily disturbed/impacted due to the proposed operations. Restoration shall include the revegetation of stripped or exposed work areas within the banks, bed, and channel of the stream (including construction areas, access roads, etc.) with native vegetation local to the area at a ratio of 1:1. The total area to be restored for temporary impacts shall be 0.83 acres.

47. MITIGATION FOR AREAS OF PERMANENT DISTURBANCE--No more than 2.01 acres of habitat within the banks, bed, and channel of the stream and/or riparian habitat shall be permanently lost due to the proposed operations. Restoration shall include the restoration of a

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degraded, stripped, or exposed area(s) with native riparian and transitional vegetation, local to the drainage, at a ratio of 1:1. Total restoration will include riparian, emergent wetland, seasonal wetland, wet meadow, hardwood/transitional upland vegetation, coastal sage scrub, and native grasslands. The total area to be restored for permanent impacts shall be 2.01 acres. All restoration shall be completed by December 31, 2007.

48. No restoration/mitigation shall occur in fuel modification zones, future project areas or areas of maintenance.

49. Planting, maintenance, monitoring and reporting activities shall be overseen by a specialist familiar with restoration of native plants.

50. All plants shall be planted in randomly spaced, naturally clumped patterns. The average planting densities shall meet the criteria specified above.

51. All plantings shall have a minimum of 80% survival, by species, the first year and 100% survival thereafter and all riparian and emergent wetlands shall attain 75% cover after 3 years and 90% cover after 5 years for the life of the project. If the survival and cover requirements have not been met, the Operator is responsible for replacement planting to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for 5 years after planting.

52. An annual report shall be submitted to the Department by Jan. 1 of each year for 5 years after planting. This report shall include the survival, % cover, and height by species of both trees and shrubs. The number by species of plants replaced, an overview of the revegetation and exotic plant control efforts, and the method used to assess these parameters shall also be included. Photos from designated photo stations shall be included.

53. The plant palette and planting plan dated October 27, 2005 is approved.

54. All planting should be done after the first wetting rains between October 1 and February 1 to take advantage of the winter rainy season, dormancy of foliage, and rooting period to ensure optimum survival of plantings. Should the Operator be required to plant during other times of the year, chances of survival are diminished. To compensate for decreased survival rates, the Operator shall be required to augment the specified planting density by 25 % to account for the likelihood of increased mortality of plantings. Any restoration/planting shall be completed by December 31, 2007.

55. The Operator shall provide irrigation when natural moisture conditions are inadequate to ensure survival of plants. Irrigation shall be provided for a period of at least two years from planting. Irrigation shall be phased out during the fall/winter of second year unless unusually severe conditions threaten survival of plantings. All plants must survive and grow for at least three years without supplemental water for the restoration phase of the project to be eligible for acceptance by the Department.

56. Coarse mulch shall be placed around plantings to minimize water loss and discourage weed growth. Mulch shall be 3 to 4 inches deep and shall be placed in a minimum area 1.5 times

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the diameter of the dripline of the plant or 2 feet in diameter, whichever is greater. The mulched area shall be maintained throughout the course of restoration, unless otherwise authorized in writing by the Department. Mulch shall not be placed directly against the main stem of the plants.

57. Plant material for revegetation shall be derived from cuttings, materials salvaged from disturbed areas, and/or seeds obtained from randomly selected native trees and shrubs occurring locally within the same drainage.

58. Any replacement tree/shrub stock, which cannot be grown from cuttings or seeds, shall be obtained from a native plant nursery, be ant free and shall not be inoculated to prevent heart rot. The Operator shall provide a list of all materials which must be obtained from other than onsite sources.

<<REMOVING NON-NATIVE VEGETATION AND ANIMALS>>

59. As needed, and consistent with the project restoration goals, the Operator shall remove any non-native vegetation (tree tobacco, castor bean, giant cane, etc.) from the work area and shall dispose of it in a manner and a location which prevents its reestablishment. Removal shall be done at least twice annually during the spring/summer season, as needed, through the term of restoration.

Giant cane (*Arundo*), if present, shall be cut to a height of 6 inches or less, and the stumps painted with an herbicide approved for aquatic use within 5 minutes of cutting. Herbicides shall be applied at least three times during the period from May 1 to October 1 to eradicate these plants. Where proposed methods for removing giant cane deviate from this procedure, the Operator shall present the alternate methods, in writing, to the Department for review and approval, prior to construction.

60. Whenever possible, invasive species shall be removed by hand or by hand-operated power tools rather than by chemical means. Where control of non-native vegetation is required within the bed, bank, or channel of the stream, the use of herbicides is necessary, and there is a possibility that the herbicides could come into contact with water, the Operator shall employ only those herbicides, such as Rodeo (Glyphosate), which are approved for aquatic use. If surfactants are required, they shall be restricted to non-ionic chemicals, such as Agri-Dex, which are approved for aquatic use.

61. The Operator shall apply any herbicides in accordance with state and federal law. No herbicides shall be used where Threatened or Endangered species occur. No herbicides shall be used when wind velocities are above 5 miles per hour.

62. No herbicides shall be used on native vegetation unless specifically authorized, in writing, by the Department.

63. Operator shall remove all non-native aquatic animals from the work area as part of the restoration of the site. Target animals include bullfrog, African clawed frog, non-native turtles, and crayfish. Compliance with this condition may be subject to a sportsfishing license from the

STREAMBED ALTERATION CONDITIONS FOR NOTIFICATION NUMBER: 1600-2005-0406-R5

Department and may be subject to other provisions of the Fish and Game Code.

<<PERMITTING AND SAFEGUARDS>>

64. The Department believes that permits/certification may be required from the Corps of Engineers and Regional Water Quality Control Board for this project, should such permits/certification be required, all terms and conditions required in the permits/certification, more restrictive than in this agreement, shall be a part of this agreement and shall be enforceable by the Department.

<<PROTECTION FOR WILDLIFE AND AQUATIC SPECIES>>

65. If possible, Operator shall phase the vegetation removal over the course of two years to provide wildlife habitat during the period where new vegetation is establishing.

66. Operator shall allow some large trees or clumps of trees on the eastern portion of the project to persist on site for up to five years to provide raptor perching and/or nesting areas until the replacement plantings have matured and provide comparable habitat. Eucalyptus trees shall not be allowed to persist on site unless they are snags (standing dead trees). Operator shall girdle eucalyptus trees or have up to five feet of soil placed at their base to facilitate eucalyptus snag formation.

67. The Operator shall not remove or otherwise disturb vegetation or conduct any other project activities on the project site from March 1 to September 1 to avoid impacts to breeding/nesting birds. OR, Prior to construction or site preparation activities, the Operator shall have a qualified biologist survey all breeding/nesting habitat within the project site and adjacent to the project site for breeding/nesting birds. Surveys shall begin no later than June 1. Surveys shall be conducted every 7 days for 8 consecutive weeks until at least July 1. Documentation of findings, including a negative finding must be submitted to the Department for review and concurrence. If no breeding/nesting birds are observed and concurrence has been received from the Department, site preparation and construction activities may begin. If breeding activities and/or an active bird nest is located and concurrence has been received from the Department, the breeding habitat/nest site shall be fenced a minimum of 300 feet (500 feet for raptors) in all directions, and this area shall not be disturbed until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the project.

If threatened or endangered species are observed in the area, no work shall occur during the breeding season (March 1 through September 15) to avoid direct or indirect (noise) take of listed species and State and/or Federal threatened/endangered species permits may be required prior to commencing project activities. This Agreement does not authorize take of species listed as Threatened and/or Endangered.

Be advised, migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918(50 C.F.R. Section 10.13). Sections 3503,

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3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

68. The Operator shall have a qualified wildlife biologist survey the area to confirm the presence/absence of any species of concern likely to be found in the area during the proposed operations. If evidence exist that additional surveys are required, survey techniques, timing, and schedule shall be approved by the Department. Survey results, analysis, and recommendations, along with the field notes shall be provided to the Department prior to commencing construction or within two weeks of completion of field surveys, whichever is earlier. Should any sensitive species be found during pre-project surveys and work must be done in identified areas during sensitive periods, the Operator shall develop and implement a plan for the protection of these species. This plan shall be approved by the department prior to commencing work. The results of any surveys and any protective measures instituted, as a part of the protection and monitoring plan, shall be provided to the Department within one week from implementation. The Operator shall be responsible for reporting all observations of threatened/endangered species or of species of special concern to the Departments Natural Diversity Data Base within ten (10) days of sighting.

69. The Operator's activities within the wetted portion of the stream course shall be limited to the dry period of the year from May 1 to October 15 and/or when the stream is not actively flowing and no measurable rain is forecasted within 72 hours. If measurable rain is predicted within 72 hours during construction, all activities shall cease and protective measures to prevent siltation/erosion shall be implemented/maintained.

70. If the Department determines that any threatened or endangered species, will be impacted by the work proposed, this Agreement shall not be valid (the project cannot begin/continue) until the Operator obtains the appropriate federal and state permits for take of threatened or endangered species. The Operator shall contact Environmental Services at (805) 964-8849 to obtain information on applying for the State Management Take Permit for State listed species.

71. A qualified biological monitor with all required collection permits shall be on site during operations and shall survey for species prior to construction. **If any life stages of any native vertebrate species are found in the path of construction, the monitor shall relocate the species to a safe location.** Exclusionary devices shall be erected to prevent the migration into or the return of species into the work site.

72. The Operator shall have a qualified wildlife biologist survey the restoration site to monitor the recovery of wildlife and/or aquatic resources in the area following construction. Survey techniques and scheduling shall be approved by the Department. Recovery shall be based on the presence/absence of "indicator" species which shall be proposed by the biologist and approved by the Department. Monitoring of wildlife and/or aquatic resources shall be done in summer and winter of each year, through the term of restoration, and the results and analysis shall be submitted with the report specified above.

<<MAINTENANCE>>

73. Except as otherwise permitted in this Agreement, the removal of soil, vegetation, and

STREAMBED ALTERATION CONDITIONS FOR NOTIFICATION NUMBER: 1600-2005-0406-R5

vegetative debris from the stream bed or stream banks is prohibited. The Operator shall remove all human generated debris, such as lawn and farm cuttings, garbage and trash. The Operator shall remove washed out culverts, and other construction materials, that the Operator places within, or where they may enter the stream.

74. Spoil shall not be placed on the stream side slope, or where it could enter the stream. Spoil shall not be placed over vegetation except as specifically noticed to and accepted by the Department.

<<ADMINISTRATIVE-MISC. >>

75. All provisions of this Agreement remain in force throughout the term of the Agreement. Any provisions of the Agreement may be amended or the Agreement may be terminated at any time provided such amendment and/or termination is agreed to in writing by both parties. Mutually approved amendments become part of the original Agreement and are subject to all previously negotiated provisions.

76. If the Operator or any employees, agents, contractors and/or subcontractors violate any of the terms or conditions of this agreement, all work shall terminate immediately and shall not proceed until the Department has taken all of its legal actions.

77. This Agreement does not retroactively authorize any alterations or operations previously conducted by the Operator.

78. Nothing in this Agreement shall be construed as an approval by the Department for any work the Operator completed prior to notifying the Department and the execution of this Agreement.

79. The Operator shall **provide a copy of this Agreement, to all contractors, subcontractors, and the Operator's project supervisors. COPIES OF THIS AGREEMENT AND ALL REQUIRED PERMITS AND SUPPORTING DOCUMENTS, SHALL BE READILY AVAILABLE AT WORK SITES AT ALL TIMES DURING PERIODS OF ACTIVE WORK** and must be presented to any Department personnel, or personnel from another agency upon demand. **ALL CONTRACTORS SHALL READ AND BECOME FAMILIAR WITH THE CONTENTS OF THIS AGREEMENT.**

80. A pre-construction meeting/briefing shall be held involving all the contractors and subcontractors, concerning the conditions in this Agreement.

81. The Operator shall notify the Department, in writing, at least five (5) days prior to initiation of construction (project) activities and at least five (5) days prior to completion of construction (project) activities. Notification shall be sent to the Department at 4949 Viewridge Avenue, San Diego 92123, Attn: ES. FAX Number (858) 467-4299, Reference # 1600-2005-0406-R5.

82. The Operator herein grants to Department employees and/or their consultants

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(accompanied by a Department employee) the right to enter the project site during business hours, to ensure compliance with the terms and conditions of this Agreement and/or to determine the impacts of the project on wildlife and aquatic resources and/or their habitats.

83. The Department reserves the right to cancel this Agreement, after giving notice to the Operator, if the Department determines that the Operator has breached any of the terms or conditions of the Agreement.

84. The Department reserves the right to suspend or cancel this Agreement for other reasons, including but not limited to, the following:

- a. The Department determines that the information provided by the Operator in support of this Agreement/Notification is incomplete or inaccurate;
- b. The Department obtains new information that was not known to it in preparing the terms and conditions of this Agreement;
- c. The condition of, or affecting fish and wildlife resources change; and
- d. The Department determines that project activities have resulted in a substantial adverse effect on the environment.

85. Before any suspension or cancellation of the Agreement, the Department will notify the operator in writing of the circumstances which the Department believes warrant suspension or cancellation. The Operator will have seven (7) working days from the date of receipt of the notification to respond in writing to the circumstances described in the Department's notification. During the seven (7) day response period, the Operator shall immediately cease any project activities which the Department specified in its notification as resulting in a substantial adverse effect on the environment and which will continue to substantially adversely affect the environment during the response period. The Operator may continue the specified activities if the Department and the Operator agree on a method to adequately mitigate or eliminate the substantial adverse effect.

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CONCURRENCE

This Agreement becomes effective on the Departments signature and the Agreement shall remain in effect until December 31, 2007 to satisfy the terms/conditions of this Agreement.

This agreement was prepared by Ronnie Glick.

(Los Angeles County Sanitation District Number 2)

Steven W. Hightler 10/18/05
Name (signature) Date

Steven W. Hightler
Name (printed)

Supervising Engineer
Title

California Department of Fish and Game

M. J. Mulligan 11/2/05
Michael J. Mulligan Date
Deputy Regional Manager
South Coast Region



California Regional Water Quality Control Board

Los Angeles Region



Dr. Alan Lloyd
Secretary for
Environmental
Protection

Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful

Arnold Schwarzenegger
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Steven W. Highter
County Sanitation District of Los Angeles Company
1955 Workman Mill Road
Whittier, CA 90601

WATER QUALITY CERTIFICATION FOR PROPOSED JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT PROJECT (Corps' Project No. 2005-01524-KW), JWPCP MARSHLAND, WILMINGTON DRAIN, HARBOR LAKE, CITY OF CARSON, LOS ANGELES COUNTY (File No. 05-112)


Dear Mr. Highter

Regional Board staff has reviewed your request on behalf of County Sanitation Districts of Los Angeles Company for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete on July 22, 2005.

I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Valerie Carrillo, Lead, Section 401 Program, at (213) 576-6759.

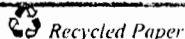

Jonathan S. Bishop
Executive Officer
Chief Deputy EO
for

11-14-05
Date

TO: Le Brun
11-17-05
11-17-05
11-17-05

DOC #
568822

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

DISTRIBUTION LIST

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2169 east Francisco Blvd., Suite G
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Oscar Balaguer
State Water Resources Control Board
Division of Water Quality
P.O. Box 944213
Sacramento, CA 94244-2130

Ronnie Glick
California Department of Fish and Game
Streambed Alteration Team
4949 View Ridge Avenue
San Diego, CA 92123

Kenneth Wong
U.S. Army Corps of Engineers
Regulatory Branch, Los Angeles District
P.O. Box 532711
Los Angeles, CA 90053-2325

Steven John
U.S. Environmental Protection Agency
600 Wilshire Boulevard, Suite 1460
Los Angeles, CA 90017

Tim Vendlinski
Supervisor, Wetlands Regulatory Office (WTR-8)
US EPA, Region 9
75 Hawthorne
San Francisco, CA 94105

Ken Berg
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92009

ATTACHMENT A

Project Information

File No. 05-112

1. Applicant: Steven W. Hightler
County Sanitation District of Los Angeles Co.
1955 Workman Mill Road
Whittier, CA 90601

Phone: (562) 699-7411 x2711 Fax: (562) 695-1874
2. Applicant's Agent: Crystal Acker
WRA
2169 East Francisco Blvd., Suite G
San Rafael, CA 94901

Phone: (415) 454-8868 Fax: (415) 454-0129
3. Project Name: Joint Water Pollution Control Plant (JWPCP) Marshland Enhancement Project
4. Project Location: Harbor Lake, Los Angeles County
Longitude: 118.285694; Latitude: 33.806844
118.283750 33.806638
118.284222 33.804472
118.286527 33.804416
118.283722 33.806305
118.284388 33.805611
118.286388 33.805844
118.285972 33.806722
5. Type of Project: Marshland (Wetland) Enhancement
6. Project Description: *Purpose:*
The purpose of the project is to enhance the wildlife and habitat value of the County Sanitation District JWPCP Marshland in order to fulfill prior mitigation requirements of the treatment plant.

Description:
Enhancement measures will include: 1) improving water management by relocating and creating new channels to more

ATTACHMENT A

Project Information

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efficiently direct flow through the entire marsh system utilizing existing water inputs and outlets; 2) creating new adjacent wetlands and open waters areas to increase the amount of wetland habitat in such a way that water levels can be more easily managed; and 3) increasing habitat quality by planting native species and removing non-native species.

7. Federal Agency/Permit: U.S. Army Corps of Engineers
NWP No. 27 Permit No. 2005-01524-KW

8. Other Required Regulatory Approvals: California Department of Fish and Game
Streambed Alteration Agreement

9. California Environmental Quality Act Compliance: The County Sanitation Districts of Los Angeles filed a Negative Declaration for the proposed project in July 2005.

10. Receiving Water: Wilmington Drain, Los Angeles River
(Hydrologic Unit No. 405.12)

11. Designated Beneficial Uses: MUN*, IND, PROC, GWR, REC-1, REC-2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL

*Conditional beneficial use

12. Impacted Waters of the United States: Federal jurisdictional wetlands: 0.08 temporary and 0.21 permanent acres

Non-wetland waters (unvegetated streambed): 0.008 temporary and 0.103 permanent acres
(140 temporary and 1800 permanent linear feet)

13. Dredge Volume: It is estimated that up to 6,500 cubic yards of fill will be placed into jurisdictional areas for the wetland restoration project: 1,500 cubic yards in vegetated wetland area and 5,000 cubic yards in non-vegetated waters on the United State.

ATTACHMENT A

Project Information

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14. Related Projects
Implemented by the
Applicant:

The proposed Joint Water Pollution Control Plant (JWPCP) Marshland Enhancement Project is a revision of a previous marsh restoration project submitted to the Corps under NWP 27 in 2002. The Marshall Management Plan (2002-01185-AOA) was submitted for NW27 by the County Sanitation Districts of Los Angeles in 2002 for restoration to be conducted at the JWPCP marshland in Carson, Los Angeles County. The proposed Marshland Management Plan was mitigation for Sanitation District public facilities expansion project (Joint Outfall System 2010 Master Plan EIR), which included the construction of new treatment digesters located east of and adjacent to the JWPCP marshland. Mitigation was proposed to off-set potential degradation of riparian and marshland habitats resulting from increased runoff; the plan was not compensatory mitigation for any wetland fill. However, the plan could not be implemented as proposed due to unforeseen adverse impacts that occurred when the construction site became flooded, resulting in a potential loss of the digester integrity. The project has since been re-designed to uphold the original goals of the restoration project and to fulfill the original mitigation requirements, but incorporates more comprehensive enhancement measures and has also been designed to avoid adverse impacts to adjacent JWPCP facilities. A new NW27 permit applicant has developed for the revised JWPCP Marshland Enhancement Project.

Construction of the new treatment digesters was completed in 2004. An odor control station will be constructed in the future on one of the major sewer lines going to the JWPCP on the west side of the Wilmington Drain near Sepulveda Boulevard. The odor control station will not discharge into the Wilmington Drain. No other projects will be conducted on Sanitation District land in the immediate vicinity; the restored marshland will be maintained as open space in perpetuity.

15. Avoidance/
Minimization
Activities:

The Applicant has proposed to implement several Best Management Practices, including, but not limited to, the following:

- The majority of existing emergent wetland on-site (2.5 acres of 2.8 acres) will be avoided by the restoration project. Most excavation and grading will be conducted within upland areas

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and degraded drainage channels.

- Construction work will be conducted during the dry season if possible, to minimize impacts resulting from soil disturbance.
- Standard sediment and erosion control measures will also be implemented during construction.
- Measures may include silt fences, bonded fiber matrix or tackified straw on slopes, and/or seeding of graded areas as soon as possible following construction.

16. Required Compensatory Mitigation:

The Applicant has proposed this restoration project as mitigation for the Sanitation District public facilities expansion project (Joint Outfall System 2010 Master Plan EIR), which included the construction of new treatment digesters located east of and adjacent to the JWPCP marshland.

The restoration project will result in the creation and/or restoration of a total of 4.10 acres of emergent wetland (1.30 acres net gain), 2.20 acres of open water (2.20 acre net gain), and 1,847 linear feet of functional stream channel. Approximately 93 feet of channel will be lost by re-establishment of the channel system, but the total acreage of aquatic resources will be greatly increased as no open water habitat previously existed on-site, in addition to providing higher quality habitat.

See Attachment B Conditions of Certifications, Additional Conditions for modifications and additions to the above proposed compensatory mitigation.

ATTACHMENT B

Conditions of Certification File No. 05-112

STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).
2. This Certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the U.S. Army Corps of Engineers' Section 404 Permit and the California Department of Fish and Game's Streambed Alteration Agreement. **These documents shall be submitted prior to any discharge to waters of the State.**
2. The Applicant and all contractors employed by the Applicant shall have copies of this Certification, the approved maintenance plan, and all other regulatory approvals for this project on site at all times so they are familiar with all conditions set forth.
3. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.

ATTACHMENT B

Conditions of Certification

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4. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State.
5. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.
6. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.
7. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.
8. The Applicant shall not conduct any construction activities within waters of the State during a rainfall event. The Applicant shall maintain a **five-day (5-day) clear weather forecast** before conducting any operations within waters of the State.
9. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum **5-foot** buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, the Applicant shall file a **Report of Waste Discharge** to this Regional Board and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging waste. Sufficient time should be allowed to obtain any such permits (generally 180 days). If groundwater is encountered without the benefit of appropriate permits, the Applicant shall cease all activities in the areas where groundwater is present, file a Report of Waste Discharge to this Regional Board, and obtain any necessary permits prior to discharging waste.
10. All project activities not included in this Certification, and which may require a permit, must be reported to the Regional Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional Certification action.

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Conditions of Certification

File No. 05-112

11. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. If surface water diversions are anticipated, the Applicant shall develop and submit a **Surface Water Diversion Plan** to this Regional Board. The plan shall include the proposed method and duration of diversion activities, erosion and sediment controls, and a map or drawing indicating the locations of diversion and discharge points. The plan shall be submitted prior to any surface water diversions. If surface flows are present, then upstream and downstream monitoring for pH, temperature, dissolved oxygen, turbidity, and total suspended solids shall be implemented. These constituents shall be monitored on a **daily** basis during the first week of diversion activities, and then on a **weekly** basis, thereafter, until the in-stream work is complete. Results of the analyses shall be submitted to this Regional Board by the **15th** day of each subsequent sampling month. A map or drawing indicating the locations of sampling points shall be included with each submittal. Diversion activities shall not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.
12. The Applicant shall restore all areas of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include grading of disturbed areas to pre-project contours and revegetation with native species. The Applicant shall implement all necessary Best Management Practices to control erosion and runoff from areas associated with this project.
13. The Applicant shall provide COMPENSATORY MITIGATION by creating and/or restoring **4.10 acres** within Federal jurisdictional wetlands (**1.30 acres** net gain at the project site). The boundary of the mitigation site shall be clearly identified on a map of suitable quality and shall be defined by latitude and longitude. This information shall be submitted to this Regional Board for approval prior to any disturbance within waters of the United States and shall include copies of any agreements made between the Applicant and a third party organization regarding compensatory mitigation efforts.
14. All open space and mitigation areas shall be placed within a conservation easement to ensure preservation in perpetuity. Documentation of proper easement placement shall be submitted to the Regional Board within one year.
15. The Applicant shall submit to this Regional Board **Annual Mitigation Monitoring Reports** by **January 1st** of each year for a minimum period of **five (5) years** after planting or until mitigation success has been achieved. The report shall describe in detail all of the project/construction activities performed during the previous year and all restoration and

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Conditions of Certification

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mitigation efforts; including percent survival by plant species and percent cover. This report shall include as a minimum, the following documentation:

- (a) Color photo documentation of the pre- and post-project and mitigation site conditions;
 - (b) Geographical Positioning System (GPS) coordinates in decimal-degrees format outlining the boundary of the project and mitigation areas;
 - (c) The overall status of project including a detailed schedule of work;
 - (d) Copies of all permits revised as required in Additional Condition 1;
 - (e) Water quality monitoring results for (as required) compiled in an easy to interpret format;
 - (f) A certified Statement of "no net loss" of wetlands associated with this project;
 - (g) Discussion of any monitoring activities and exotic plant control efforts; and
 - (h) A certified Statement from the permittee or his/her representative that all conditions of this Certification have been met.
16. Prior to any subsequent maintenance activities within the project area, including clearing, maintenance by-hand, and/or the application of pesticides, the Applicant shall submit to this Regional Board a NOTIFICATION of any such activity. Notification shall include: (a) the proposed schedule; (b) a description of the existing condition/capacity; (c) the area of proposed temporary impact within waters of the State; (c) a description of any existing aquatic resources (e.g., wetland/riparian vegetation); and (d) any proposed compensatory mitigation. Notifications must be submitted a minimum of **three (3) weeks** prior to commencing work activities.
17. All applications, reports, or information submitted to the Regional Board shall be signed:
- (a) For corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates.
 - (b) For a partnership, by a general partner.
 - (c) For a sole proprietorship, by the proprietor.

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(d) For a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

18. Each and any report submitted in accordance with this Certification shall contain the following completed declaration:

"I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the _____ day of _____ at _____.

(Signature)
(Title)"

19. All communications regarding this project and submitted to this Regional Board shall identify the Project File Number **05-112**. Submittals shall be sent to the attention of the 401 Certification Unit.
20. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application and appropriate filing fee.
21. The project shall also comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) **General Permit** for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. All stormwater treatment systems shall be located outside of any water of the State and shall not be used as a wetland or riparian mitigation credit.
22. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.
23. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written

ATTACHMENT B

Conditions of Certification

File No. 05-112

submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

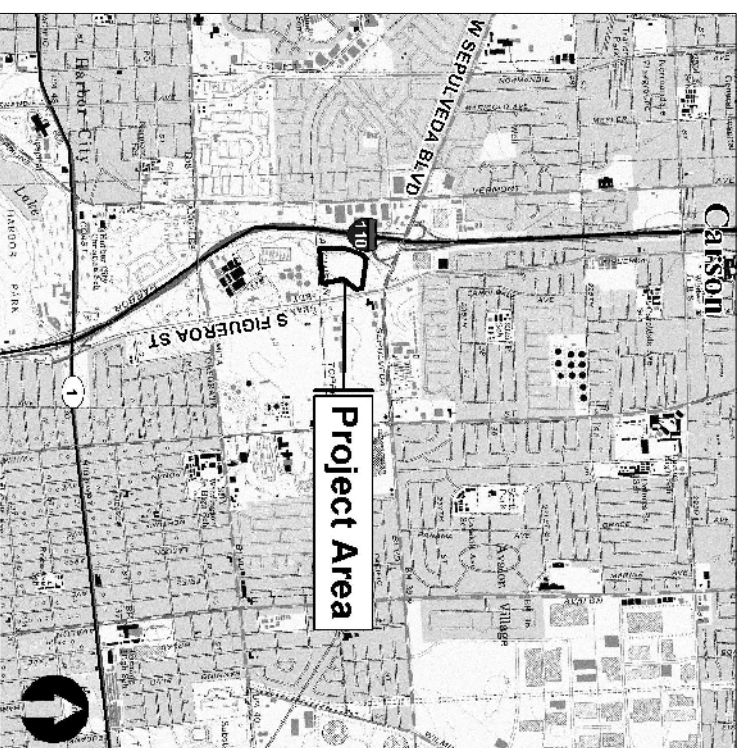
24. *Enforcement:*

- (a) In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- (b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
- (c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.

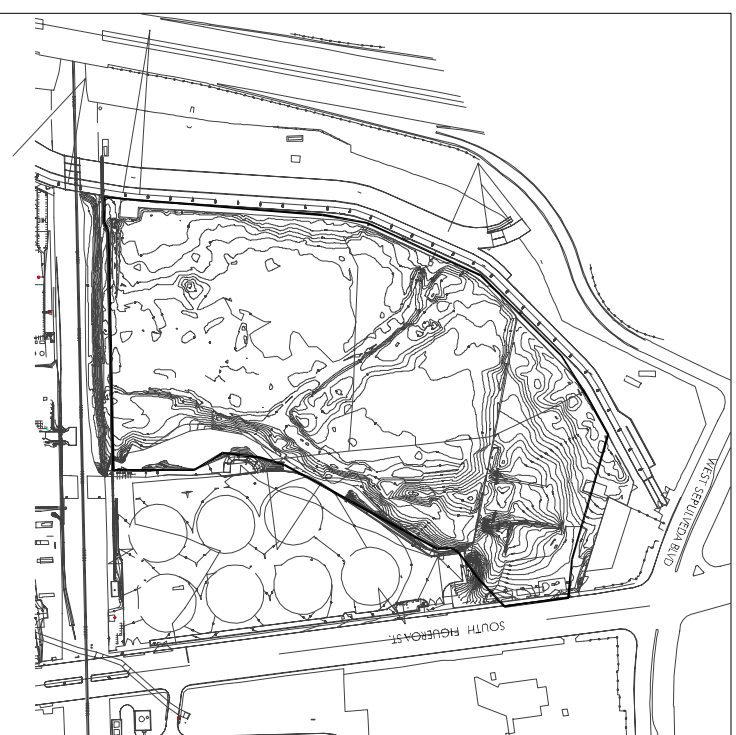
25. This Certification shall expire **five (5) years** from date of this Certification. The Applicant shall submit a complete application prior to termination of this Certification if renewal is requested.

JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT CARSON, CALIFORNIA

LOCATION MAP



SITE MAP



SCALE: 1"=200'

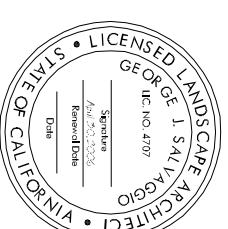
SHEET INDEX

- M-1 --- SHEET INDEX
- M-2/4/8 --- DEMOLITION AND SITE PREPARATION PLAN
- M-3/4/8 --- GRADING PLANS
- M-4/4/8 --- GRADING & TRASH RACK DETAILS
- M-5/4/8 --- TREE PLANTING PLANS
- M-6/4/8 --- SHRUB PLANTING PLANS
- M-7/4/8 --- WETLAND PLANTING PLANS
- M-8/4/8 --- EROSION CONTROL & SEEDING PLANS
- M-9/4/8 --- IRRIGATION PLANS
- E-1 --- SITE PLAN AND DEMOLITION PLAN
- E-2 --- LAYOUT PLAN
- E-3/4/8 --- GRADING & DRAINAGE PLAN
- E-4/4/8 --- TREE & SHRUB PLANTING PLAN
- E-5 --- MEADOW PLANTING & SEEDING PLAN
- E-6 --- IRRIGATION PLAN
- E-7 --- SITE DETAILS
- E-8 --- SITE DETAILS
- E-9/4/8 --- PAVILION DETAILS
- E-10 --- BOARDWALK DETAILS
- E-11 --- SECURITY FENCE

HORIZONTAL & VERTICAL CONTROL

- BENCHMARK CR-9446
 - LOS ANGELES COUNTY PUBLIC WORKS
 - ELEVATION = 23.717 (NAD 83)
 - ELEVATION = 23.280 (LOCAL PLANT DATUM)
 - VERTICAL TRANSFORMATION TO LOCAL PLANT
COORDINATES = -0.467
 - NO HORIZONTAL TRANSFORMATION
- NOTE: ELEVATIONS IN CONSTRUCTION DRAWINGS ARE
BASED ON LOCAL PLANT DATUM.
- BASIS OF BEARING
N 7° 24' 35" W

Date	Issues And Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
01/27/06	100% DRAFT CONSTRUCTION SET	
10/28/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	
02/15/05	100% DRAFT CONSTRUCTION SET	
12/16/04	90% CONSTRUCTION SET	
09/02/04	50% CONSTRUCTION SET	



SCALE: AS INDICATED

PROJECT # 13039
DRAWN BY: MEW, GMG, RBC
CHECKED BY: GJS
ORIGINAL DRAWING SIZE: 24 X 36

SHEET INDEX

M-1



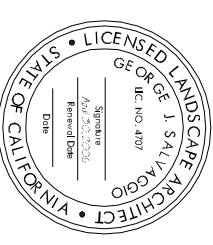
**JOINT WATER
POLLUTION
CONTROL PLANT
MARSHLAND ENHANCEMENT,
EDUCATION, AND VIEWING AREA
PROJECT
CARSON, CALIFORNIA**

Sheet



ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS AND PLANNERS
2169 G. East Francisco Blvd.
San Rafael, CA 94901
(415) 454-8868 Phone
(415) 454-0129 Fax

**JOINT WATER
POLLUTION
CONTROL PLANT
MARSHLAND ENHANCEMENT,
EDUCATION, AND VIEWING AREA
PROJECT
CARSON, CALIFORNIA**

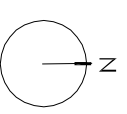


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01/27/06	100% DRAFT CONSTRUCTION SET
10/28/05	100% DRAFT CONSTRUCTION SET
07/20/05	100% DRAFT CONSTRUCTION SET
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12/16/04	90% CONSTRUCTION SET
09/02/04	50% CONSTRUCTION SET

Date	Issues And Revisions	No.
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PROJECT #13039
DRAWN BY: MEW, GAW, BRC
CHECKED BY: GIS
ORIGINAL DRAWING SIZE: 24 X 36

SCALE: 1" = 30'

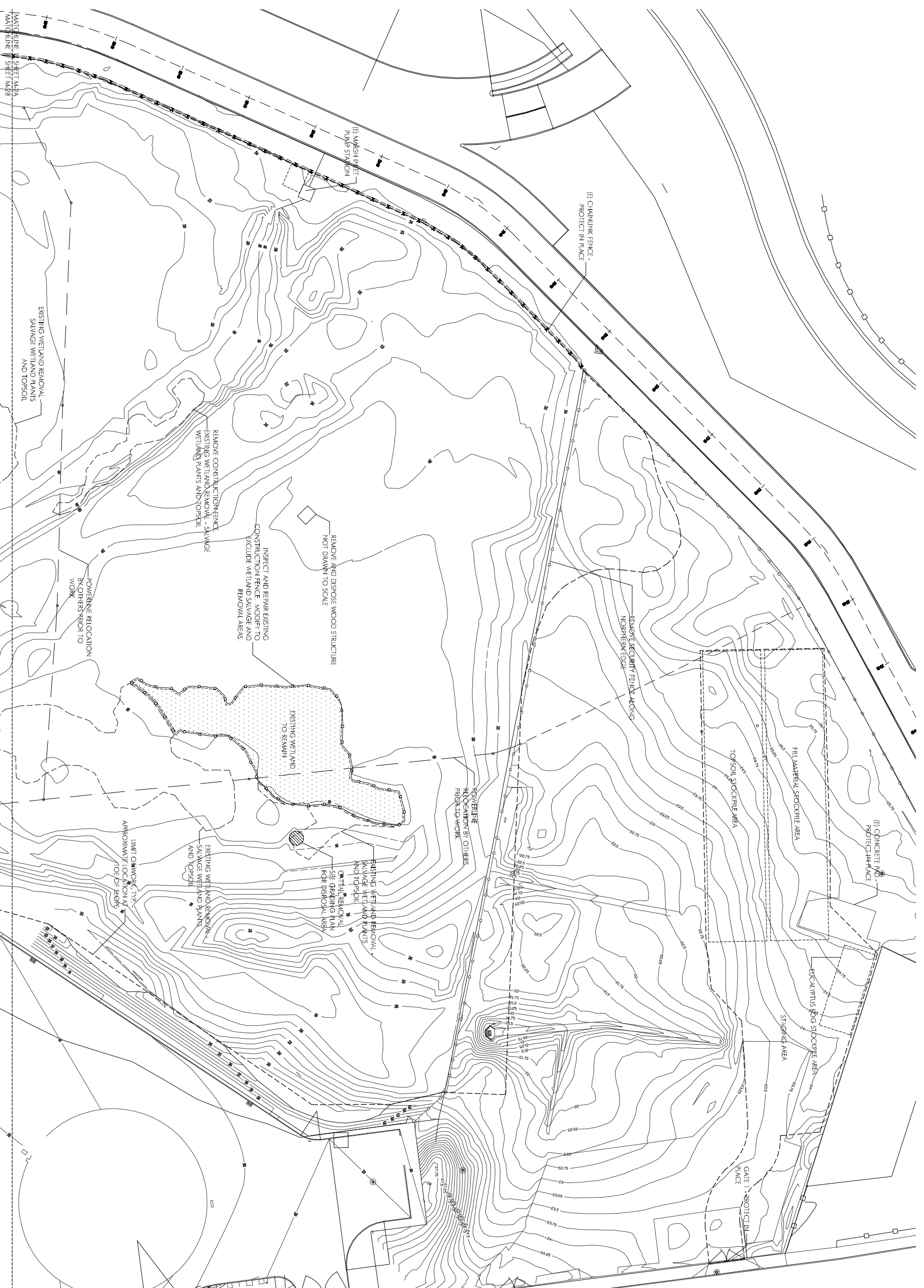


**SITE PREPARATION
PLAN**

Sheet

M-2A

L:\ACAD\20-1\130001\3039\dwg\100% Construction - Mrc12006\1248B.dwg
LACSD DRAWING No.: JC-g-1175





WQA
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
2199-C East Foothill Blvd.
San Rafael, CA 94901
(415) 454-8868 Phone
(415) 454-0129 Fax

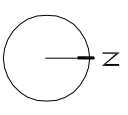
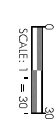
JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
CARSON, CALIFORNIA



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01/27/06	100% DR4FT CONSTRUCTION SET	
10/28/05	100% DR4FT CONSTRUCTION SET	
07/20/05	100% DR4FT CONSTRUCTION SET	
02/15/05	100% DR4FT CONSTRUCTION SET	
12/16/04	90% CONSTRUCTION SET	
09/02/04	50% CONSTRUCTION SET	

Date	Issues And Revisions	No.
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PROJECT #13039
DRAWN BY: JMW, GNG, BRC
CHECKED BY: GJS
ORIGINAL DRAWING SIZE: 24 X 36



SITE PREPARATION PLAN

Sheet

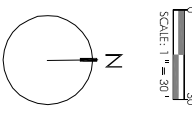
M-2B

**JOINT WATER
 POLLUTION
 CONTROL PLANT
 MARSHLAND ENHANCEMENT,
 EDUCATION, AND VIEWING AREA
 PROJECT**
 CARSON, CALIFORNIA



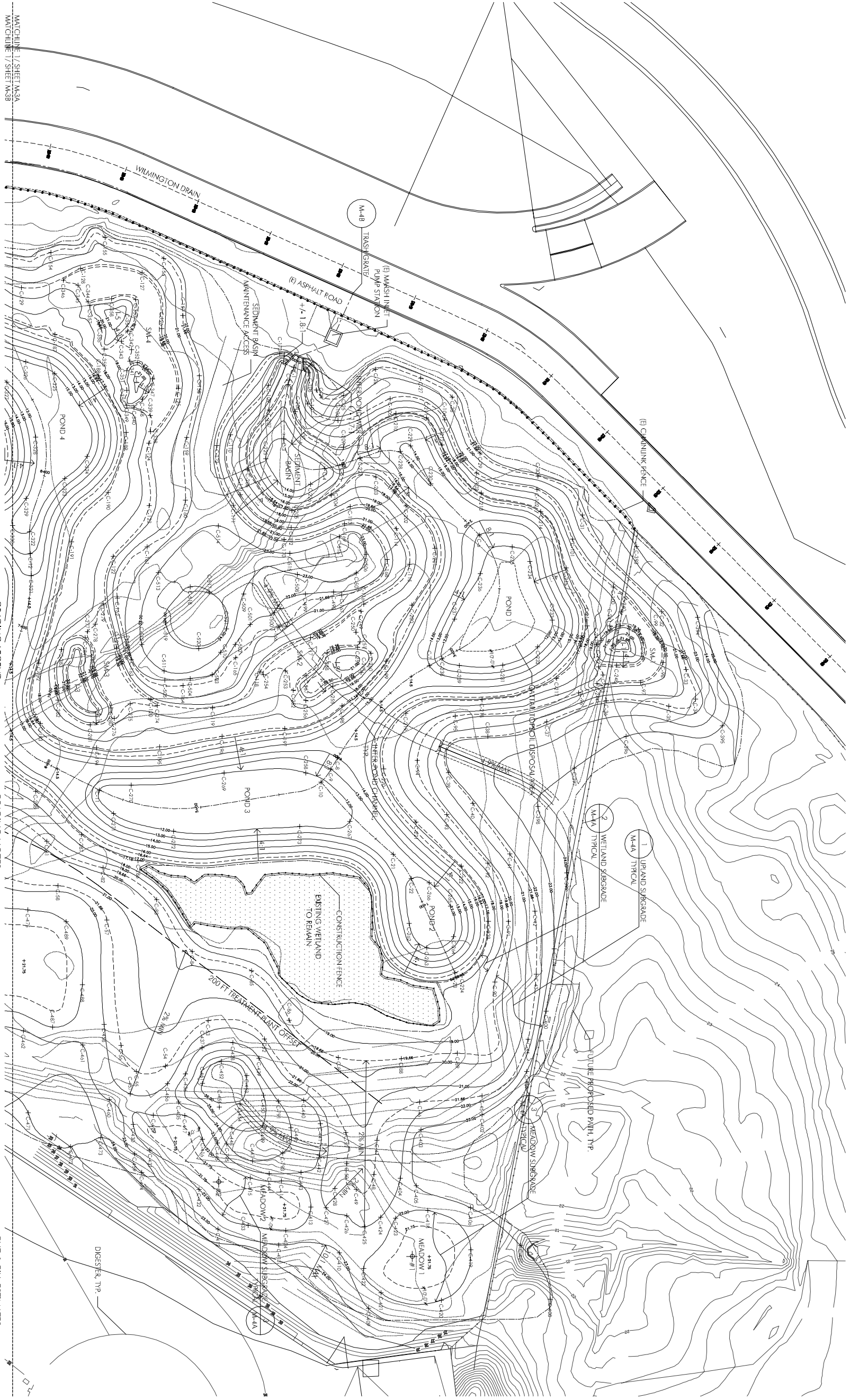
Date	Issues And Revisions	No.
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01/27/06	100% DR-4FT CONSTRUCTION SET	
10/28/05	100% DR-4FT CONSTRUCTION SET	
07/20/05	100% DR-4FT CONSTRUCTION SET	
02/15/05	100% DR-4FT CONSTRUCTION SET	
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09/02/04	50% CONSTRUCTION SET	

PROJECT #13039
 DRAWN BY: MFW, GMG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36



GRADING PLAN

M-3A



GRADING LEGEND

SYMBOL	DESCRIPTION
31	EXISTING CONTOUR LINE
31	PROPOSED CONTOUR LINE
31.5	EXISTING SPOT ELEVATION
31.5	PROPOSED SPOT ELEVATION
31.5	LIMIT OF GRADING
31.5	CENTER LINE
31.5	CENTER LINE OF SWALE
31.5	SLOPE INDICATION
31.5	SOIL TEST SITE
31.5	ISLAND
31.5	SEASONAL WASH
31.5	HORIZONTAL CONTROL POINT
31.5	STATION POINT

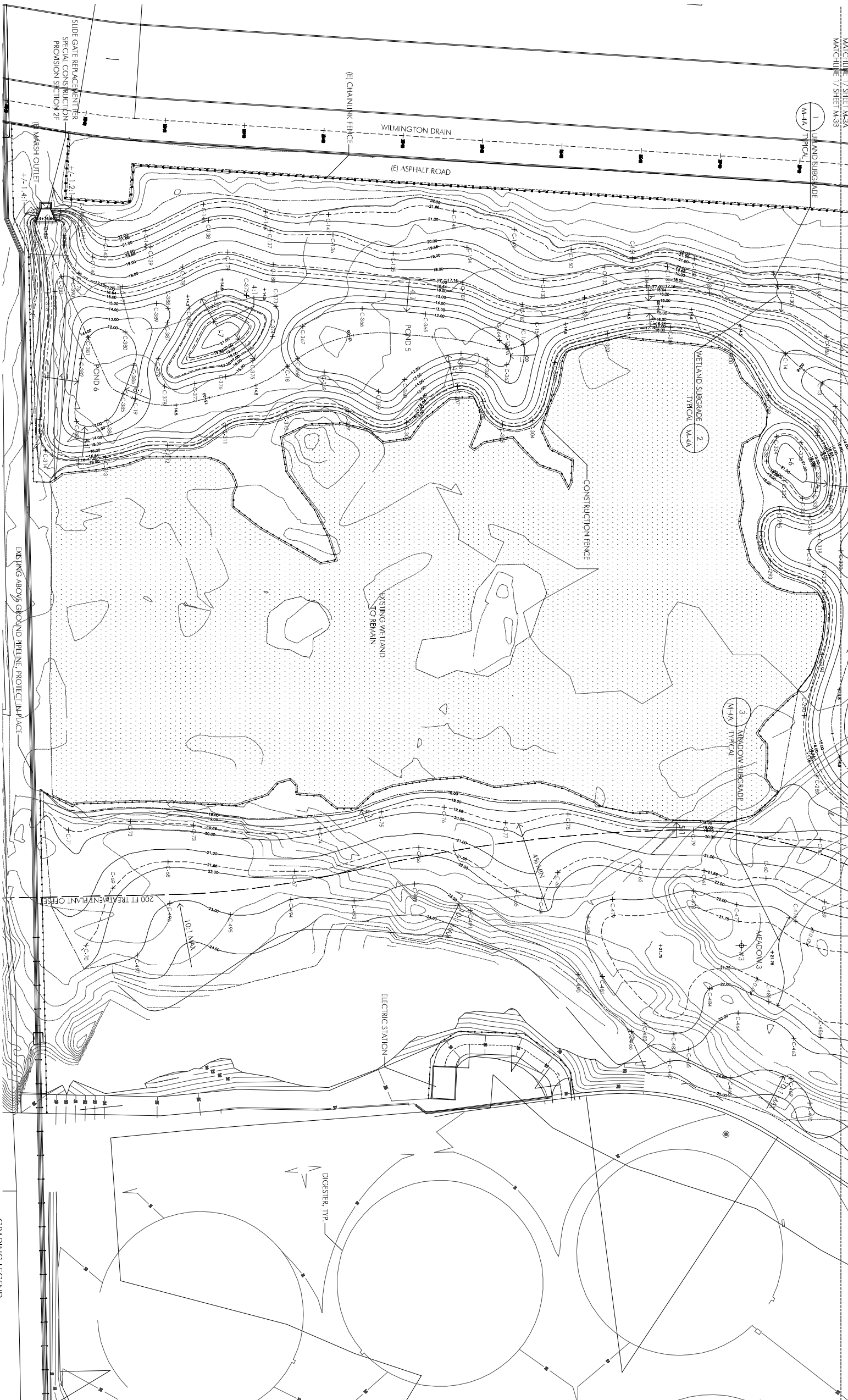
GRADING NOTES

1. THE GRADING PLANS INDICATE FINISHED GRADE ELEVATIONS REFER TO THE GRADING DETAILS AND SPECIAL PROVISIONS FOR SURGRADE SPECIFICATIONS.
2. SAWAGE TOSPOIL FROM ENTIRE AREA WITHIN THE LIMIT OF GRADING IN ACCORDANCE WITH SPECIAL PROVISIONS SECTION NO. 2C.
3. LOCATIONS OF TOSPOIL STOCKPILE AREAS AND HAUL ROADS SHALL BE DETERMINED BY THE PROJECT ENGINEER.
4. THE SURGRADE FOR FINISH GRADE ELEVATIONS OF 19.66 FEET AND ABOVE SHALL BE PREPARED IN ACCORDANCE WITH THE UPLAND SURGRADE DETAIL (1), SHEET M-4A, EXCLUDING THE AREAS INDICATED AS BROWN SURGRADE.
5. THE SURGRADE FOR FINISH GRADE ELEVATIONS BETWEEN 17.16 FEET AND 19.66 FEET SHALL BE PREPARED IN ACCORDANCE WITH THE WETLAND SURGRADE DETAIL (2), SHEET M-4A.
6. THE SURGRADE FOR FINISH GRADE ELEVATIONS BETWEEN 12.00 FT AND 17.16 FEET SHALL BE PREPARED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
7. UNLESS OTHERWISE INDICATED, THE MAXIMUM SLOPE SHALL BE 3:1 AND THE MINIMUM SLOPE SHALL BE 2%.
8. NO GRADING SHALL OCCUR WITHIN 5 FEET OF EXISTING ABOVE-GROUND INFRASTRUCTURE.
9. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING AND PROTECTING IN PLACE ANY ABOVE OR BELOW GROUND UTILITIES, UNLESS OTHERWISE INDICATED, PRIOR TO THE COMMENCEMENT OF GRADING.
10. THE FINAL ELEVATIONS WITHIN THE 200 FT TREATMENT PLANT OFFSET SHALL NOT BE LESS THAN 19.66 FT.
11. PARABOLICALLY SHAPE ALL INTER-POND CHANNELS TO DIRECT FLOW AWAY FROM TOE OF SLOPES AND PREVENT UNDERMINING SLOPES.
12. *1/2 SLOPE INDICATIONS ON THE GRADE ADJACENT TO THE INLET AND OUTLET STRUCTURES REPRESENT THE APPROXIMATE SLOPE. FINAL SLOPE SHALL NOT BE STEEPER THAN THE EXISTING SLOPE IN THESE AREAS.
13. PROPOSED WATERLINE ELEVATION = 19.66 FT

CUT & FILL ESTIMATES

CUT = 225,520 CU. YDS.
 FILL = 17,227 CU. YDS. (1.2 COMPACTION FACTOR)
 NET = 5,288 CU. YDS. CUT

1 USE AND SURGRADE
TYPICAL



GRADING LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR LINE
---	PROPOSED CONTOUR LINE
---	GRADE BREAK
x (31.5)	EXISTING SPOT ELEVATION
+ 31.5	PROPOSED SPOT ELEVATION
---	LIMIT OF GRADING
---	CENTER LINE
---	CENTER LINE OF SWALE
3:1 MAX	SLOPE INDICATION
+	SOIL TEST SITE
I#	ISLAND
SM#	SEASONAL WADSH
+C#	HORIZONTAL CONTROL POINT
0+00	

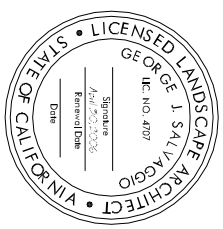
GRADING PLAN

M-3B

LACSD DRAWING No. J0-g-1175
STATION POINT
E:\ACAD20-1\30000\130399.dwg\100% Construction - March0006\13A485.dwg

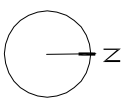
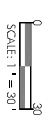
WRCA
ENVIRONMENTAL CONSULTANTS
14400 COUNTRY CLUB BLVD.
21492 C. East Foothill Blvd.
San Rafael, CA 94901
(415) 454-8848 phone
(415) 454-0129 fax

JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
CARSON, CALIFORNIA



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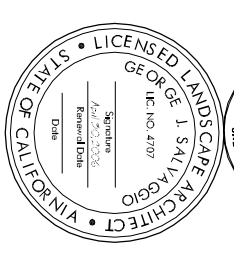
PROJECT #13039
DRAWN BY: JMW, GAG, RBC
CHECKED BY: GJS
ORIGINAL DRAWING SITE: 24 X 36



GRADE STAKING DATA

PL. NO.	NORTHING	EASTING	PL. NO.	NORTHING	EASTING	PL. NO.	NORTHING	EASTING	PL. NO.	NORTHING	EASTING	PL. NO.	NORTHING	EASTING	PL. NO.	NORTHING	EASTING
C-1	1637.06	310.10	C-101	1713.14	418.78	C-201	1626.16	424.55	C-301	1322.18	288.53	C-401	1684.27	755.29	C-501	1513.92	474.11
C-2	1633.60	320.98	C-102	1650.78	387.30	C-202	1608.01	397.61	C-302	1212.52	291.63	C-402	1686.09	782.71	C-502	1502.60	488.05
C-3	1630.77	326.29	C-103	1652.70	376.87	C-203	1608.70	379.43	C-303	1179.45	271.93	C-403	1671.41	792.29	C-503	1488.80	501.07
C-4	1632.38	374.03	C-104	1632.38	374.03	C-204	1632.38	374.03	C-304	1165.38	328.22	C-404	1606.33	808.02	C-504	1471.53	506.88
C-5	1637.51	371.46	C-105	1637.51	371.46	C-205	1637.51	371.46	C-305	1146.36	330.79	C-405	1612.14	826.21	C-505	1456.57	507.86
C-6	1654.29	376.19	C-106	1654.29	376.19	C-206	1654.29	376.19	C-306	1134.14	316.14	C-406	1648.71	841.56	C-506	1482.77	428.26
C-7	1622.78	498.59	C-107	1622.78	498.59	C-207	1622.78	498.59	C-307	1118.10	337.03	C-407	1680.47	865.35	C-507	1576.66	440.21
C-8	1564.72	557.01	C-108	1564.72	557.01	C-208	1564.72	557.01	C-308	1086.08	329.53	C-408	1699.13	899.30	C-508	1559.19	440.96
C-9	1560.49	564.21	C-109	1560.49	564.21	C-209	1560.49	564.21	C-309	1049.35	322.55	C-409	1684.27	895.14	C-509	1505.46	453.49
C-10	1554.28	572.31	C-110	1554.28	572.31	C-210	1554.28	572.31	C-310	1010.42	322.92	C-410	1665.75	899.91	C-510	1480.78	490.19
C-11	1414.27	577.42	C-111	1414.27	577.42	C-211	1414.27	577.42	C-311	972.02	331.59	C-411	1627.56	865.06	C-511	1455.11	502.02
C-12	1370.51	427.83	C-112	1370.51	427.83	C-212	1370.51	427.83	C-312	936.74	343.67	C-412	1489.10	855.02	C-512	1440.88	485.29
C-13	1347.44	304.62	C-113	1347.44	304.62	C-213	1347.44	304.62	C-313	886.79	351.50	C-413	1547.89	841.12	C-513	1451.39	439.89
C-14	1324.48	286.26	C-114	1324.48	286.26	C-214	1324.48	286.26	C-314	840.37	401.37	C-414	1529.22	824.62	C-514	1489.31	410.40
C-15	1168.33	275.02	C-115	1168.33	275.02	C-215	1168.33	275.02	C-315	856.33	327.62	C-415	1509.44	822.63	C-515	1534.48	427.68
C-16	1159.56	280.27	C-116	1159.56	280.27	C-216	1159.56	280.27	C-316	820.27	247.86	C-416	1479.37	798.26	C-516	1565.86	417.11
C-17	1149.96	283.00	C-117	1149.96	283.00	C-217	1149.96	283.00	C-317	862.72	208.90	C-417	1488.08	783.17	C-517	1478.98	462.04
C-18	1011.16	284.07	C-118	1011.16	284.07	C-218	1011.16	284.07	C-318	1345.87	400.23	C-418	1621.72	843.25	C-518	1471.53	448.88
C-19	913.42	314.89	C-119	913.42	314.89	C-219	913.42	314.89	C-319	1339.23	419.83	C-419	1630.24	899.97	C-519	1485.97	471.70
C-20	899.05	203.90	C-120	1446.69	519.98	C-220	1446.69	519.98	C-320	1317.15	413.88	C-420	1592.21	895.24	C-520	1477.01	487.89
C-21	1659.94	617.96	C-121	1425.12	429.75	C-221	1614.36	659.65	C-321	1370.01	413.88	C-421	1581.17	879.84	C-521	1494.54	475.38
C-22	1611.33	633.39	C-122	1423.02	429.67	C-222	1643.00	625.52	C-322	1370.01	413.88	C-422	1581.17	879.84			
C-23	1638.96	693.04	C-123	1445.73	397.49	C-223	1660.44	660.44	C-323	1392.33	380.34	C-423	1601.49	838.94			
C-24	1551.35	324.33	C-124	1445.54	358.04	C-224	1643.00	625.52	C-324	1406.41	366.36	C-424	1586.20	838.94			
C-25	1668.82	321.38	C-125	1454.58	323.44	C-225	1519.38	367.85	C-325	1385.98	314.02	C-425	1581.75	853.57			
C-26	1688.82	311.38	C-126	1453.53	285.56	C-226	1547.62	383.83	C-326	1367.62	308.58	C-426	1581.75	853.57			
C-27	1617.24	316.87	C-127	1441.21	280.37	C-227	1547.62	383.83	C-327	1365.63	319.40	C-427	1557.59	841.40			
C-28	1637.25	328.95	C-128	1441.21	280.37	C-228	1604.49	363.25	C-328	1373.84	354.13	C-428	1563.10	829.19			
C-29	1654.80	364.36	C-129	1425.12	429.75	C-229	1610.83	369.70	C-329	1367.95	392.92	C-429	1448.26	782.99			
C-30	1691.36	378.81	C-130	1623.68	244.07	C-230	1623.68	244.07	C-330	1359.28	410.15	C-430	1435.52	788.83			
C-31	1719.38	403.42	C-131	1250.21	231.49	C-231	1669.09	498.33	C-331	1335.18	377.19	C-431	1446.18	805.03			
C-32	1769.68	464.63	C-132	1210.74	231.59	C-232	1691.22	448.92	C-332	1323.50	365.76	C-432	1477.14	829.90			
C-33	1784.98	501.18	C-133	1127.06	240.16	C-233	1700.35	470.00	C-333	1312.48	353.63	C-433	1508.17	852.56			
C-34	1790.99	519.93	C-134	1124.00	219.31	C-234	1688.33	432.94	C-334	1318.78	338.15	C-434	1531.92	853.74			
C-35	1774.02	524.27	C-135	1077.71	223.20	C-235	1675.20	423.63	C-335	1324.17	342.03	C-435	1464.32	774.56			
C-36	1734.58	521.00	C-136	1039.73	211.31	C-236	1675.20	423.63	C-336	1342.87	356.88	C-436	1468.68	756.90			
C-37	1697.03	534.22	C-137	1000.15	208.43	C-237	1638.68	469.27	C-337	1343.23	372.78	C-437	1479.17	747.09			
C-38	1661.43	549.08	C-138	961.43	202.33	C-238	1630.81	494.26	C-338	1446.53	350.73	C-438	1498.56	737.09			
C-39	1649.70	565.55	C-139	925.09	218.92	C-239	1641.61	498.52	C-339	1446.34	340.48	C-439	1515.08	746.98			
C-40	1650.76	585.22	C-140	888.62	225.26	C-240	1743.93	464.78	C-340	1436.11	335.25	C-440	1543.33	773.63			
C-41	1673.61	617.87	C-141	879.87	208.37	C-241	1738.83	473.49	C-341	1433.39	308.22	C-441	1566.08	788.46			
C-42	1689.51	653.93	C-142	881.86	202.03	C-242	1729.66	469.48	C-342	1428.01	296.97	C-442	1566.69	808.14			
C-43	1690.28	693.81	C-143	896.82	214.46	C-243	1732.48	504.89	C-343	1428.01	296.97	C-443	1521.57	819.29			
C-44	1685.18	734.89	C-144	922.16	208.72	C-244	1728.71	509.89	C-344	1407.01	268.66	C-444	1541.54	819.29			
C-45	1686.00	770.73	C-145	958.43	196.77	C-245	1757.81	484.28	C-345	1400.59	258.28	C-445	1488.67	800.57			
C-46	1616.72	774.64	C-146	967.35	198.61	C-246	1743.43	473.50	C-346	1391.40	254.92	C-446	1550.25	790.89			
C-47	1587.20	799.52	C-147	1036.87	198.61	C-247	1728.15	485.43	C-347	1447.73	317.40	C-447	1510.94	811.80			
C-48	1584.55	819.11	C-148	1115.75	196.40	C-248	1741.10	498.42	C-348	1441.28	330.10	C-448	1497.96	791.00			
C-49	1576.50	829.89	C-149	1183.75	207.65	C-249	1579.56	464.30	C-349	1431.49	324.13	C-449	1517.38	789.32			
C-50	1670.47	813.62	C-150	1188.53	220.69	C-250	1578.42	467.83	C-350	1431.60	324.66	C-450	1517.38	789.32			
C-51	1569.97	794.00	C-151	1228.12	226.46	C-251	1578.89	493.66	C-351	1431.58	312.26	C-451	1479.24	762.94			
C-52	1518.51	734.74	C-152	1267.00	226.35	C-252	1536.78	514.33	C-352	1438.19	307.09	C-452	1491.37	749.00			
C-53	1482.91	723.24	C-153	1346.29	238.40	C-253	1531.85	502.77	C-353	1437.02	267.30	C-453	1507.30	757.83			
C-54	1465.88	751.94	C-154	1383.53	237.50	C-254	1517.81	504.38	C-354	1431.96	287.11	C-454	1503.11	775.95			
C-55	1437.56	756.37	C-155	1417.84	227.97	C-255	1544.55	511.76	C-355	1414.24	298.45	C-455	1490.05	763.01			
C-56	1427.81	738.75	C-156	1454.95	241.20	C-256	1544.55	511.76	C-356	1414.24	298.45	C-456	1457.16	763.01			
C-57	1418.91	669.51	C-157	1468.97	277.24	C-257	1544.77	505.00	C-357	1408.11	271.12	C-457	1453.64	769.40			
C-58	1387.98	637.81	C-158	1477.29	313.46	C-258	1536.17	490.59	C-358	1421.99	266.79	C-458	1417.16	725.54			
C-59	1348.85	631.05	C-159	1469.38	354.38	C-259	1577.43	487.02	C-359	1408.38	309.80	C-459	1436.45	807.30			
C-60	1312.16	616.08	C-160	1468.69	394.06	C-260	1586.79	490.99	C-360	1084.93	302.43	C-460	1420.30	773.65			
C-61	1273.11	611.42	C-161	1579.48	423.57	C-261	1579.48	423.57	C-361	1120.36	285.99	C-461	1403.58	738.65			
C-62	1233.36	609.19	C-162	1444.38	434.87	C-262	1544.68	566.47	C-362	1017.56	289.24	C-462	1289.63	741.62			
C-63	1181.12	612.64	C-163	1425.47	466.06	C-263	1492.91	568.61	C-363	1034.19	297.73	C-463	1327.87	742.09			
C-64	1170.73	628.97	C-164	1425.47	466.06	C-264	1610.02	661.70	C-364	1136.59	289.95	C-464	1366.15	729.67			
C-65	1152.22	624.22	C-165	1434.35	494.91	C-265	1610.02	661.70	C-365	1149.10	293.08	C-465	1329.69	716.83			
C-66	1093.77	596.92	C-166	1467.12	511.28	C-266	1638.03	670.01	C-366	1144.41	277.73	C-466	1284.66	700.88			
C-67	1015.62	611.81	C-167	1530.29	493.78	C-267	1622.68	635.95	C-367	1098.07	261.13						

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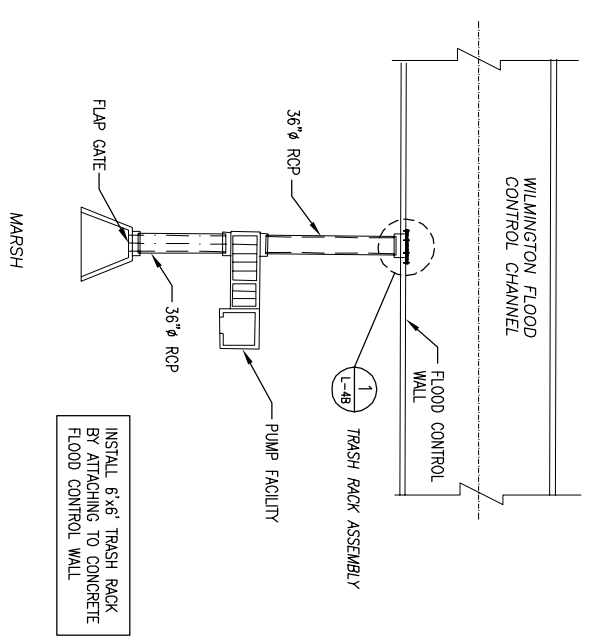


Date	Issues And Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
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02/15/05	100% DRAFT CONSTRUCTION SET	
12/16/04	90% CONSTRUCTION SET	
09/02/04	50% CONSTRUCTION SET	

PROJECT #13039
 DRAWN BY: MRY, GMG, RBC
 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36
SCALE: AS INDICATED

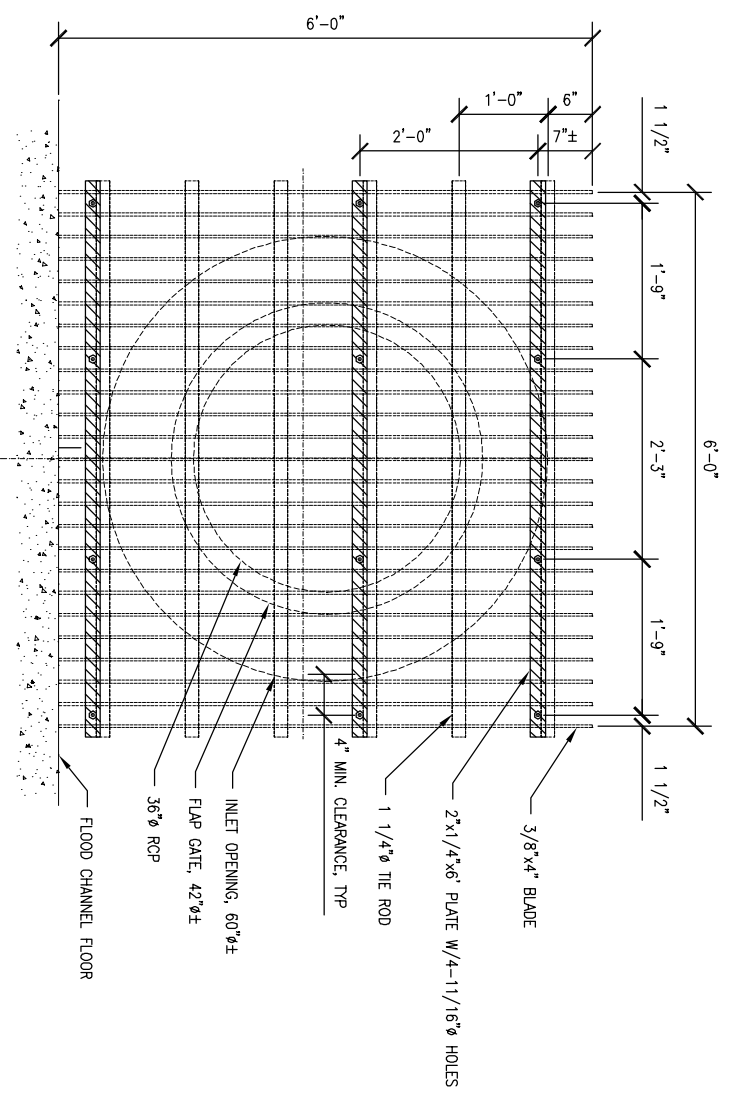
TRASH RACK DETAILS
 Sheet

M-4B

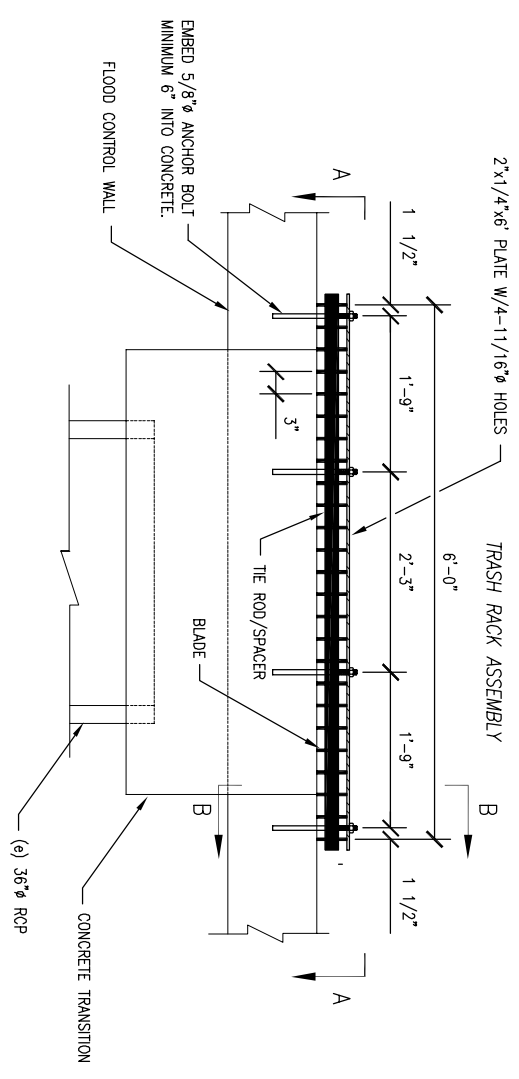


PLAN VIEW OF INLET STRUCTURE
 SCALE: 1/16" = 1'-0"

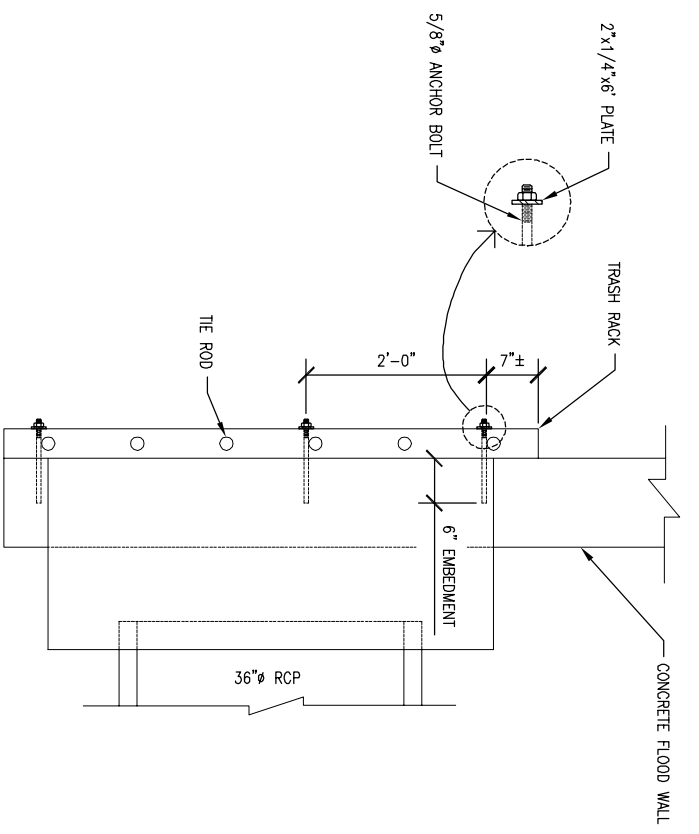
TRASH RACK BY HYDROTHANE SYSTEMS (530-265-5099).
 ANCHOR BOLTS & PLATES TO BE STAINLESS STEEL.



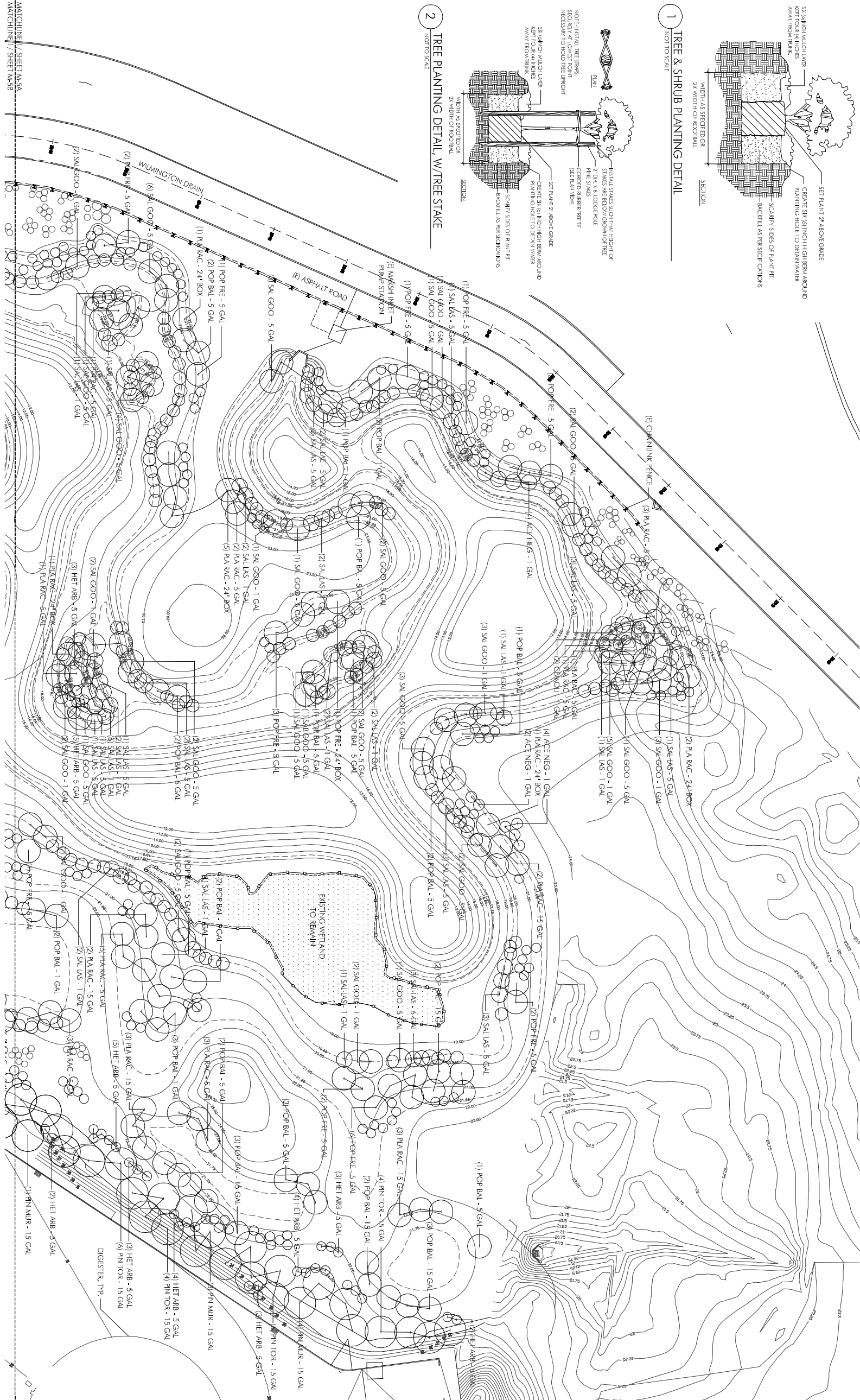
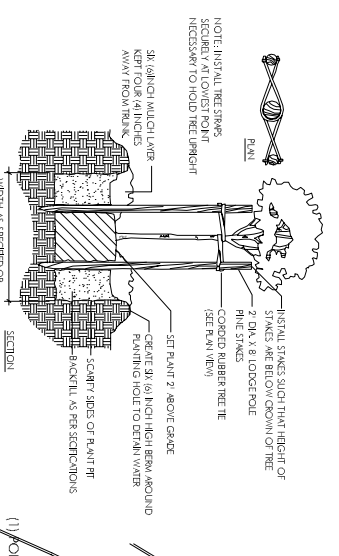
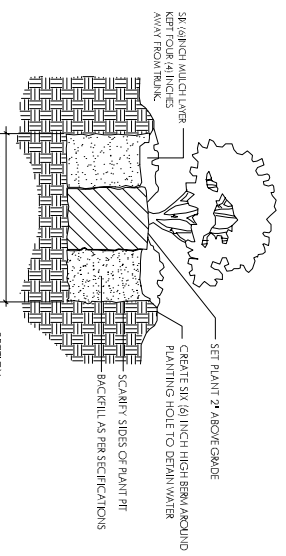
SECTION A
 SCALE: 1" = 1'-0"



TRASH RACK DETAIL
 SCALE: 1" = 1'-0"



SECTION B
 SCALE: 1" = 1'-0"



PLANT LEGEND - TREES

PLANT LEGEND - TREES CONT.

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
○	ACER NEGUNDO	BOX ELDER	1 GALLON	7' O.C.	19.66 TO 23.00'	NONE	13
○	ALN RHIO	WHITE ALDER	1 GALLON	7' O.C.	19.66 TO 23.00'	NONE	9
○	HET ARB	HETEROMELES ARBUTIFOLIA	5 GALLON	8' O.C.	ABOVE 22.0'	NONE	51
○	POP FRE	FREHMONT COTTONWOOD	5 GALLON	15' O.C.	19.66 TO 21.66'	NONE	22
○	POP FRE	FREHMONT COTTONWOOD	15 GALLON	15' O.C.	19.66 TO 21.66'	STAKES SEE DETAIL 2	11
○	POP FRE	FREHMONT COTTONWOOD	24' BOX	15' O.C.	19.66 TO 21.66'	STAKES SEE DETAIL 2	1
○	POP BAL	BLACK COTTONWOOD	1 GALLON	15' O.C.	19.66 TO 21.66'	NONE	31
○	POP BAL	BLACK COTTONWOOD	5 GALLON	15' O.C.	19.66 TO 21.66'	NONE	28
○	POP BAL	BLACK COTTONWOOD	15 GALLON	15' O.C.	19.66 TO 21.66'	STAKES SEE DETAIL 2	15

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
○	SAL LAS	SALVASTOLERS	1 GALLON	19' O.C.	19.66 TO 21.66'	ONSITE COLLECTION	51
○	SAL GOO	SAUVAGE GOODENIUM	1 GALLON	19' O.C.	19.66 TO 21.66'	ONSITE COLLECTION	28
○	SAL GOO	SAUVAGE GOODENIUM	5 GALLON	10' O.C.	19.66 TO 21.66'	ONSITE COLLECTION	41
○	SAL LAE	SAUVAGE LAEVIGATA	5 GALLON	12' O.C.	19.66 TO 21.66'	NONE	5
○	PIA RAC	PATARIUS RACEOSA	5 GALLON	19' O.C.	19.66 TO 22.00'	NONE	32
○	PIA RAC	PATARIUS RACEOSA	15 GALLON	19' O.C.	19.66 TO 22.00'	STAKES SEE DETAIL 2	14
○	PIA RAC	PATARIUS RACEOSA	24' BOX	19' O.C.	19.66 TO 22.00'	STAKES SEE DETAIL 2	10
○	PIN TOR	PINUS TORREYANA	15 GALLON	19' O.C.	23.00 TO 27.00'	STAKES SEE DETAIL 2	22
○	PIN MUR	PINUS MURICATA	15 GALLON	19' O.C.	23.00 TO 27.00'	STAKES SEE DETAIL 2	22

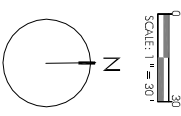
WRQ
 ENVIRONMENTAL CONSULTANTS
 LANDSCAPE ARCHITECTS AND PLANNERS
 2165-G East Francisco Blvd.
 San Rafael, CA 94901
 (415) 454-8868 Phone
 (415) 454-0129 Fax

JOINT WATER POLLUTION CONTROL PLANT
 MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA
 PROJECT
 CARSON, CALIFORNIA



Date	Issues And Revisions	No.
03/22/06	100% RINAL CONSTRUCTION SET	
01/27/06	100% DRAFT CONSTRUCTION SET	
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07/20/05	100% DRAFT CONSTRUCTION SET	
02/15/05	100% DRAFT CONSTRUCTION SET	
12/16/04	90% CONSTRUCTION SET	
09/02/04	50% CONSTRUCTION SET	

PROJECT #13039
 DRAWN BY: NEW, GAM, RBC
 CHECKED BY: GAS
 ORIGINAL DRAWING SIZE: 24 X 36



TREE PLANTING PLAN

M-5A



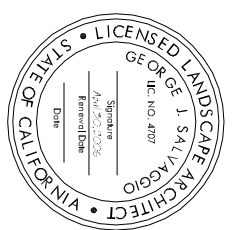
PLANT LEGEND - TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
ACE NEG	ACER NEGANDRO	BOX ELDER	1 GALLON	7' O.C.	19.66' TO 23.00'	NONE	13
ALN RHQ	ALYUS RHOMBIFOLIA	WHITE ALDER	1 GALLON	7' O.C.	19.66' TO 23.00'	NONE	9
HET ARB	HETEROMELES ARBUTIFOLIA	TOYON	5 GALLON	8' O.C.	ABOVE 22.0'	NONE	51
POP FRE	POPULUS FREMONTI	FREMONT COTTONWOOD	5 GALLON	15' O.C.	19.66' TO 21.66'	NONE	22
POP FRE	POPULUS FREMONTI	FREMONT COTTONWOOD	15 GALLON	15' O.C.	19.66' TO 21.66'	STAKES SEE DETAIL 2	11
POP FRE	POPULUS FREMONTI	FREMONT COTTONWOOD	24" BOX	15' O.C.	19.66' TO 21.66'	STAKES SEE DETAIL 2	1
POP BAL	POPULUS BALSMIFERA	BLACK COTTONWOOD	1 GALLON	15' O.C.	19.66' TO 21.66'	NONE	31
POP BAL	POPULUS BALSMIFERA	BLACK COTTONWOOD	5 GALLON	15' O.C.	19.66' TO 21.66'	NONE	28
POP BAL	POPULUS BALSMIFERA	BLACK COTTONWOOD	15 GALLON	15' O.C.	19.66' TO 21.66'	STAKES SEE DETAIL 2	15

PLANT LEGEND - TREES CONT.

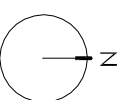
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
SAL LAS	SAULUS LASOLENS	ARBOVO WILLOW	1 GALLON	19' O.C.	19.66' TO 21.66'	ONSITE COLLECTION	51
SAL LAS	SAULUS LASOLENS	ARBOVO WILLOW	5 GALLON	19' O.C.	19.66' TO 21.66'	ONSITE COLLECTION	28
SAL GOO	SAULUS GOODENINGII	GOODENING WILLOW	1 GALLON	19' O.C.	19.66' TO 21.66'	ONSITE COLLECTION	41
SAL GOO	SAULUS GOODENINGII	GOODENING WILLOW	5 GALLON	19' O.C.	19.66' TO 21.66'	ONSITE COLLECTION	43
SAL LAE	SAULUS LAEVIGATA	RED WILLOW	5 GALLON	12' O.C.	19.66' TO 21.66'	NONE	5
PLA RAC	PLATANUS RACEMOSA	WESTERN SYCAMORE	5 GALLON	19' O.C.	19.66' TO 22.00'	NONE	32
PLA RAC	PLATANUS RACEMOSA	WESTERN SYCAMORE	15 GALLON	19' O.C.	19.66' TO 22.00'	STAKES SEE DETAIL 2	14
PLA RAC	PLATANUS RACEMOSA	WESTERN SYCAMORE	24" BOX	19' O.C.	19.66' TO 22.00'	STAKES SEE DETAIL 2	10
PIN TOR	PINUS TORREYANA	TORREY PINE	15 GALLON	19' O.C.	23.00' TO 27.00'	STAKES SEE DETAIL 2	22
PIN MUR	PINUS MURICATA	MURICATA PINE	15 GALLON	19' O.C.	23.00' TO 27.00'	STAKES SEE DETAIL 2	22

○ ○ ○ ○ ○
SHRUBS SEE M-5A



Date	Issues and Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
01/27/06	100% DRAFT CONSTRUCTION SET	
10/28/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	
02/15/05	100% DRAFT CONSTRUCTION SET	
12/16/04	90% CONSTRUCTION SET	
09/02/04	50% CONSTRUCTION SET	

PROJECT # 13039
DRAWN BY: MBW, GMG, RBC
CHECKED BY: GJS
ORIGINAL DRAWING SIZE: 24 X 36
SCALE: 1" = 30'



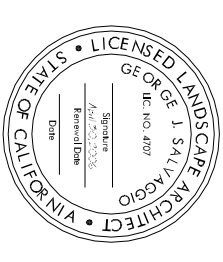
TREE PLANTING PLAN

M-5B

WPA
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS AND SURVEYORS
2169-C East Foothill Blvd.
San Rafael, CA 94901
(415) 454-8969 Phone
(415) 454-0129 Fax

JOINT WATER POLLUTION CONTROL PLANT
MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
CARSON, CALIFORNIA

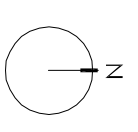
**JOINT WATER
 POLLUTION
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 MARSHLAND ENHANCEMENT,
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02/15/05	100% DRAFT CONSTRUCTION SET
12/16/04	90% CONSTRUCTION SET
09/02/04	50% CONSTRUCTION SET

Date	Issues And Revisions	No.

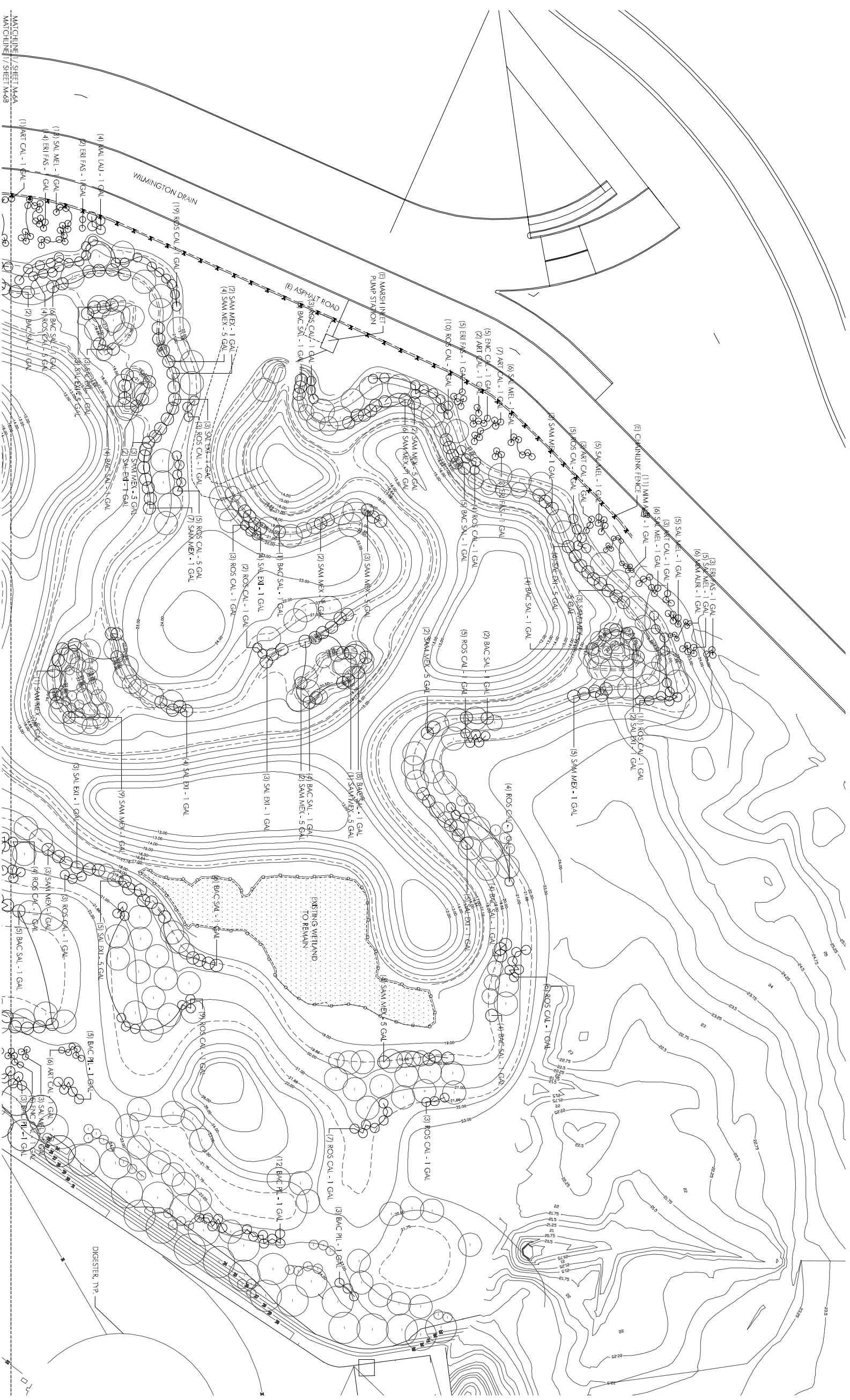
PROJECT # 13039
 DRAWN BY: MHW, GMG, RBC
 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36
 SCALE: 1" = 30'



**SHRUB PLANTING
 PLAN**

Sheet

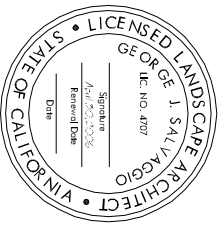
M-6A



SHRUB CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
ART CAL	ARTEMISA CALIFORNICA	CALIFORNIA SAGE BRUSH	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	76
BAC FIL	BACCHARIS FULVIDENS	COYOTE BUSH	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	46
BAC SAL	BACCHARIS SAUCIFICOLA	MULEFAT	1 GALLON	8 O.C.	19.66' TO 20.00'	ONSITE COLLECTION	112
ERI FAS	ERIODONUM PASCUOLATUM	CALIFORNIA BUCKWHEAT	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	68
ENC CAL	ENCEDIA CALIFORNICA	CALIFORNIA BRITTLEBUSH	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	20
MAN LAM	MANOLIS LAURINA	LAUREL SLIMAC	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	20
MAN AUR	MANOLIS ALBAVANTICUS	BLUSH MONKEYFLOWER	1 GALLON	3 O.C.	ABOVE 21.66'	NONE	20

SHRUB CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
RHU INT	RHUS INFERIORIFLOA	LEMONADE BERRY	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	20
ROS CAL	ROSA CALIFORNICA	CALIFORNIA ROSE	1 GALLON	6 O.C.	19.66' TO 21.66'	NONE	204
SAL EN	SALICARIA ENIGMA	NARROW LEAF WILLOW	1 GALLON	6 O.C.	19.66' TO 20.00'	NONE	63
SAL MEL	SALICAMELIIFERA	BLACKSAGE	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	70
SAM MEX	SAMBUCUS MEXICANA	BLUE ELDERBERRY	1 GALLON	6 O.C.	19.66' TO 21.66'	NONE	30
TR	TRISTEMIS	TRISTEMIS	5 GALLON	6 O.C.	19.66' TO 21.66'	NONE	51

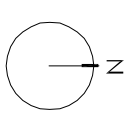
**JOINT WATER
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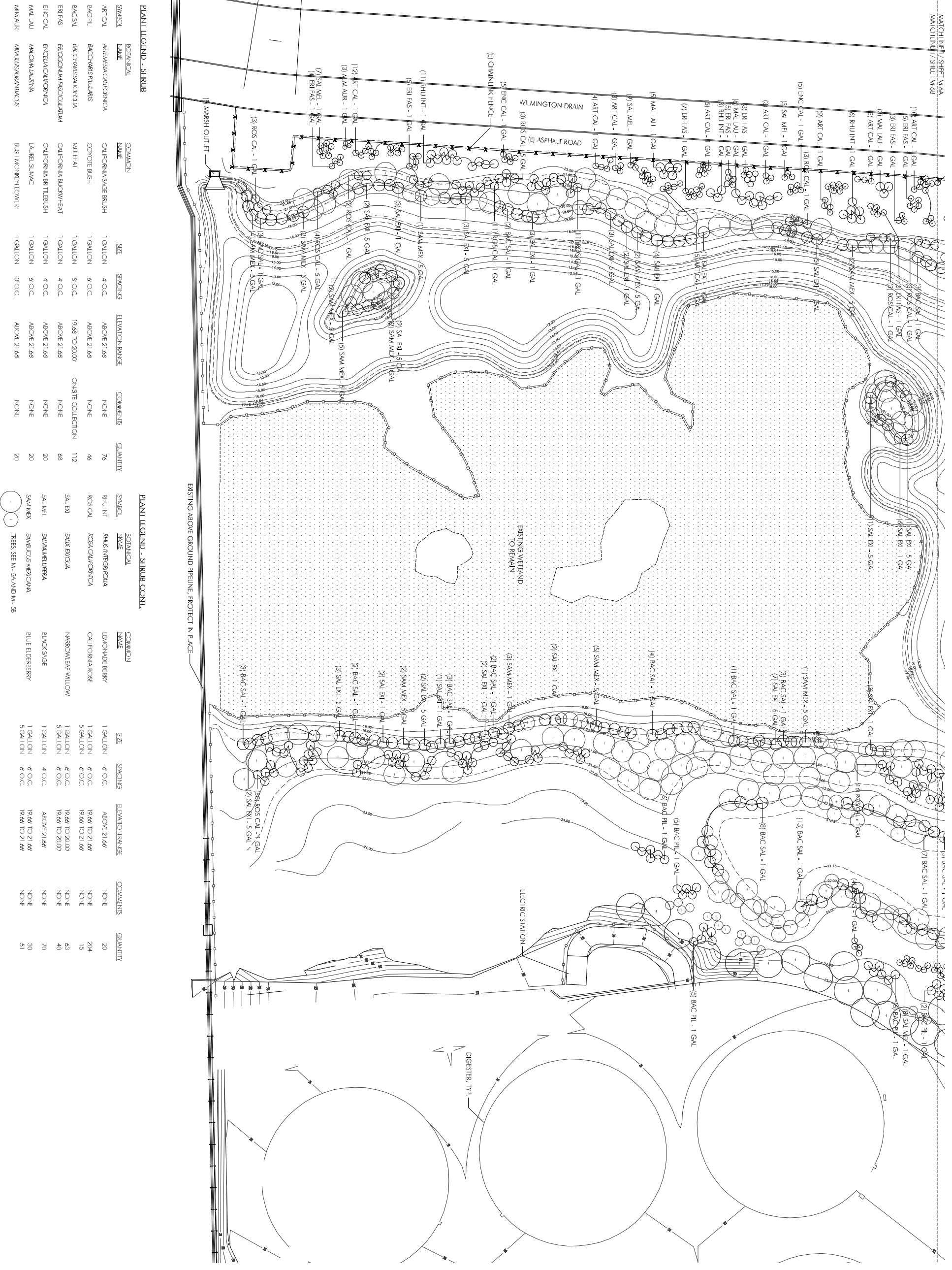
PROJECT #13039
 DRAWN BY: MEW, GWG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36
 SCALE: 1" = 30'



**SHRUB PLANTING
 PLAN**

M-6B

Sheet



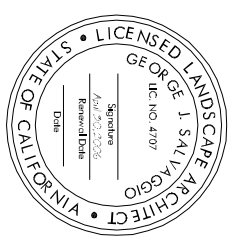
PLANT LEGEND - SHRUB

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION/RANGE	COMMENTS	QUANTITY
(Symbol)	ART CAL	ARTESIA CALIFORNICA	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	76
(Symbol)	BAC FIL	BACCHARIS SPICULATA	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	46
(Symbol)	BAC SAL	BACCHARIS SPICULATA	1 GALLON	8 O.C.	19.66' TO 20.00'	ONSITE COLLECTION	112
(Symbol)	ERI FAS	ERIOCHLOA PACIFICOLATA	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	68
(Symbol)	ENC CAL	EREBIA CALIFORNICA	1 GALLON	4 O.C.	ABOVE 21.66'	NONE	20
(Symbol)	MAU LAU	MACOMALAUINA	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	20
(Symbol)	MAU LAU	MACOMALAUINA	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	20
(Symbol)	MAU LAU	MACOMALAUINA	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	20

PLANT LEGEND - SHRUB CONT.

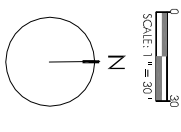
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION/RANGE	COMMENTS	QUANTITY
(Symbol)	RHU INT	RHYSOPHYLLA	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	20
(Symbol)	RCS CAL	ROSA CALIFORNICA	1 GALLON	6 O.C.	19.66' TO 21.66'	NONE	204
(Symbol)	SAL EX	SALICEX	1 GALLON	6 O.C.	19.66' TO 21.66'	NONE	15
(Symbol)	SAL EX	SALICEX	1 GALLON	6 O.C.	19.66' TO 20.00'	NONE	63
(Symbol)	SAL EX	SALICEX	1 GALLON	6 O.C.	19.66' TO 20.00'	NONE	40
(Symbol)	SAL EX	SALICEX	1 GALLON	6 O.C.	ABOVE 21.66'	NONE	70
(Symbol)	SAL EX	SALICEX	1 GALLON	6 O.C.	19.66' TO 21.66'	NONE	30
(Symbol)	SAL EX	SALICEX	1 GALLON	6 O.C.	19.66' TO 21.66'	NONE	51

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12/16/04	90% CONSTRUCTION SET	
09/02/04	50% CONSTRUCTION SET	

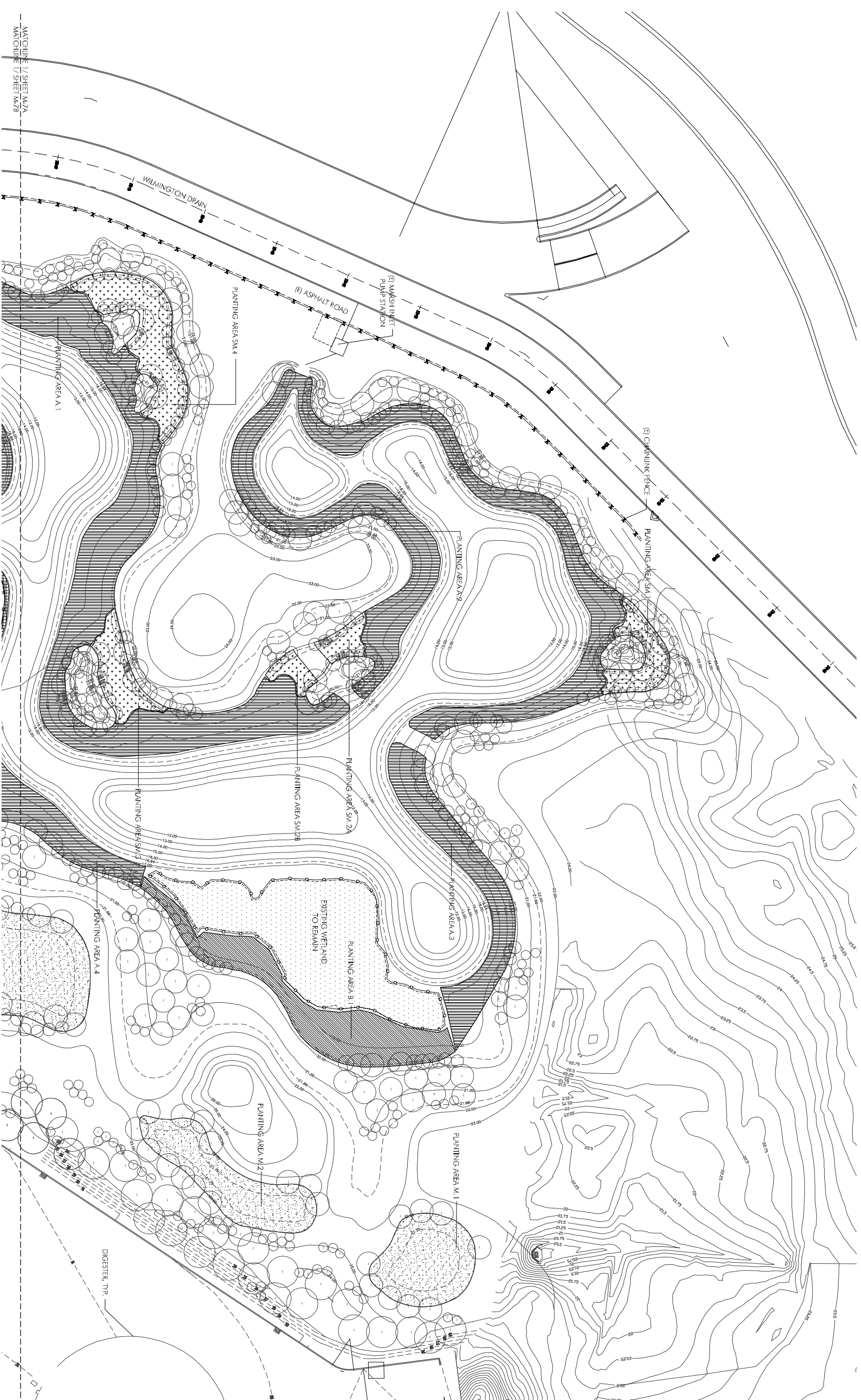
PROJECT # 13039
 DRAWN BY: MEW, GMG, RBC
 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36
 SCALE: 1" = 30'



**WETLAND PLANTING
 PLAN**

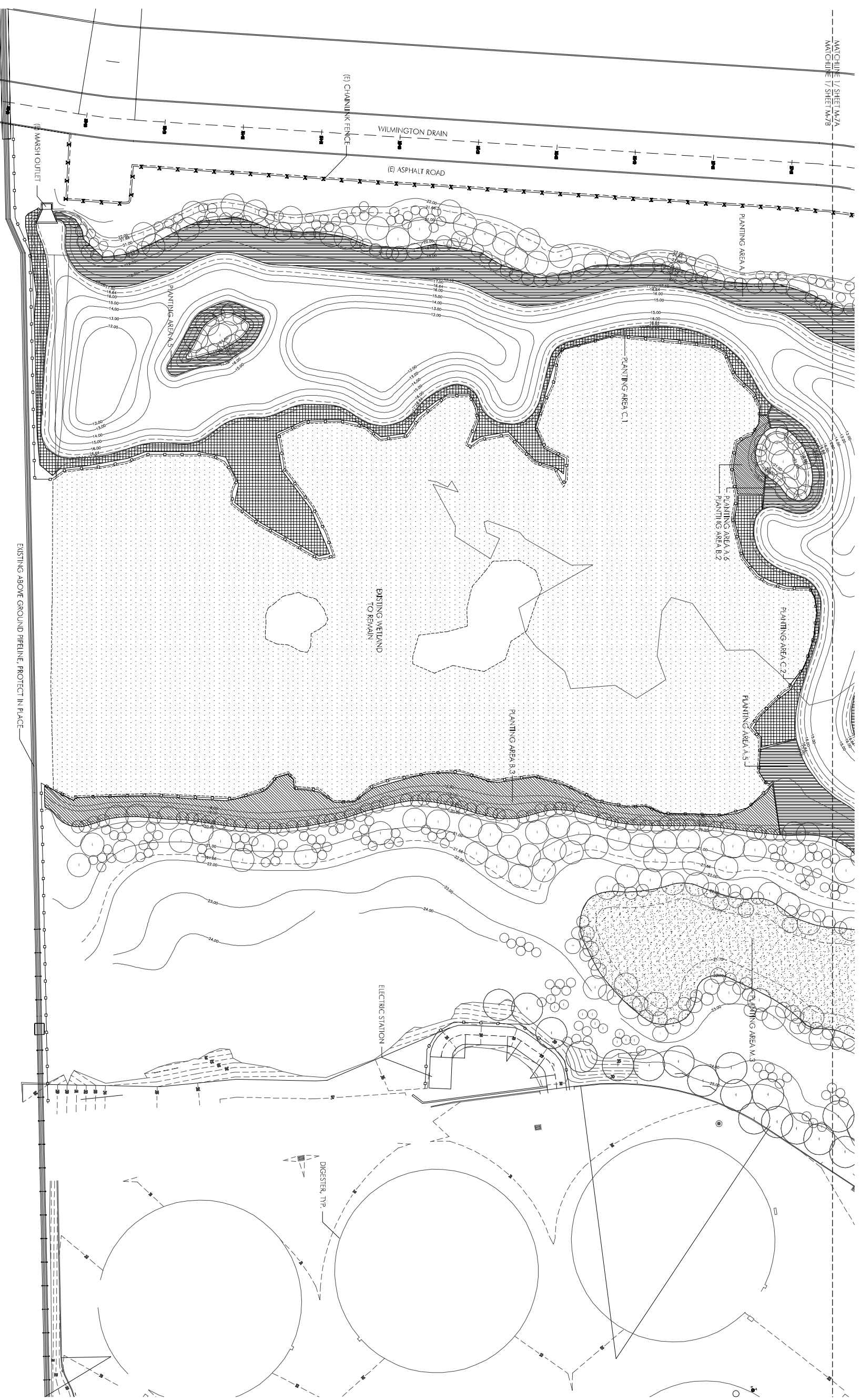
Sheet

M-7A



WETLAND PLANTING LEGEND

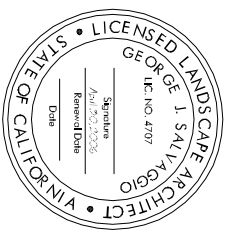
SYMBOL	DESCRIPTION
[Hatched pattern]	PLANTING AREA TYPE A
[Diagonal lines]	PLANTING AREA TYPE B
[Cross-hatched]	PLANTING AREA TYPE C
[Stippled]	PLANTING AREA TYPE SM
[Dotted]	PLANTING AREA TYPE M
[Circle]	TREES, SEE M-5A AND M-5B
[Circle]	SHRUBS, SEE M-6A AND M-6B



WETLAND PLANTING LEGEND

SYMBOL	DESCRIPTION
	PLANTING AREA TYPE A
	PLANTING AREA TYPE B
	PLANTING AREA TYPE C
	PLANTING AREA TYPE SM
	PLANTING AREA TYPE M
	TREES, SEE M-5A AND M-5B
	SHRUBS, SEE M-6A AND M-6B

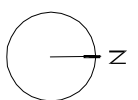
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01/27/06	100% DRAFT CONSTRUCTION SET	
10/28/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	
02/15/05	100% DRAFT CONSTRUCTION SET	
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09/02/04	50% CONSTRUCTION SET	



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 ENVIRONMENTAL CONSULTANTS
 DANIEL J. WATSON PARTNERS
 2160C East Foothill Blvd.
 San Rafael, CA 94901
 (415) 454-8568 Phone
 (415) 454-0277 Fax

JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
 CARSON, CALIFORNIA

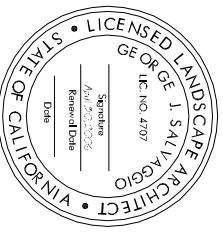
WETLAND PLANTING PLAN



SCALE: 1" = 30'

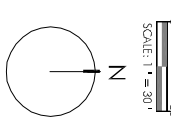
M-7B

**JOINT WATER
 POLLUTION
 CONTROL PLANT
 MARSHLAND ENHANCEMENT,
 EDUCATION, AND VIEWING AREA
 PROJECT
 CARSON, CALIFORNIA**



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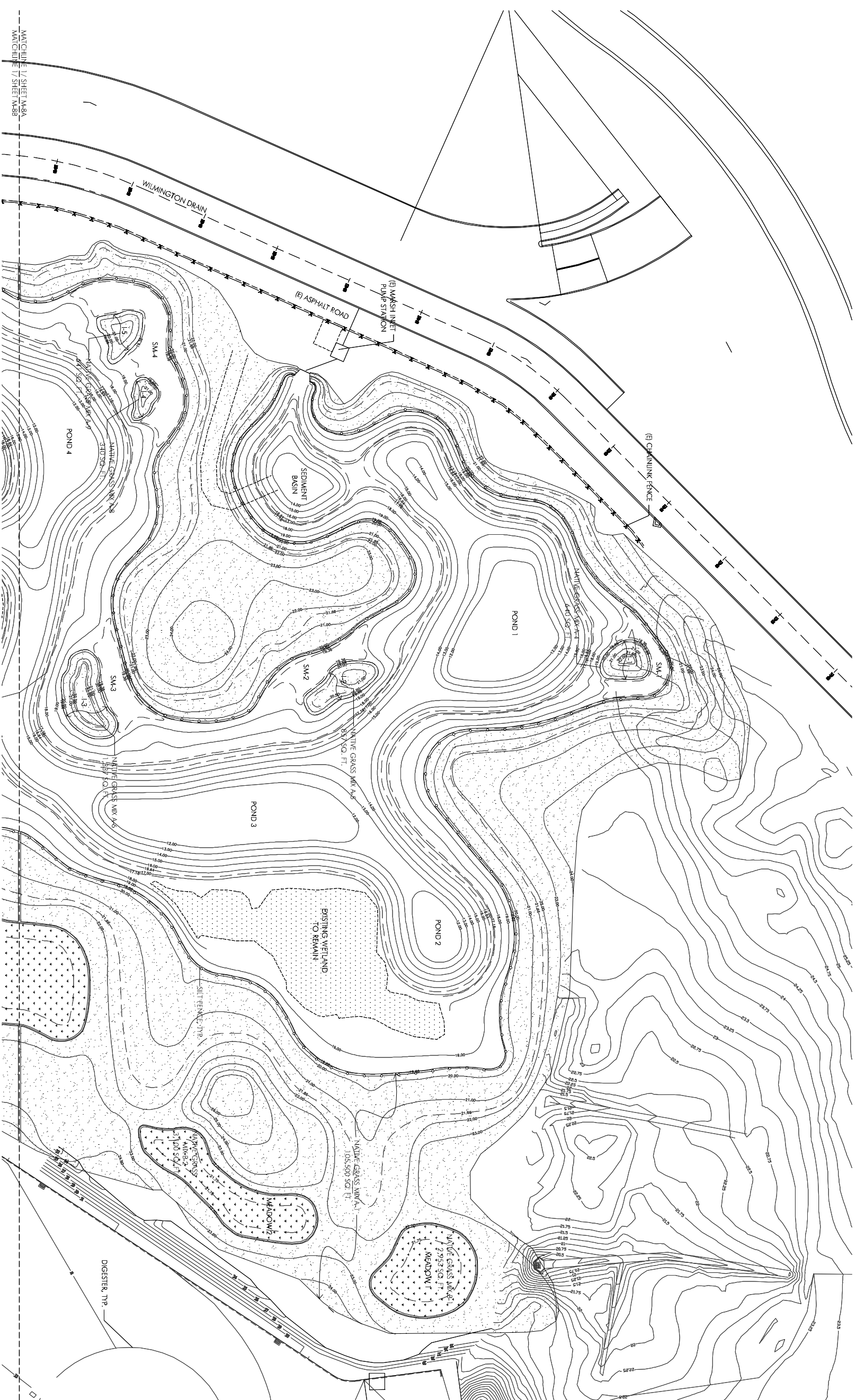
PROJECT #13039
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 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36



**EROSION CONTROL
 & SEEDING PLAN**

Sheet

M-8A



PLANT LEGEND FOR NATIVE GRASS MIX A

BOTANICAL NAME	RATE (LB./ACRE)	SYMBOL
ARTIFUS CALIFORNICA	2	
BROdiaea CALIFORNICA	15	
BRIOCHLOA FACILITATUM	4	
LOUIS SCOPARIUS	2	
NESSILA CERNUA	8	
VILFA MICROSTACHYS	5	
TOTAL	42	

SEE SHEET M-8B FOR PLANT LEGEND AND QUANTITY ESTIMATES FOR NATIVE GRASS MIX B

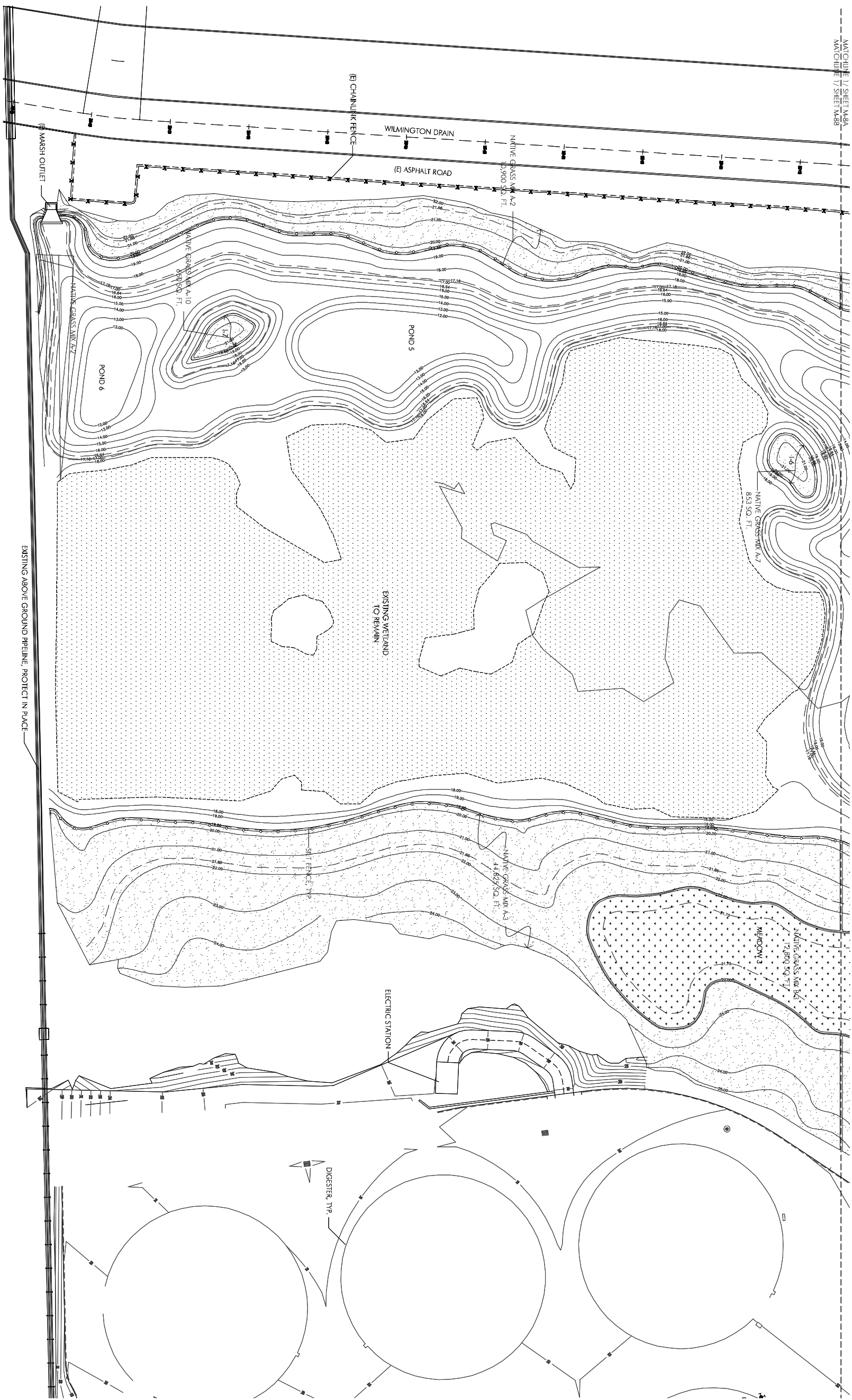
QUANTITY ESTIMATES FOR NATIVE GRASS MIX A

SIZE (ACRE)	ART COV (LS)	BRO COV (LS)	ENC COV (LS)	ERR PAG (LS)	ESC COV (LS)	LOT 300 (LS)	NAB GER (LS)	NAT PL (LS)	VOL W/C (LS)	TOTAL (LS)
105,500	484	36,33	484	484	484	9,69	484	484	19,38	1211
10,900	0,50	3,75	0,50	0,50	1,00	0,50	0,50	2,00	1,25	10,51
44,825	2,06	15,44	2,06	2,06	4,12	2,06	2,06	8,23	5,15	42,22
640	0,03	0,22	0,03	0,03	0,06	0,03	0,03	0,12	0,07	0,62
897	0,04	0,30	0,04	0,04	0,08	0,04	0,04	0,16	0,10	0,83
1,327	0,06	0,46	0,06	0,06	0,12	0,06	0,06	0,25	0,15	1,29
893	0,04	0,29	0,04	0,04	0,08	0,04	0,04	0,16	0,10	0,82
340	0,02	0,12	0,02	0,02	0,03	0,02	0,02	0,06	0,04	0,33
641	0,03	0,22	0,03	0,03	0,06	0,03	0,03	0,12	0,07	0,62
650	0,03	0,22	0,03	0,03	0,06	0,03	0,03	0,12	0,07	0,63
166,548	7,65	57,95	7,65	7,65	15,29	7,65	7,65	30,59	19,12	160,58

SEEDING LEGEND

[Symbol]	NATIVE GRASS MIX A
[Symbol]	NATIVE GRASS MIX B

- SEEDING NOTES**
- THE ENTIRE AREA WITHIN THE LIMIT OF CLEARING (SHOWN ON SHEETS M-2A AND M-2B) SHALL BE PREPARED AND SEDED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
 - NATIVE GRASS SEEDING AREAS SHALL BE SEDED IN TWO PHASES INITIAL SEEDING AND SECONDARY SEEDING AS SPECIFIED IN THE SPECIAL PROVISIONS. BOTH SEEDING PHASES SHALL COVER THE SAME AREA AND USE THE SAME SEED MIX AND APPLICATION RATE, AS SHOWN ON THIS DRAWING.



PLANT LEGEND FOR NATIVE GRASS MIX B

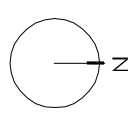
BOTANICAL NAME	RATE LBS./ACRE	SYMBOL	SIZE ACRE	SIZE SQ. FT.	DESIGNS LBS	RE MAC LBS	HOR BRA LBS	JAN EFF LBS	LEY TR LBS	TOTAL LBS
DESCHAMPSIA CESYTOXA	10	NATIVE GRASS MIX B.1	0.07	2,953	0.68	0.14	0.68	0.14	0.68	2.30
ELEOCHARIS MACROSTACHYA	2	NATIVE GRASS MIX B.2	0.07	3,229	0.74	0.15	0.74	0.15	0.74	2.53
HORDEUM BACCHAVATHERMUM	2	NATIVE GRASS MIX B.3	0.29	12,800	2.94	0.59	2.94	0.59	2.94	9.99
JUNCUS EFFLUSUS	2									
LEWISIA TRILICOIDES	10									
TOTAL	34		0.44	18,992	4.36	0.87	4.36	0.87	4.36	14.82

QUANTITY ESTIMATES FOR NATIVE GRASS MIX B

SEE SHEET M-8B FOR PLANT LEGEND AND QUANTITY ESTIMATES FOR NATIVE GRASS MIX B

SEEDING LEGEND

	NATIVE GRASS MIX A
	NATIVE GRASS MIX B



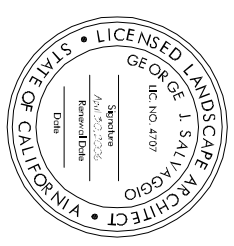
EROSION CONTROL & SEEDING PLAN

Sheet

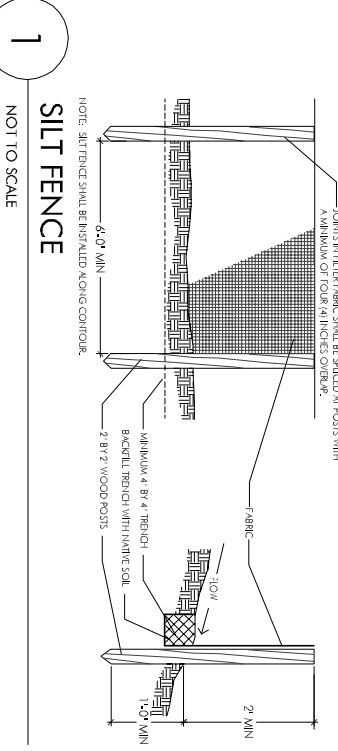
M-8B

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JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
 CARSON, CALIFORNIA



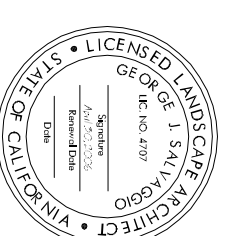
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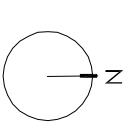
NOT TO SCALE

JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
 CARSON, CALIFORNIA



Date	Issues And Revisions	No.
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PROJECT #13039
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 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36
 SCALE: 1" = 30'



IRRIGATION PLAN

M-9A

LACSD DRAWING No. IO-9-1175
 Construction - March2006\19\368.dwg



IRRIGATION NOTES

- THESE IRRIGATION DRAWINGS ARE DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR GRAPHIC CLARITY ONLY AND ARE TO BE INSTALLED WITHIN PLANTING AREAS WHERE POSSIBLE. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, STEVES, ETC., WHICH MAY BE REQUIRED. THE CONTRACTOR IS REQUIRED TO INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONAL DIFFERENCES WHICH MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. IN THE EVENT OF FIELD DIFFERENCES, THE CONTRACTOR IS REQUIRED TO PLAN THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE PROJECT ENGINEER AND ACCORDING TO THE SPECIAL PROVISIONS. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY AND COORDINATE IRRIGATION CONTRACT WORK WITH ALL APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT OR STEVES THROUGH OR UNDER WALLS, ROADWAYS, PAVING, STRUCTURE, ETC., BEFORE CONSTRUCTION. IN THE EVENT THESE NOTIFICATIONS ARE NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REQUIRED REVISIONS.
- THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROGRAM THE IRRIGATION CONTROLLERS TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. THIS INCLUDES MAKING ADJUSTMENTS TO THE PROGRAM FOR SEASONAL WEATHER CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDS AND SLOPES, SUN, SHADE, AND WIND EXPOSURES.
- THE CONTRACTOR SHALL INSTALL NEW BATTERIES IN IRRIGATION CONTROLLER TO BETAIN PROGRAM IN MEMORY DURING TEMPORARY POWER FAILURES. USE QUANTITY, TYPE, AND SIZE REQUIRED AS PER CONTROLLER MANUFACTURERS INSTRUCTIONS.
- THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRAY HEADS FOR OPTIMUM PERFORMANCE. PROVIDE FULL AND EVEN COVERAGE OF DESIGNATED AREAS AND PREVENT OVER SPRAY ONTO WALLS, ROADWAYS, AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS INCLUDES SELECTING THE BEST DEGREE OF ARC TO MATCH THE PROPOSED IRRIGATED AREA AND TO THROUGH THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON THE OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE PROJECT ENGINEER.
- MAXIMUM IRRIGATION DEMAND: 29.8 GPM AT 55 PSI. VERIFY STATIC PRESSURE OF 80-90 PSI AT EXISTING WATER METER.

LEGEND

SYMBOL	NAME
(C)	CONTROLLER
(I)	ISOLATION VALVE
(E)	EMITTER
(S)	QUICK COUPLING VALVE
(M)	REMOTE CONTROL VALVE MAINFOLD
(R)	FILTER AND REGULATOR MAINFOLD
(F)	9" PIPE COUPLER WITH BEYER-BEYER
(A)	EMITTER FLUSH VALVE ASSEMBLY
(N)	MANHOLE ABOVE VALVES
(7)	CONTROLLER STATION NUMBER
(13)	APPROXIMATE FLOW (GPM)
(1)	REMOTE CONTROL VALVE SIZE
(2)	MANHOLE 2-INCH DIAMETER
(3)	MANHOLE 4-INCH DIAMETER
(4)	EXISTING 2-INCH DIAMETER MANHOLE TO REMAIN
(5)	LATERAL LINE PIPE
(6)	IRRIGATION STEVE
(7)	INITIAL ABOVE VALVES

SYMBOL	LOCATION DESCRIPTION	MODEL NUMBER	MODEL DESCRIPTION	OPERATION PRESSURE (PSI)
(1)	1 GALLON TREES & SHRUBS	FCC-1	TWO (2) 1 GPH SALICO SINGLE OUTLET EMITTERS - GREEN	30
(2)	5 GALLON TREES & SHRUBS	FCC-1	THREE (3) 1 GPH SALICO SINGLE OUTLET EMITTERS - GREEN	30
(3)	15 GALLON TREES	FCC-2	FOUR (4) 2 GPH SALICO SINGLE OUTLET EMITTERS - BLACK	30
(4)	24 BOLI TREES	FCC-2	SIX (6) 2 GPH SALICO SINGLE OUTLET EMITTERS - BLACK	30
(5)	22 CONDOLETO CORNER WINDOWS	5012-FCC-5M	RAINBIRD 5000 STAND ANGLE RAIN CURTAIN 4.0 NOZZLE	55
(6)	22 CONDOLETO CORNER WINDOWS	5012-FCC-5M	RAINBIRD 5000 RADIIUS+ 3.0 NOZZLE	55

LATERAL LINE PIPE SIZE CHART		FLEX HOSE CHART	
GPM	DIAMETER (IPS)	GPM	DIAMETER (IPS)
0-10	3/4"	0-2.5	1/2"
10-16	1"	2.5-5.0	3/4"
16-26	1 1/4"	5.0-12	1"
26-35	1 1/2"		
35-55	2"		

SPRAY HEAD & DRIP EMITTER LEGEND

IMPORTANT - FLEX HOSE ROUTING:

- FLEX HOSE IS NOT SHOWN, CONTRACTOR SHALL DETERMINE SPECIFIC ROUTING FROM LATERAL LINE TO PLANTS. SEE BATTERY DETAILS.
- ROUND THE LATERAL LINE, MAKE THE SHORTEST ROUTES TO EACH PLANT USING THE LEAST AMOUNT OF HOSE.
- LOOP FLEX HOSE TO MINIMIZE DEAD ENDS.
- DIVID ZONES EVENLY TO LIMIT LONG RUNS.

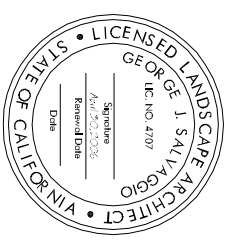
INITIAL IRRIGATION SCHEDULE

- GENERAL:**
- OPERATE THE IRRIGATION SYSTEM BETWEEN FEBRUARY 28 AND DECEMBER 1.
 - OPERATE THE IRRIGATION SYSTEM BETWEEN DECEMBER 1ST AND FEBRUARY 28 IF PRECIPITATION IS LESS THAN FIFTY PERCENT OF 50% OF NORMAL PRECIPITATION FOR SAISON PERIODS.
 - REGULATIVELY MONITOR AND ADJUST WATERING TO IMPROVE PLANT HEALTH. IN TIME, WATER FOR LONGER AND LESS FREQUENTLY TO DEVELOP DEEP ROOTS.
 - IN ADDITION WATERING SCHEDULE MAY BE REQUIRED AS DETERMINED BY PROJECT ENGINEER.
- PLANT ZONES:**
- THE SEED GERMINATION PROCESS, ABOUT TWO TO THREE WEEKS, OPERATE SYSTEM AT 15 PSI UNTIL SEEDS HAVE GERMINATED AND ARE 6 IN. THE GOALS TO MAINTAIN AN IDEAL DAMP SOIL SUFFICIENT FOR SEED GERMINATION. SOIL SHOULD NOT BE ALLOWED TO DRY AT ANY TIME. BOTH CAN LEAD TO FAILURE. CONTRACTOR SHALL MONITOR AND ADJUST SYSTEM ONLY AS NEEDED TO MEET THE GOALS. AFTER GERMINATION THE CONTRACTOR SHOULD MONITOR AND ADJUST SYSTEM ONLY AS NEEDED TO MEET THE GOALS OF SEEDS. SEEDS TO 3 CALIFORNIA RED WINGS (CALIFORNIA RED WING) SHOULD BE PLANTED TO THEIR FINAL LOCATION.
- PLANT ZONES:**
- PLANT ZONES IN AND AROUND THE PLANT PIT AT THE SAME TIME PLANTS ARE INSTALLED. THE OPERATOR SHOULD BE WORKS 5 MINUTES PER CYCLE ON ZONES 2, 6, 7 & 13. ALL OTHER ZONES OPERATE 4 CYCLES PER WEEK, 10 MINUTES PER CYCLE. 1-1-ACD-20-113039.dwg\100% Construction - March2006\19\368.dwg



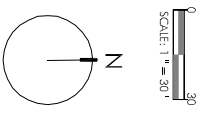
WRA
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**JOINT WATER
 POLLUTION
 CONTROL PLANT
 MARSHLAND ENHANCEMENT,
 EDUCATION, AND VIEWING AREA
 PROJECT
 CARSON, CALIFORNIA**



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PROJECT #13039
 DRAWN BY: MEW, GMG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36



IRRIGATION PLAN
 Sheet

M-9B

JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA PROJECT
 CARSON CALIFORNIA

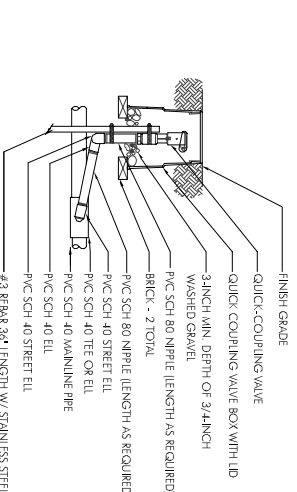


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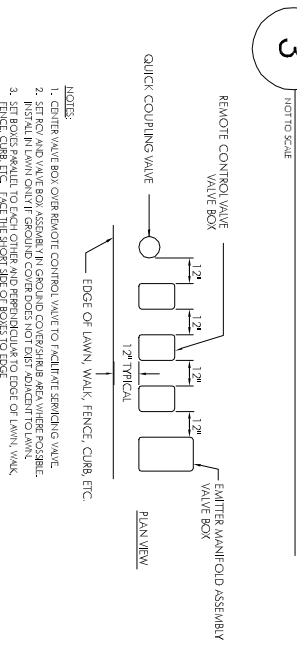
PROJECT #13039
 DRAWN BY: MENV, GMG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36
 SCALE: AS INDICATED

IRRIGATION DETAILS

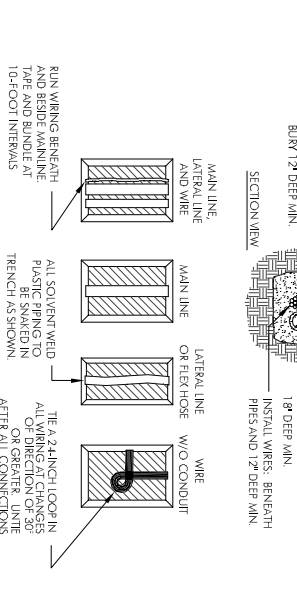
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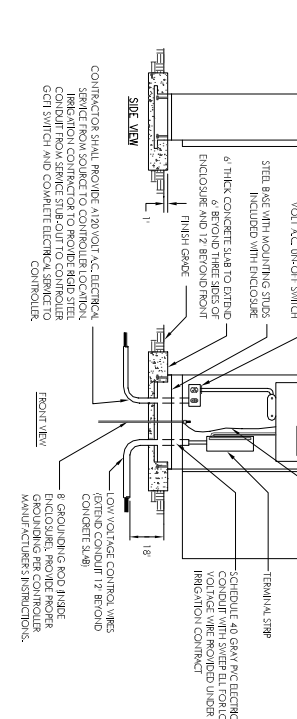
5 QUICK COUPLING VALVE
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4 VALVE BOX INSTALLATION
 NOT TO SCALE



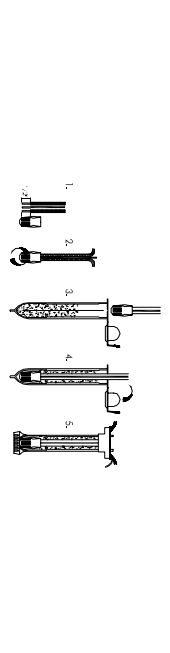
2 TRENCHING
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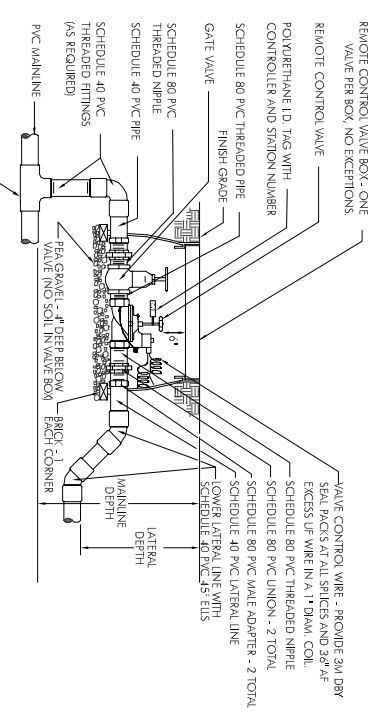
1 IRRIGATION CONTROLLER IN ENCLOSURE
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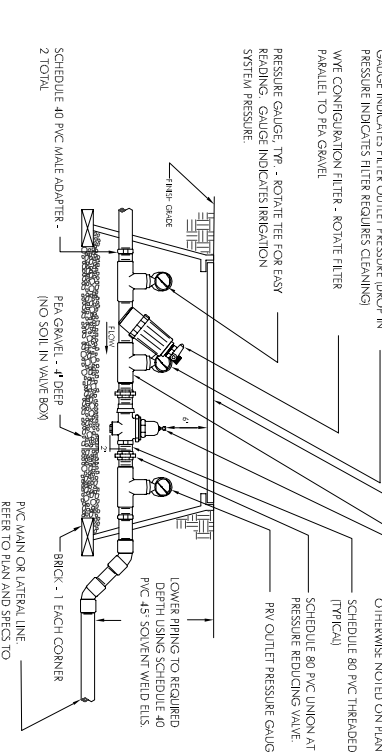
3 WEATHERPROOF SPICE ASSEMBLY
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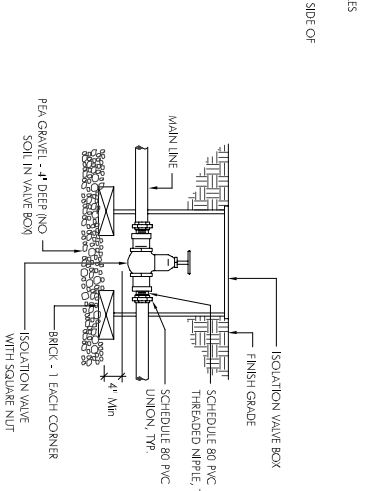
1 DRIP EMITTERS WITH FLEX HOSE
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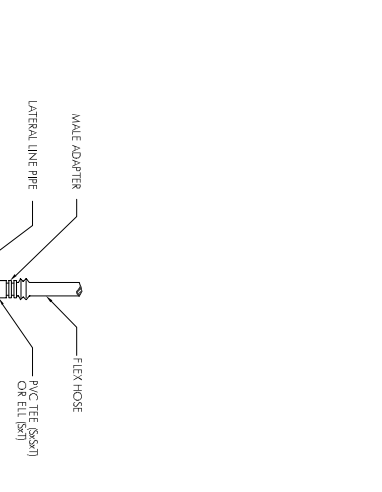
6 REMOTE CONTROL VALVE MANIFOLD
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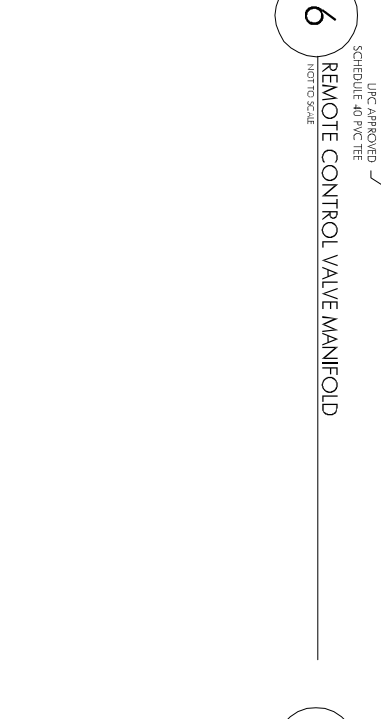
7 FILTER & REGULATOR MANIFOLD AT DRIP ZONES
 NOT TO SCALE



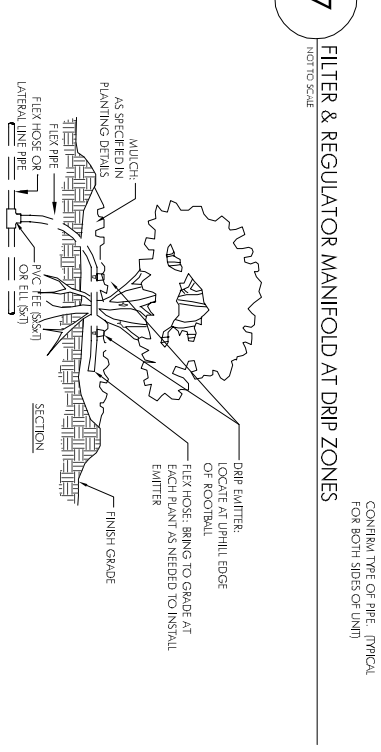
8 ISOLATION VALVE ASSEMBLY
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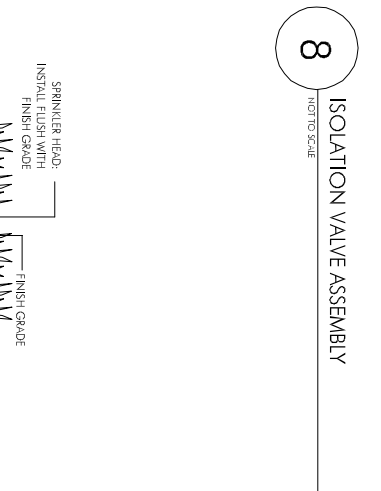
9 LATERAL LINE TO FLEX HOSE CONNECTION
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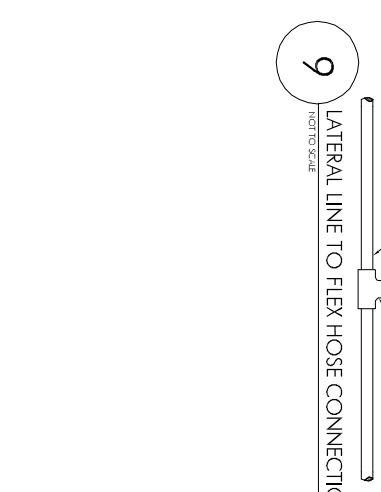
10 DRIP EMITTERS WITH FLEX HOSE
 NOT TO SCALE



11 DRIP EMITTERS WITH FLEX HOSE
 NOT TO SCALE

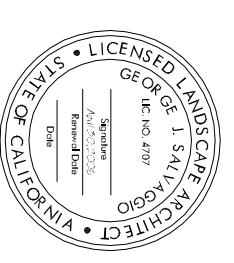
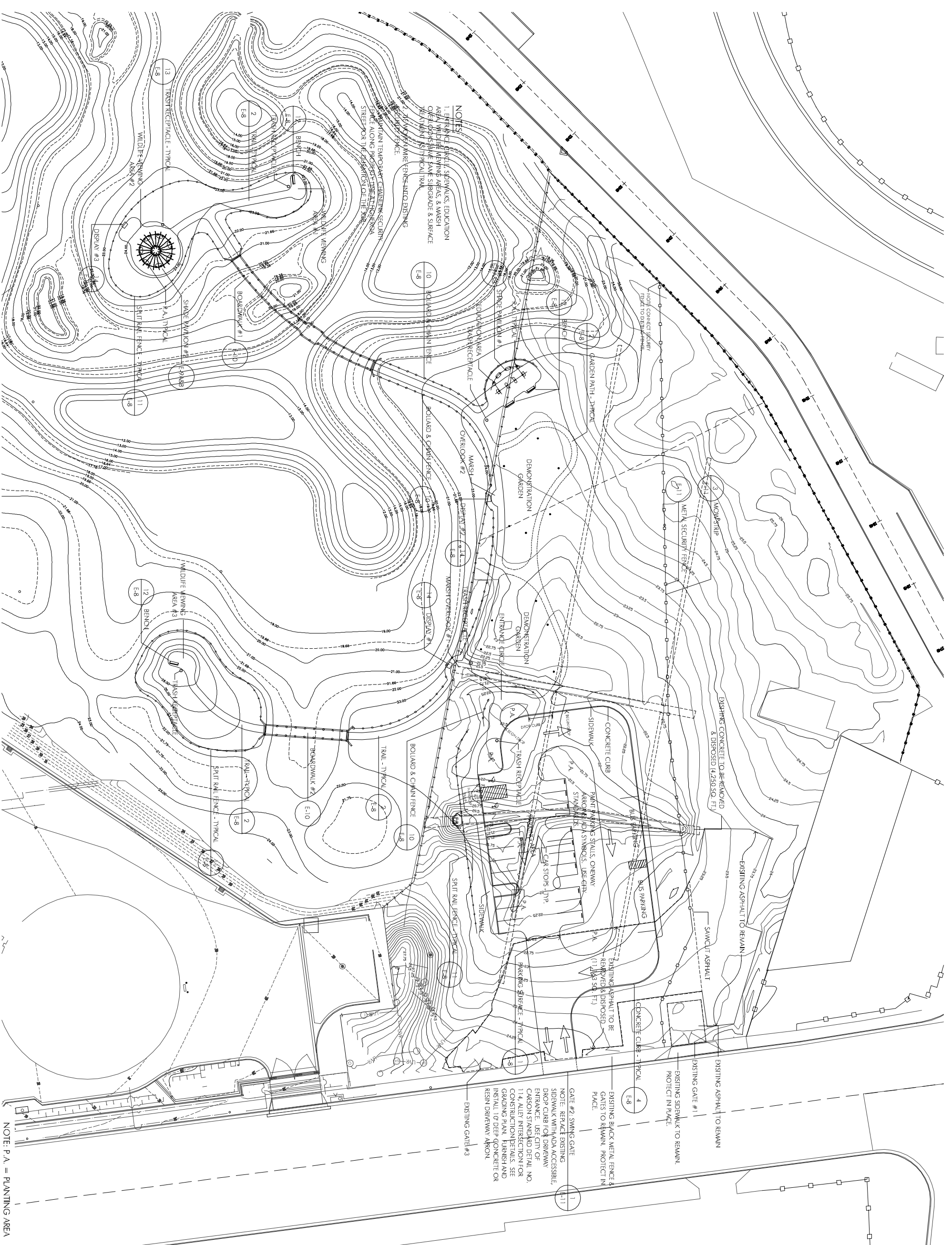


12 SWING RISER
 NOT TO SCALE



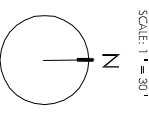
13 EMITTER LINE FLUSH ASSEMBLY
 NOT TO SCALE

**JOINT WATER
 POLLUTION
 CONTROL PLANT
 MARSHLAND ENHANCEMENT,
 EDUCATION, AND VIEWING AREA
 CARSON, CALIFORNIA**



Date	Issues And Revisions	No.
03/22/06	100% RNL CONSTRUCTION SET	
01/27/06	100% DRAFT CONSTRUCTION SET	
10/28/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	

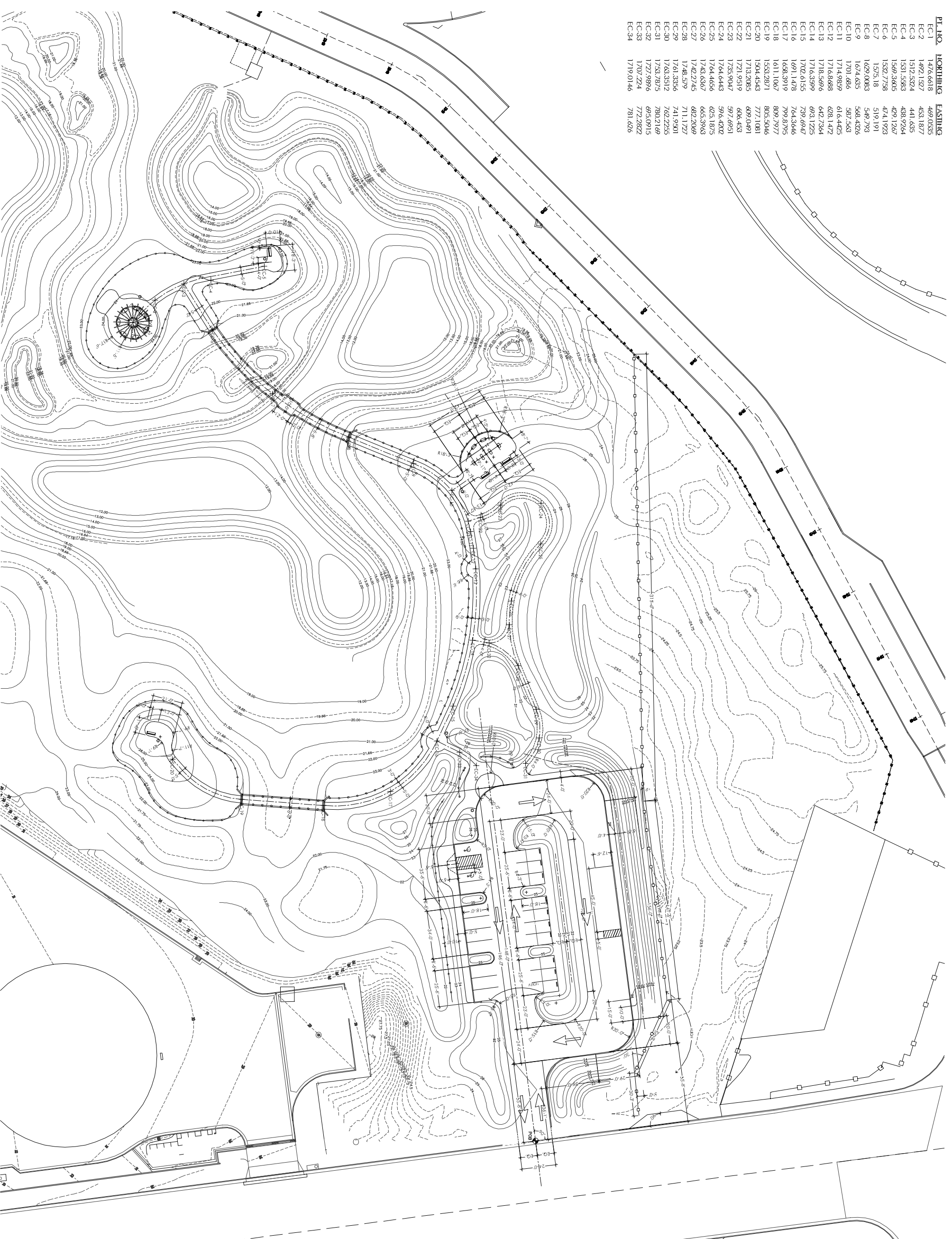
PROJECT #13039
 DRAWN BY: MEW, GMG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36
 SCALE: 1" = 30'



**SITE PLAN &
 DEMOLITION PLAN**

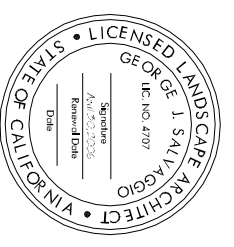
E-1

PI. NO.	NORTHING	EASTING
EC-1	1476.6618	469.0535
EC-2	1492.1327	453.1877
EC-3	1512.5324	441.635
EC-4	1531.5383	438.9264
EC-5	1549.3305	429.1267
EC-6	1522.7758	474.1923
EC-7	1531.18	519.191
EC-8	1629.0083	549.793
EC-9	1674.635	568.4326
EC-10	1701.686	587.543
EC-11	1714.9859	616.4425
EC-12	1716.8688	628.1472
EC-13	1718.5896	642.7364
EC-14	1716.3599	693.1225
EC-15	1702.6155	739.6947
EC-16	1691.478	764.3646
EC-17	1658.3919	799.8795
EC-18	1611.1067	809.7977
EC-19	1553.2871	805.5046
EC-20	1504.4543	777.1081
EC-21	1713.2085	609.0491
EC-22	1721.9519	606.453
EC-23	1735.9047	597.6951
EC-24	1764.6443	596.4282
EC-25	1764.4566	625.1875
EC-26	1743.6367	665.3963
EC-27	1742.2745	682.2069
EC-28	1748.579	711.1727
EC-29	1761.3356	741.9501
EC-30	1763.3512	762.2255
EC-31	1753.7875	780.2169
EC-32	1727.9896	695.0915
EC-33	1707.224	772.2822
EC-34	1719.0146	781.626



WRC
 ENVIRONMENTAL CONSULTANTS
 LANDSCAPE ARCHITECTS AND PLANNERS
 2769-G East Francisco Blvd.
 San Rafael, CA 94901
 (415) 454-8868 Phone
 (415) 454-0729 Fax

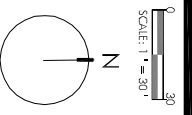
**JOINT WATER
 POLLUTION
 CONTROL PLANT
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03/22/06	100% RINAL CONSTRUCTION SET
01/27/06	100% DRAFT CONSTRUCTION SET
10/28/05	100% DRAFT CONSTRUCTION SET
07/20/05	100% DRAFT CONSTRUCTION SET

Date	Issues And Revisions	No.

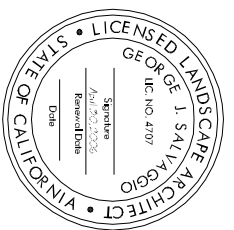
PROJECT #13039
 DRAWN BY: MENV, GMG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36



LAYOUT PLAN
 Sheet

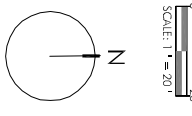
E-2

**JOINT WATER
 POLLUTION
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Date	Issues And Revisions	No.
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10/28/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	

PROJECT # 13039
 DRAWN BY: MEW, GMG, RBC
 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36



**GRADING &
 DRAINAGE PLAN**

E-3A



GRADING LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR LINE
---	PROPOSED CONTOUR LINE
- - -	GRADE BREAK
x (31.5)	EXISTING SPOT ELEVATION
+ 31.5	PROPOSED SPOT ELEVATION
---	LIMIT OF GRADING
---	CENTER LINE
---	CENTER LINE OF SWALE
---	SLOPE INDICATION
+	SOIL TEST SITE
+ C#	HORIZONTAL CONTROL POINT
o+00	STATION POINT

DRAINAGE LEGEND

SYMBOL	DESCRIPTION
HPS	HIGH POINT OF SWALE
HP/LP	HIGH POINT/LOW POINT
TF	TOP OF FRAME
INV	INVERT ELEVATION
●	PROPOSED DRAIN INLET

CUT & FILL ESTIMATES

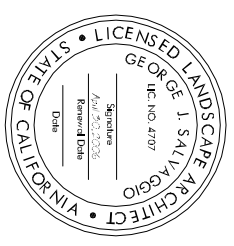
CUT = 335 CU YDS.
 FILL = 3,499 CU YDS. (WITH 1:2 COMPACTION FACTOR)

GRADING NOTES

1. THE GRADING PLANS INDICATE FINISHED GRADE ELEVATIONS. REFER TO THE GRADING DETAILS AND SPECIAL PROVISIONS FOR SUBGRADE SPECIFICATIONS.
2. LOCATIONS OF TOP SOIL STOCKPILE AREAS AND HAUL ROADS SHALL BE DETERMINED BY THE PROJECT ENGINEER.
3. THE SUBGRADE FOR FINISH GRADE ELEVATIONS OF 19.66 FEET AND ABOVE SHALL BE PREPARED IN ACCORDANCE WITH THE DRAINAGE SHEET DETAIL (DRAIN. SHEET #+4+), INCLUDING THE AREAS INDICATED AS MEADOW SUBGRADE.
4. UNLESS OTHERWISE INDICATED, THE MAXIMUM SLOPE SHALL BE 2:1 AND THE MINIMUM SLOPE SHALL BE 2%.
5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND PROTECTING IN PLACE ANY ABOVE OR BELOW GROUND UTILITIES, UNLESS OTHERWISE INDICATED, PRIOR TO THE COMMENCEMENT OF GRADING.
6. THE FINAL ELEVATIONS WITHIN THE 200 FT. OF THE TREATMENT PLANT OFFSET SHALL NOT BE LESS THAN 19.66 FT.
7. PARABOLICALLY SHAPE ALL SWALES.
8. PROPOSED WATERLINE ELEVATION = 19.66 FT. DRAINAGE PIPE AND CULVERT INVERT ELEVATIONS SHALL NOT BE BELOW 19.66 FT.
9. D/I#1 SHALL BE A 9" STANDARD DRAIN BASIN BY INCEPT. D/I#2 SHALL BE A 10" STANDARD DRAIN BASIN BY INCEPT.

MATCHLINE SHEET E-3A
 MATCHLINE 17 SHEET E-3B

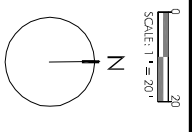
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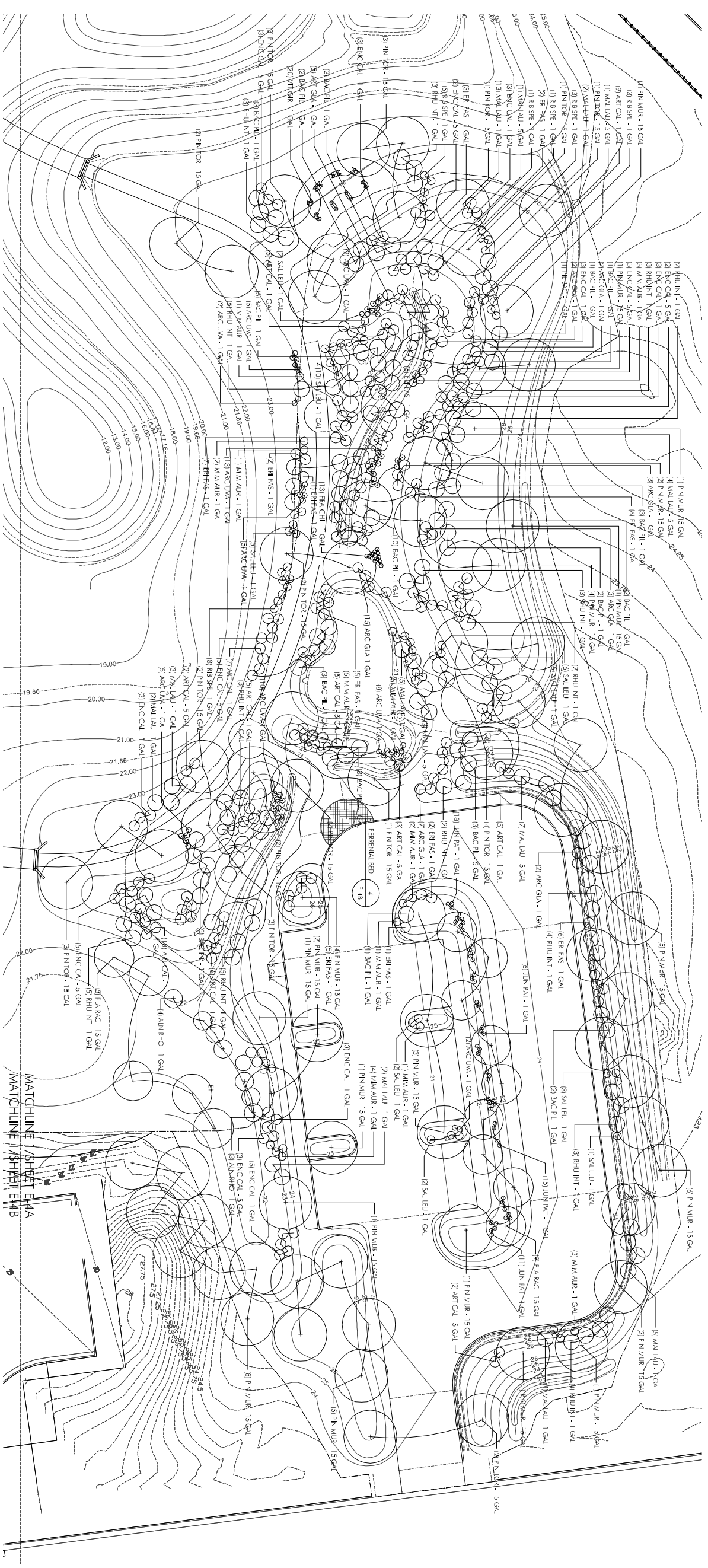
Date	Issues And Revisions	No.

PROJECT #13039
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 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36



**TREE & SHRUB
 PLANTING PLAN**

E-4A



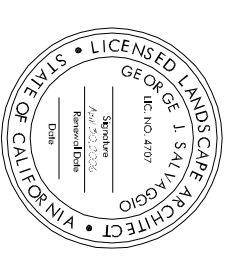
PLANT LEGEND - SHRUBS AND GROUNDCOVERS

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
ARC GLA	ARCTOSTAPHYLOS GLOMATA	BIG BERRY MANZANITA	1 GALLON	4' O.C.	ABOVE 21.66'	NONE	29
ARC UVA	ARCTOSTAPHYLOS UVA-URS	KINNICK KINNICK	1 GALLON	2' O.C.	ABOVE 21.66'	NONE	42
ART CAL	ARTEMISA CALIFORNICA	CALIFORNIA SAGE BRUSH	1 GALLON	4' O.C.	ABOVE 21.66'	NONE	58
BAC PIL	BACCHARIS PILLARIS	COYOTE BUSH	1 GALLON	6' O.C.	ABOVE 21.66'	NONE	21
ERI FAS	ERIOCHLOM BISCUTELLATUM	CALIFORNIA BUCKWHEAT	1 GALLON	4' O.C.	ABOVE 21.66'	NONE	8
ENC CAL	ENCELTA CALIFORNICA	CALIFORNIA BRITTLEBUSH	1 GALLON	4' O.C.	ABOVE 21.66'	NONE	46
FRA CHI	FRAGARIA CHILICENSIS	BEACH STRAWBERRY	1 GALLON	1.9' O.C.	ABOVE 21.66'	NONE	14
JUN PAT	JUNCUS PATENS	COMMON RUSH	1 GALLON	1.9' O.C.	BELOW 21.00'	NONE	39
MAL LAU	MALOSMA LAURINA	LAUREL SUAMAC	1 GALLON	6' O.C.	ABOVE 21.66'	NONE	53
MIM AUR	MIMULUS AURANTIACUS	BUSH MONKEYFLOWER	1 GALLON	3' O.C.	ABOVE 21.66'	NONE	7
RIB SPE	RIBES SPECIOSUM	FUSCHIA GOOSEBERRY	1 GALLON	3' O.C.	ABOVE 21.66'	NONE	32
RHU INT	RHUS INTERMEDIA	LEMONADE BERRY	1 GALLON	6' O.C.	ABOVE 21.66'	NONE	21
SAL LEU	SALEA LEUCOPHYLLA	PURPLE SAGE	1 GALLON	3' O.C.	ABOVE 21.66'	NONE	47
VIT GIR	VITIS GIRDHAYA	DESERT GRAPE	1 GALLON	1' O.C.	ABOVE 21.66'	NONE	32
							48

PLANT LEGEND - TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ELEVATION RANGE	COMMENTS	QUANTITY
ACE NEG	ACER NEGUNDO	BOX ELDER	1 GALLON	7' O.C.	19.66' TO 23.00'	NONE	6
AIN RHO	AYULUS RHOMBICOLA	WHITE ALDER	1 GALLON	7' O.C.	19.66' TO 23.00'	NONE	18
PIN MUR	PNUS MERICATA	MURICATA PINE	15 GALLON	20' O.C.	ABOVE 21.66'	STAKE, DETAIL 2E-4B	52
PIN TOR	PNUS TORREYANA	TORREY PINE	15 GALLON	20' O.C.	ABOVE 21.66'	STAKE, DETAIL 2E-4B	36
PLA PAC	PLATANUS RACTICOSA	WESTERN Sycamore	15 GALLON	19' O.C.	19.66' TO 21.66'	STAKE, DETAIL 2E-4B	23
POP BAL	POPULUS BALSMIFERA	BLACK COTTONWOOD	1 GALLON	19' O.C.	19.66' TO 21.66'	NONE	9
POP FRE	POPULUS FREMONCHII	FREMONT COTTONWOOD	5 GALLON	19' O.C.	19.66' TO 21.66'	NONE	9

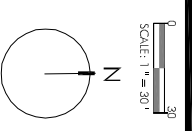
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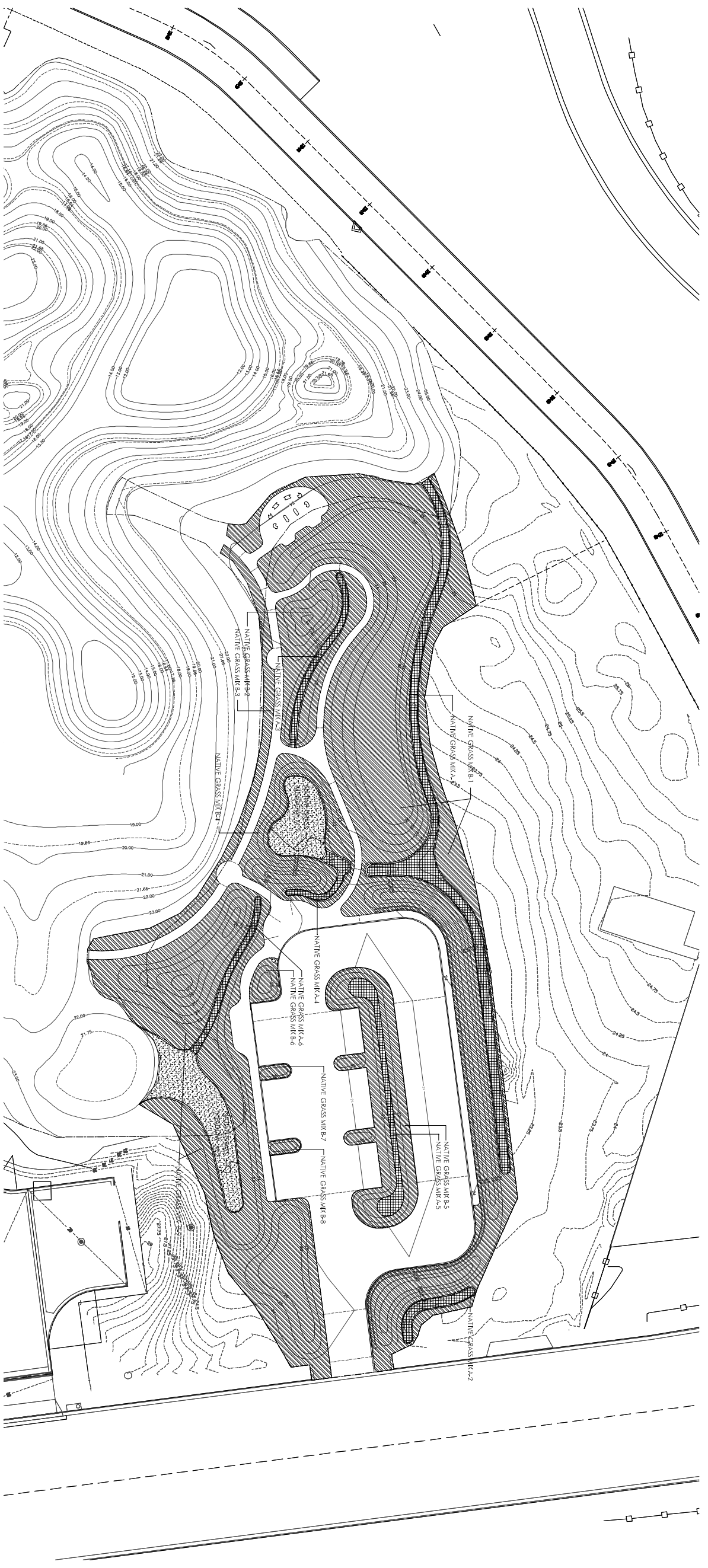
Date	Issues And Revisions	No.

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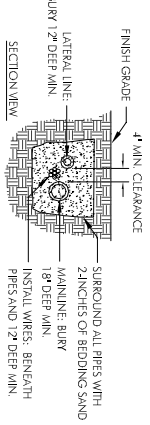
**MEADOW PLANTING
 & SEEDING PLAN**

E-5



PLANT LEGEND FOR NATIVE GRASS MIX A

BOTANICAL NAME	RATE LBS/ACRE	SYMBOL	SIZE ACRE	SIZE SQ. FT.	LETTER LBS	DIS. SP. LBS	HOR. JAB LBS	ET. TRA LBS	TOTAL LBS
LEHMUS TRICHODES	12	NATIVE GRASS MIX A.1	0.05	2,187	0.60	0.40	0.40	0.40	2.01
DISTICHIS SPICATA	12	NATIVE GRASS MIX A.2	0.01	291	0.08	0.08	0.08	0.08	0.27
FESTUCA IDAHOENSIS	8	NATIVE GRASS MIX A.3	0.01	318	0.09	0.06	0.06	0.29	0.29
LEHMUS TRICHOCALUS	8	NATIVE GRASS MIX A.4	0.01	223	0.06	0.04	0.04	0.20	0.20
TOTAL	40	NATIVE GRASS MIX A.5	0.01	694	0.17	0.12	0.12	0.38	0.38
		NATIVE GRASS MIX A.6	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.7	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.8	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.9	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.10	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.11	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.12	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.13	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.14	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.15	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.16	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.17	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.18	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.19	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.20	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.21	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.22	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.23	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.24	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.25	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.26	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.27	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.28	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.29	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.30	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.31	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.32	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.33	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.34	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.35	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.36	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.37	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.38	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.39	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.40	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.41	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.42	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.43	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.44	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.45	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.46	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.47	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.48	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.49	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.50	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.51	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.52	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.53	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.54	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.55	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.56	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.57	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.58	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.59	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.60	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.61	0.01	292	0.08	0.08	0.08	0.27	0.27
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		NATIVE GRASS MIX A.63	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.64	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.65	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.66	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.67	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.68	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.69	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.70	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.71	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.72	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.73	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.74	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.75	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.76	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.77	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.78	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.79	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.80	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.81	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.82	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.83	0.01	292	0.08	0.08	0.08	0.27	0.27
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		NATIVE GRASS MIX A.85	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.86	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.87	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.88	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.89	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.90	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.91	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.92	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.93	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.94	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.95	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.96	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.97	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.98	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.99	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.100	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.101	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.102	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.103	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.104	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.105	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.106	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.107	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.108	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.109	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.110	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.111	0.01	292	0.08	0.08	0.08	0.27	0.27
		NATIVE GRASS MIX A.112	0.01	292	0.08</				

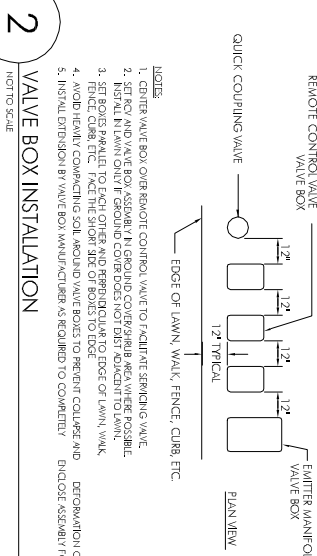


1 TRENCHING
NOT TO SCALE

RUN WIRING BENEATH AND BESIDE MAINLINE TAPE AND BURIED AT 10-FOOT INTERVALS

ALL SOLVENT WELD PLASTIC PIPING TO BE SUNK IN TRENCH AS SHOWN

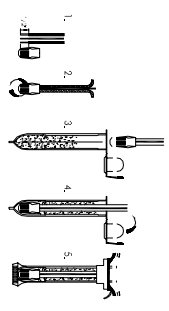
TE A 2 INCH LOOP IN ALL WIRING AT CHANGES OF DIRECTION OF PIPE AFTER ALL CONNECTIONS HAVE BEEN MADE



2 VALVE BOX INSTALLATION
NOT TO SCALE

NOTES:

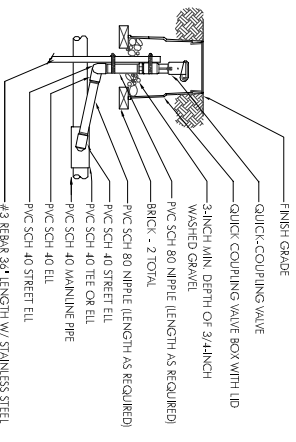
- CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
- SET RIG AND VALVE BOX ASSEMBLY IN GRADE, COVERING IN PLACE WHERE POSSIBLE.
- SET BOSS PIPING TO EACH OTHER AND PERPENDICULAR TO EDGE OF LAWN, WALK, FENCE, CURB, ETC. FACE THE SHORT SIDE OF BOSS TO EDGE.
- AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOSS TO PREVENT COLLAPSE AND DISJOINT ASSEMBLY FOR EASY ACCESS.
- INSTALL DISTRIBUTION BY VALVE BOX MANUFACTURER & REQUIRED TO COMPLY WITH DISJOINT ASSEMBLY FOR EASY ACCESS.



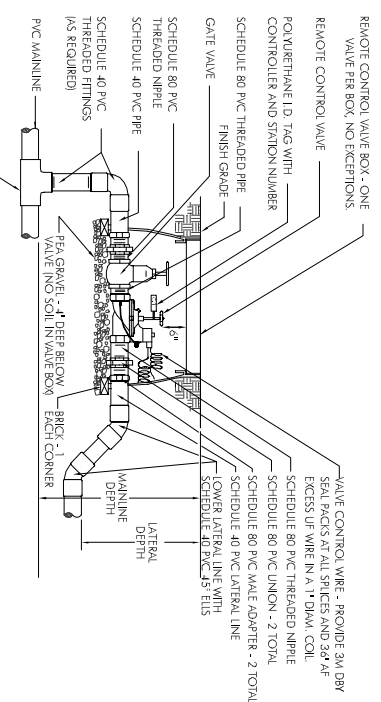
3 WEATHERPROOF SPLICE ASSEMBLY
NOT TO SCALE

RESTRICTIONS:

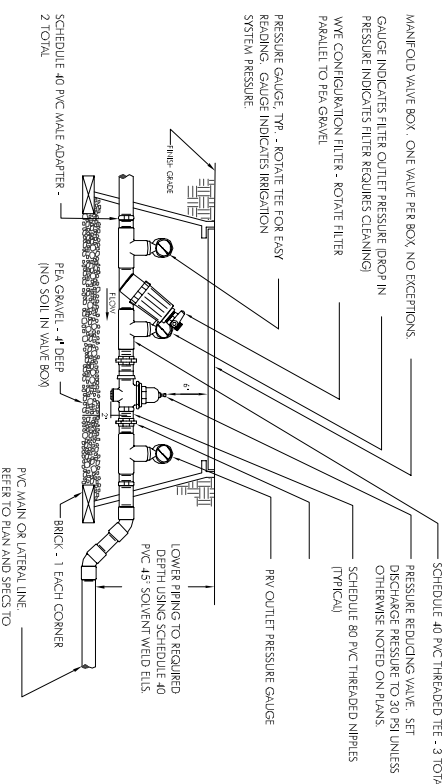
1. STRIP WIRES APPROXIMATELY 1/2" (12.7 MM) TO EXPOSE WIRES.
2. THIRST CONNECTOR AROUND WIRES CLOSER TO TIGHT. DO NOT OVERTIGHTEN.
3. RUBBER WIRE ASSEMBLY INTO PLASTIC TUBE UNIT. WIRE CONNECTOR SHIPS PAST RUBBER.
4. RACE WIRES WHICH DO NOT FIT IN WIRE DIRT HOLES AND CLOSE CAP UNIT IF SWAP.
5. INSPECT FINAL SPLICE ASSEMBLY TO BE SQUARE AND TIGHTER.



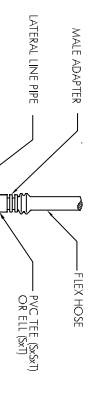
4 QUICK COUPLING VALVE
NOT TO SCALE



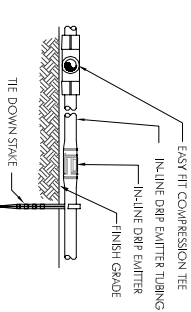
5 REMOTE CONTROL VALVE MANIFOLD
NOT TO SCALE



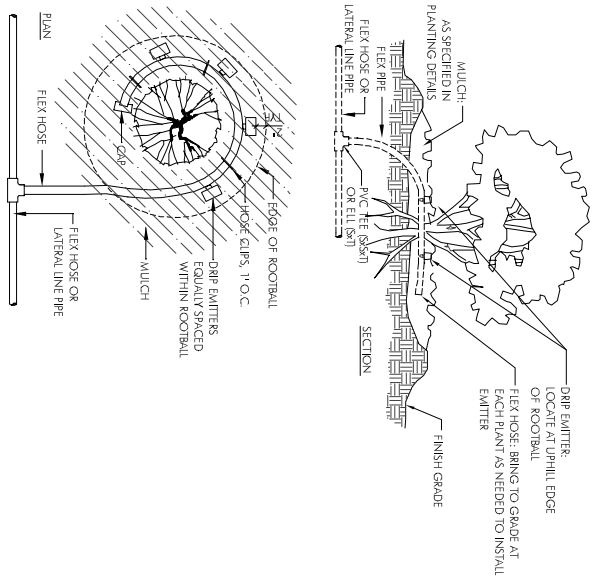
6 FILTER & REGULATOR MANIFOLD AT DRIP ZONES
NOT TO SCALE



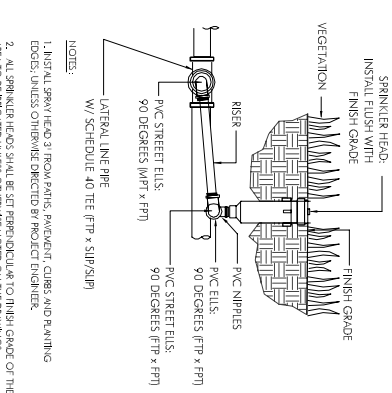
7 LATERAL LINE TO FLEX HOSE CONNECTION
NOT TO SCALE



8 IN-LINE DRIP EMITTER TUBING
NOT TO SCALE



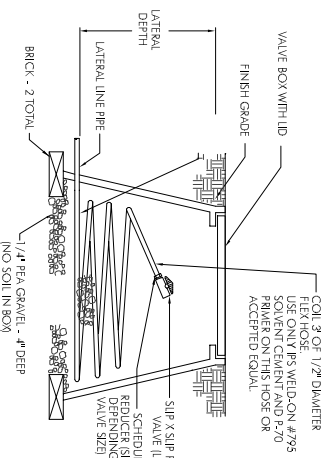
9 DRIP EMITTERS WITH FLEX HOSE
NOT TO SCALE



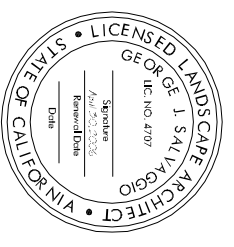
10 SPRINKLER HEAD WITH SWING RISER
NOT TO SCALE

NOTES:

- INSTALL SPRAY HEAD & ROW PATIS, PAVEMENT, CURBS, AND PARKING EDGES, UNLESS OTHERWISE DIRECTED BY PROJECT ENGINEER.
- ALL SPRINKLER HEADS SHALL BE SET APPROXIMATELY TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED ON THE DRAWINGS.



11 EMITTER LINE FLUSH ASSEMBLY
NOT TO SCALE



Date	Issues And Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
01/27/06	100% DRAWING CONSTRUCTION SET	
10/26/05	100% DRAWING CONSTRUCTION SET	
07/20/05	100% DRAWING CONSTRUCTION SET	

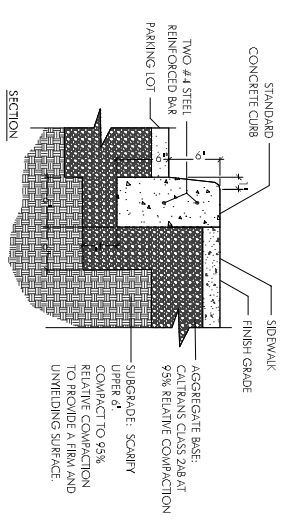
PROJECT # 13039
DRAWN BY: MEW, GWG, RBC
CHECKED BY: GIS
ORIGINAL DRAWING SIZE: 24 X 36
SCALE: AS INDICATED

IRRIGATION DETAILS

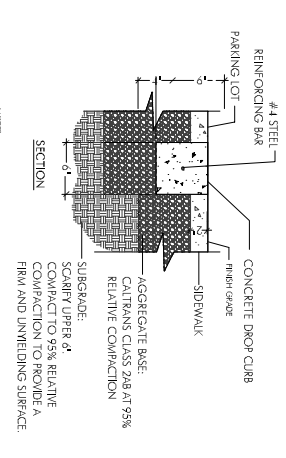
WQA
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS AND PLANNERS
2169-G East Francisco Blvd.
San Rafael, CA 94901
(415) 454-8668 Phone
(415) 454-0129 Fax

JOINT WATER POLLUTION CONTROL PLANT MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA CARSON, CALIFORNIA

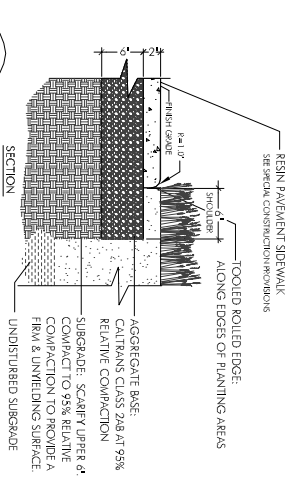
**JOINT WATER
POLLUTION
CONTROL PLANT
MARSHLAND ENHANCEMENT,
EDUCATION, AND VIEWING AREA
CARSON, CALIFORNIA**



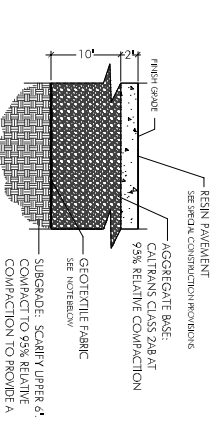
4 STANDARD CURB @ SIDEWALKS
NOT TO SCALE



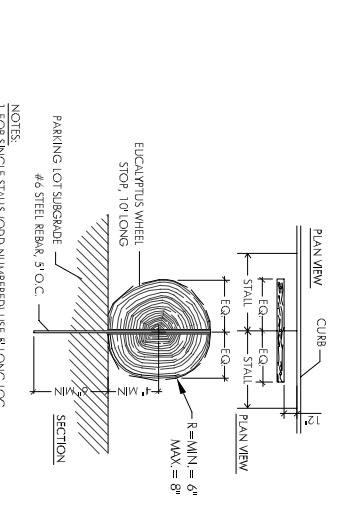
3 FLUSH CURB
NOT TO SCALE



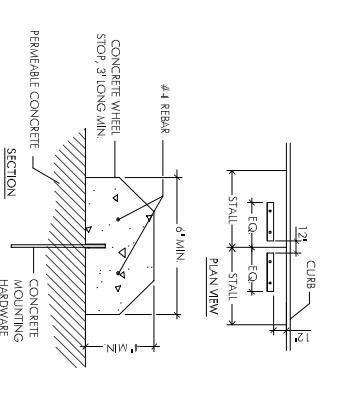
2 PAVING: SIDEWALK, TRAIL & GARDEN PATH
NOT TO SCALE



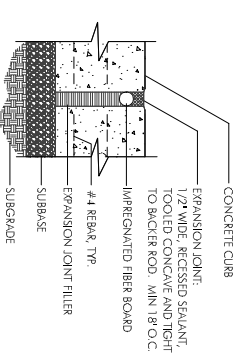
1 PAVING: RESIN PAVEMENT PARKING LOT
NOT TO SCALE



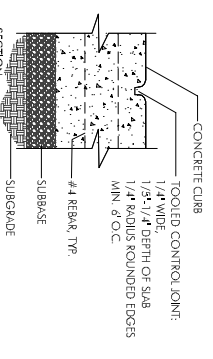
9 CAR STOP - RECYCLED EUCALYPTUS
NOT TO SCALE



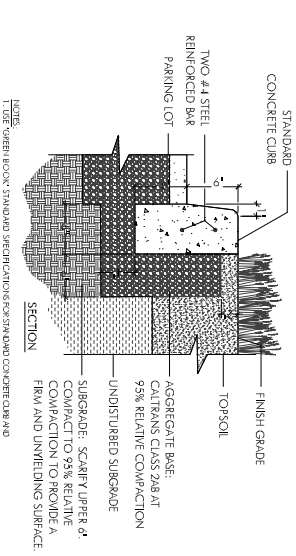
8 CAR STOP - CONCRETE (OPTIONAL)
NOT TO SCALE



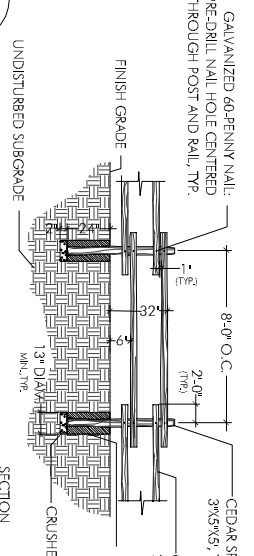
7 EXPANSION JOINT @ CURBS
NOT TO SCALE



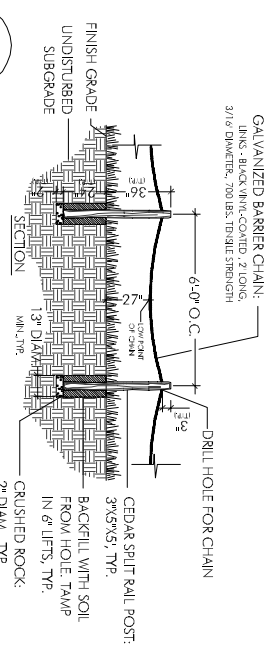
6 CONSTRUCTION JOINT @ CURBS
NOT TO SCALE



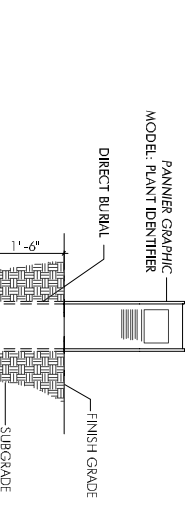
5 STANDARD CURB @ PLANTING AREAS
NOT TO SCALE



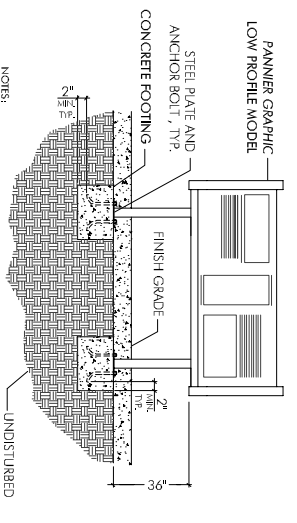
11 SPLIT RAIL FENCE
NOT TO SCALE



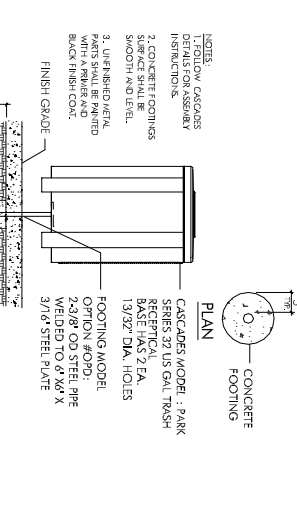
10 BOLLARD AND CHAIN FENCE
NOT TO SCALE



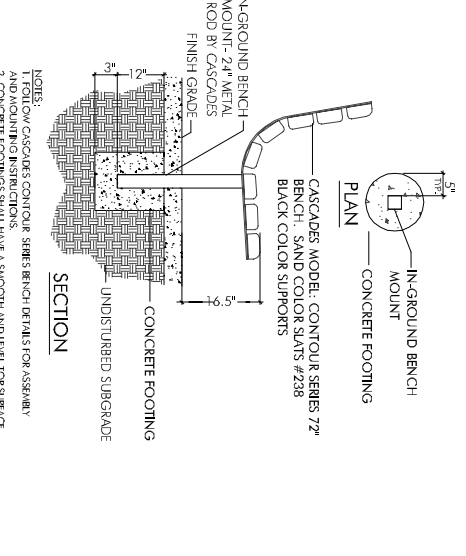
15 PLANT IDENTIFIER DISPLAY
NOT TO SCALE



14 EDUCATIONAL DISPLAY
NOT TO SCALE



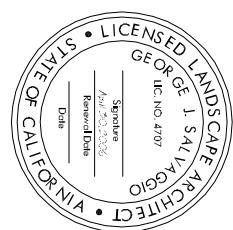
13 TRASH RECEPTACLE
NOT TO SCALE



12 BENCH
NOT TO SCALE

Date	Issues And Revisions	No.

PROJECT # 13039
DRAWN BY: MEW, GM/G, RBC
CHECKED BY: GIS
ORIGINAL DRAWING SIZE: 24 X 36
SCALE: AS INDICATED

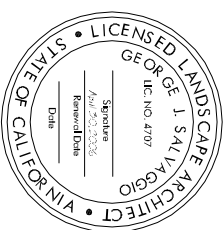


SITE DETAILS

E-8

**JOINT WATER
 POLLUTION
 CONTROL PLANT**
 MARSHLAND ENHANCEMENT,
 EDUCATION, AND VIEWING AREA
 CARSON, CALIFORNIA

NOBLE
 CONSULTANTS, INC.
 2201 DORRONT DRIVE, SUITE 620
 IRVINE, CA 92612
 TEL: 949/252-1330
 FAX: 949/252-8381

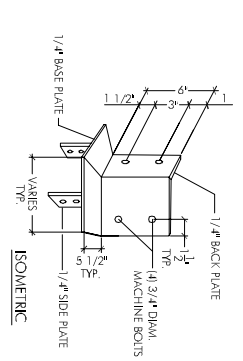


Date	Issues And Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
01/27/06	100% DRAFT CONSTRUCTION SET	
10/26/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	

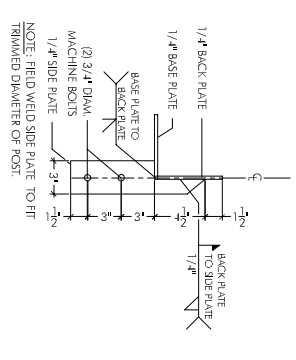
PROJECT # 13039
 DRAWN BY: MEW, GMG, RBC
 CHECKED BY: GIS
 ORIGINAL DRAWING SIZE: 24 X 36
SCALE: AS INDICATED

PAVILION DETAILS
 Sheet

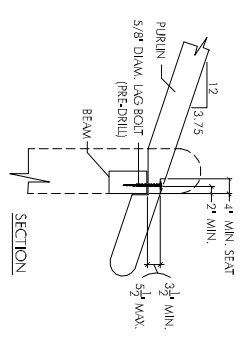
E-9B



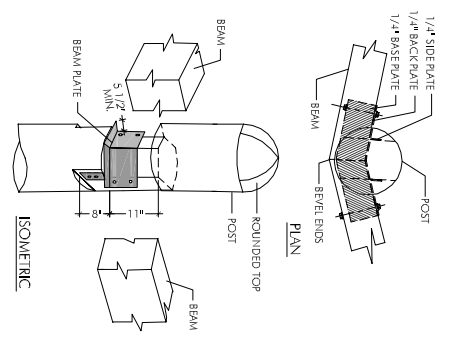
5 BEAM PLATE
 SCALE: NOT TO SCALE



4 BEAM PLATE
 SCALE: 1 1/2\"/>

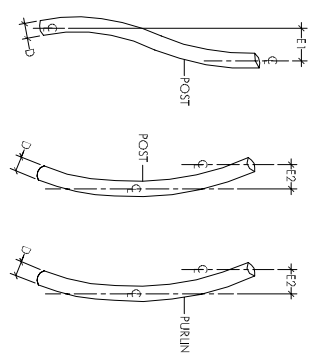


3 PURLIN TO BEAM CONNECTION
 SCALE: 1/2\"/>

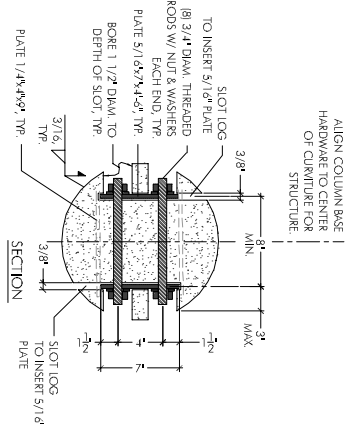


2 BEAM TO POST CONNECTION
 SCALE: NOT TO SCALE

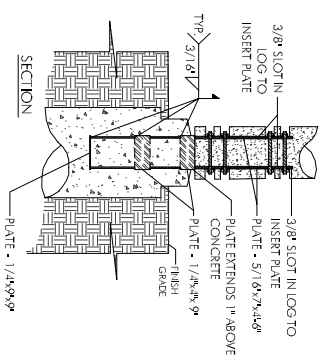
1 POST & PURLIN ALIGNMENT
 SCALE: 1/4\"/>



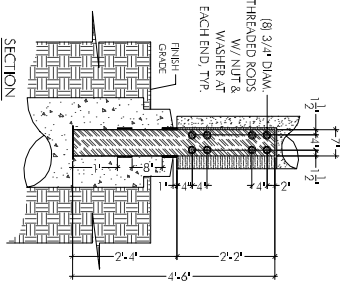
NOTES:
 D = SMALLEST DIAMETER FOUND ON POST/PURLIN,
 E1 = LESS THAN OR EQUAL TO 5% OF D,
 E2 = LESS THAN OR EQUAL TO 10% OF D.



8 POST TO FOUNDATION PIER CONNECTION
 SCALE: 1 1/2\"/>



7 POST TO FOUNDATION PIER CONNECTION
 SCALE: 1/2\"/>

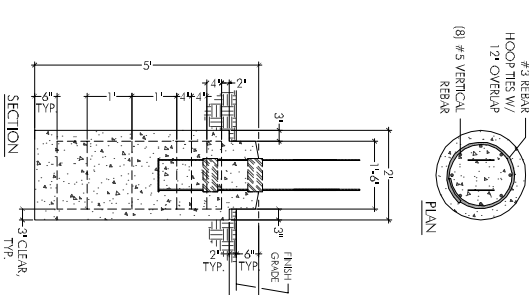


6 POST TO FOUNDATION PIER CONNECTION
 SCALE: 1/2\"/>

TIMBER SCHEDULE FOR SHADE PAVILIONS

SHADE PAVILION #1 - CIRCULAR		
ITEM	QUANTITY	APPROX. DIMENSION
WOOD		
POSTS	7	12\"/>
BEAMS	14	12\"/>
	7	6X10, LENGTH 7'-1\"/>
	7	6X10, LENGTH 3'-7\"/>
PURLINS	7	6X10, LENGTH 3'-7\"/>
	14	6X10, LENGTH 12'10 1/2\"/>
LATTICE	84	6X4, 5\"/>
	96	6X4, 1 1/2\"/>
SHADE PAVILION #2 - RECTANGULAR		
WOOD		
POSTS	4	12\"/>
BEAMS	6	6X10, LENGTH 8'-4\"/>
	5	6X10, LENGTH 10\"/>
	12	6X10, LENGTH 4\"/>
LATTICE	50+	6X4, 2\"/>

NOTE: APPROXIMATE DIMENSIONS ARE PROVIDED TO AID THE CONTRACTOR IN PRICING THE SHADE PAVILIONS. THE CONTRACTOR SHALL REFERENCE PLANS, DETAILS AND SPECIFICATIONS IN ORDER TO DETERMINE EXACT DIMENSIONS. THE CONTRACTOR MAY NEED TO DETERMINE FINAL DIMENSION OF KEY ELEMENTS IN THE FIELD.



9 FOUNDATION PIER
 SCALE: 1/2\"/>

NOTES:
 1. USE 2\"/>

JOINT WATER POLLUTION CONTROL PLANT
MARSHLAND ENHANCEMENT, EDUCATION, AND VIEWING AREA
CARSON, CALIFORNIA

NOBLE CONSULTANTS, INC.
2301 DORRONT DRIVE, SUITE 620
IRVINE, CA 92612
TEL: 949/252-1350
TEL: 949/252-5581

REGISTERED PROFESSIONAL ENGINEER
THOMAS J. FISCHETTI
No. C 0395339
Exp. 12-31-05
STATE OF CALIFORNIA
CIVIL

LICENSED LANDSCAPE ARCHITECT
GEORGE I. SALVAGGIO
LIC. NO. 4107
State of California
No. 252232
Exp. 1/31/05
Date

Date	Issues And Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
01/27/06	100% DR-4F CONSTRUCTION SET	
10/26/05	100% DR-4F CONSTRUCTION SET	
07/20/05	100% DR-4F CONSTRUCTION SET	

PROJECT # 13039
DRAWN BY: MEW, GM/G, RBC
CHECKED BY: GIS
ORIGINAL DRAWING SIZE: 24 X 36
SCALE: AS INDICATED

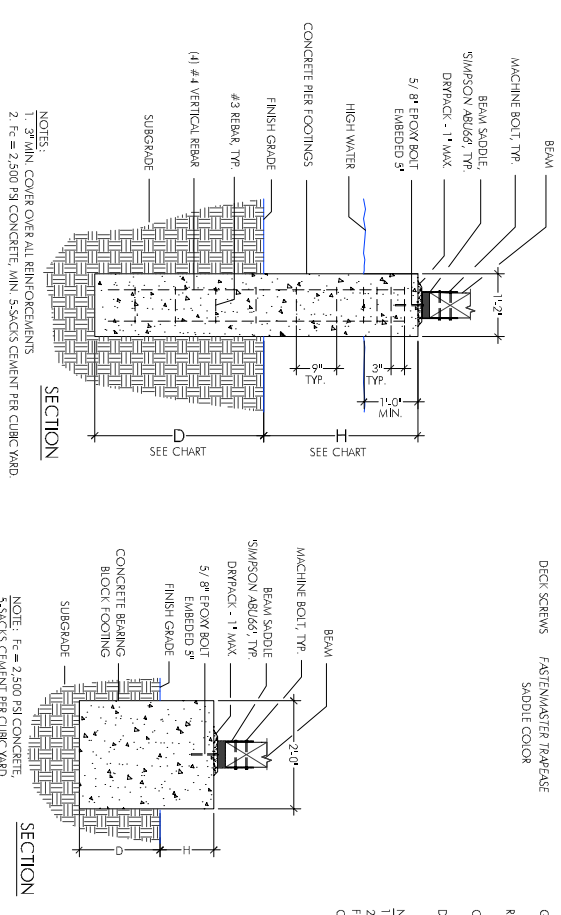
BOARDWALK DETAILS

E-10

FASTENER LEGEND

FASTENER	MODEL	MEMBER	NOMINAL DIMENSION	SPECIES & GRADE
BEAMS SADDLE	SIMPSON ABU66	BEAMS	6" X 12"	DOUGLASS-FR #1
HEAVY ANGLE	SIMPSON H135	JOISTS	2" X 10"	DOUGLASS-FR #2
JOIST HANGER	SIMPSON UZ10	BLOCKING	2" X 10"	DOUGLASS-FR #2
FRAMING ANGLE	SIMPSON A35	GUARD RAIL POSTS	6" X 6"	DOUGLASS-FR #2
DECK SCREWS	FASTENMASTER TRAPSAFE SADDLE COLOR	GUARD RAILS	2" X 10"	DOUGLASS-FR #2
		RAIL CAPS	2" X 8"	DOUGLASS-FR #1
		CURBS	6" X 6"	DOUGLASS-FR #2
		DECKING	2" X 4"	TRX ACCENTS, MADIRA, COCOR, WOOD GRAIN SIDE UP

NOTES:
1. ALL FRAMING COMPONENTS SHALL BE PRESSURE TREATED.
2. SEE SPECIAL PROVISIONS SECTION 216-2 Z MATERIALS AND FINISHES ON MATERIALS AND FINISHES FOR ALL METAL COMPONENTS.



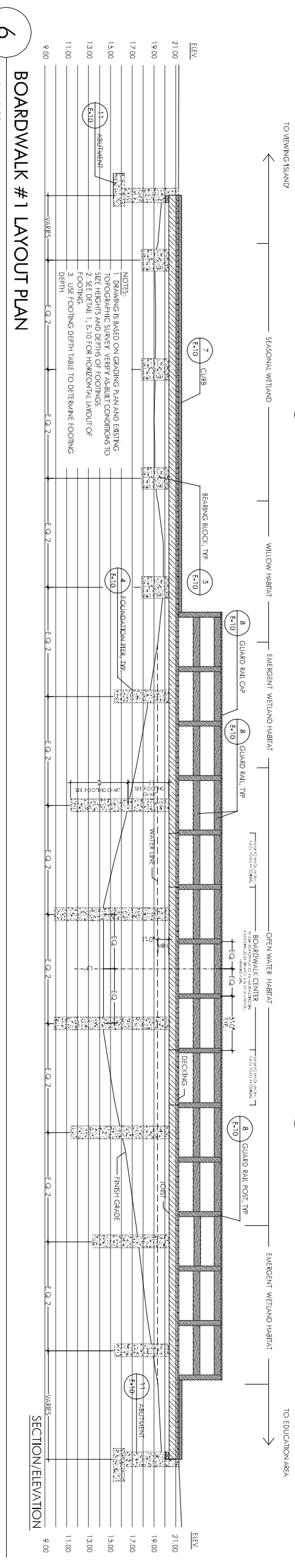
NOTES:
1. 3" MIN. COVER OVER ALL REINFORCEMENTS
2. FC = 2,500 PSI CONCRETE
5.5% SCS CEMENT PER CUBIC YARD

5 BEARING BLOCK

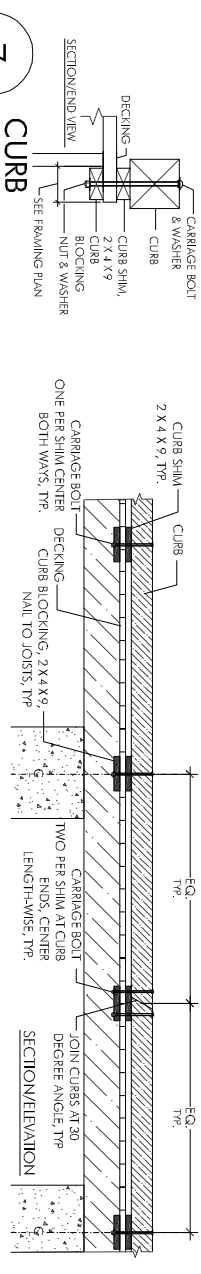
4 FOUNDATION PIER #1

3 RAIL POST TO JOIST CONNECTION

1 FRAMING PLAN

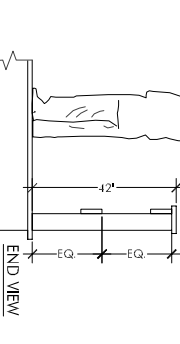


6 BOARDWALK #1 LAYOUT PLAN

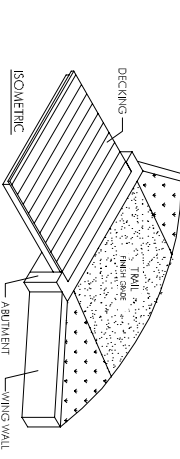


7 CURB

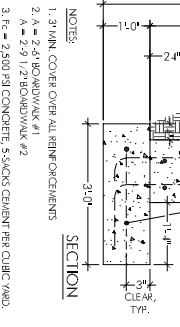
10 ABUTMENT



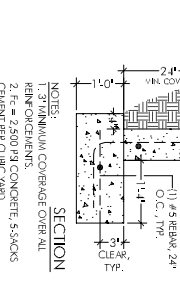
8 GUARD RAIL



11 ABUTMENT

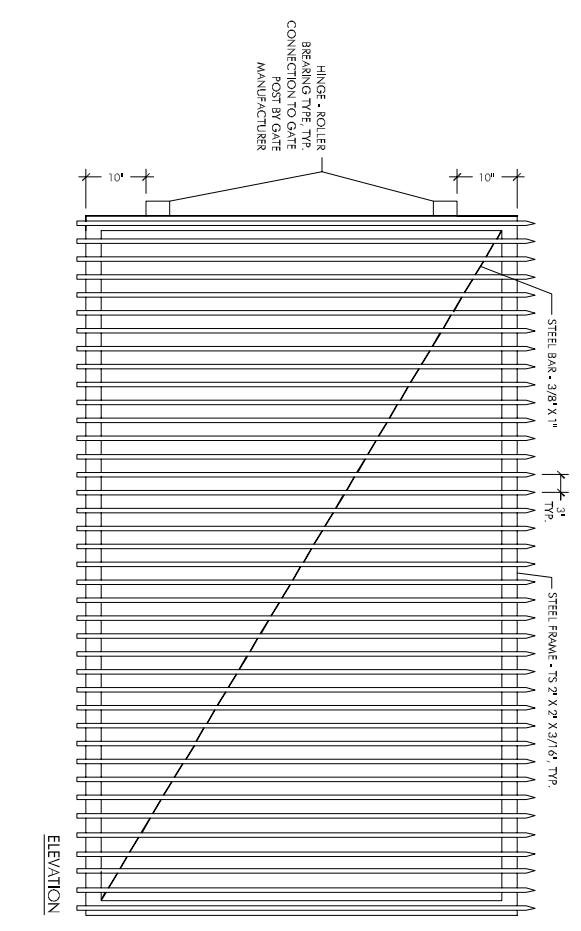


12 ABUTMENT

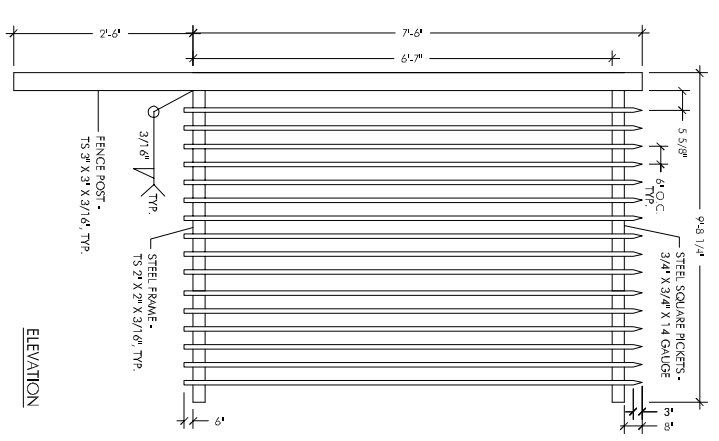


13 WING WALL

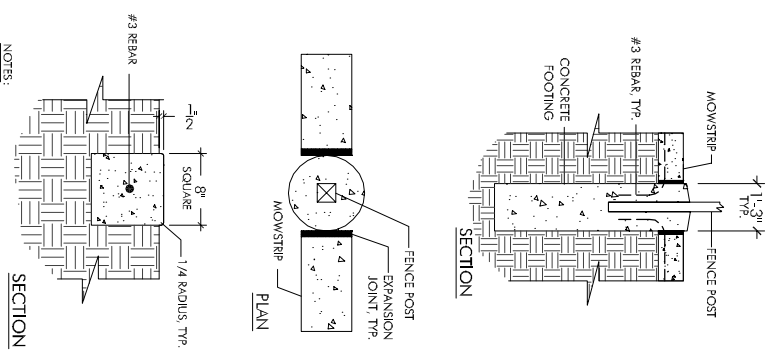
**JOINT WATER
 POLLUTION
 CONTROL PLANT**
 MARSHLAND ENHANCEMENT,
 EDUCATION, AND VIEWING AREA
 CARSON, CALIFORNIA



1 SWING GATE
 NOT TO SCALE

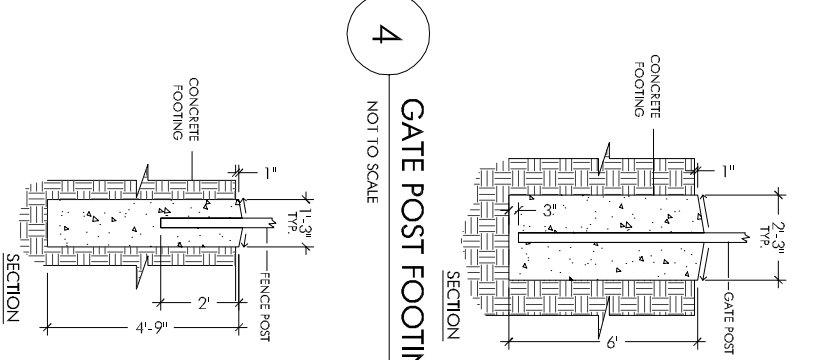


2 FENCE PANEL, TYP.
 NOT TO SCALE



3 MOW STRIP
 NOT TO SCALE

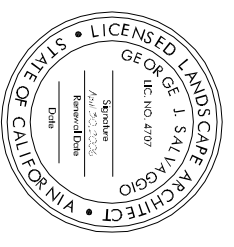
NOTES:
 1. PROVIDE EXPANSION JOINTS 20' O.C.
 2. STEEL TROWEL FINISH TOP AND SIDES.



5 FENCE POST FOOTING
 NOT TO SCALE

4 GATE POST FOOTING
 NOT TO SCALE

Date	Issues And Revisions	No.
03/22/06	100% FINAL CONSTRUCTION SET	
01/27/06	100% DRAFT CONSTRUCTION SET	
10/26/05	100% DRAFT CONSTRUCTION SET	
07/20/05	100% DRAFT CONSTRUCTION SET	



PROJECT # 13039
 DRAWN BY: MEW, GMG, RBC
 CHECKED BY: GJS
 ORIGINAL DRAWING SIZE: 24 X 36
SCALE: AS INDICATED

**SECURITY FENCE
 DETAILS**

E-11

NOTE: SEE SPECIAL PROVISIONS SECTION 2N-2.2 MATERIALS AND FABRICATION FOR MATERIALS AND FINISHES FOR ALL METAL COMPONENTS.