



Appendix C

MITIGATION MONITORING AND REPORTING  
PROGRAM



## **MITIGATION MONITORING AND REPORTING PROGRAM**

Section 21081.6 of the State of California Public Resources Code requires a Lead or Responsible Agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a “reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects.” The City of San Diego is the lead Agency for the Master Program PEIR, and, therefore, is responsible for implementation of the MMRP. Because the PEIR recommends measures to mitigate these impacts, an MMRP is required to ensure that adopted mitigation measures are implemented.

As Lead Agency for the proposed project under CEQA, the City of San Diego will administer the MMRP for the following environmental issue areas: biological resources, historical resources, land use policies, paleontological resources, and water quality.

### **GENERAL**

***General Mitigation 1:*** Prior to commencement of work, the ADD Environmental Designee of the Entitlements Division shall verify that mitigation measures for impacts to biological resources (Mitigation Measures 4.3.1 through 4.3.20), historical resources (Mitigation Measures 4.4.1 and 4.4.2), land use policy (Mitigation Measures 4.1.1 through 4.1.13), paleontological resources (Mitigation Measure 4.7.1), and water quality (Mitigation Measures 4.8.1 through 4.8.3) have been included in entirety on the submitted maintenance documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Pre-maintenance Meeting shall be noted on all maintenance documents.

***General Mitigation 2:*** Prior to the commencement of work, a Pre-maintenance Meeting shall be conducted and include, as appropriate, the MMC, SWD Project Manager, Biological Monitor, Historical Monitor, Paleontological Monitor, Water Quality Specialist, and Maintenance Contractor, and other parties of interest.

***General Mitigation 3:*** Prior to the commencement of work, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

***General Mitigation 4:*** Prior to commencement of work and pursuant to Section 1600 et seq. of the State of California Fish & Game Code, evidence of compliance with Section 1605 is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

## **BIOLOGICAL RESOURCES**

Potential impacts to biological resources would be reduced to below a level of significance through implementation of the following mitigation measures as well as Mitigation Measures 4.1-1 through 4.1-25.

***Mitigation Measure 4.3.1:*** Prior to commencement of any activity within a specific annual maintenance program, a qualified biologist shall prepare an IBA for each area proposed to be maintained. The IBA shall be prepared in accordance with the specifications included in the Master Program.

***Mitigation Measure 4.3.2:*** No maintenance activities within a proposed annual maintenance program shall be initiated before the City's Assistant Deputy Director (ADD) Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IBAs including proposed mitigation for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall confirm that the appropriate maintenance protocols have been incorporated into each IMP.

***Mitigation Measure 4.3.3:*** No maintenance activities within a proposed annual maintenance program shall be initiated until the City's ADD Environmental Designee and Mitigation Monitoring Coordinator (MMC) have approved the qualifications for biologist(s) who shall be responsible for monitoring maintenance activities which may impact sensitive biological resources.

***Mitigation Measure 4.3.4:*** Prior to undertaking any maintenance activity included in an annual maintenance program, a mitigation account shall be established to provide sufficient funds to implement all biological mitigation associated with the proposed maintenance activities. The fund amount shall be determined by the ADD Environmental Designee. The account shall be managed by the City's SWD, with quarterly status reports submitted to DSD. The status reports shall separately identify upland and wetland account activity. Based upon the impacts identified in the IBAs, money shall be deposited into the account, as part of the project submittal, to ensure available funds for mitigation.

***Mitigation Measure 4.3.5:*** Prior to commencing any activity that could impact wetlands, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

***Mitigation Measure 4.3.6:*** Prior to commencing any activity where the IBA indicates significant impacts to biological resources may occur, a pre-maintenance meeting shall be held on site with the following in attendance: City's SWD Maintenance Manager (MM), MMC, and Maintenance Contractor (MC). The biologist selected to monitor the activities shall be present. At this meeting, the monitoring biologist shall identify and discuss the maintenance protocols that apply to the maintenance activities.

At the pre-maintenance meeting, the monitoring biologist shall submit to the MMC and MC a copy of the maintenance plan (reduced to 11"x17") that identifies areas to be protected, fenced, and monitored. This data shall include all planned locations and design of noise attenuation walls or other devices. The monitoring biologist also shall submit a maintenance schedule to the MMC and MC indicating when and where monitoring is to begin and shall notify the MMC of the start date for monitoring.

**Mitigation Measure 4.3.7:** Within three months following the completion of mitigation monitoring, two copies of a written draft report summarizing the monitoring shall be prepared by the monitoring biologist and submitted to the MMC for approval. The draft monitoring report shall describe the results including any remedial measures that were required. Within 90 days of receiving comments from the MMC on the draft monitoring report, the biologist shall submit one copy of the final monitoring report to the MMC.

**Mitigation Measure 4.3.8:** Within six months of the end of an annual storm water facility maintenance program, the monitoring biologist shall complete an annual report which shall be distributed to the following agencies: the City of San Diego DSD, CDFG, RWQCB, USFWS, and Corps. At a minimum, the report shall contain the following information:

- Tabular summary of the biological resources impacted during maintenance and the mitigation;
- Master table containing the following information for each individual storm water facility or segment which is regularly maintained;
- Date and type of most recent maintenance;
- Description of mitigation which has occurred; and
- Description of the status of mitigation which has been implemented for past maintenance activities.

**Mitigation Measure 4.3.9:** Wetland impacts resulting from maintenance shall be mitigated in one of the following ~~three~~two ways: (1) habitat creation, restoration, and/or enhancement ~~concurrent with maintenance~~, (2) habitat creation, restoration, and/or enhancement ~~prior to maintenance~~, or (3)2 mitigation credits. ~~The amount of mitigation~~ When mitigation is proposed to be accomplished through concurrent creation, restoration or enhancement, the amount of planting shall be in accordance with ratios in Table 4.3-10 unless different mitigation ratios are required by state or federal agencies with jurisdiction over the impacted wetlands. In this event, the mitigation ratios required by these agencies will supersede, and not be in addition to, the ratios defined in Table 4.3-10. When previously created, restored or enhanced wetland habitat is proposed to be used for mitigation, the ratio shall be 1:1, provided the habitat has been determined to be successfully established by the ADD Environmental Designee in consultation with the Resource Agencies prior to commencing the maintenance activity. Mitigation credits may be used at a ratio of 1:1, provided the mitigation credits are from a mitigation bank which has been approved by the Resource Agencies. ~~No maintenance shall commence until the ADD Environmental Designee has~~

determined that mitigation proposed for a specific maintenance activity meets one of these ~~three~~ two options.

<b>Table 4.3-1011-1 WETLAND MITIGATION RATIOS</b>	
<b>WETLAND TYPE</b>	<b>MITIGATION RATIO<sup>±</sup></b>
Southern riparian forest	3:1
Southern sycamore riparian woodland	3:1
Riparian woodland	3:1
Coastal saltmarsh	4:1
Coastal brackish marsh	4:1
Southern willow scrub	2:1
Mule fat scrub	2:1
Riparian scrub <sup>1</sup>	2:1
Freshwater marsh <sup>2</sup>	<del>±</del> 2:1
Cismontane alkali marsh	4:1
Disturbed wetland	<del>±</del> 2:1
Streambed/natural flood channel	<del>NA</del> 2:1

<sup>1</sup> Mitigation ratio within the Coastal Zone will be 3:1

<sup>2</sup> Mitigation ratio within the Coastal Zone will be 4:1<sup>±</sup> Mitigation done in advance or through purchase of mitigation credits would be at a 1:1 ratio.

Mitigation locations for wetland impacts shall be selected using the following order of preference, based on the best mitigation value to be achieved.

1. Within impacted watershed, within City limits.
2. Within impacted watershed, outside City limits on City-owned or other publicly-owned land.
3. Outside impacted watershed, within City limits.
4. Outside impacted watershed, outside City limits on City-owned or other publically-owned land.

In order to mitigate for impacts in an area outside the limits of the watershed within which the impacts occur, the SWD must demonstrate to the satisfaction of the ADD Environmental Designee in consultation with the Resource Agencies that no suitable location exists within the impacted watershed.

**Mitigation Measure 4.3.10:** Whenever maintenance will impact wetland vegetation, a wetland mitigation plan shall be prepared in accordance with the Conceptual Wetland Restoration Plan contained in Appendix H of the Biological Technical Report, included as Appendix D.3 of the PEIR.

Mitigation which involves habitat enhancement, restoration or creation shall include a wetland mitigation plan containing the following information:

- Conceptual planting plan including planting zones, grading, and irrigation;
- Seed mix/planting palette;
- Planting specifications;
- Monitoring program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation which involves habitat acquisition and preservation shall include the following:

- Location of proposed acquisition;
- Description of the biological resources to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

Mitigation which involves the use of mitigation credits shall include the following:

- Location of the mitigation bank;
- Description of the credits to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the credits are associated with a mitigation bank which has been approved by the appropriate Resource Agencies.

**Mitigation Measure 4.3.11:** Upland impacts shall be mitigated through payment into the City's Habitat Acquisition Fund, acquisition and preservation of specific land, or purchase of mitigation credits in accordance with the ratios identified in Table 4.3-11. Upland mitigation shall be completed within six months of the date the related maintenance has been completed.

<b>Table 4.3-1111-2 UPLAND HABITAT MITIGATION RATIOS<sup>1</sup></b>			
<b>Vegetation Type</b>	<b>Tier</b>	<b>Location of Impact with Respect to the MHPA</b>	
		<b>Inside</b>	<b>Outside</b>
Coast live oak woodland	I	2:1	1:1
Scrub oak chaparral	I	2:1	1:1
Southern foredunes	I	2:1	1:1
Beach	I	2:1	1:1
Diegan coastal sage scrub	II	1:1	1:1
Coastal sage-chaparral scrub	II	1:1	1:1
Broom baccharis scrub	II	1:1	1:1
Southern mixed chaparral	IIA	1:1	0.5:1
Non-native grassland	IIIB	1:1	0.5:1
Eucalyptus woodland	IV	--	--
Non-native vegetation/ornamental	IV	--	--
Disturbed habitat/ruderal	IV	--	--
Developed	IV	--	--

<sup>1</sup>Assumes mitigation occurs within an MHPA

**Mitigation Measure 4.3.12:** Loss of habitat for the coastal California gnatcatcher shall be mitigated through the acquisition of suitable habitat or mitigation credits at a ratio of 1:1. Mitigation shall take place within the MHPA, and shall be accomplished within six months of the date maintenance is completed.

**Mitigation Measure 4.3.13:** Prior to commencing any maintenance activity which may impact sensitive biological resources, the monitoring biologist shall verify that the following actions have been taken, as appropriate:

- Fencing, flagging, signage, or other means to protect sensitive resources to remain after maintenance have been implemented;
- Noise attenuation measures needed to protect sensitive wildlife are in place and effective; and/or
- Nesting raptors have been identified and necessary maintenance setbacks have been established if maintenance is to occur between January 15 and August 31.

The designated biological monitor shall be present throughout the first full day of maintenance, whenever mandated by the associated IBA. Thereafter, through the duration of the maintenance activity, the monitoring biologist shall visit the site weekly to confirm that measures required to protect sensitive resources (e.g., flagging, fencing, noise barriers) continue to be effective. The monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the MM each month. The MM will forward copies to MMC.

**Mitigation Measure 4.3.14:** Whenever off-site mitigation would result in a physical disturbance to the proposed mitigation area, the City will conduct an environmental review of the proposed mitigation plan in accordance with CEQA. If the off-site mitigation would have a significant impact on biological resources associated with the mitigation site, mitigation measures will be identified and implemented in accordance with the MMRP resulting from that CEQA analysis.

**Mitigation Measure 4.3.15:** Impacts to listed or endemic sensitive plant species shall be offset through implementation of one or a combination of the following actions:

- Impacted plants would be salvaged and relocated;
- Seeds from impacted plants would be collected for use at an off-site location;
- Off-site habitat that supports the species impacted shall be enhanced and/or supplemented with seed collected on site; and/or
- Comparable habitat at an off-site location shall be preserved.

Mitigation which involves relocation, enhancement or transplanting sensitive plants shall include the following:

- Conceptual planting plan including grading and, if appropriate, temporary irrigation;
- Planting specifications;
- Monitoring Program including success criteria; and
- Long-term maintenance and preservation plan.

**Mitigation Measure 4.3.16:** Maintenance activities shall not occur within the following areas:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*);
- 1,500 feet from known locations of the southern pond turtle (*Clemmys marmorata pallida*);
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*);
- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*); or
- 300 feet from any occupied burrow or burrowing owls (*Athene cunicularia*).



**Mitigation Measure 4.3.17:** If evidence indicates the potential is high for a listed species to be present, based on historical records or site conditions, then clearing, grubbing, or grading (inside and outside the MHPA) shall be restricted during the breeding season where development may impact the following species:

- Western snowy plover (between March 1 and September 15);
- Least tern (between April 1 and September 15);
- Cactus wren (between February 15 and August 15); or
- Tricolored black bird (between March 1 and August 1).

When other sensitive species, including, but not limited to, the arroyo toad, burrowing owl, or Quino checkerspot butterfly are known or suspected to be present all appropriate protocol surveys and mitigation measures shall be implemented.

**Mitigation Measure 4.3.18:** If a subject species is not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the ADD Environmental Designee and an applicable resource agency which demonstrates whether or not mitigation measures such as noise walls are necessary between the dates stated above for each species. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

**Mitigation Measure 4.3.19:** If the SWD chooses not to do the required surveys, then it shall be assumed that the appropriate avian species are present and all necessary protection and mitigation measures shall be required as described in Mitigation Measure 4.3.21

**Mitigation Measure 4.3.20:** If no surveys are completed and no sound attenuation devices are installed, it will be assumed that the habitat in question is occupied by the appropriate species and that maintenance activities would generate more than 60dB(A)  $L_{eq}$  within the habitat requiring protection. All such activities adjacent to the protected habitat shall cease for the duration of the breeding season of the appropriate species and a qualified biologist shall establish a limit of work.

**Mitigation Measure 4.3.21:** If maintenance occurs during the raptor breeding season (January 15 to August 31), a pre-maintenance survey for active raptor nests shall be conducted in areas supporting suitable habitat. If active raptor nests are found, maintenance shall not occur within 300 feet of a Cooper's hawk nest, 900 feet of a northern harrier's nest, or 500 feet of any other raptor's nest until any fledglings have left the nest.

**Mitigation Measure 4.3.22:** If removal of any eucalyptus trees or other trees used by raptors for nesting within a maintenance area is proposed during the raptor breeding season (January 15 through August 31), a qualified biologist shall ensure that no raptors are nesting in such trees. If maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 300 feet of any nesting site of Cooper's hawk

or other nesting raptor until the young fledge. Should the biologist determine that raptors are nesting, the trees shall not be removed until after the breeding season. In addition, if removal of grassland or other habitat appropriate for nesting by northern harriers, a qualified biologist shall ensure that no harriers are nesting in such areas. If maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 900 feet of any nesting site of northern harrier until the young fledge.

**Mitigation Measure 4.3.23:** If maintenance activities would occur at known localities for listed fish species or within suitable habitat for other highly sensitive aquatic species (i.e., southwestern pond turtle), avoidance or minimization measures (i.e., exclusionary fencing, dewatering of the activity area, live-trapping, and translocation to suitable habitat) must be implemented.

**Mitigation Measure 4.3.24:** If maintenance activities will occur within areas supporting listed and/or narrow endemic plants, the boundaries of the plant populations designated sensitive by the resource agencies will be clearly delineated with flagging or temporary fencing that must remain in place for the duration of the activity.

**Mitigation Measure 4.3.25:** In order to avoid impacts to nesting avian species, including those species not covered by the MSCP, maintenance within or adjacent to avian nesting habitat shall occur outside of the avian breeding season (January 15 to August 31) unless postponing maintenance would result in a threat to human life or property.

## **HISTORICAL RESOURCES**

Potential impacts to historical resources would be reduced to below a level of significance through implementation of the following mitigation measures.

**Mitigation Measure 4.4.1:** Prior to commencement of the first occurrence of maintenance activity within a drainage facility included in the Master Program, an archaeologist, meeting the qualifications specified by the City's HRG, shall determine the potential for significant historical resources to occur in the maintenance area. If the archaeologist determines that the potential is moderate to high, an IHA shall be prepared. Based on the IMP for the proposed maintenance activity, the archaeologist shall determine the APE, which shall include access, staging, and maintenance areas. The IHA shall include a field survey of the APE with a Native American monitor, using the standards of the City's HRG. In addition, the archaeologist shall request a record search from the SCIC. Based on the results of the field survey and record search, the archaeologist shall conduct an archaeological testing program for any identified historical resources, using the standards of the City's HRG. If significant historical resources are identified, they shall be taken to the Historical Resources Board for designation as Historic Sites. Avoidance or implementation of an Archaeological Data Recovery Program (ADRP) and Archaeological Monitoring Program shall be required to mitigate project impacts to significant historical resources. The archaeologist shall prepare a report in accordance with City guidelines. At a minimum, the IHA report shall include:

- Description of maintenance to be performed, including length, width, and depth;
- Prehistory and History Background Discussion;

- Results of Record Search;
- Survey Methods;
- Archaeological Testing Methods;
- Impact Analysis; and
- Mitigation Recommendations, including avoidance or implementation of an ADRP and archaeological monitoring program.

In the event that the IHA indicates that no significant historical resources occur within the APE, or have the potential to occur within the APE, no further action shall be required.

**Mitigation Measure 4.4.2:** Prior to initiating any maintenance activity where the IHA identifies existing significant historical resources within the APE, the following actions shall be taken.

**4.4.2.1** The Storm Water Department shall select a Principal Investigator (PI), who shall be approved by the ADD Environmental Designee. The PI must meet the requirements of the City's HRG.

**4.4.2.2** Mitigation recommendations from the IHA shall be incorporated into the IMP to the satisfaction of the PI and the ADD Environmental Designee. Typical mitigation measures shall include but not be limited to: delineating resource boundaries on maintenance plans; implementing protective measures such as fencing, signage or capping; and selective monitoring during maintenance activities.

**4.4.2.3** If impacts to significant historical resources cannot be avoided, the PI shall prepare an Archaeological Research Design and Data Recovery Program (ARDDRP) for the affected resources, with input from a Native American consultant, and the ARDDRP shall be approved by the ADD Environmental Designee. Based on the approved research design, a phased excavation program shall be conducted, which will include the participation of a Native American. The sample size to be excavated shall be determined by the PI, in consultation with City staff. The sample size shall vary with the nature and size of the archaeological site, but need not exceed 15 percent of the overall resource area. The area involved in the ARDDRP shall be surveyed, staked and flagged by the archaeological monitor, prior to commencing maintenance activities which could affect the identified resources.

**4.4.2.4** A pre-maintenance meeting shall be held on-site prior to commencing any maintenance that may impact a significant historical resource. The meeting shall include representatives from the PI, the Native American consultant, Storm Water Department, Mitigation Monitoring Coordinator (MMC), Resident Engineer (RE), and Maintenance Contractor (MC). The PI shall explain mitigation measures which must be implemented during maintenance. The PI shall also confirm that all protective measures (e.g. fencing, signage or capping) are in place.

**4.4.2.5** If human remains are discovered in the course of conducting the ARDDRP, work shall be halted in that area and the following procedures set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) will be taken:

- The PI shall notify the RE, and the MMC. The MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS).
- The PI shall notify the Medical Examiner, after consultation with the RE, either in person or via telephone.
- Work will be redirected away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner, in consultation with the PI, concerning the provenience of the remains.
- The Medical Examiner, in consultation with the PI, shall determine the need for a field examination to determine the provenience.
- If a field examination is not warranted, the Medical Examiner shall determine, with input from the PI, if the remains are or are most likely to be of Native American origin.
- If Human Remains are determined to be Native American, the Medical Examiner shall notify the Native American Heritage Commission (NAHC). The NAHC shall contact the PI within 24 hours after the Medical Examiner has completed coordination. The NAHC will identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information. The PI will coordinate with the MLD for additional coordination. If (1) the NAHC is unable to identify the MLD, or the MLD fails to make a recommendation within 24 hours after being notified by the Commission; or (2) the landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, then the landowner or their authorized representative shall re-inter the human remains and all associated grave goods with appropriate dignity, on the property in a location not subject to subsurface disturbance. Information on this process will be provided to the NAHC.
- If Human Remains are not Native American, the PI shall contact the Medical Examiner and notify them of the historic era context of the burial. The Medical Examiner shall determine the appropriate course of action with the PI and City staff (PRC 5097.98). If the remains are of historic origin, they shall be appropriately removed and conveyed to the Museum of Man for analysis. The decision for reinterment of the human remains shall be made in consultation with MMC, EAS, the landowner, and the Museum.

**4.4.2.6** The PI shall be responsible for ensuring: (1) that all cultural materials collected are cleaned, catalogued and permanently curated with an appropriate institution; (2) that a letter of acceptance from the curation institution has been submitted to MMC; (3) that all artifacts are

analyzed to identify function and chronology as they relate to the history of the area; (4) that faunal material is identified as to species; and (5) that specialty studies are completed, as appropriate. Curation of artifacts associated with the survey, testing and/or data recovery for this project shall be completed in consultation with LDR and the Native American representative, as applicable.

**4.4.2.7** The Archaeologist shall be responsible for updating the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B associated with the ARDDRP in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the SCIC with the Final Results Report.

**4.4.2.8** The PI shall prepare a Draft Results Report (even if negative) that describes the results, analysis and conclusions of the ARDDRP (with appropriate graphics). The MMC shall return the Draft Results Report to the PI for revision or for preparation of the Final Report. The PI shall submit the revised Draft Results Report to MMC for approval. The MMC shall provide written verification to the PI of the approved report. The MMC shall notify the RE of receipt of all Draft Result Report submittals and approvals. The MMC shall notify the RE of receipt of the Final Results Report.

**Mitigation Measure 4.4.3:** Prior to initiating any maintenance activity where the IHA identifies a moderate to high potential for the occurrence of significant historical resources within the APE, the following actions shall be taken:

**4.4.3.1 Prior to Permit Issuance or Bid Opening/Bid Award**

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable maintenance documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

#### 4.4.3.2 Prior to Start of Maintenance

##### A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

##### B. PI Shall Attend Pre-maintenance Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Pre-maintenance Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Maintenance Manager (MM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Pre-maintenance Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Maintenance Manager and/or Grading Contractor.
  - a. If the PI is unable to attend the Pre-maintenance Meeting, the Applicant shall schedule a focused Pre-maintenance Meeting with MMC, the PI, RE, MM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)  
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
3. Identify Areas to be Monitored  
Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate maintenance documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.  
The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).  
MMC shall notify the PI that the AME has been approved.
4. When Monitoring Will Occur
  - a. Prior to the start of any work, the PI shall also submit a maintenance schedule to MMC through the RE indicating when and where monitoring will occur.
  - b. The PI may submit a detailed letter to MMC prior to the start of work or during maintenance requesting a modification to the monitoring program.

This request shall be based on relevant information such as review of final maintenance documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

5. Approval of AME and Maintenance Schedule  
After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Maintenance Schedule from the MM.

#### 4.4.3.3 During Maintenance

##### A. Monitor Shall be Present During Grading/Excavation/Trenching

1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Maintenance Manager is responsible for notifying the RE, PI, and MMC of changes to any maintenance activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Sections 4.4.3.3.B-C and 4.4.3.4-A-D shall commence.
3. The PI may submit a detailed letter to MMC during maintenance requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the MM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

##### B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section 4.4.3.4 below.
  - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
  - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, MM and RE. ADRP and any mitigation must be approved by MMC, RE and/or MM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
    - (1).Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under “D.”
  - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
    - (1).Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
    - (2).Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

1. Procedures for documentation, curation and reporting
  - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.



- b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section 4.4.3.6-A.
- c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
- d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

#### **4.4.3.4 Discovery of Human Remains**

*If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:*

##### **A. Notification**

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

##### **B. Isolate discovery site**

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

##### **C. If Human Remains **ARE** determined to be Native American**

1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in

accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.

4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
  - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
  - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
  - c. To protect these sites, the landowner shall do one or more of the following:
    - (1) Record the site with the NAHC;
    - (2) Record an open space or conservation easement; or
    - (3) Record a document with the County.
  - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 4.4.3.5.c., above.

**D. If Human Remains are **NOT** Native American**

1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

**4.4.3.5 Night and/or Weekend Work**

**A. If night and/or weekend work is included in the contract**

1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Pre-maintenance meeting.
2. The following procedures shall be followed.
  - a. No Discoveries  
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day.

- b. Discoveries  
All discoveries shall be processed and documented using the existing procedures detailed in Sections 4.4.3.3 - During Maintenance, and 4.4.3.4 – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
  - c. Potentially Significant Discoveries  
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Sections 4.4.3.3 During Maintenance and 4.4.3.4- Discovery of Human Remains shall be followed.
  - d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section 4.4.3.3- B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of maintenance
- 1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
  - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

#### **4.4.3.6 Post Maintenance**

- A. Submittal of Draft Monitoring Report
- 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**
    - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
    - b. Recording Sites with State of California Department of Parks and Recreation  
The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
  - 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.

3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
  4. MMC shall provide written verification to the PI of the approved report.
  5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
  2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
  2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section 4.4.3.4 – Discovery of Human Remains, Subsection C.
  3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
  4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
  5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
  2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

## **LAND USE**

Potential impacts to land use policies in the City's General Plan would be reduced to below a level of significance through implementation of the following mitigation measures.

***Mitigation Measure 4.1.1:*** Prior to commencing maintenance on any storm water facility within, or immediately adjacent to, a Multi-Habitat Planning Area (MHPA), the ADD

Environmental Designee shall verify that all MHPA boundaries and limits of work have been delineated on all maintenance documents.

**Mitigation Measure 4.1.2:** A qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) shall survey those habitat areas inside and outside the MHPA suspected to serve as habitat (based on historical records or site conditions) for the coastal California gnatcatcher, least Bell's vireo and/or other listed species. Surveys for the appropriate species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service. When other sensitive species, including, but not limited to, the arroyo toad, burrowing owl, or Quino checkerspot butterfly are known or suspected to be present all appropriate protocol surveys and mitigation measures identified in Subchapter 4.3, Biological Resources, required shall be implemented.

**Mitigation Measure 4.1.3:** If a listed species is located within 500 feet of a proposed maintenance activity and maintenance would occur during the associated breeding season, an analysis of the noise generated by maintenance activities shall be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the ADD Environmental Designee. The analysis shall identify the location of the 60 dB(A)  $L_{eq}$  noise contour on the maintenance plan. The report shall also identify measures to be undertaken during maintenance to reduce noise levels.

**Mitigation Measure 4.1.4:** Based on the location of the 60 dB(A)  $L_{eq}$  noise contour and the results of the protocol surveys, the Project Biologist shall determine if maintenance has the potential to impact breeding activities of listed species. If one or more of the following species are determined to be significantly impacted by maintenance, then maintenance (inside and outside the MHPA) shall avoid the following breeding seasons unless it is determined that maintenance is needed to protect life or property.

- Coastal California gnatcatcher (between March 1 and August 15 inside the MHPA only; no restrictions outside MHPA);
- Least Bell's vireo (between March 15 and September 15); and
- Southwestern willow flycatcher (between May 1 and September 1).

**Mitigation Measure 4.1.5:** If maintenance is required during the breeding season for a listed bird to protect life or property, then the following conditions must be met:

- At least two weeks prior to the commencement of maintenance activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from maintenance activities shall not exceed 60 dB(A) hourly average at the edge of occupied habitat. Concurrent with the commencement of maintenance activities and the maintenance of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the

noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated maintenance activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season of the subject species, as noted above.

- Maintenance noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the maintenance activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of maintenance equipment and the simultaneous use of equipment.
- Prior to the commencement of maintenance activities that would disturb sensitive resources during the breeding season, the biologist shall ensure that all fencing, staking and flagging identified as necessary on the ground have been installed properly in the areas restricted from such activities.
- If noise attenuation walls or other devices are required to assure protection to identified wildlife, then the biologist shall make sure such devices have been properly constructed, located and installed.

**Mitigation Measure 4.1.6:** A pre-maintenance meeting shall be held with the Maintenance Contractor, City representative and the Project Biologist. The Project Biologist shall discuss the sensitive nature of the adjacent habitat with the crew and subcontractor. Prior to the pre-maintenance meeting, the following shall be completed:

- The Storm Water Division (SWD) shall provide a letter of verification to the Mitigation Monitoring Coordination Section stating that a qualified biologist, as defined in the City of San Diego Biological Resources Guidelines, has been retained to implement the projects MSCP monitoring Program. The letter shall include the names and contact information of all persons involved in the Biological Monitoring of the project. At least thirty days prior to the pre-maintenance meeting, the qualified biologist shall submit all required documentation to MMC, verifying that any special reports, maps, plans and time lines, such as but not limited to, revegetation plans, plant relocation requirements and timing, MSCP requirements, avian or other wildlife protocol surveys, impact avoidance areas or other such information has been completed and updated.
- The limits of work shall be clearly delineated. The limits of work, as shown on the approved maintenance plan, shall be defined with orange maintenance fencing and checked by the biological monitor before initiation of maintenance. All native plants or species of special concern, as identified in the biological assessment, shall be staked, flagged and avoided within Brush Management Zone 2, if applicable.

**Mitigation Measure 4.1.7:** Maintenance plans shall be designed to accomplish the following.

- Invasive non-native plant species shall not be introduced into areas adjacent to the MHPA. Landscape plans shall contain non-invasive native species adjacent to sensitive biological areas, as shown on the approved maintenance plan.
- All lighting adjacent to, or within, the MHPA shall be shielded, unidirectional, low pressure sodium illumination (or similar) and directed away from sensitive areas using appropriate placement and shields. If lighting is required for nighttime maintenance, it shall be directed away from the preserve and the tops of adjacent trees with potentially nesting raptors, using appropriate placement and shielding.
- All maintenance activities (including staging areas and/or storage areas) shall be restricted to the disturbance areas shown on the approved maintenance plan. The project biologist shall monitor maintenance activities, as needed, to ensure that maintenance activities do not encroach into biologically sensitive areas beyond the limits of work as shown on the approved maintenance plan.
- No trash, oil, parking or other maintenance-related activities shall be allowed outside the established maintenance areas including staging areas and/or storage areas, as shown on the approved maintenance plan. All maintenance related debris shall be removed off-site to an approved disposal facility.
- Access roads through MHPA-designated areas shall comply with the applicable policies contained in the “Roads and Utilities Construction and Maintenance Policies” identified in Section 1.4.2 of the City’s Subarea Plan.

**Mitigation Measure 4.1.8:** Prior to commencing any maintenance in, or within 500 feet of any area determined to support coastal California gnatcatchers, the ADD Environmental Designee shall verify that the MHPA boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the maintenance plans:

NO MAINTENANCE ACTIVITIES SHALL OCCUR BETWEEN MARCH 1 AND AUGUST 15, THE BREEDING SEASON OF THE COASTAL CALIFORNIA GNATCATCHER, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE ADD ENVIRONMENTAL DESIGNEE:

- a. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE HABITAT AREAS WITHIN THE MHPA THAT WOULD BE SUBJECT TO MAINTENANCE NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE COASTAL CALIFORNIA GNATCATCHER. SURVEYS FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING

SEASON PRIOR TO THE COMMENCEMENT OF ANY MAINTENANCE. IF GNATCATCHERS ARE PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

1. BETWEEN MARCH 1 AND AUGUST 15, MAINTENANCE OF OCCUPIED GNATCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND
2. BETWEEN MARCH 1 AND AUGUST 15, NO MAINTENANCE ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE MAINTENANCE ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED GNATCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY MAINTENANCE ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES. PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR
3. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM MAINTENANCE ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE COASTAL CALIFORNIA GNATCATCHER. CONCURRENT WITH THE COMMENCEMENT OF MAINTENANCE ACTIVITIES AND THE MAINTENANCE OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING\* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED MAINTENANCE ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE



ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (AUGUST 16).

\* Maintenance noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the maintenance activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD environmental designee, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of maintenance equipment and the simultaneous use of equipment.

b. IF COASTAL CALIFORNIA GNATCATCHERS ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 1 AND AUGUST 15 AS FOLLOWS:

1. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR COASTAL CALIFORNIA GNATCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
2. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

### **PALEONTOLOGICAL RESOURCES**

Potential impacts to paleontological resources would be reduced to below a level of significance through implementation of the following mitigation measures.

***Mitigation Measure 4.7.1:*** Prior to initiating any maintenance activity where significant paleontological resources may occur within the APE, the following actions shall be taken.

#### ***4.7.1.1 Prior to Permit Issuance or Bid Opening/Bid Award***

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the

requirements for Paleontological Monitoring have been noted on the appropriate maintenance documents.

- B. Letters of Qualification have been submitted to ADD
  - 1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.
  - 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
  - 3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

#### ***4.7.1.2 Prior to Start of Maintenance***

- A. Verification of Records Search
  - 1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
  - 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
- B. PI Shall Attend Pre-maintenance Meetings
  - 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Pre-maintenance Meeting that shall include the PI, Maintenance Manager (MM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Pre-maintenance Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Maintenance Manager and/or Grading Contractor.
    - a. If the PI is unable to attend the Pre-maintenance Meeting, the Applicant shall schedule a focused Pre-maintenance Meeting with MMC, the PI, RE, MM or BI, if appropriate, prior to the start of any work that requires monitoring.
  - 2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)  
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
  - 3. Identify Areas to be Monitored
    - a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate maintenance documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or

- as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
- b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
  - c. MMC shall notify the PI that the PME has been approved.
4. When Monitoring Will Occur
- a. Prior to the start of any work, the PI shall also submit a maintenance schedule to MMC through the RE indicating when and where monitoring will occur.
  - b. The PI may submit a detailed letter to MMC prior to the start of work or during maintenance requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final maintenance documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.
5. Approval of PME and Maintenance Schedule
- After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Maintenance Schedule from the MM.

#### **4.7.1.3 During Maintenance**

- A. Monitor Shall be Present During Grading/Excavation/Trenching
1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Maintenance Manager is responsible for notifying the RE, PI, and MMC of changes to any maintenance activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**
  2. The PI may submit a detailed letter to MMC during maintenance requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
  3. The monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the MM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.

2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

C. Determination of Significance

1. The PI shall evaluate the significance of the resource.
  - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
  - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or MM before ground disturbing activities in the area of discovery will be allowed to resume.
    - (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
  - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
  - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
    - (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
    - (2). Note, for Pipeline Trenching Projects Only: If significance cannot be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching Projects

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.

1. Procedures for documentation, curation and reporting
  - a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with

Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.

- b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section 4.7.1.1-A.
- c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
- d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

#### **4.7.1.4 Night and/or Weekend Work**

- A. If night and/or weekend work is included in the contract
  1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Pre-maintenance meeting.
  2. The following procedures shall be followed.
    - a. No Discoveries  
In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSV and submit to MMC via the RE via fax by 8AM on the next business day.
    - b. Discoveries  
All discoveries shall be processed and documented using the existing procedures detailed in Section 4.7.1.3 - During Maintenance.
    - c. Potentially Significant Discoveries  
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section 4.7.1.3 - During Maintenance shall be followed.
    - d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section 4.7.1.3-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of maintenance
  1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
  2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

#### 4.7.1.5 Post Maintenance

- A. Preparation and Submittal of Draft Monitoring Report
  - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring,
    - a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
    - b. Recording Sites with the San Diego Natural History Museum  
The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
  - 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
  - 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
  - 4. MMC shall provide written verification to the PI of the approved report.
  - 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
  
- B. Handling of Fossil Remains
  - 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
  
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
  - 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
  - 2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
  - 3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.
  - 4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
  
- D. Final Monitoring Report(s)
  - 1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
  - 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

**WATER QUALITY**

Potential impacts to water quality would be reduced to below a level of significance through implementation of the following mitigation measures.

**Mitigation Measure 4.8.1:** Prior to commencement of any activity within a specific annual maintenance program, a qualified water quality specialist shall prepare an IWQA for each area proposed to be maintained. The IWQA shall be prepared in accordance with the specifications included in the Master Program. If the IWQA indicates that maintenance would impact a water pollutant where the existing level for that pollutant exceeds or is within 25 percent of the standard established by the San Diego Basin Plan, mitigation measures identified in Table 4.8-8 shall be incorporated into the IMP to reduce the impact to within the established standard for that pollutant.

<b>Mitigation Measure</b>	<b>Pollutant Type</b>						
	<b>Bacteria</b>	<b>Metals</b>	<b>Nutrients</b>	<b>Pesticides</b>	<b>Sediment</b>	<b>TDS/ Chloride Sulfates</b>	<b>Trash</b>
Remove kelp on beaches					●	●	
Sweep streets	●	●	●	●	●	●	●
Retrofit residential landscaping to reduce runoff	●	●	●		●		
Install artificial turf	●	●	●	●	●		●
Install inlet devices on storm drains		●	●		●		
Replace impermeable surfaces with permeable surfaces		●	●		●		●
Install modular storm water filtration systems		●	●	●	●	●	●

<b>Table 4.8-8 (cont.) MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY</b>							
<b>Mitigation Measure</b>	<b>Pollutant Type</b>						
	<b>Bacteria</b>	<b>Metals</b>	<b>Nutrients</b>	<b>Pesticides</b>	<b>Sediment</b>	<b>TDS/ Chloride Sulfates</b>	<b>Trash</b>
Install storm water retention basins		●	●	●	●	●	●
Install catch basin media filters		●	●		●	●	●
Create vegetated swales	●	●	●	●	●	●	●
Restore wetlands	●	●	●	●	●	●	●
Install check dams		●			●		●

**Mitigation Measure 4.8.2:** No maintenance activities within a proposed annual maintenance program shall be initiated before the City’s ADD Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IWQAs including proposed mitigation and BMPs for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall also confirm that the appropriate maintenance protocols have been incorporated into each IMP.

**Mitigation Measure 4.8.3:** Prior to commencing any activity where the IWQA indicates significant water quality impacts may occur, a pre-maintenance meeting shall be held on site with following in attendance: City’s SWD, MM, MMC, and MC. A qualified water quality specialist shall also be present. At this meeting, the water quality specialist shall identify and discuss mitigation measures, protocols and BMPs identified in the IWQA that must be carried out during maintenance. After the meeting, the water quality specialist shall provide DSD with a letter indicating that the applicable mitigation measures, protocols and BMPs identified in the IWQA have been appropriately implemented.



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Appendix D

INDIVIDUAL BIOLOGICAL ASSESSMENT  
REPORT FORM





**Are there any conservation easements which have been previously recorded within the maintenance area?**

Yes  No

If yes, describe them and their purpose:

**Jurisdictional Areas:**

**U.S. Army Corps of Engineers**

**Wetland Waters of the U.S. (WUS):**

**Non-wetland WUS:**

**California Department of Fish and Game/City of San Diego:**

**Wetlands:**

**Streambed/Unvegetated Waters:**

Attach documentation supporting the determination of jurisdictional areas.

**Sensitive\* Plant Species Observed:**

Yes  No

If yes, what species were observed and where? If yes, complete a California Native Species Field Survey Form and submit it to the California Natural Diversity Database.

\* Sensitive species shall include those listed by state or federal agencies as well as species that could be considered sensitive under Sections 15380(b) and (c) and 15126(c) of the CEQA Guidelines.

**Sensitive\* Animal Species Observed/Detected:**

Yes  No

If yes, what species were observed/detected and where? If yes, complete a California Native Species Field Survey Form and submit it to the California Natural Diversity Database.

\* Sensitive species shall include those listed by state or federal agencies as well as species that could be considered sensitive under Sections 15380(b) and (c) and 15126(c) of the CEQA Guidelines.

**Is any portion of the maintenance activity within an MHPA?** Yes  No

If yes, describe which portions are within an MHPA:

**Is there moderate or high potential for listed animal species to occur in or adjacent to the impact area?**

Yes  No

If yes, which species (check all that apply) and describe any surveys which should be undertaken to determine whether those species could occur within the maintenance area:

- |   |  |
|---|--|
| <input type="checkbox"/> Least Bell's vireo             | <input type="checkbox"/> Riverside fairy shrimp    |
| <input type="checkbox"/> Southwester willow flycatcher  | <input type="checkbox"/> California least tern     |
| <input type="checkbox"/> Arroyo toad                    | <input type="checkbox"/> Light-footed clapper rail |
| <input type="checkbox"/> Coastal California gnatcatcher | <input type="checkbox"/> Western snowy plover      |
| <input type="checkbox"/> San Diego fairy shrimp         | <input type="checkbox"/> Other: _____              |

Attach documentation supporting the determination of the presence or absence of listed animal species with a moderate or high potential to occur (e.g. California Natural Diversity Database records searches).

.

**Is there moderate or high potential for a listed plant species to occur in or adjacent to the impact area?**

Yes  No

If yes, identify which species may occur and describe any surveys which should be undertaken to determine whether those species could occur within the maintenance area:

Attach documentation supporting the determination of the presence or absence of listed animal species with a moderate or high potential to occur (e.g. California Natural Diversity Database records searches).

**Could maintenance disrupt the integrity of an important habitat (i.e., disruption of a wildlife corridor and/or an extensive riparian woodland):** Yes  No

If yes, discuss which habitat could be impacted and how:

**Could work be conducted during the avian breeding season (January 15 – August 31) without the need for pre-construction nesting surveys:** Yes  No

If yes, provide justification:

**Is it anticipated that maintenance activities would generate noise in excess of 60 dB(A)  $L_{eq,2h}$ ?**

Yes  No

If yes, what measures should be taken to avoid adverse impacts on avian bird breeding within or adjacent to the maintenance?

**Biological Resource Conditions Relative to Original Survey Conducted for MASTER PROGRAM Final Program EIR (May 2010) (vegetation communities present, including adjacent uplands; general habitat quality/level of disturbance):**

**MAINTENANCE IMPACTS**

**Maintenance Methodology (based on IMP)**

**Vegetation Impacts:**

**Wetland**

**Upland**

**Jurisdictional Impacts:**

**U.S. Army Corps of Engineers**

**Wetland Waters of the U.S. (WUS):**

**Non-wetland WUS:**

**California Department of Fish and Game/City of San Diego:**

**Wetlands:**

**Streambed/Unvegetated Waters:**

**Is there a moderate or high potential for maintenance to impact an MHPA? Yes  No**

If yes, discuss the potential impacts that could occur from the portion within or adjacent to that MHPA.

**Is there moderate or high potential for listed animal species to be impacted? Yes  No**

If yes, which species (check all that apply):

- |   |  |
|---|--|
| <input type="checkbox"/> Least Bell's vireo             | <input type="checkbox"/> Riverside fairy shrimp    |
| <input type="checkbox"/> Southwester willow flycatcher  | <input type="checkbox"/> California least tern     |
| <input type="checkbox"/> Arroyo toad                    | <input type="checkbox"/> Light-footed clapper rail |
| <input type="checkbox"/> Coastal California gnatcatcher | <input type="checkbox"/> Western snowy plover      |
| <input type="checkbox"/> San Diego fairy shrimp         | <input type="checkbox"/> Other: _____              |

<b>MITIGATION</b>
<b>Applicable Maintenance Protocols (list the applicable maintenance protocols based on the biological resources occurring or likely to occur on site --include any special protocols required):</b>
<b>Applicable PEIR mitigation measures:</b>
<b><u>Other mitigation measures:</u></b>
<b>Environmental Mitigation Requirements (including wetland enhancement, restoration, creation, and/or purchase of wetland credits in a mitigation bank; off-site upland habitat acquisition/payment into the City's habitat acquisition fund):</b>
<b>Corps Jurisdictional Areas:</b>
<b>CDFG Jurisdictional Areas/City Wetlands</b>
<b>Mitigation Description/Location:</b>
<b>ADDITIONAL COMMENTS OR RECOMMENDATIONS</b>

**SITE PHOTOS**

---

<b>PHOTO NOTES:</b>	<b>PHOTO NOTES:</b>

<b>PHOTO NOTES:</b>	<b>PHOTO NOTES:</b>





Appendix E

INDIVIDUAL HISTORICAL ASSESSMENT  
REPORT FORM



## INDIVIDUAL HISTORICAL ASSESSMENT REPORT

**Site Name/Facility:** \_\_\_\_\_

**Master Program Map No.:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Archaeologist Name:** \_\_\_\_\_

**Native American Monitor Name:** \_\_\_\_\_

**Instructions:** This form must be completed for each target facility identified in the Annual Maintenance Needs Assessment report and prior to any work on site. Attach additional sheets as needed.

<b>EXISTING CONDITIONS</b>
----------------------------

<b>Site Conditions:</b>
-------------------------

<b>Survey Methods and Date:</b>
---------------------------------

<b>Record Search Results:</b>
-------------------------------

**Are any Native American Tribes expected to be concerned about the proposed maintenance? :**

Yes  No

If yes, indentify the tribe and their potential concerns?

**Archaeological Survey Results:**

**MAINTENANCE IMPACTS**

**Is there a moderate or high potential for archaeological resources to occur in or adjacent to the impact area:** Yes  No

**MITIGATION**

**Environmental Mitigation Requirements:**

**What, if any, PEIR mitigation measures are applicable?**

**What, if any, other measures are required?**

**ADDITIONAL COMMENTS OR RECOMMENDATIONS**



Appendix F

INDIVIDUAL HYDROLOGIC AND  
HYDRAULIC ASSESSMENT REPORT FORM



# INDIVIDUAL HYDROLOGIC & HYDRAULIC ASSESSMENT (IHHA) REPORT

**Site Name/Facility:** \_\_\_\_\_

**Master Program Map No.:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Civil Engineer** (name, company,  
phone number): \_\_\_\_\_

**Register Civil Engineer Number  
& Expiration Date** (place stamp  
here): \_\_\_\_\_

• **Instructions:** This form must be completed for each target facility following the completion of the Individual Maintenance Plan (IMP) report form and prior to any work being conducted in the facility. Attach additional sheets if needed.

EXISTING CONDITIONS
<p><b>Description of creek/channel (limits of reach, surrounding land use and area, creek/channel geometry and vegetative condition):</b></p> <p>Note: See attached pictures</p>
<p><b>Hydrologic information (source of hydrologic information, summary of flow rates and return frequencies):</b></p>
<p><b>Hydraulic analyses (description of hydraulic models created for project):</b></p>
<p>Current Vegetated Condition:</p> <p>Note: Attach Model Output &amp; Workmap</p>
<p>Ultimate Vegetated Condition:</p> <p>Note: Attach Model Output &amp; Workmap</p>
<p>Maintained Condition - No sediment removed:</p> <p>Note: Attach Model Output &amp; Workmap</p>

Maintained Condition - Sediment removed (if applicable):

Note: Attach Model Output & Workmap

**MAINTENANCE IMPACTS**

**Hydraulics Results (Describe capacity of channel for each condition):**

Note: Reference Profile

Ultimate Vegetated Condition:

Note: Reference Profile

Maintained Condition - No sediment removed:

Note: Reference Profile

Maintained Condition - Sediment removed (if applicable):

Note: Reference Profile

**Areas within channel that can be avoided (this section can be completed upon completion of Individual Biological Assessment Form):**

**Would the velocity of storm water during a “bank-full” storm event exceed the velocities identified for unlined channels per Table 1-104.108 of the City’s Design Manual? If so, describe the appropriate form of erosion control (e.g., check dam or comparable mechanism). Is a downstream check dam or comparably mechanism required?**

**MITIGATION**

**Conclusion/Recommendations (Describe the limits of recommended maintenance, degree to which native vegetation within the facility can be retained, and capacity of maintained channel):**

**ADDITIONAL COMMENTS OR RECOMMENDATIONS**

--

**LIST OF ATTACHMENTS (Check All That Apply):**

---

- Site Photos
- Hydraulic Profiles for Current Vegetated Condition Model
- Hydraulic Profiles for Ultimate Vegetated Condition Model
- Hydraulic Profiles for Maintained Condition Model (No Sediment Removed)
- Hydraulic Profiles for Maintained Condition Model (Sediment Removed)
- Hydraulic Workmap
- Detailed Hydraulic Results for Current Vegetated Condition Model
- Detailed Hydraulic Results for Ultimate Vegetated Condition Model
- Detailed Hydraulic Results for Maintained Condition Model (No Sediment Removed)
- Detailed Hydraulic Results for Maintained Condition Model (Sediment Removed)



**SITE PHOTOS:**

Date of Site Visit:

See Hydraulic Workmap for picture locations and orientation.

1.	2.
----	----

3.	4.
----	----

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SITE PHOTOS:**

Date of Site Visit:

See Hydraulic Workmap for picture locations and orientation.

5.	6.
----	----

7a.	7b.
-----	-----

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

**SITE PHOTOS:**

Date of Site Visit:

See Hydraulic Workmap for picture locations and orientation.

8.	9.
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10.	
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Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





HYDRAULIC PROFILE FOR  
MAINTAINED CONDITION MODEL (NO SEDIMENT REMOVED)

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HYDRAULIC PROFILE FOR  
MAINTAINED CONDITION MODEL (SEDIMENT REMOVED)

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DETAILED HYDRAULIC RESULTS FOR  
CURRENT VEGETATED CONDITION MODEL

---

DETAILED HYDRAULIC RESULTS FOR  
ULTIMATE VEGETATED CONDITION MODEL

---

DETAILED HYDRAULIC RESULTS FOR  
MAINTAINED CONDITION MODEL (NO SEDIMENT REMOVED)

---

DETAILED HYDRAULIC RESULTS FOR  
MAINTAINED CONDITION MODEL (SEDIMENT REMOVED)

---



Appendix G

INDIVIDUAL WATER QUALITY ASSESSMENT  
FORM



## INDIVIDUAL WATER QUALITY ASSESSMENT REPORT

**Site Name/Facility:** \_\_\_\_\_

**Master Program Map No.:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Civil Engineer** (name, company, phone number): \_\_\_\_\_

**Register Civil Engineer Number & Expiration Date** (place stamp here): \_\_\_\_\_

**Instructions:** This form must be completed for each facility prior to the completion of the Individual Maintenance Plan and prior to any work being conducted in the facility. Attach additional sheets if needed.

<b>EXISTING CONDITIONS</b>
<p><b>Description of creek/channel geometry (length, width, and depth):</b></p>  
<p><b>Description of Sediment Sampling Activities (location(s), depth, shipment/deliverer to laboratory(s)):</b></p>  <p><small>Note: Attach Chain of Custody Sheet(s), Table of Chemical Analysis Results, and Laboratory Sieve Analysis Results</small></p>
<p><b>Description of Flow Measurement Activities (location(s) and equipment):</b></p>  <p><small>Note: Attach Field Notes and Model Calculation Worksheets</small></p>
<p><b>Description of Volume Measurement Activities (interval, total number, equipment):</b></p>  <p><small>Note: Attach Field Notes and Model Calculation Worksheets</small></p>
<p><b>Description of Water Quality Sampling Activities (location(s), shipment/delivery to laboratory(s) ):</b></p>  <p><small>Note: Attach Chain of Custody Sheet(s) and Table of Chemical Analysis Results</small></p>
<p><b>Description of Wetland Assessment (Existing) Activities (personnel, general conditions):</b></p>  <p><small>Note: Attach Field Notes and Scoring Sheet(s)</small></p>

**Description of Wetland Assessment (Recovery) Activities (personnel, general conditions):**

Note: Attach Field Notes and Scoring Sheet(s)

**Sediment Pollutant Loading Estimates:**

Note: Attach Estimate of Gravel and Cobble Calculations and Sediment Pollutant Loading Calculations

**MAINTENANCE IMPACTS**

**Evaluation of Benefits / Impacts:**

**Are there constituents that have potential impacts greater than benefits?**

Yes  No

**If so, identify constituents here and compare measured concentrations to thresholds.**

Note: Attach Model Calculation Worksheet showing all constituents.

**MITIGATION**

**If impacts are identified, list potential mitigation efforts (e.g., BMPs type(s) and number(s)) that may be implemented in the watershed:**

Note: Attach Model Calculation Worksheet.

**ADDITIONAL COMMENTS OR RECOMMENDATIONS**

**LIST OF ATTACHMENTS (Check All That Apply):**

---

- Site Photos
- Chain of Custody Sheet(s) for Sediment Sampling
- Analytical Results of Sediment Sample(s)
- Chain of Custody Sheet(s) for Water Column Sampling
- Analytical Results of Water Column Sample(s)
- Flow Measurement Model
- Volume Measurement Model (Existing Condition)
- Wetland Land Assessment Scoring Sheet (Existing Condition)
- Wetland Land Recovery Assessment Scoring Sheet (Maintained Storm water facility)
- Sieve Analysis Laboratory Results
- Sediment Pollutant Loading Model (Load Removal in Sediment)
- Potential Water Quality Impacts Model and Comparison to Benefits
- Potential Mitigation Efforts Model



## SITE PHOTOS

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Date of Site Visit:

See notes below for picture locations and orientation.

1.	2.
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3.	4.
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Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

## SITE PHOTOS

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Date of Site Visit:

See notes below for picture locations and orientation.

5.	6.
----	----

7.	8.
----	----

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## SITE PHOTOS

---

Date of Site Visit:

See notes below for picture locations and orientation.

5.	6.
----	----

7.	8.
----	----

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**CHAIN OF CUSTODY SHEET(S) FOR SEDIMENT SAMPLING CONDITION**

**ANALYTICAL RESULTS OF SEDIMENT SAMPLE(S)**

---

**CHAIN OF CUSTODY SHEET(S) FOR WATER COLUMN SAMPLING**

**ANALYTICAL RESULTS OF WATER COLUMN SAMPLE(S)**

---

## **FLOW MEASUREMENT MODEL**



## **VOLUME MEASUREMENT MODEL (EXISTING CONDITION)**

**WETLAND LAND ASSESSMENT SCORING SHEET (EXISTING CONDITION)**

**WETLAND LAND RECOVERY ASSESSMENT SCORING SHEET (MAINTAINED  
STORM WATER FACILITY)**

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## **SIEVE ANALYSIS LABORATORY RESULTS**

---

## **SEDIMENT POLLUTANT LOADING MODEL (LOAD REMOVAL IN SEDIMENT)**

**POTENTIAL WATER QUALITY IMPACTS MODEL AND COMPARISON  
TO BENEFITS**

---

## **POTENTIAL MITIGATION EFFORTS MODEL**



Appendix H

INDIVIDUAL NOISE ASSESSMENT REPORT  
FORM





## INDIVIDUAL NOISE ASSESSMENT REPORT

**Site Name/Facility:** \_\_\_\_\_

**Master Program Map No.:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Acoustician Name:** \_\_\_\_\_

**Instructions:** This form must be completed in its entirety for each target facility identified in the Annual Maintenance Needs Assessment report when the potential exists for sensitive wildlife to occur within 750 feet of a proposed maintenance activity. If no sensitive species are expected within 750 feet of maintenance, only the first two rows under the Existing Conditions section must be completed. Attach additional sheets as needed.

EXISTING CONDITIONS
<b>Survey Methods and Date:</b>  
<b>Are there sensitive wildlife species within 750 feet of proposed maintenance?</b> Yes <input type="checkbox"/> No <input type="checkbox"/> If not, no further assessment of noise impacts from maintenance is required. If yes, the rest of this form must be completed.
<b>Sensitive Wildlife Observed/Detected:</b> Describe sensitive wildlife anticipated to occur within 750 feet of maintenance that were observed and the closest distance to proposed maintenance.  
MAINTENANCE IMPACTS
<b>List the equipment to be used during maintenance and anticipated noise levels associated with each. Calculate the combined maximum hourly noise level associated with simultaneous operation of equipment during maintenance. Estimate the distance to the 60 dBA Leq including existing ambient noise sources affecting the maintenance area.</b>  

**Would sensitive wildlife receptors be affected by maintenance noise in excess of 60 dBA Leq?**

Yes  No

If yes, identify the wildlife species and discuss their sensitivity to maintenance noise.

**MITIGATION**

**What mitigation measures would be required to avoid adverse impacts to sensitive wildlife (e.g. barriers or limitations on hours of operation)?**

**ADDITIONAL COMMENTS OR RECOMMENDATIONS**



Appendix I

INDIVIDUAL MAINTENANCE ACTIVITY  
REPORT FORM



# INDIVIDUAL MAINTENANCE ACTIVITY REPORT

**Site Name/Facility:** \_\_\_\_\_  
**Master Program**  
**Map No:** \_\_\_\_\_  
**Dates:** START \_\_\_\_\_ COMPLETION \_\_\_\_\_ REPORT \_\_\_\_\_  
**Preparer Name:** \_\_\_\_\_

**Instructions:** This form must be completed following any work done at a storm water facility. Attach additional sheets if needed.

<b>Description of Work (e.g., routine, re-occurring; also note general frequency maintenance at this site):</b>  	
<b>Street Name:</b> _____ <b>Latitude:</b> _____ <b>Longitude:</b> _____	<b>Work Orientation from Street (N, S, E, W):</b> <b>Location Between Street _____ and Street _____</b>
<b>Maintenance Facility Type:</b> <input type="checkbox"/> Stream <input type="checkbox"/> Roadside Ditch <input type="checkbox"/> Spillway <input type="checkbox"/> Culvert <input type="checkbox"/> Detention Basin <input type="checkbox"/> Other: _____	<b>Additional Description:</b>  
<b>Work within drainage/creek:</b> Length: _____ (How many linear feet were cleared)	<b>Name of drainage/creek:</b> <b>Width (FT):</b> _____ <b>Area (SQ FT):</b> _____ <b>Depth (FT):</b> _____
<b>Is the creek lined:</b> Yes <input type="checkbox"/> No <input type="checkbox"/>  <b>Notes:</b>  	<b>Lining Type:</b> <input type="checkbox"/> Concrete lined both sides, bottom <input type="checkbox"/> Earthen, both sides, bottom <input type="checkbox"/> Riprap sides, earth bottom <input type="checkbox"/> Concrete sides, earth bottom <input type="checkbox"/> Other type: _____
<b>Silt/Sand Removal:</b> Length: _____ (How many linear feet were cleared of silt/sand)	<b>Describe cause of silt/sand:</b>  
<b>Debris Removal:</b> Length: _____ (How many linear feet were cleared of debris)	<b>Describe debris and cause:</b>  
<b>Were any toxic materials found:</b> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>List toxics:</b>  <b>Hazardous Material Manifest:</b> _____	<b>Were more than 9 tires recovered?</b> Yes <input type="checkbox"/> No <input type="checkbox"/>  <b>CTL Number:</b> _____
<b>Access via previously disturbed area:</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	<b>Access route:</b>  <b>Maintenance Equipment Used:</b>  
<b>Vegetation Removal:</b> Length: _____ (How many linear feet were cleared of vegetation)	<b>Types of Vegetation Removed:</b>  (Indicate bush, trees, plants, grasses, list diameter of trunk at 4' height)

<b>Ground Disturbing Activities:</b> Length: _____ (How many linear feet were disturbed by activity)	<b>Upland Vegetation Removed - Types &amp; Area:</b>
<b>Were erosion controls necessary?</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	<b>Describe interim erosion control measures:</b>
<b>Did work occur within nesting breeding season (January 15 – August 31)?</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	<b>Biologist/Monitor/Archaeologist present:</b> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Names:</b> _____
<b>Was any water quality sampling required?</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	
<b>Additional Maintenance Description:</b>   	
<b>Describe surrounding land use within work area (assume 500-foot buffer area):</b>   	
<b>Identify temporary/permanent impacts to habitat by area (acres/square footage) as determined by Biologist:</b>   	
<b>Additional Comments (Describe any unusual conditions, situations or special requirements needed to do the work such as diversion of water, construction of staging area, replacement of bank material, presence of utilities, etc.):</b>   <p style="text-align: center;"><b>LIST QUANTITIES REMOVED</b></p>	

## SITE PHOTOS

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<p style="text-align: center;">Attach 1st of 2 pictures <b>BEFORE</b> work, include upstream and downstream views.</p> <p><b>Note:</b> if resources at site are flagged or staked to limit impacts to sensitive areas, also include pictures showing the measures that were installed.</p>	<p style="text-align: center;">Attach 2nd of 2 pictures <b>BEFORE</b> work, include upstream and downstream views.</p>
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**PHOTO NOTES:**

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<p style="text-align: center;">Attach 1st of 2 pictures <b>AFTER</b> work, include upstream and downstream views.</p>	<p style="text-align: center;">Attach 2nd of 2 pictures <b>AFTER</b> work, include upstream and downstream views.</p>
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**PHOTO NOTES:**

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Appendix J

SUBSTANTIAL CONFORMANCE REVIEW  
CHECKLIST



**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST**

**MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

**Purpose:** This Substantial Conformance Review (SCR) Checklist is intended to be used by Development Services Department Staff as an aid in reviewing storm water system maintenance projects for consistency with the ~~Master~~ Site Development Permit (SDP) and Coastal Development Permit (CDP) based on conformance with the Mitigation, Monitoring and Reporting Program (MMRP); the Maintenance Protocols contained in the Master Program; and the ~~Master Site Development Permit~~ SDP and CDP Conditions. It will also assist in the determination as to whether the maintenance activity should be approved through Process One or Process Two.

**Date:** \_\_\_\_\_

**Name of Preparer:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**ACTIVITY INFORMATION**

**Master Program Map #s):** \_\_\_\_\_

**City Equipment #s):** \_\_\_\_\_

**Creek Name:** \_\_\_\_\_

**Watershed(s):** \_\_\_\_\_

**Location:** \_\_\_\_\_

**DOCUMENTS INCLUDED IN ~~CONSISTENCY DETERMINATION~~ SCR PACKAGE**

Included	NA	Document
<input type="checkbox"/>	<input type="checkbox"/>	Individual Maintenance Plan (IMP)
<input type="checkbox"/>	<input type="checkbox"/>	Individual Biological Assessment (IBA)
<input type="checkbox"/>	<input type="checkbox"/>	Individual Historical Assessment (IHA)
<input type="checkbox"/>	<input type="checkbox"/>	Individual Hydrologic and Hydraulic Assessment (IHHA)
<input type="checkbox"/>	<input type="checkbox"/>	Individual Water Quality Assessment (IWQA)
<input type="checkbox"/>	<input type="checkbox"/>	Individual Noise Assessment (INA)
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	



**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

<b>No.</b>	<b>Measure/Criteria</b>	<b>Y/N/NA</b>	<b>Basis for Determination (attach separate sheet(s) as necessary)</b>
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>General Mitigation</b>			
1	Have mitigation measures for impacts to biological resources, historical resources, land use, and paleontological resources, as appropriate, been included in entirety on the submitted maintenance documents and contract specifications, under the heading, "Environmental Mitigation Requirements"? (General Mitigation Measure 1)		
2	Is a Pre-maintenance Meeting required, including, as appropriate, the Mitigation Monitoring Coordinator (MMC), Storm Water Division (SWD) Project Manager, Biological Monitor, Historical Monitor, Paleontological Monitor, and Maintenance Contractor (MC), and other parties of interest? (General Mitigation Measure 2)		
3	Is there documented evidence of compliance with other permitting authorities (e.g., copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the Assistant Deputy Director [ADD] Environmental Designee), as applicable? (General Mitigation Measure 3)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>General Mitigation (cont.)</b>			
4	Is there documented evidence of compliance with Section 1602 of the State of California Fish & Game Code (e.g., copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee), as applicable? (General Mitigation Measure 4)		
<b>Biological Resources</b>			
5	Has a qualified biologist prepared an IBA for each area proposed to be maintained in accordance with the specifications included in the Master Program? (Mitigation Measure 4.3.1)		
6	Have the IMPs and IBAs for maintenance activities within a proposed annual maintenance program been approved by the City's Assistant Deputy Director (ADD) Environmental Designee and state and federal agencies with jurisdiction over maintenance activities? (Mitigation Measure 4.3.2)		
7	Has an IBA been prepared by a qualified biologist for each proposed maintenance activity, including the required contents? (Mitigation Measure 4.3.3)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Biological Resources (cont.)</b>			
8	Has a mitigation account been established to provide sufficient funds to implement all biological mitigation associated with the proposed maintenance act? (Mitigation Measure 4.3.4)		
9	Has evidence been provided documenting approval of the proposed maintenance by permitting authorities? (Mitigation Measure 4.3.5)		
10	Does the IMP call for a pre-maintenance meeting, if identified in the associated IBA? (Mitigation Measure 4.3.6)		
11	Does the IBA for each proposed maintenance activity identify appropriate wetland mitigation measures according to the ratios identified in Table 4.3-10? (Mitigation Measure 4.3.9)		
12	Have wetland mitigation plans and enhancement and/or restoration plans been prepared and submitted to the DSD pursuant to the requirements described in Mitigation Measure 4.3.10? Are they consistent with Appendix H of the Biological Technical Report (BTR) contained in Appendix D.3 of the PEIR? (Mitigation Measure 4.3.10)		
13	Would upland impacts be compensated through payment into the City's Habitat Acquisition Fund, or through acquisition and/or preservation of land in accordance with the ratios and requirements identified in Table 4.3-11? (Mitigation Measure 4.3.11)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Biological Resources (cont.)</b>			
14	If the maintenance activity would result in loss of habitat for the coastal California gnatcatcher, is mitigation planned (i.e., through the acquisition of suitable habitat or mitigation credits within the MHPA at a ratio of 1:1, to be accomplished within six months of the date of maintenance completion? (Mitigation Measure 4.3.12)		
15	If sensitive biological resources may be impacted, would the monitoring biologist be able to verify that the following actions have been taken: <ul style="list-style-type: none"> <li>• Has fencing, flagging, signage, or other means to protect sensitive resources been implemented?</li> <li>• Are noise attenuation measures needed to protect sensitive wildlife in place and effective?</li> <li>• Have nesting raptors been identified and necessary maintenance setbacks have been established if maintenance is to occur between February 1 and August 1?</li> </ul> (Mitigation Measure 4.3.13)		
16	Have off-site mitigation areas been reviewed to determine if the mitigation would have a significant impact on biological resources located within the disturbance area of the mitigation? If so, have appropriate mitigation measures been proposed to reduce these impacts to below a level of significance? (Mitigation Measures 4.3.14)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Biological Resources (cont.)</b>			
17	Does the IBA discuss appropriate actions to offset impacts to listed or endemic sensitive plant species? (Mitigation Measure 4.3.15)		
18	Would maintenance activities meet setback requirements for sensitive species? (Mitigation Measure 4.3.16)		
19	Would clearing, grubbing, or grading (inside and outside the MHPA) be restricted during the breeding season of the listed species? Have protocol surveys been conducted for other potentially occurring sensitive species? If observed, have adequate mitigation measures been identified in the IBA? (Mitigation Measure 4.3.17)		
20	Has evidence been submitted to document that protocol surveys have been conducted for potentially occurring sensitive bird species? (Mitigation Measure 4.3.18)		
21	Has the IBA included appropriate mitigation measures when the potential exists for a sensitive bird species to occur near a proposed maintenance area and no protocol surveys have been conducted? (Mitigation Measures 4.3.19, 20 and 21)		
22	Would removal of any eucalyptus trees or other trees used by raptors for nesting be proposed within the maintenance area? If yes, would maintenance include appropriate setbacks and limitations? (Mitigation Measure 4.3.22)		
23	Would maintenance activities occur at known localities for listed fish species? If yes, would maintenance include appropriate mitigation? (Mitigation Measure 4.3.23)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Biological Resources (cont.)</b>			
24	Would maintenance activities occur within areas supporting listed and/or narrow endemic plants? If yes, would maintenance proceed as described in Mitigation Measure 4.3.24?		
25	If maintenance is proposed during the nesting season of avian species, including those species not covered by the MSCP, does the IBA require maintenance within or adjacent to avian nesting habitat occur outside of the avian breeding season (January 15 to August 31) unless postponing maintenance would result in a threat to human life or property? (Mitigation Measure 4.3.25)		
<b>Historical Resources</b>			
26	Has a qualified archaeologist determined the potential for significant historical resources to occur in the maintenance area and prepared an IHA? (Mitigation Measure 4.4.1)		
27	Has an Individual Historical Assessment (IHA) been prepared for the proposed maintenance? (Mitigation Measure 4.4.1)		
28	If required, has a field survey of the maintenance activity APE been performed by a qualified archaeologist and a Native American monitor? (Mitigation Measure 4.4.1)		
29	Has a record search been requested from the South Coastal Information Center (SCIC)? (Mitigation Measure 4.4.1)		
30	Has an archaeological testing program been performed based on the City's Historical Resources Guidelines? (Mitigation Measure 4.4.1)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Historical Resources (cont.)</b>			
31	Have significant historical resources been identified within the proposed maintenance activity APE? If yes, address criteria numbers 36 through 42. If no, proceed to criteria number 43. (Mitigation Measures 4.4.1 and 4.4.2)		
32	Has a Principal Investigator (PI) been selected and approved by the SWD and ADD Environmental Designee? (Mitigation Measure 4.4.2.1)		
33	Have mitigation recommendations from the IHA been incorporated into the IMP to the satisfaction of the PI and the ADD Environmental Designee? (Mitigation Measure 4.4.2.2)		
34	If impacts to significant historical resources cannot be avoided, has the PI prepared and implemented an Archaeological Research Design and Data Recovery Program (ARDDRP) for the affected resources, with input from a Native American consultant (approved by the ADD Environmental Designee)? (Mitigation Measure 4.4.2.3)		
35	Has a pre-maintenance meeting been planned and/or conducted on site, including representatives from the PI, Native American consultant, SWD, MMC, Resident Engineer (RE), and MC? (Mitigation Measure 4.4.2.4)		
36	If human remains have been discovered in the course of conducting the ARDDRP, would the procedures set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) be implemented? (Mitigation Measure 4.4.2.5)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Historical Resources (cont.)</b>			
37	Will the PI and Archaeologist assume required responsibilities? (Mitigation Measures 4.4.2.6, 4.4.2.7, and 4.4.2.8)		
38	If the IHA identifies a moderate to high potential for the occurrence of significant historical resources within the APE, would mitigation measures be implemented? (Mitigation Measure 4.4.3)		
<b>Land Use</b>			
39	Has the ADD Environmental Designee verified that all MHPA boundaries and limits of work have been delineated on all maintenance documents? (Mitigation Measure 4.1.1)		
40	Has a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) surveyed habitat areas inside and outside the MHPA suspected to serve as habitat for the coastal California gnatcatcher, least Bell's vireo and/or other listed species? (Mitigation Measure 4.1.2)		
41	Has a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) performed a noise analysis for the proposed maintenance activity? (Mitigation Measure 4.1.3)		
42	Would the proposed maintenance have the potential to impact breeding activities of listed species? If yes, would maintenance activities be restricted to the breeding season? (Mitigation Measure 4.1.4)		



**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program PEIR Mitigation, Monitoring, and Reporting Program</b>			
<b>Land Use (cont.)</b>			
43	If maintenance cannot be avoided during an identified breeding season for a listed bird which is determined to be potentially significantly affected by maintenance, would the appropriate measures be taken? (Mitigation Measure 4.1.5)		
44	Has a pre-maintenance meeting been planned and/or conducted, including the MC, Project Biologist, and City representative? (Mitigation Measure 4.1.6)		
45	Does the IMP include appropriate maintenance designs? (Mitigation Measure 4.1.7)		
46	Has the ADD Environmental Designee verified that the MHPA boundaries and the requirements regarding coastal California gnatcatcher been included in the IMP and/or IBA? (Mitigation Measure 4.1.8)		
<b>Master Program Protocols</b>			
<b>Water Quality</b>			
47	Does the IMP include measures to stabilize designated access roads (or other graded areas) with permeable protective surfacing (e.g., grasscrete), storm water diversion structures (e.g., brow ditches or berms), or crossing structures (e.g., culverts) to control erosion and prevent off-site sediment transport? (WQ-1)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program Protocols (cont.)</b>			
<b>Water Quality (cont.)</b>			
48	Does the IMP include measures to prevent off-site sediment transport during maintenance through the use erosion and sediment controls within storm water facilities, along access routes and around stockpile/staging areas? Will temporary erosion or sediment control measures be removed upon completion of maintenance unless their removal would result in greater environmental impact than leaving them in place? (WQ-2)		
49	Does the IMP require storage of BMP materials on-site in a way that provides complete protection of exposed areas and prevent off-site sediment transport? (WQ-3)		
50	Does the IMP require training for personnel responsible for the proper installation, inspection, and maintenance of on-site BMPs. (WQ-4)		
51	Does the IMP require revegetation of spoil and staging areas within 30 days of completion of maintenance activities? Does it require monitoring and maintenance of revegetated areas for a period of not less than 25 months following planting? (WQ-5)		
52	Does the IMP require sampling and analysis; monitoring and reporting; and post-maintenance management programs per National Pollutant Discharge Elimination System (NPDES) and/or City requirements? (WQ-6)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program Protocols (cont.)</b>			
<b>Water Quality (cont.)</b>			
53	Does the IMP prohibit storing hazardous materials used during maintenance within 50 feet from storm water facilities? Does it require hazardous materials to be managed and stored in accordance with applicable local, state and federal regulations? (WQ-7)		
54	Does the IMP prohibit storage of maintenance-related trash in areas within 50 feet from storm water facilities, and require removal of trash in receptacles at least weekly? (WQ-8)		
55	Does the IMP require installation of any check dam or other comparable mechanism identified in the corresponding IHHA? Are these structures required to be removed when vegetation growth has reached a point where the structure is no longer required unless removal would result in greater environmental harm than leaving them in place? (WQ-9)		
56	Does the IMP require inspection of earthen-bottom storm water facilities within 30 days of the first 2-year storm following maintenance? Are erosion control measures recommended by the field engineer incorporated into the IMP? (WQ-10)		
57	<u>Does the IMP incorporate mitigation measures identified in the IWQA and/or Table 4.8-8 of the PEIR?</u>		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program Protocols (cont.)</b>			
<b>Biological Resource Protection</b>			
5758	Does the IMP restrict vehicles to access designated in the Master Program? (BIO-1)		
5859	Does the IMP require delineation and flagging of all sensitive biological resources to remain within or adjacent to the maintenance area? (BIO-2)		
5960	Does the IMP require a pre-maintenance meeting when maintenance will occur within or adjacent to sensitive biological resources? (BIO-3)		
6061	Are erosion control measures designed to avoid introduction of invasive plant species? (BIO-4)		
6162	Does the IMP require conducting pre-maintenance protocol surveys if maintenance is proposed during the breeding season of a sensitive animal species? (BIO-5)		
6263	If arundo will be removed during maintenance, does the IMP include appropriate removal methods to minimize downstream dispersal? (BIO-6)		
6364	Does the IMP prohibit the use of mechanized maintenance within 300 feet of a Cooper's hawk nest, 900 feet of a northern harrier's nest, or 500 feet of any other raptor's nest until any fledglings have left the nest? (BIO-7)		
<b>Historical Resource Protection</b>			
6465	Does the IMP call for flagging, capping, or fencing of all historical resource areas in the field prior to initiation of maintenance activities in the presence of a qualified historical resource specialist, as necessary)? (HIST-1)		

**SUBSTANTIAL CONFORMANCE REVIEW CHECKLIST****MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM**

No.	Measure/Criteria	Y/N/NA	Basis for Determination (attach separate sheet(s) as necessary)
<b>Master Program Protocols (cont.)</b>			
<b>Historical Resource Protection (cont.)</b>			
6566	Does the IMP require a pre-maintenance meeting on-site when maintenance activities are determined in the IHA to potentially impact historic resources? (HIST-2)		
<b>Waste Management</b>			
6667	Does the IMP call for disposal of compostable green waste material at an approved composting facility, if available? (WM-1)		
6768	Does the IMP call for screening of soil, sand, and silt to remove waste debris and, wherever possible, to be re-used as fill material, aggregate, or other raw material? (WM-2)		
6869	Does the IMP call for separation and transport of waste tires to an appropriate disposal facility, including the completion of a Comprehensive Trip Log (CTL) if more than nine tires are in a vehicle or waste bin at any one time? (WM-3)		
6970	Does the IMP require hazardous materials encountered during maintenance to be logged under a hazardous materials manifest and transported to an approved hazardous waste storage, recycling, treatment or disposal facility? (WM-4)		