PROJECT REPORT

TO: ENVIRONMENTAL EVALUATION COMMITTEE **AGENDA DATE: July 23, 2020**

FROM: PLANNING & DEVELOPMENT SERVICES **AGENDA TIME 1:30 PM/ No. 4**

Initial Study #20-0009

PROJECT TYPE: Imperial Solid Waste Site Final Closure SUPERVISOR DIST # 3

LOCATION: 1705 W. Worthington Road, APN: 034-320-050-000

Imperial, CA 92251 PARCEL SIZE: 40 +/- AC

GENERAL PLAN (existing) Special Purpose Facility GENERAL PLAN (proposed) N/A

ZONE (existing) G/S (Government/Special) ZONE (proposed) N/A

GENERAL PLAN FINDINGS ☒ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE: N/A

☐ APPROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: N/A

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 07-23-20

INITIAL STUDY: 20-0009

☐ NEGATIVE DECLARATION ☐ MITIGATED NEG. DECLARATION ☐ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☒ NONE	☐ ATTACHED
AG	☒ NONE	☐ ATTACHED
APCD	☐ NONE	☒ ATTACHED
E.H.S.	☒ NONE	☒ ATTACHED
FIRE / OES	☒ NONE	☐ ATTACHED
SHERIFF	☒ NONE	☐ ATTACHED
OTHER	Quechan and CalRecycle	

REQUESTED ACTION:

(See Attached)

☐ NEGATIVE DECLARATION
☒ MITIGATED NEGATIVE DECLARATION

Initial Study & Environmental Analysis
For:

County Project Number: 6478SW
Imperial Solid Waste Site Final Closure

Prepared By:

Geosyntec Consultants, Inc.
2355 Northside Dr., Suite 250
San Diego, CA 92108

and reviewed by

COUNTY OF IMPERIAL
Planning & Development Services Department
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El Centro, CA 92243
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Revised 30 July 2020

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SECTION 1
INTRODUCTION

A. PURPOSE

This document is a ☐ policy-level, ☒ project level Initial Study for evaluation of potential environmental impacts resulting with the proposed Imperial Solid Waste Site Final Closure (Refer to Exhibit "A" & "B").

B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS AND THE IMPERIAL COUNTY'S GUIDELINES FOR IMPLEMENTING CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's "CEQA Regulations Guidelines for the Implementation of CEQA, as amended", an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

☐ According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

☐ According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.

☒ According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will not result in any potentially significant environmental impacts and therefore, a Mitigated Negative Declaration is deemed as the appropriate document to provide necessary environmental evaluations and clearance as identified hereinafter.

This Initial Study and Mitigated Negative Declaration are prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial Guidelines for Implementing CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the

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principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

C. INTENDED USES OF INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

This Initial Study and Mitigated Negative Declaration are informational documents which are intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Initial Study and Mitigated Negative Declaration prepared for the project will be circulated for a period of 20 days (*30-days if submitted to the State Clearinghouse for a project of area-wide significance*) for public and agency review and comments. At the conclusion, if comments are received, the County Planning & Development Services Department will prepare a document entitled "Responses to Comments" which will be forwarded to any commenting entity and be made part of the record within 10-days of any project consideration.

D. CONTENTS OF INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

PROJECT SUMMARY, LOCATION AND EVIRONMENTAL SETTINGS describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

IV. PERSONS AND ORGANIZATIONS CONSULTED identifies those persons consulted and involved in preparation of this Initial Study and Mitigated Negative Declaration.

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V. REFERENCES lists bibliographical materials used in preparation of this document.

VI. MITIGATED NEGATIVE DECLARATION – COUNTY OF IMPERIAL

VII. FINDINGS

SECTION 4

VIII. RESPONSE TO COMMENTS (IF ANY)

IX. MITIGATION MONITORING & REPORTING PROGRAM (MMRP) (IF ANY)

E. SCOPE OF ENVIRONMENTAL ANALYSIS

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. **No Impact:** A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.

2. **Less Than Significant Impact:** The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.

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

4. **Potentially Significant Impact:** The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. POLICY-LEVEL or PROJECT LEVEL ENVIRONMENTAL ANALYSIS

This Initial Study and Mitigated Negative Declaration will be conducted under a ☐ policy-level, ☒ project level analysis. Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures and therefore, will not be identified in this document.

G. TIERED DOCUMENTS AND INCORPORATION BY REFERENCE

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. Tiered Documents

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

"Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects;

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incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

"Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

2. Incorporation By Reference

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]). This document incorporates by reference appropriate information from the "Final Environmental Impact Report and Environmental Assessment for the "County of Imperial General Plan EIR" prepared by Brian F. Mooney Associates in 1993 and updates.

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR and updates are available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the

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relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the County of Imperial General Plan EIR is SCH #93011023.

- The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]). This has been previously discussed in this document.

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II. Environmental Checklist

1. **Project Title**: Imperial Solid Waste Site Final Closure
2. **Lead Agency**: Imperial County Planning & Development Services Department
3. **Contact person and phone number**: Diana Robinson, (442) 265-1736
4. **Address**: 801 Main Street, El Centro CA, 92243
5. **E-mail**: DianaRobinson@co.imperial.ca.us
6. **Project location**: The proposed Project includes final closure of the Imperial Solid Waste Site (ISWS or Site) landfill. The proposed Project is located in the south-central portion of Imperial Valley, approximately six miles west of the City of Imperial (Exhibit A). The Site address is 1705 W. Worthington Road, Imperial, California 92251.
7. **Project sponsor's name and address**: Imperial County Department of Public Works, 155 South 11th Street, El Centro, CA 92243
8. **General Plan designation**: Special Purpose Facility
9. **Zoning**: G-S (Government / Special Public)
10. **Description of project**: The ISWS property is owned and operated by the Imperial County Department of Public Works (ICDPW). The ISWS was in operation as an illegal disposal Site until approximately 1970 when it received its waste discharge requirements (WDRs). The landfill is located on approximately 69 acres with a total disposal area footprint of approximately 18 acres. The landfill ceased operation on 29 July 2018 and was converted to a transfer station on 1 March 2019. The landfill has reached the maximum permitted capacity and therefore requires closure in accordance with California Code of Regulations, Title 27 (27 CCR) Section 21110.

This proposed project is for the closure of the Imperial Solid Waste Site, as such, closure will include waste relocation, cover soil import, engineered fill placement and compaction, and installation of stormwater management features. Relocated waste will be placed in areas to promote positive drainage and limit cover soil import. The source for final cover at the ISWS is anticipated to be imported material from the Holtville Borrow Source, this material has successfully met similar cover design criteria. Imported engineered material will be placed to provide drainage and will meet project criteria to support the construction of the final cover design. Earthen diversion berms and surface channels will be constructed to divert stormwater runoff away from the slopes toward the nearest drainage conveyance. The purpose of the final soil cover is to minimize surface water intrusion, accommodate settlement and subsidence, isolate waters from the surface, and reduce the potential for odors and gas emissions. Equipment used for construction will include but are not limited to the following: motor graders, soil compactors, front-end loaders, bulldozers and skid steers. The estimated time frame to complete the closure tasks described for the site is approximately 4 to 6 months.

The transfer station will temporarily close during construction; therefore, customers will be directed to the Calexico Landfill during this time. Once construction is completed, the transfer station will reopen at the ISWS.

11. **Surrounding land uses and setting**: Briefly describe the project's surroundings:

The site, is located in an agricultural area along the eastern bank of the south to north flowing New River. Properties surrounding the Site are generally used for agriculture and owned by private farmers and the Imperial Irrigation District (IID). An unnamed tributary/drainage flows south to north into the New River along the southwest portion of the Site. Based on FEMA mapping, the New River floodplain intersects the Site along portions of the west and northwestern slopes adjacent to the river. Naval Air Facility El Centro airstrip is located approximately 1.0 miles south/southeast of the landfill.

12. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.):

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- CalRecycle
- Imperial County Department of Environmental Health acting as the Local Enforcement Agency for CalRecycle
- Regional Water Quality Control Board – Colorado River Region
- Air Quality Management District- Imperial District
- United States Army Corps of Engineers – Federal Emergency Management Agency

13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentially, etc.?

In accordance with Assembly Bill 52 and Section 21080.3.1(d) of the California Public Resources Code, Imperial County Planning and Development Services issued a letter on May 14, 2020 to the Fort Yuma Quechan Indian Tribe for notification of the proposed project. The Tribe was given a time frame to review whether Tribal Cultural Resources are present within the project area. A response from the Tribe is pending the June 22, 2020 due date. However, the project is not anticipated to impact Tribal Cultural Resources.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code, Section 21080.3.2). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code, Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code, Section 21082.3 (c) contains provisions specific to confidentiality.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Energy
☐	Geology /Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology / Water Quality	☐	Land Use / Planning	☐	Mineral Resources
☐	Noise	☐	Population / Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

ENVIRONMENTAL EVALUATION COMMITTEE (EEC) DETERMINATION

After Review of the Initial Study, the Environmental Evaluation Committee has:

☐ Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE DE MINIMIS IMPACT FINDING: ☐ Yes ☐ No

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☒	☐	☐
ENVIRONMENTAL HEALTH SVCS	☐	☐	☒
OFFICE EMERGENCY SERVICES	☒	☐	☐
APCD	☒	☐	☐
AG	☒	☐	☐
SHERIFF DEPARTMENT	☐	☐	☒
ICPDS	☒	☐	☐

Jim Minnick, Director of Planning/EEC Chairman — Date: 7/31/24

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PROJECT SUMMARY

A. Project Location:

The proposed Project includes final closure of the Imperial Solid Waste Site (ISWS or Site) landfill. The proposed Project is located in the south-central portion of Imperial Valley, approximately six miles west of the City of Imperial (Exhibit A). The Site address is 1705 W. Worthington Road, Imperial, California 92251.

B. Project Summary:

The proposed Project includes final closure of the Imperial Solid Waste Site landfill (Site). The Site address is 1705 W. Worthington Road, Imperial, California 92251.The ISWS property is owned and operated by the Imperial County Department of Public Works (ICDPW). The ISWS was in operation as an illegal disposal Site until approximately 1970 when it received its waste discharge requirements (WDRs). The landfill is located on approximately 69 acres with a total disposal area footprint of approximately 18 acres. A proposed borrow area, evaluated for use to supply miscellaneous fill for the Site is located across the New River to the west. The landfill ceased operation on 29 July 2018 and was converted to a transfer station on 1 March 2019. The landfill has reached the maximum permitted capacity and therefore requires closure in accordance with 27 CCR Section 21110.

Closure will include waste relocation, cover soil import, engineered fill placement and compaction, and installation of stormwater management features. Approximately 11,000 cubic yards (cy) of relocated waste will be placed in areas to promote positive drainage and limit cover soil import. This figure is higher than originally noted in the Traffic Impact Analysis [Linscott, 2020] since the grading plan has been modified since our initial contact with the traffic engineer. The proposed final cover for the ISWS will consist of a minimum one-foot thick foundation layer composed of soil materials, a three-foot thick layer of select soil material that will comprise the monolithic select soil cover layer, and, along the slopes, a 6-inch layer of pit run erosion protection rock. The source for final cover at the ISWS is anticipated to be imported material from the Holtville Borrow Source. Earthen diversion berms and surface channels will be constructed on the cover and around the Site to divert stormwater runoff away from the slopes toward the nearest drainage conveyance. The proposed Project includes the following construction components:

1. Excavate, load, haul, approximately 79,000 cubic yards (CY) of materials for the monolithic soil cover and engineered fill and approximately 3,500 CY of pit run rock for erosion protection on side slopes. Miscellaneous fill soils will be transported from the proposed borrow area west of the Site. The soil cover materials will be transported from the Holtville Borrow Pit, located off of Norrish Road, approximately 24 miles east of the Site. The pit run rock may be obtained from a variety of sand and gravel borrow sources in the Imperial Valley.
2. Excavate, relocate on Site, and compact approximately 11,000 CY of waste from the northern and western edges of the landfill to the top deck of the landfill.
3. Place and spread 75,000 CY of materials for the monolithic soil cover and foundation layer, 39,600 CY of engineered fill, and 3,500 CY of erosion protection rock, construct and maintain roads.
4. Compact approximately 75,000 CY of materials for the monolithic soil cover and foundation layer, 39,600 CY of engineered fill, and 3,500 CY of erosion protection rock.
5. Install landfill stormwater conveyance system.

Equipment used for construction will include but are not limited to the following: motor graders, soil compactors, front-end loaders, bulldozers and skid steers. The estimated time frame to complete the closure tasks described for the site is approximately 4 to 6 months.

Attached as Exhibit B are selected sheets from the Final Closure Post-Closure Maintenance Plan and include:

- Drawing No. 03, the Site Plan, showing the existing limits of waste, delineated wetlands, delineated non-

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wetlands, the FEMA floodplain boundary, the 100-year floodplain, and other existing site features, including landfill gas monitoring probes, groundwater monitoring wells, and survey monuments.

- Drawing No. 04, Waste Relocation Plan I, indicating the waste removal areas and a representative cross section.
- Drawing No. 08, Final Cover Grading I, indicating the proposed new grades created as part of this project for the southwest portion of the Project.
- Drawing No. 09, Final Cover Grading II, indicating the proposed new grades created as part of this project for the southeast portion of the Project.
- Drawing No. 10, Final Cover Grading III, indicating the proposed new grades created as part of this project for the northwest portion of the Project.
- Drawing No. 11, Final Cover Grading IV, indicating the proposed new grades created as part of this project for the northeast portion of the Project.

C. Environmental Setting:

The site is located in an agricultural area along the eastern bank of the south to north flowing New River. Properties surrounding the Site are generally used for agriculture and owned by private farmers and the Imperial Irrigation District (IID). An unnamed tributary/drainage flows south to north into the New River along the southwest portion of the Site. Based on FEMA mapping, the New River floodplain intersects the Site along portions of the west and northwestern slopes adjacent to the river.

D. Analysis:

The Project involves the closure of the ISWS requiring import of cover soil, waste relocation, and drainage and stormwater improvements- including berms to convey surface water flows to comply with 27 CCR Section 21110. The purpose of the final soil cover is to minimize surface water intrusion, accommodate settlement and subsidence, isolate waters from the surface, and reduce the potential for odors and gas emissions. There will be temporary increases in site activities and traffic; however, the activities will be short in duration (less than 6-months) and based on studies and analyses performed, have no impact on the environment. Long-term, the closed landfill will benefit the environment by providing open-space, stormwater controls, and reduced percolation of precipitation through waste.

E. General Plan Consistency:

The existing General Plan land use designation is "Special Purpose Facility". The project site is currently zoned G-S (Government / Special Public).

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Exhibit "A"
Vicinity Map

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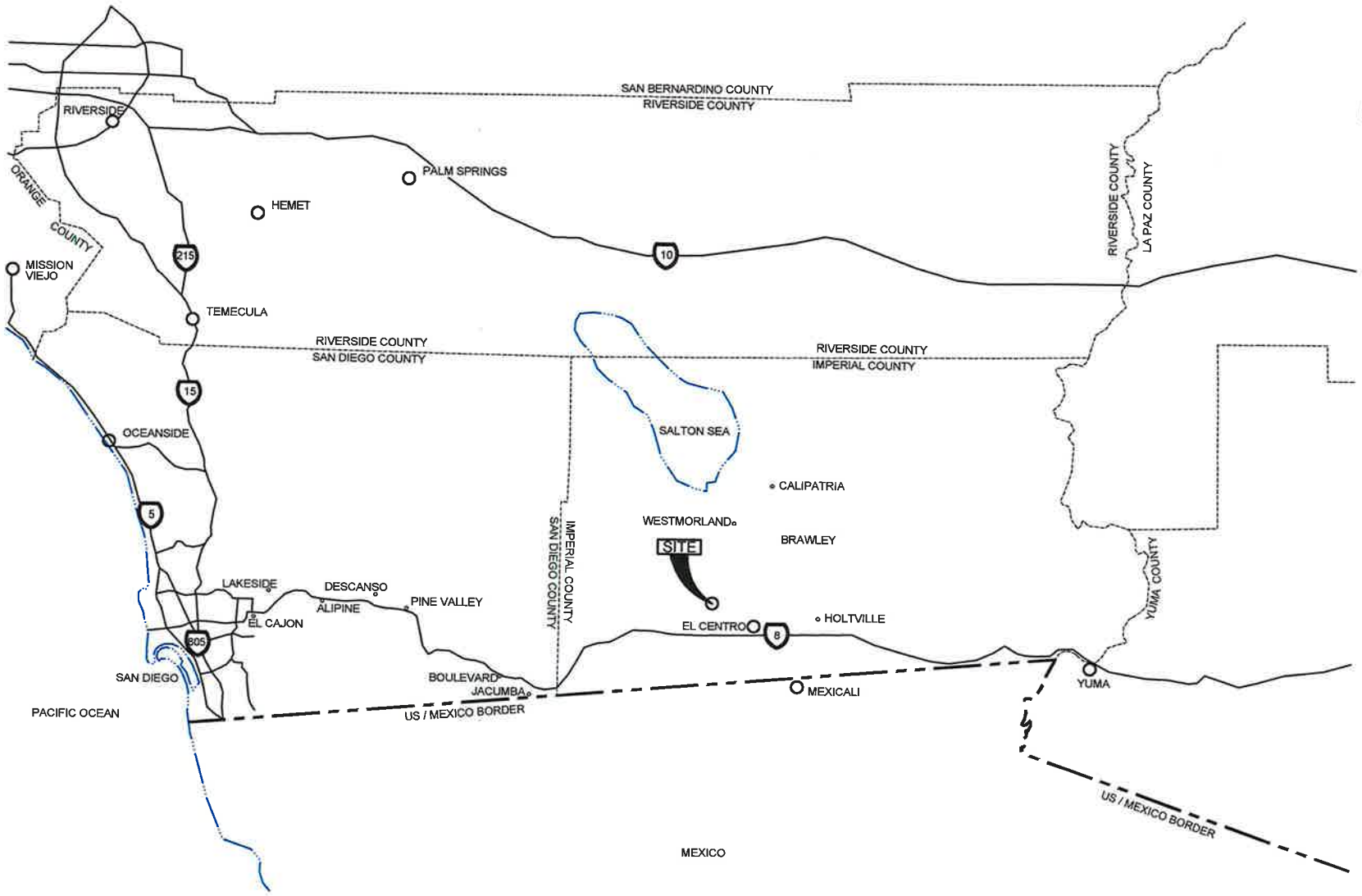

VICINITY MAP
IMPERIAL COUNTY SOLID WASTE SITE
IMPERIAL COUNTY, CALIFORNIA

Geosyntec consultants

DATE: APRIL 2020

PROJECT NO. SC0974

FIGURE 1

P:\CADD\IMPERIAL SOLID WASTE\FIGURES\FCPCMP\SC0593-F01.DWG - DRAWN BY: JDURAN

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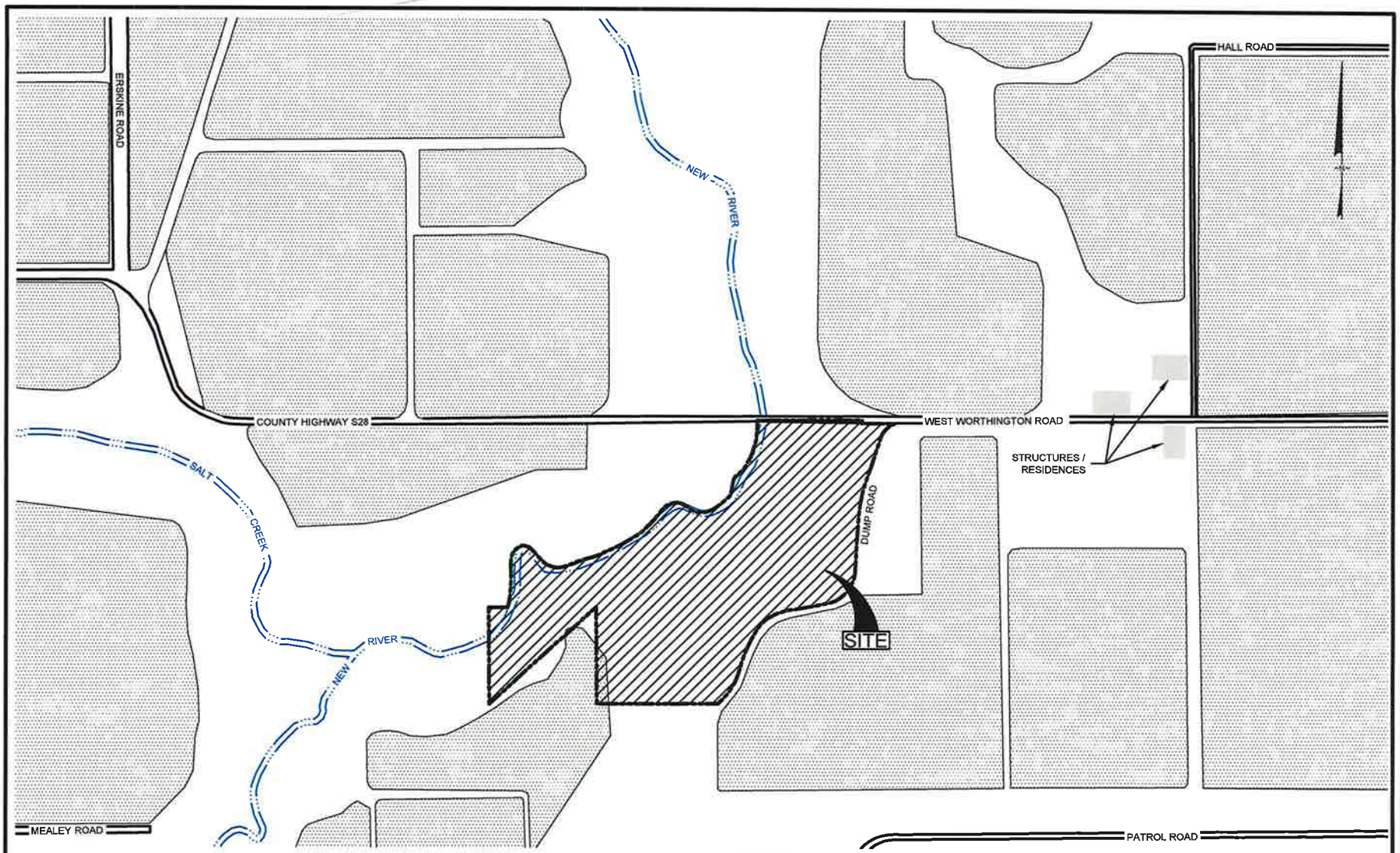

NOTE:

1. PROPERTY BOUNDARY IS BASED ON BOUNDARY PROVIDED FROM: BAS, 2006, "PRELIMINARY CLOSURE/POST-CLOSURE MAINTENANCE PLAN, IMPERIAL SOLID WASTE SITE, IMPERIAL COUNTY, CA", REVISION 4 JUNE.

LEGEND:

AGRICULTURAL FIELDS

PROPERTY BOUNDARY

0 1,000'

SCALE IN FEET

SITE LOCATION
IMPERIAL SOLID WASTE SITE
IMPERIAL COUNTY, CALIFORNIA

Geosyntec consultants

DATE:	APRIL 2020
PROJECT NO.	SC0974

FIGURE 2

P:\CADD\IMPERIAL SOLID WASTE\FIGURES\FCPCMP\SC0593-F02.DWG - DRAWN BY: JDURAN

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Exhibit "B"
Site Plan/Tract Map/etc.

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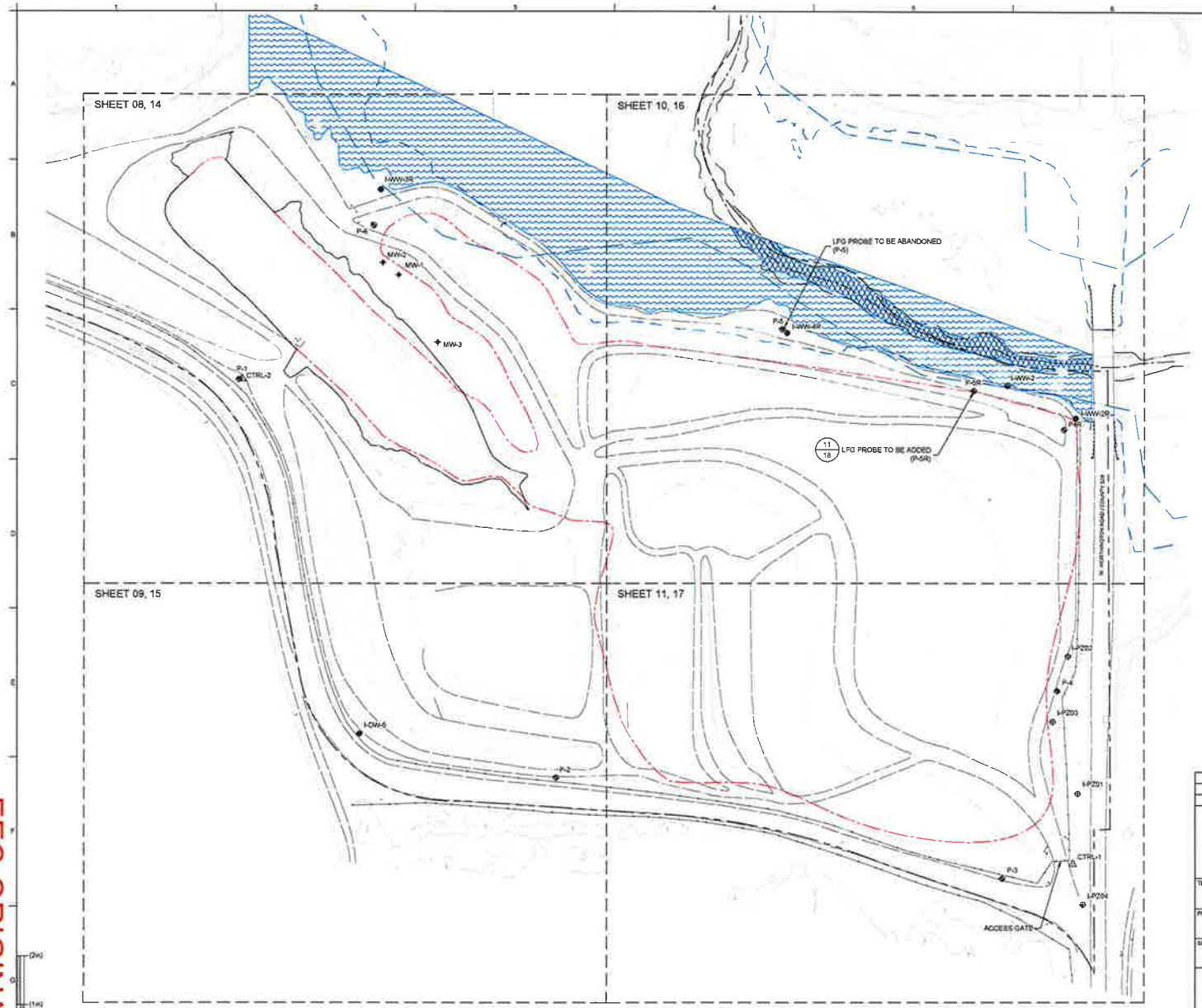

LEGEND

- 2019 EXISTING GROUND MAJOR CONTOUR (5')
- 2019 EXISTING GROUND MINOR CONTOUR (1')
- EXISTING FENCE
- ACCESS ROADS
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE 100 YR FLOOD PLAIN
- PUBLISHED FEMA FLOOD PLAN BOUNDARY
- NEW RIVER CENTERLINE
- LIMIT OF WASTE (NOTE 4)
- DELINEATED WETLANDS
- DELINEATED NON-WETLAND WATERS
- LANDFILL GAS MONITORING PROBE
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- ABANDONED GROUNDWATER MONITORING WELL
- MONITORING WELL TO BE ABANDONED
- SITE SURVEY CONTROL MONUMENT (TO BE ESTABLISHED IN ACCORDANCE WITH CONTROL NOTES 20,21 SHEET 02

NOTES

1. EXISTING TOPOGRAPHY BASED ON A UAS PHOTOGRAMMETRIC SURVEY CONDUCTED ON AUGUST 2019.
2. BASIS OF BEARING BASED ON GNSS STATIC MEASUREMENTS BETWEEN NATIONAL GEODETIC SURVEY (NGS) CONTROL MONUMENTS "F 512" (PID DB0740) AND "D 1223" (PID DB0763).
3. PROJECT BENCHMARK: NGS HORIZONTAL AND VERTICAL CONTROL SURVEY MONUMENT "D 1223" (DB0763) EL: -30.08 USFT (NAVD88 PER GEOID 12B)
4. LIMIT OF WASTE SHOWN BASED ON WASTE DELINEATION STUDY PERFORMED BY GOESYNTEC CONSULTANTS DATED 16 DECEMBER 2019.

0 80 160
SCALE IN FEET

REV.	DATE	DESCRIPTION	DRN	APP
0	01/24/20	PERMIT ISSUANCE	-	-

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ICDPW
158 SOUTH 11 STREET
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TELEPHONE: 442.265.1818

TITLE: SITE PLAN

PROJECT: IMPERIAL SOLID WASTE SITE FINAL CLOSURE

SITE: COUNTY OF IMPERIAL, CALIFORNIA

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION UNLESS SEALED.

01/24/2020
DATE

DESIGN BY:	RO	DATE:	JANUARY 2020
DRAWN BY:	MC	PROJECT NO.:	SO0974
CHECKED BY:	RO	FILE:	SO0974 03
REVIEWED BY:	RO	DRAWING NO.:	03 OF 20
APPROVED BY:	RB		

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 33")

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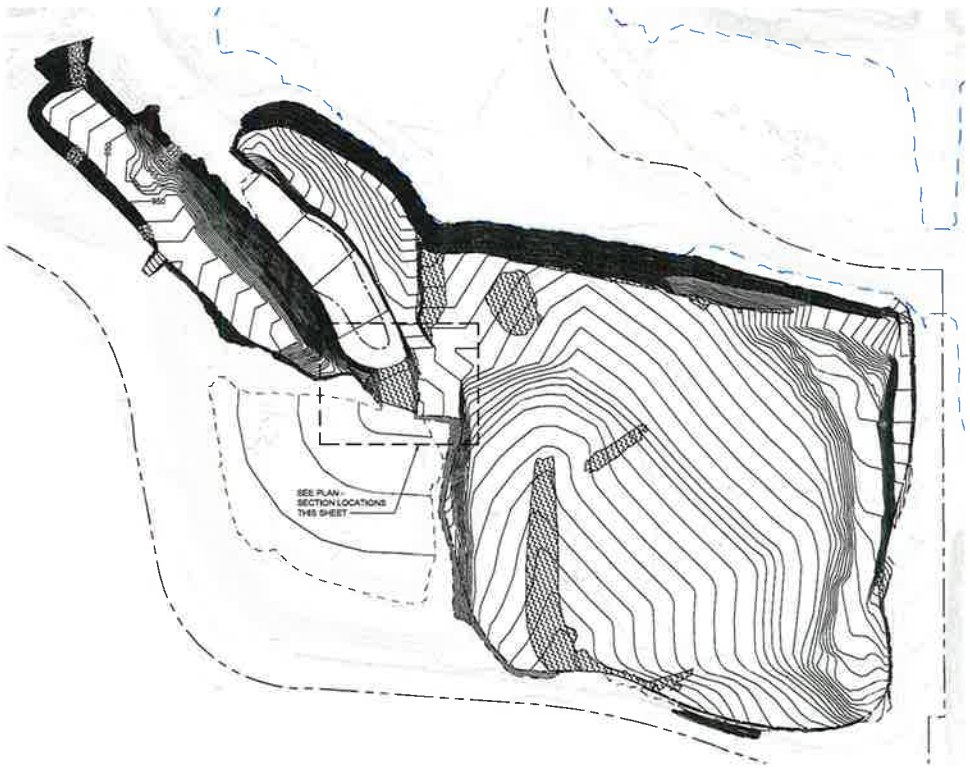
EEC ORIGINAL PKG



0 100 200
SCALE IN FEET

LEGEND

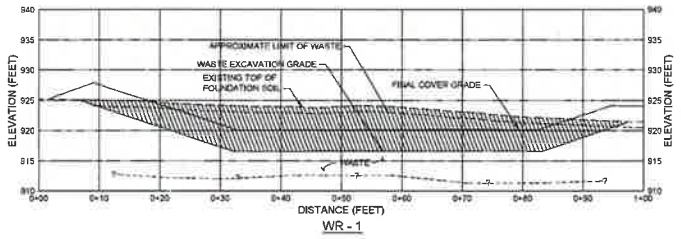
- EXISTING GROUND MAJOR CONTOUR (5')
- EXISTING GROUND MINOR CONTOUR (1')
- PROPOSED GRADING MAJOR CONTOUR (5')
- PROPOSED GRADING MINOR CONTOUR (1')
- APPROXIMATE 100 YR FLOOD PLAIN
- PROPOSED LIMIT OF GRADING
- LIMIT OF WASTE (NOTE 1)
- ESTIMATED WASTE REMOVAL AREA

NOTES

1. LIMIT OF WASTE SHOWN BASED ON WASTE DELINEATION STUDY PERFORMED BY GOESYNTEC CONSULTANTS DATED 15 DECEMBER 2019.

PROFILE KEY

- FINAL COVER GRADE
- EXISTING GROUND
- LIMIT OF WASTE
- APPROXIMATE AREA OF WASTE AND INTERMEDIATE COVER EXCAVATION

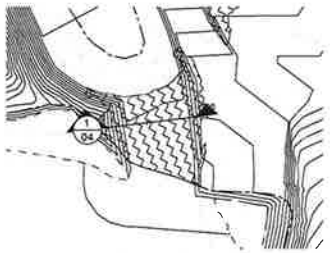


WR - 1

0 10 20
SCALE IN FEET HORIZONTAL

0 10 20
SCALE IN FEET VERTICAL

VERTICAL EXAGGERATION = 1



PLAN - SECTION LOCATIONS
SCALE: 1" = 50'

0 50 100
SCALE IN FEET

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 33")

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REV	DATE	DESCRIPTION	DRN	APP
0	01/24/20	PERMIT ISSUANCE	-	-

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155 SOUTH 11 STREET
EL CENTRO, CALIFORNIA 92243
TELEPHONE: 442.265.1818

TITLE: WASTE RELOCATION PLAN I

PROJECT: IMPERIAL SOLID WASTE SITE FINAL CLOSURE

SITE: COUNTY OF IMPERIAL, CALIFORNIA

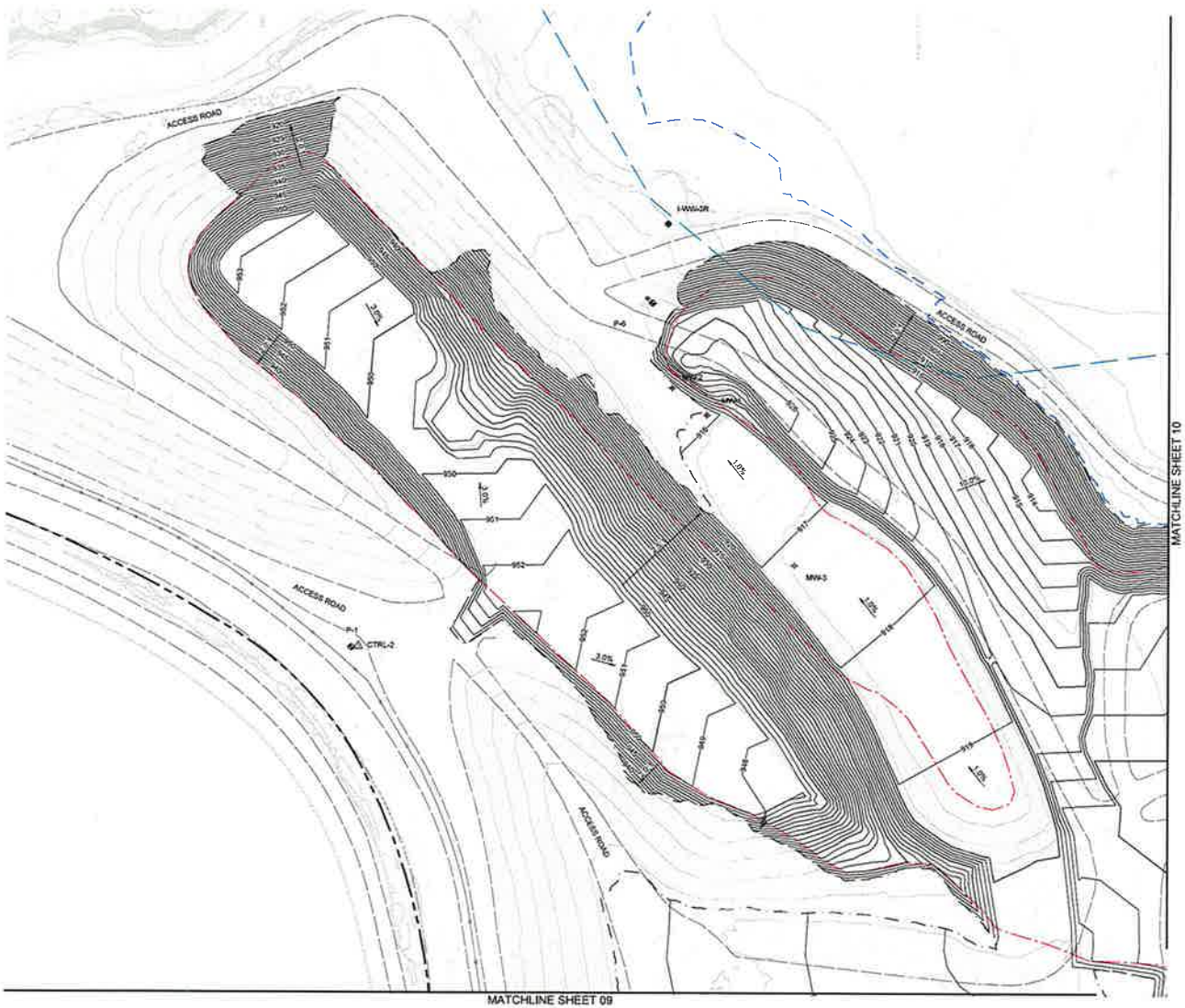
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION UNLESS SEALED.

01/24/2020
DATE

CT5046 Exp. 12/31/20 CIVIL STATE OF CALIFORNIA

DESIGN BY:	RD	DATE:	JANUARY 2020
DRAWN BY:	MC	PROJECT NO.:	SC0974
CHECKED BY:	RS	FILE:	SC0974 04-07
REVIEWED BY:	RS	DRAWING NO.:	04 OF 20
APPROVED BY:	RS		

EEC ORIGINAL PKG



LEGEND

- 2019 EXISTING GROUND MAJOR CONTOUR (5')
- 2019 EXISTING GROUND MINOR CONTOUR (1')
- EXISTING FENCE
- 920 PROPOSED GRADING MAJOR CONTOUR (5')
- PROPOSED GRADING MINOR CONTOUR (1')
- PROPOSED GRADING LIMIT
- PROPERTY BOUNDARY
- APPROXIMATE 100 YR FLOOD PLAIN
- PUBLISHED FEMA FLOOD PLAIN BOUNDARY
- NEW RIVER CENTERLINE
- LIMIT OF WASTE (NOTE 3)
- LANDFILL GAS MONITORING PROBE
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- ABANDONED GROUNDWATER MONITORING WELL
- MONITORING WELL TO BE ABANDONED

NOTES

1. PROPOSED GRADES SHOWN WITHIN PROPOSED LIMIT OF WASTE REPRESENT THE TOP OF THE FINAL COVER SOIL, EXCLUDING EROSION PROTECTION AND BEDDING LAYER.
2. AREAS WITHIN PROPOSED LIMIT OF WASTE SHALL BE CONSTRUCTED WITH FINAL COVER SYSTEM PER SECTIONS: B 18, A 18
3. LIMIT OF WASTE SHOWN BASED ON WASTE DELINEATION STUDY PERFORMED BY GOESYNTEC CONSULTANTS DATED 18 DECEMBER 2019.

KEY MAP
SCALE = 1" = 600'

0 40 80
SCALE IN FEET

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 33").

FOR REVIEW PURPOSES ONLY
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REV	DATE	DESCRIPTION	DRN	APP
0	01/24/20	PERMIT ISSUANCE	-	-

Geosyntec consultants
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TITLE: FINAL COVER GRADING I

PROJECT: IMPERIAL SOLID WASTE SITE FINAL CLOSURE

SITE: COUNTY OF IMPERIAL, CALIFORNIA

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

01/24/2020
DATE

C79043 EXP. 12/31/21 CIVIL

DESIGN BY:	RG	DATE:	JANUARY 2020
DRAWN BY:	MC	PROJECT NO.:	SC0074
CHECKED BY:	RG	FILE:	SC0074 08-11
REVIEWED BY:	RG	DRAWING NO.:	08 OF 20
APPROVED BY:	RG		

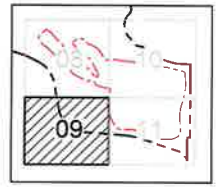
EEC ORIGINAL PKG

LEGEND

- 2019 EXISTING GROUND MAJOR CONTOUR (5')
- 2019 EXISTING GROUND MINOR CONTOUR (1')
- EXISTING FENCE
- 920 PROPOSED GRADING MAJOR CONTOUR (5')
- PROPOSED GRADING MINOR CONTOUR (1')
- PROPOSED GRADING LIMIT
- PROPERTY BOUNDARY
- APPROXIMATE 100 YR FLOOD PLAIN
- PUBLISHED FEMA FLOOD PLAIN BOUNDARY
- NEW RIVER CENTERLINE
- LIMIT OF WASTE (NOTE 3)
- LANDFILL GAS MONITORING PROBE
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- ABANDONED GROUNDWATER MONITORING WELL
- MONITORING WELL TO BE ABANDONED

NOTES

1. PROPOSED GRADES SHOWN WITHIN PROPOSED LIMIT OF WASTE REPRESENT THE TOP OF THE FINAL COVER SOIL EXCLUDING EROSION PROTECTION AND BEDDING LAYER.
2. AREAS WITHIN PROPOSED LIMIT OF WASTE SHALL BE CONSTRUCTED WITH FINAL COVER SYSTEM PER SECTIONS B/18 AND A/18.
3. LIMIT OF WASTE SHOWN BASED ON WASTE DELINEATION STUDY PERFORMED BY GOESYNTEC CONSULTANTS DATED 18 DECEMBER 2019.



KEY MAP
SCALE = 1" = 600'

0 40 80
SCALE IN FEET

NO	DATE	DESCRIPTION	ORIG	APP
0	01/24/20	PERMIT ISSUANCE	-	-

Geosyntec consultants
2055 NORTHSIDE DRIVE, SUITE 250
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TITLE: FINAL COVER GRADING II

PROJECT: IMPERIAL SOLID WASTE SITE FINAL CLOSURE

SITE: COUNTY OF IMPERIAL, CALIFORNIA

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

01/24/2020

C79042 EXP. 12/31/21 CIVIL STATE OF CALIFORNIA

DESIGN BY:	RG	DATE:	JANUARY 2020
DRAWN BY:	MC	PROJECT NO.:	SC0974
CHECKED BY:	RO	FILE:	SC0974 08-11
REVIEWED BY:	RG	DRAWING NO.:	09 OF 20
APPROVED BY:	RO		

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 33")

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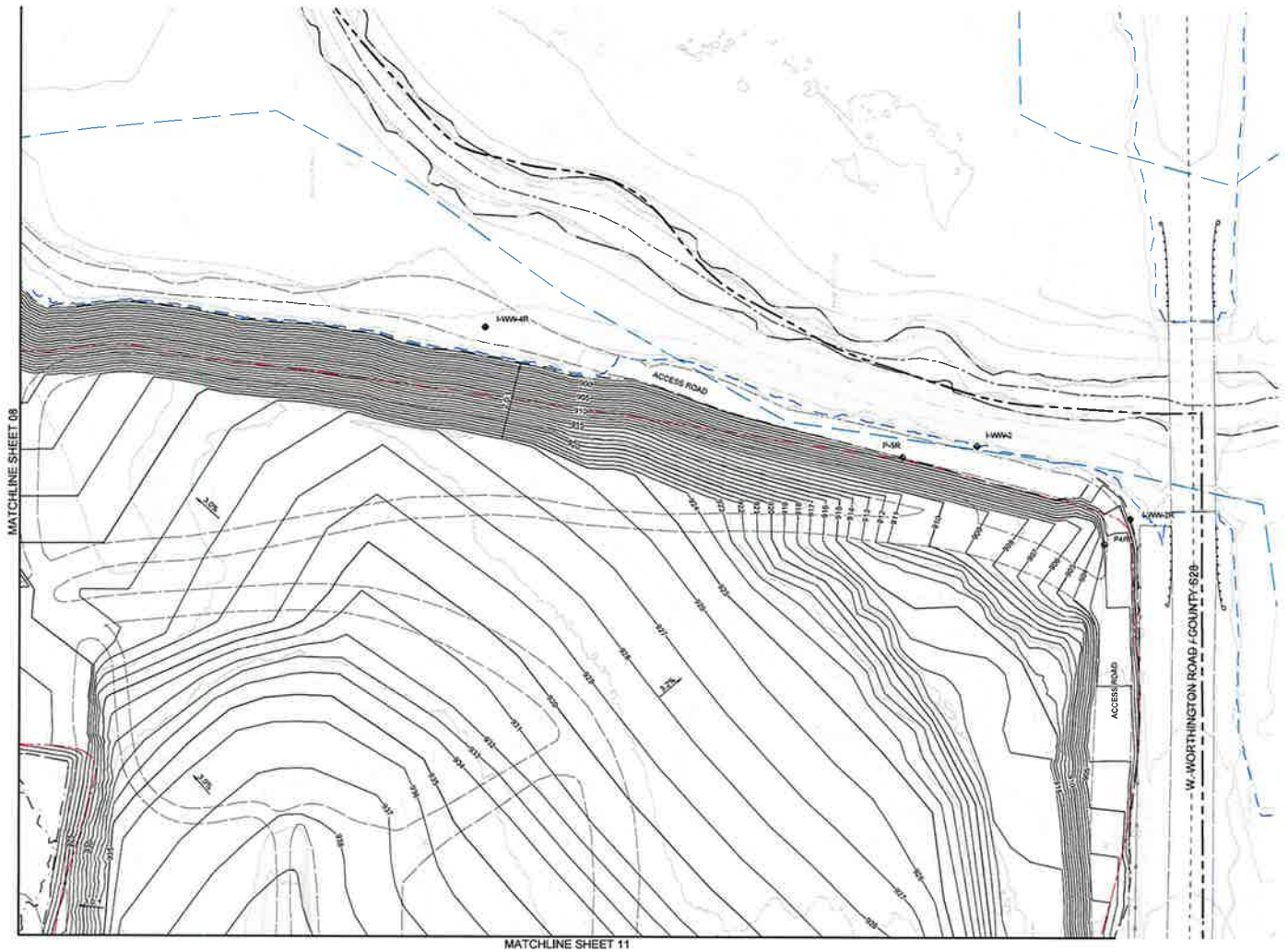
EEC ORIGINAL PKG



LEGEND

- 2019 EXISTING GROUND MAJOR CONTOUR (5')
- 2019 EXISTING GROUND MINOR CONTOUR (1')
- EXISTING FENCE
- 920 PROPOSED GRADING MAJOR CONTOUR (5')
- PROPOSED GRADING MINOR CONTOUR (1')
- PROPOSED GRADING LIMIT
- PROPERTY BOUNDARY
- APPROXIMATE 100 YR FLOOD PLAIN
- PUBLISHED FEMA FLOOD PLAN BOUNDARY
- NEW RIVER CENTERLINE
- LIMIT OF WASTE (NOTE 3)
- LANDFILL GAS MONITORING PROBE
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- ABANDONED GROUNDWATER MONITORING WELL
- MONITORING WELL TO BE ABANDONED

NOTES

1. PROPOSED GRADES SHOWN WITHIN PROPOSED LIMIT OF WASTE REPRESENT THE TOP OF THE FINAL COVER SOIL EXCLUDING EROSION PROTECTION AND BEDDING LAYER.
2. AREAS WITHIN PROPOSED LIMIT OF WASTE SHALL BE CONSTRUCTED WITH FINAL COVER SYSTEM PER SECTIONS: B 18 / A 18
3. LIMIT OF WASTE SHOWN BASED ON WASTE DELINEATION STUDY PERFORMED BY GOESYNTEC CONSULTANTS DATED 18 DECEMBER 2018.

KEY MAP
SCALE = 1" = 600'

0 40 80
SCALE IN FEET

NO	DATE	DESCRIPTION	DRN	APP
C	01/24/20	PERMIT SUBMITTAL		

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TELEPHONE: 442.265.1818

TITLE: FINAL COVER GRADING III

PROJECT: IMPERIAL SOLID WASTE SITE FINAL CLOSURE

SITE: COUNTY OF IMPERIAL, CALIFORNIA

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

01/24/2020
DATE

C79042 (Exp. 12/31/21) Civil STATE OF CALIFORNIA

DESIGN BY:	RC	DATE:	JANUARY 2020
DRAWN BY:	MC	PROJECT NO:	SC0974
CHECKED BY:	RC	FILE:	SC0974 08-11
REVIEWED BY:	RO	DRAWING NO.:	10 OF 20
APPROVED BY:	RC		

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 33")

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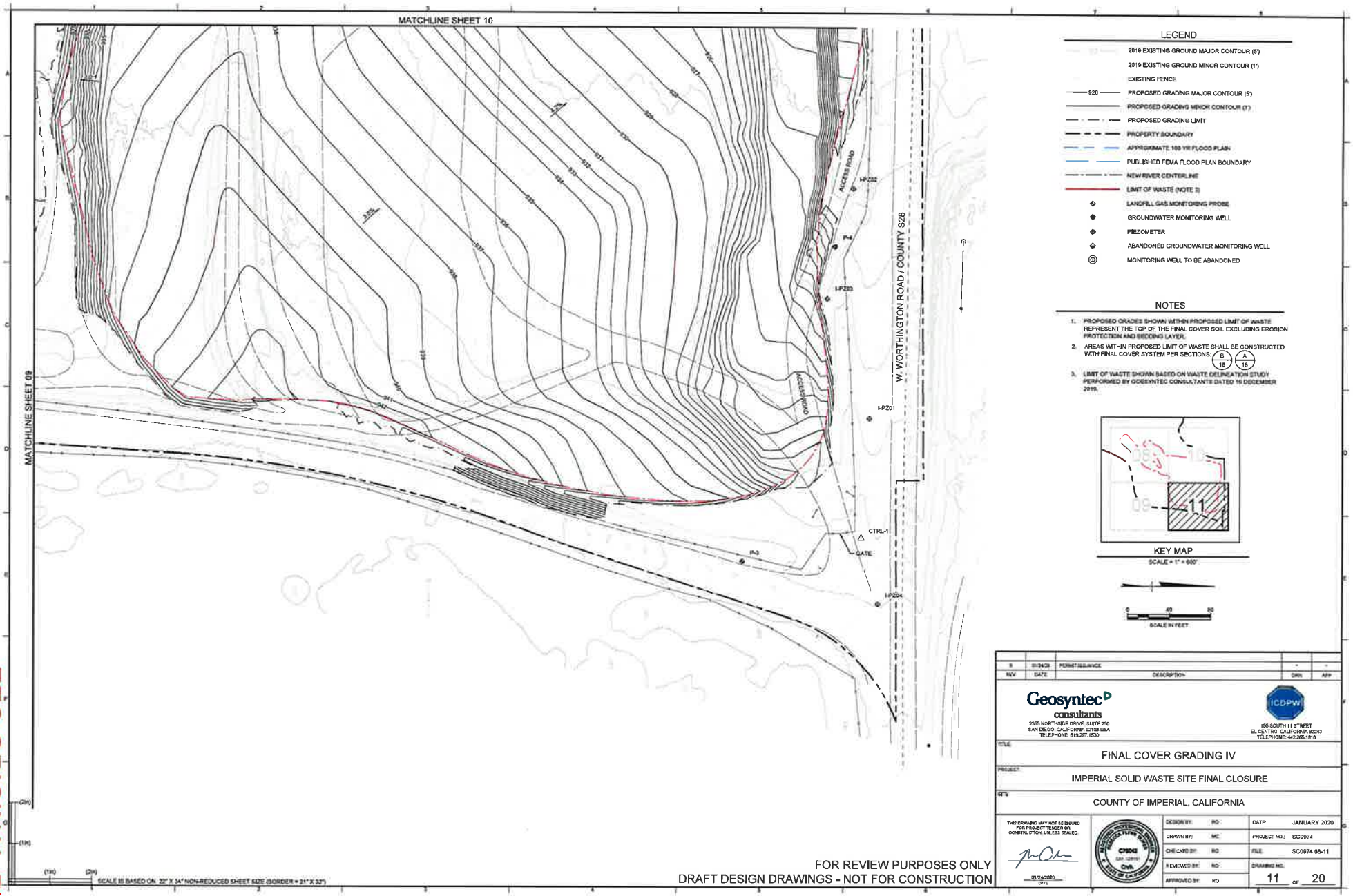
EEC ORIGINAL PKG



LEGEND

- 2019 EXISTING GROUND MAJOR CONTOUR (5')
- 2019 EXISTING GROUND MINOR CONTOUR (1')
- EXISTING FENCE
- 920 PROPOSED GRADING MAJOR CONTOUR (5')
- PROPOSED GRADING MINOR CONTOUR (1')
- PROPOSED GRADING LIMIT
- PROPERTY BOUNDARY
- APPROXIMATE 100 YR FLOOD PLAIN
- PUBLISHED FEMA FLOOD PLAN BOUNDARY
- NEW RIVER CENTERLINE
- LIMIT OF WASTE (NOTE 3)
- LANDFILL GAS MONITORING PROBE
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- ABANDONED GROUNDWATER MONITORING WELL
- MONITORING WELL TO BE ABANDONED

NOTES

1. PROPOSED GRADES SHOWN WITHIN PROPOSED LIMIT OF WASTE REPRESENT THE TOP OF THE FINAL COVER SOIL EXCLUDING EROSION PROTECTION AND BEDDING LAYER.
2. AREAS WITHIN PROPOSED LIMIT OF WASTE SHALL BE CONSTRUCTED WITH FINAL COVER SYSTEM PER SECTIONS: B/15 A/15
3. LIMIT OF WASTE SHOWN BASED ON WASTE DELINEATION STUDY PERFORMED BY GOSSYNTEC CONSULTANTS DATED 16 DECEMBER 2019.

KEY MAP
SCALE = 1" = 600'

0 40 80
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
B	01/24/20	PERMIT SUBMITTAL	-	-

Geosyntec consultants
2695 NORTHSIDE DRIVE, SUITE 250
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TELEPHONE: 442.265.1818

TITLE: FINAL COVER GRADING IV

PROJECT: IMPERIAL SOLID WASTE SITE FINAL CLOSURE

SITE: COUNTY OF IMPERIAL, CALIFORNIA

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

01/24/2020
DATE

DESIGN BY:	RO	DATE:	JANUARY 2020
DRAWN BY:	MC	PROJECT NO.:	SC0974
CHECKED BY:	RO	FILE:	SC0974 08-11
REVIEWED BY:	RO	DRAWING NO.:	11 OF 20
APPROVED BY:	RO		

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EEC ORIGINAL PKG

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

EEC ORIGINAL PKG

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista or scenic highway? ☐ ☐ ☐ ☒

According to the Imperial County Conservation and Open Space Element (2016) Section E, Number 2, no State scenic highways have been designated in Imperial County. In addition, according to Figure 9 of the Imperial County Conservation and Open Space Element the project is mapped in an area designated to have a Low Value of Maintenance of Visual Quality. The project site is not located near a designated scenic vista. No Impact is projected.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? ☐ ☐ ☐ ☒

There are no historic buildings near or around this project site. The project site and surrounding areas are mostly open space with little to no vegetation or rock outcroppings. No impact is projected.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surrounding? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? ☐ ☐ ☐ ☒

The project will temporarily increase the amount of equipment onsite changing the existing view; however, after construction, the site will have the same visual character as it currently has. In addition, according to Figure 9 of the Imperial County Conservation and Open Space Element (2016), the project is mapped in an area designated to have a Low Value of Maintenance of Visual Quality. No impact is projected.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ☐ ☐ ☐ ☒

No light or glare sources as noted in Section E, Number 4 of the Imperial County Conservation and Open Space Element (2016), will be added as a result of the project. No impact is projected.

II. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. --Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ☐ ☐ ☐ ☒

The Site is located on land designated for government/special (G/S) use purposes and the project will not result in the conversion of farmland to non-agricultural use. No impact is projected.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? ☐ ☐ ☐ ☒

The Site is located on land designated for government/special (G/S) use purposes and the project will not result in the conversion of farmland to non-agricultural use. No impact is projected.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ☐ ☐ ☐ ☒

There are no timber resources on or near the proposed project. No impact is projected.

d) Result in the loss of forest land or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

EEC ORIGINAL PKG

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

There are no timber resources on or near the proposed project. No impact is projected.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

The Site is located on land designated for government/special (G/S) use purposes and the project will not result in the conversion of farmland to non-agricultural use. There are no timber resources on or near the proposed project. As a result, the proposed project will have no impact on agricultural or forest resources. No Impact is projected.

III. AIR QUALITY

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

a) Conflict with or obstruct implementation of the applicable air quality plan? ☐ ☒ ☐ ☐

Imperial County is designated by the United States Environmental Protection Agency (USEPA) as non-attainment for the ozone and particulate matter less than ten microns in diameter (PM10) National Ambient Air Quality Standards (NAAQS) with a portion of the County designated as non-attainment for the particulate matter less than 2.5 microns in diameter (PM2.5) NAAQS. Similarly, the area does not attain California ambient air quality standards (CAAQS) for ozone, PM10 and PM2.5. Based on similar earthwork construction activities, mitigated construction-related emissions are estimated to be below the daily threshold of significance for construction activities. The project is subject to mitigation during construction which includes:

MM AQ-1*:* Dust emissions are anticipated to decrease once the final cover is complete. Project construction is anticipated to occur over a period of 71 days. The main construction activities that contribute to emissions are as follows:

- Grubbing
- Excavation
- Waste relocation
- Soil import and placement
- Grading
- Temporary electricity generation

MM AQ-2: Preparation of a Dust Control Plan in accordance with Rule 801 of the Imperial County Air Pollution Control District requirements with written notification to the Air District 10 days prior to construction/earthmoving commencement.
MM AQ-3: Cover soil in haul trucks.
MM AQ-4: Cover or wet debris, soil, and other sources of fugitive dust when not in use.
MM AQ-5: Minimize drop heights during loading and unloading.
MM AQ-6: Clean vehicles and tires.
MM AQ-7: Sweep adjacent streets of oils and mud if needed.
MM AQ-8: Water exposed areas at least three times per day.
MM AQ-9: Limit vehicle speeds on unpaved roads to 15 miles per hour.
MM AQ-10: Apply water or soil stabilizer on unpaved road.
MM AQ-11: Suspend earth-moving or dust producing activities during periods of winds greater than 25 miles per hour as needed to meet the exemption provided by ICAPCD Rule 801, Section D.2.

In accordance with California Code of Regulations, Title 13, Section 2485(c)(1), the following mitigation measures MM AQ-12 and MM AQ-13 will be implemented to reduce exhaust emissions from highway-licensed diesel-fueled vehicles with gross weight rating over 10,000 pounds that are not equipped with alternative technologies listed in Section 2485(c)(2):
MM AQ-12: Diesel engines shall not be permitted to idle for greater than five minutes at any location.
MM AQ-13: Diesel auxiliary power engines shall not be used to power a heater, air conditioner or any ancillary equipment on the vehicle during sleeping or resting for greater than five minutes at any location when within 100 feet of a restricted area (i.e., residential area).

MM AQ-14: Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
MM AQ-15: Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). Should any transformers/generators be used on-site, an Authority to Construct/Permit to Operate application shall be submitted to the APCD.
MM AQ-16: Construction equipment operating on-site should be equipped with two to four degree engine timing retard or pre-combustion chamber engines.
MM AQ-17: Construction equipment used for the project should utilize EPA Tier 2 or better engine technology.
MM AQ-18: Maintain vehicles and equipment to prevent leaks and minimize emissions and encourage employees to do the same.
MM AQ-19: Cover exposed waste daily with daily cover in accordance with Technical Specification.
MM AQ-20:Odors will be minimized using odor suppressants.

EEC ORIGINAL PKG

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

MM AQ-21: During waste excavation, a photoionization detector (PID) will be used to monitor volatile organic compounds (VOCs) emissions.

As a result, impacts are potentially significant unless mitigation is incorporated. Mitigation measures are also included in the CEQA Project Description included as Attachment A [Geosyntec, 2020] and in the Mitigation, Monitoring, and Reporting Program (MMRP) in Section 4, IX.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ☐ ☒ ☐ ☐

Imperial County is designated by the United States Environmental Protection Agency (USEPA) as non-attainment for the ozone and particulate matter less than ten microns in diameter (PM10) National Ambient Air Quality Standards (NAAQS) with a portion of the County designated as non-attainment for the particulate matter less than 2.5 microns in diameter (PM2.5) NAAQS. Similarly, the area does not attain California ambient air quality standards (CAAQS) for ozone, PM10 and PM2.5. Air quality impacts are anticipated to be minimal and short-lived (less than 6 months).

As a result, impacts are potentially significant unless mitigation measures MM AQ-1 through MM AQ-21 are implemented during construction. Mitigation measures are also included in the CEQA Project Description included as Attachment A [Geosyntec, 2020] and in the Mitigation, Monitoring, and Reporting Program (MMRP) in Section 4, IX.

c) Expose sensitive receptors to substantial pollutants concentrations? ☐ ☐ ☐ ☒

There are no populated areas within 1,000 feet of the project site. No impact is projected.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people? ☐ ☐ ☒ ☐

Waste relocation may result in odors. Odors will be minimized with the use of daily cover and/or odor suppressants. No receptors are within 1,000 feet of the project site. Less than significant impact is projected.

IV. BIOLOGICAL RESOURCES Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? ☐ ☒ ☐ ☐

The Project site is highly disturbed with little vegetation or other habitat for candidate, sensitive, or special status species. Due to the potential presence of burrowing owls or nesting birds in the future, the following mitigation measures should be implemented:

MM BR-1: A qualified biologist(s) will conduct a pre-construction presence/absence survey for burrowing owls 14 days prior to ground disturbing activities and 24 hours immediately before ground disturbing activities. If burrowing owls are documented on site, then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls.

MM BR-2: Vegetation clearing and ground disturbing activities should be conducted outside of the nesting season (January 15 to August 31). Due to the potential for nesting birds to occur, a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species will have an avoidance buffer of 500 feet and other bird species will have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW.

As a result, potentially significant impact is projected unless the above mitigation measures are implemented.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? ☐ ☐ ☐ ☒

No work within the jurisdictional waters of the United States or other sensitive natural communities is anticipated. No impact is projected.

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		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
	migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				

The Project site is highly disturbed with little vegetation or other habitat for candidate, sensitive, or special status species. The project will not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. No impact is projected.

e)	Conflict with any local policies or ordinance protecting biological resource, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

The project does not conflict with any local policies or ordinance protecting biological resource, such as a tree preservation policy or ordinance. No impact is projected.

f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact is projected.

V. CULTURAL RESOURCES Would the project:

a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒

There are no historical resources at the Project site. No impact is projected.

b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒

The site is highly disturbed without archaeological resources. No impact is projected.

c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

The site is highly disturbed and has been used as a landfill since the 1960's. The site was not used as a cemetery and there are no cemeteries nearby. In addition, the local Native American Tribe has been contacted by the County in pursuant to AB52 as discussed in Section II-13 regarding the potential impact to Tribal Cultural Resources [PDSD, 2020]. A response from the Tribe is pending. However, no impact is projected.

VI. ENERGY Would the project:

a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

Construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic; however, no energy will be consumed after landfill closure. Construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with local, state, and federal regulations limiting engine idling times would reduce the amount of transportation fuel demand during project construction. Less than significant impact is projected.

b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact is projected.

VII. GEOLOGY AND SOILS Would the project:

a)	Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death involving:	☐	☐	☒	☐

EEC ORIGINAL PKG

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? ☐ ☐ ☒ ☐

The Site is subject to seismic events due to its location within the Salton trough, the boundary between the Pacific and North American Tectonic plates. The effects of seismic events on the landfill and closure were evaluated as part of closure design. The analysis was performed for Maximum Credible Earthquake (MCE) in accordance with 27 CCR Section 21750(f)(5). The design event for the Site is a moment magnitude (Mw) 76.7 event on the Superstition Hills Fault located approximately 3 miles from the site. The final cover was evaluated considering the seismic event and estimates of seismically-induced displacement was calculated to be less than currently accepted displacements for unlined landfills. Less than significant impact is projected.

2) Strong Seismic ground shaking? ☐ ☐ ☒ ☐

The Site is subject to strong ground motions and liquefaction resulting from seismic events due to its location within the Salton trough, the boundary between the Pacific and North American Tectonic plates. The effects of seismic events on the landfill and closure were evaluated as part of closure design. The analysis was performed for Maximum Credible Earthquake (MCE) in accordance with 27 CCR Section 21750(f)(5). The design event for the Site is a moment magnitude (Mw) 76.7 event on the Superstition Hills Fault located approximately 3 miles from the site. The final cover was evaluated considering the seismic event and estimates of seismically-induced displacement was calculated to be less than currently accepted displacements for unlined landfills. Less than significant impact is projected.

3) Seismic-related ground failure, including liquefaction and seiche/tsunami? ☐ ☐ ☐ ☒

The effects of seismic events on the landfill and closure were evaluated as part of closure design. The analysis was performed for Maximum Credible Earthquake (MCE) in accordance with 27 CCR Section 21750(f)(5). The design event for the Site is a moment magnitude (Mw) 76.7 event on the Superstition Hills Fault located approximately 3 miles from the site. The final cover was evaluated considering the seismic event and estimates of seismically-induced displacement was calculated to be less than currently accepted displacements for unlined landfills. Due to the inland Site location and distance from a large body of water, the potential for a tsunami or seiche to affect the Site is also considered extremely low. No impact is projected.

4) Landslides? ☐ ☐ ☐ ☒

The site is not subject to adverse effects from landslides. The site will remain open space after closure. No impact is projected.

b) Result in substantial soil erosion or the loss of topsoil? ☐ ☐ ☐ ☒

The erosion protection layer on the cover minimizes soil loss due to soil erosion. Soil erosion calculations performed during closure design indicates soil loss less than allowable in accordance with 27 CCR. No impact is projected.

c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse? ☐ ☐ ☒ ☐

The Site is subject to liquefaction resulting from seismic events due to its location within the Salton trough, the boundary between the Pacific and North American Tectonic plates. The effects of seismic events on the landfill and closure were evaluated as part of closure design. The analysis was performed for Maximum Credible Earthquake (MCE) in accordance with 27 CCR Section 21750(f)(5). The design event for the Site is a moment magnitude (Mw) 76.7 event on the Superstition Hills Fault located approximately 3 miles from the site. The final cover was evaluated considering the seismic event and estimates of seismically-induced displacement was calculated to be less than currently accepted displacements for unlined landfills. Less than significant impact is projected.

d) Be located on expansive soil, as defined in the latest Uniform Building Code, creating substantial direct or indirect risk to life or property? ☐ ☐ ☐ ☒

Potentially expansive clays were observed at the Site. However, clays placed during grading will be properly moisture conditioned prior to placement and the proposed volumes to be placed are not great enough to create a substantial risk to life or property. Further, future site land use (open space) would not include the installation or use of a septic tank. No impact is projected.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ☐ ☐ ☐ ☒

The soil at the Site is considered capable of adequately supporting a septic tank or alternative waste water disposal systems (depending on the system proposed- infiltration/percolation at the site is considered very low); however, the land use for the site is to remain open space without permanent structures requiring waste water disposal. During construction, portable toilet units will be provided for construction workers. No impacted is projected.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ☐ ☐ ☐ ☒

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

sewers are not available for the disposal of wastewater?
The soil at the Site is considered capable of adequately supporting a septic tank or alternative waste water disposal systems (depending on the system proposed- infiltration/percolation at the site is considered very low); however, the land use for the site is to remain open space without permanent structures requiring waste water disposal. During construction, portable toilet units will be provided for construction workers. No impacted is projected.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ☐ ☐ ☐ ☒

The Project site has been disturbed with landfilling activities. No unique paleontological resource or site or unique geologic features will be impacted. No impacted is projected.

VIII. GREENHOUSE GAS EMISSION Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ☐ ☒ ☐ ☐

During construction, GHGs would be emitted through the use of equipment and various construction-related vehicle trips for transport and site access. During waste relocation, methane gas may be emitted when waste is exposed. The construction is subject to MM AQ-13 through MM AQ-18 and should also implement the following mitigation measures to minimize greenhouse gas emissions during construction:

MM GG-1: Cover exposed waste daily with daily cover in accordance with the Technical Specifications.

As a result, no impact with mitigation is projected.

b) Conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ☐ ☒ ☐ ☐

Performance standards and the requirements for LFG monitoring and control for solid waste disposal sites are dictated in 27 CCR Sections 20921 through 20939. 27 CCR Section 20921 stipulates that the concentration of methane gas must not exceed 1.25 percent by volume (%v) in air within any portion of any on-site structures, and that the concentration of methane gas migrating from the disposal site must not exceed 5 %v in soil gas at the disposal site permitted facility boundary or an alternative boundary approved in accordance with 27 CCR Section 20925. The following mitigation measures should be implemented after completion of construction:

MM GG-2: The landfill cover will minimize surface emissions of landfill gas including methane. Landfill gas will be monitored at perimeter probes for migration as required by CalRecycle in 27 CCR Section 20921 [Bryan A. Stirrat, 2009]. If migration is identified, a control system may be implemented to extract and treat landfill gas.

As a result, no impact with mitigation is projected.

IX. HAZARDS AND HAZARDOUS MATERIALS Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ☐ ☒ ☐ ☐

During landfill operations, load checks were performed by Site personnel to ensure that hazardous materials were not being disposed of at the Site. During implementation of the proposed project, municipal solid waste will be relocated within the project boundary to reduce slope inclinations; hazardous waste is not anticipated. The following mitigation measures will be implemented:

MM HHM-1: Hazardous materials will not be used during site closure.
MM HHM-2: The project will adhere to the Waste Relocation Plan [Geosyntec, 2020a] to provide monitoring and contingency planning in the event hazardous wastes are encountered. Hazardous wastes, if encountered, will be segregated and disposed of offsite in accordance with local, state, and federal regulations.

No impact is projected provided proper mitigation measures are performed.

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the ☐ ☐ ☐ ☒

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ☐ ☐ ☒ ☐

The site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Less than significant impacted is projected.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ☐ ☐ ☒ ☐

The Site is located within one mile of the El Centro Naval Air Facility; however, the site land use will not change and will not result in a new safety hazard for people working at the landfill. Due to the proximity of the Site in relation to the airport, best management landfill practices and daily cover regulations will mitigate the presence of birds through controlling vectors. Impacts associated with hazards and hazardous materials will be less than significant.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☐ ☒

The proposed project will not interfere with the Imperial County Operational Area Emergency Operations Plan (EOP) as adopted by the Imperial County Fire Department and Office of Emergency Services. No impact is projected.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ☐ ☐ ☐ ☒

The proposed project will not expose people or structures to significant risk associated with wildfires. No impact is projected.

X. HYDROLOGY AND WATER QUALITY Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? ☐ ☐ ☒ ☐

Along with agricultural runoff, the New River, adjacent to the site, is known to convey community and industrial wastewater, raw and inadequately treated sewage, industrial waste, garbage and other solid wastes, animal wastes, and occasionally geothermal wastewaters (RWQCB, 2006a). Furthermore, the New River is included in the 2014/2016 Clean Water Act Section 303(d) list that identifies significantly polluted waters and proposes total maximum daily loads (TMDL) for specific pollutants contributing to the water's impairment. Four TMDLs have been implemented for the New River for indicator bacteria, organic enrichment/low dissolved oxygen (DO), sediment, and trash. Seventeen TMDLs have also been proposed, including several metals, pesticides, volatile organic compounds (VOCs), and nutrients, to reduce pollutant levels (RWQCB, 2006b). The stormwater management system on the landfill is designed to manage the 100-year flood event. Further, the closure disturbances will be outside of the 100-year floodplain along the western boundary of the site as identified by the Flood Insurance Rate Maps (FIRM) prepared by Federal Emergency Management Agency (FEMA) and updated by the Letter of Map Revision (Geosyntec, 2020c, pending approval). IN addition, a ground water monitoring network remains onsite and monitoring is performed semi-annually as required in 27 CCR Sections 20380 through 20435. Following closure, the site will be stabilized to minimize soil erosion. As a result, a less than significant impact to hydrology and water quality is anticipated as a result of the proposed project.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ☐ ☐ ☐ ☒

The project site is located in the Imperial Valley Groundwater Basin (Basin 7-30) of the Colorado River Hydrologic Region. The Salton Sea bounds the basin to the west and acts as the discharge point for the basin's groundwater. The New River to the direct west of the project site acts as a conveyance for run-off to the Salton Sea for groundwater recharge. . The Site is currently a landfill with minimal groundwater recharge potential. The cover will improve groundwater quality and the proposed drainage improvements will provide run-off from the site into the New River. As a result, the proposed project does not substantially decrease groundwater supplies or interfere with groundwater recharge. No impact is projected.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream ☐ ☐ ☐ ☒

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

or river or through the addition of impervious surfaces, in a manner which would:

The proposed drainage improvements will follow the current natural run-off flows at the site. The 100-year floodplain was reevaluated and identified along the toe of the landfill slope outside of the landfill waste limits. The 100-year floodplain will not be impacted as a result of the project. No impact is projected.

(i) result in substantial erosion or siltation on- or off-site; ☐ ☒ ☐ ☐

The following Mitigation Measures will be performed to minimize erosion or siltation on- or off-site:

MM HWQ-1: Erosion control measures are implemented in the closure grading design at the site. The uppermost layer of the final cover system on the side slopes will be constructed of a six inch blanket of pit run rock to reduce the potential for erosion from wind and water for the underlying monolithic select soil layer. To help reduce erosion or rill formation on slopes, diversion berms from six inches to twelve inches high will redirect surface water flow. These berms will also be surfaced with rock as required in the Technical Specifications for the erosion protection rock on the side slopes. Surface channels are to be incorporated into the drainage design along access roads in the northwestern corner of the site. The surface channels are lined with rock to protect against scour and reduce erosion. High density polyethylene (HDPE) pipe anchored at regular intervals along the landfill surface convey the stormwater runoff from the top deck and concentrated flow locations along the surface channels to the discharge locations. Riprap energy dissipators are constructed to promote positive drainage toward drainage structures and provide a means for decreasing the amount of erosion.

MM HWQ-2: In addition, the landfill drainage facilities must be operational and free of debris. Maintenance of the drainage system is based on the site inspection program to identify potential and existing problems, and the general program of responsible and timely corrective action. Inspections will be performed quarterly and after significant precipitation or seismic events. Inspections will include review of the site for the following conditions:

- Open channels and ditches are draining and free of debris;
- No areas of excessive sedimentation or scour;
- Diversion berms are intact and operable; and/or
- Downdrains are free of debris and vegetation and cracks.

MM HWQ-3: During closure construction, a SWPPP will be developed to identify BMPs to minimize discharge of pollutants to the New River during construction. Following closure, the site will be stabilized to minimize soil erosion.

Therefore, impacts are potentially significant unless mitigation is incorporated.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; ☐ ☐ ☐ ☒

The proposed project does not increase the rate of surface runoff in a manner which would result in flooding. Onsite stormwater controls are designed to manage the 100-year flood event. No impact is projected.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or; ☐ ☐ ☐ ☒

The proposed project does not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. The stormwater management system is designed to manage the 100-year storm event. No impact is projected.

(iv) impede or redirect flood flows? ☐ ☐ ☐ ☒

The proposed project does not impede or redirect flood flows. No impact is projected.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? ☐ ☐ ☐ ☒

Geosyntec developed a report detailing the reevaluation of the New River floodplain as part of an application for a Letter of Map Revision (LOMR) submitted to FEMA due to the work required within the floodplain as part of the closure that is not anticipated to affect

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

the hydrologic or hydraulic characteristics of the New River floodplain. This included a Letter of Map Revision (LOMR) that has been prepared and will be submitted to FEMA during closure activities (Geosyntec, 2020c). The proposed project does not risk release of pollutants due to project inundation. No impact is projected.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ☐ ☐ ☒ ☐

Groundwater beneath the Site generally occurs between 9 and 44 feet below the top of well casings and flows northwest towards the New River at a hydraulic gradient of approximately 0.036 feet per foot (ft/ft). Analysis of the groundwater samples collected from monitoring wells at the ISWS has shown consistently elevated concentrations of chloride, sulfate, and total dissolved solids (TDS), exceeding State of California secondary drinking water standards. Data from the site's background and compliance wells are relatively consistent upgradient and downgradient and suggest that the concentrations of TDS and chloride are considered to be naturally occurring and not indicative of a release from the landfill (GLA, 2019). Less than significant impact is projected.

XI. LAND USE AND PLANNING Would the project:

a) Physically divide an established community? ☐ ☐ ☐ ☒

The proposed project does not divide an established community. No impact is projected.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ☐ ☐ ☐ ☒

The proposed project does not conflict with the Imperial County Planning & Development Services Title 9, Division 5 Zoning Areas Established, Chapter 20 Government/Special land use ordinance; nor any policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect [Title 9, 1998]. No impact is projected.

XII. MINERAL RESOURCES Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ☐ ☐ ☐ ☒

The proposed project does not result in the loss of availability of a known mineral resource. According to the Imperial County Conservation and Open Space Element (2016) Existing Mineral Resources map, no mineral resources are present near the Site [PDSD, 2016]. No impact is projected.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ☐ ☐ ☐ ☒

The proposed project does not result in the loss of availability of locally-important mineral resource. According to the Imperial County Conservation and Open Space Element (2016) Existing Mineral Resources map, no mineral resources are present near the Site [PDSD, 2016]. No impact is projected.

XIII. NOISE Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ☐ ☐ ☒ ☐

Noise at the Site may temporarily increase as a result of the Project. Working hours are anticipated to be 8 to 12 hours per day beginning in the morning hours and per the contractor's direction. In accordance with the General Plan, construction equipment operation will be limited to the hours of 7 am to 7pm Monday through Friday and 9 am to 5pm on Saturdays. Temporary increases may result from traffic to the site and operation of construction equipment. Equipment used for construction will include but are not limited to the following: motor graders, soil compactors, front-end loaders, bulldozers and skid steers. Construction noise, from a single piece of equipment or a combination of equipment, will not exceed the Construction Noise Standards of 75 dB L_{eq} (Equivalent Continuous Sound Level) when averaged over an eight (8) hour period. Noise levels will be maintained as outlined in the Imperial

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

County General Plan Noise Element (2015). In addition, no sensitive noise receptors are located near the site. Less than significant impact is projected.

b) Generation of excessive groundborne vibration or groundborne noise levels? ☐ ☐ ☐ ☒

Strong ground vibration equipment (impact pile drivers, hydraulic breakers, blasting, etc.) is not anticipated during construction and in most cases, vibration induced by typical construction equipment does not result in adverse effects on people and structures. Noise from the equipment generally overshadows any meaningful ground vibration effects on people (CalTrans, 2013). In accordance with the General Plan, construction equipment will be limited to the hours of 7 am to 7pm Monday through Friday and 9 am to 5 pm on Saturday. However, no impact is projected.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ☐ ☐ ☒ ☐

The project is within the vicinity of the El Centro Naval Air Facility; however, there are no changes to site activities which would be affected by airplane noise. The project area is within the Air Installation Compatible Use Zone (AICUZ) "B1" as defined in the Imperial County Airport Land Use Compatibility Plan [ALUCP, 1996]. The potential impact elements may include aircraft below 400 ft and substantial noise up to 65-75 dB from aircraft. However, those noise levels are considered acceptable for agricultural areas. Noise generated from closure construction activities are standard with general construction and will have a less than significant impact.

XIV. POPULATION AND HOUSING Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)? ☐ ☐ ☐ ☒

There is no housing at the Site. No impact is projected.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒
There is no housing at the Site. No impact is projected.

XV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: ☐ ☐ ☐ ☒
The project would not result in substantial adverse physical impacts associated with governmental or public services facilities. No impact is projected.

1) Fire Protection? ☐ ☐ ☐ ☒
There are no facilities at the site which would result in fire risk. Future vegetation will be maintained to minimize risk of brush fire per CCR 27 Section 21140. Landfill gas monitoring will minimize explosive hazards associated with methane gas migration.
The proposed project will have no impact to fire protection.

2) Police Protection? ☐ ☐ ☐ ☒
There are no facilities at the site and site access will be restricted through fencing, geologic barriers (New River), and a locked gate.

EEC ORIGINAL PKG

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

The proposed project will have no impact to police protection.

3) Schools? ☐ ☐ ☐ ☒
The proposed project will have no impact to schools, there are none in the vicinity of the project.

4) Parks? ☐ ☐ ☐ ☒
The proposed project will have no impact to public parks, there are none in the vicinity of the project.

5) Other Public Facilities? ☐ ☐ ☐ ☒
The proposed project will have no impact to any public facilities, there are none in the vicinity of the project.

XVI. RECREATION

a) Would the project increase the use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ☐ ☐ ☐ ☒
The Project will not affect parks, or recreational facilities. No impact is projected.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment? ☐ ☐ ☐ ☒
The Project will not affect parks, or recreational facilities. No impact is projected.

XVII. TRANSPORTATION ***Would the project:***

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ☐ ☐ ☒ ☐
A Traffic Impact Analysis was performed to evaluate if import of borrow material including cover soil and erosion protection rock would impact traffic along the material haul routes [Linscott, 2020]. The study included as Attachment 3 of the CEQA Project Description indicated no Project or cumulative related significant impacts to traffic were identified and therefore no mitigation measures are necessary. The amount of import noted in the Traffic Impact Analysis is a conservative estimate based on the full quantity of fill needed at the site. However, we anticipate that the proposed on-site borrow will be utilized to make up some, or all of the difference in the volumes noted. Therefore; the increased traffic on access roads will have a less than significant impact.

b) Would the project conflict or be inconsistent with the CEQA Guidelines section 15064.3, subdivision (b)? ☐ ☐ ☐ ☒
The proposed project will not conflict with the CEQA Guidelines section 15064.3, subdivision (b). No impact is projected.

c) Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ☐ ☐ ☐ ☒
The proposed project will not increase hazards due to any design features. No impact is projected.

d) Result in inadequate emergency access? ☐ ☐ ☐ ☒
The project will not result in inadequate emergency access. No impact is projected.

XVIII. TRIBAL CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is: ☐ ☐ ☐ ☒

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒

The site has been disturbed from landfill operation activities since approximately 1960. A cultural study was performed at the Borrow site and no evidence of cultural resources were identified. It is not listed or eligible for listing in the California or local register of Historic Resources as defined in Public Resources Code Section 5020.1 (k). No impact is projected.

(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth is subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☐	☐	☒

In accordance with Assembly Bill 52 and Section 21080.3.1(d) of the California Public Resources Code, Imperial County Planning and Development Services issued a letter on May 14, 2020 to the Fort Yuma Quechan Indian Tribe for notification of the proposed project. The Tribe was given a time frame to review whether Tribal Cultural Resources are present within the project area. A response from the Tribe is pending the June 22, 2020 due date. However, the project is not anticipated to impact Tribal Cultural Resources.

XIX. UTILITIES AND SERVICE SYSTEMS Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

The Project will not generate wastewater or require new water services except temporary pumps and stand pipes for construction. The stormwater discharged from the site will utilize existing drainage features sized to manage flows. Less than significant impact is projected.

b) Have sufficient water supplies available to serve the project from existing and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

Approximately 2 million gallons of water will be utilized for closure construction. This amount is considered typical for a grading project of this size and in this climate. This water will be used for moisture conditioning material for compaction, but primarily dust control during construction activities. The Project site does not have existing water service. Water for use during construction will be acquired by the grading contractor through Imperial Irrigation District (IID) or another Municipal Agency. The grading contractor will be responsible for acquiring the proper permits and paying the required fees. Post-closure/construction, the site owner will be responsible for any water use necessary at the site. Therefore, less than significant impact is projected.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

The proposed project will not result in a determination by the wastewater treatment provider (IID). No impact is projected.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒

The landfill ceased operations in 2018 and was converted to a transfer station. The transfer station will temporarily close during construction; therefore, customers will be directed to the Calexico Landfill during this time. The Imperial County Department of Public Works will issue a Public Service Announcement (PSA) prior to this closure. In addition, posted signage during construction activities will direct customers to and provide the location of, the Calexico Landfill. No waste originating from the ISWS will be relocated to the

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

Calexico Landfill. Following closure completion, it is anticipated that the transfer station will reopen at the site. Any solid waste brought to the transfer station will not remain at the site and will be transported to the Calexico Landfill within the requirements of State and local standards. Waste volumes will not exceed the capacity of the local infrastructure or impair the attainment of solid waste reduction goals. All waste accepted will comply with federal, state, and local management such as CFR and CCR regulations pertaining to solid waste. No impact is projected

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ☐ ☐ ☒ ☐

The landfill ceased operations in 2018 and was converted to a transfer station. The transfer station will temporarily close during construction; therefore, customers will be directed to the Calexico Landfill during this time. The Imperial County Department of Public Works will issue a Public Service Announcement (PSA) prior to this closure. In addition, posted signage during construction activities will direct customers to and provide the location of, the Calexico Landfill. No waste originating from the ISWS will be relocated to the Calexico Landfill. Following closure completion, it is anticipated that the transfer station will reopen at the site. Any solid waste brought to the transfer station will comply with federal, state, and local management such as CFR and CCR regulations pertaining to solid waste. Therefore, a less than significant impact is projected.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☐ ☒

The project is not located in or near state responsibility areas or lands classified as a very high fire hazard severity zone. The proposed project will not impair an adopted emergency response plan or emergency evacuation plan. No impact is projected.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ☐ ☐ ☐ ☒

The Project is not located within or near a very high fire hazard severity zone nor a state responsibility zone. The proposed project will not exacerbate wildfire risks. No impact is projected.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ☐ ☐ ☐ ☒

The project is not located in or near state responsibility areas or lands classified as a very high fire hazard severity zone. The proposed project does not require the installation of infrastructure that may exacerbate fire risk. No impact is projected.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ☐ ☐ ☐ ☒

The project is not located in or near state responsibility areas or lands classified as a very high fire hazard severity zone. The proposed project does not expose people to significant risks. No impact is projected.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Revised 2009- CEQA
Revised 2011- ICPDS

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	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

SECTION 3
III. MANDATORY FINDINGS OF SIGNIFICANCE

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, eliminate tribal cultural resources or eliminate important examples of the major periods of California history or prehistory?**	☐	☒	☐	☐
b) **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**	☐	☒	☐	☐
c) **Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**	☐	☐	☒	☐

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IV. PERSONS AND ORGANIZATIONS CONSULTED

This section identifies those persons who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

A. COUNTY OF IMPERIAL

- Jim Minnick, Director of Planning & Development Services
- Michael Abraham, AICP, Assistant Director of Planning & Development Services
- Imperial County Air Pollution Control District
- Department of Public Works
- Fire Department
- Ag Commissioner
- Environmental Health Services
- Sheriff's Office

B. OTHER AGENCIES/ORGANIZATIONS

- Local Enforcement Agency
- Rocks Biological Consulting
- Laguna Mountain Environmental, Inc
- Linscott Law & Greenspan, Engineers

(Written or oral comments received on the checklist prior to circulation)

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V. REFERENCES

2. [ALUCP, 1996] "Airport Land Use Compatibility Plan, Imperial County Airports" June 1996.
3. [Brian F. Mooney & Associates, 1993] "County of Imperial General Plan EIR", prepared by Brian F. Mooney & Associates in 1993; and as Amended by County in 1996, 1998, 2001, 2003, 2006 & 2008, 2015, 2016.
4. [Bryan A. Stirrat, 2009] "Landfill Gas Perimeter Probe Plan, Imperial Solid Waste Site", prepared by Bryan A. Stirrat & Associates January 2009.
5. [CalTrans, 2013] "Transportation and Construction Vibration Guidance Manual", prepared by CalTrans, September 2013.
6. [CCR, 2020] California Code of Regulations (CCR), Title 27, Environmental Protection, Solid Waste
7. [Geosyntec, 2020] "California Environmental Quality Act, Project Description with Supporting Information, Imperial Solid Waste Site", prepared by Geosyntec Consultants, January 2020.
8. [Geosyntec, 2020a] "Waste Relocation Plan, Imperial Solid Waste Site", prepared by Geosyntec Consultants, January 2020.
9. [Geosyntec, 2020b] "Imperial Solid Waste Site, Final Closure Post Closure Maintenance Plan" prepared by Geosyntec, January 2020 revised April 2020.
10. [Geosyntec, 2020c] "Letter of Map Revision and Addendum 1 for New River Floodplain at Imperial Solid Waste Site" Case No. 20-09-0728P, April 2020
11. [HEC-14, 2006] "Hydraulic Engineering Circular No. 14, Third Edition Hydraulic Design of Energy Dissipators for Culverts and Channels, 2006. U.S. Department of Transportation, Federal Highway Administration.
12. [Imperial County OES. 2007] "Imperial County Operational Area: Emergency Operations Plan", 2007.
13. [Laguna, 2019] "Cultural Resource Survey for the Imperial Solid Waste Site Borrow Area, Imperial County" prepared by Laguna Mountain Environmental, November 2019.
14. [Linscott, 2020] "Transportation Impact Analysis, Imperial Solid Waste Site Closure", prepared by Linscott Law & Greenspan Engineers, April 2020.
15. [PDSD, 2015a] "Noise Element", prepared by Planning & Development Services, County of Imperial, October 6, 2015.
16. [PDSD, 2020] "Notice of Opportunity to Consult for the Imperial Solid Waste Site Final Closure Project in Imperial County; APN#002-040-078-000", prepared by Planning & Development Services, Department County of Imperial, May 14th, 2020.
17. [PDSD, 2016] "Imperial County Conservation and Open Space Element" prepared by Planning and Development Services Department, March 2016.
18. [PDSD, 2015] "Land Use Element of the Imperial County General Plan", prepared by Planning & Development Services, Department County of Imperial, October 6, 2015.
19. [Rocks Bio, 2019] "Imperial Solid Waste Site Project, Biotic Resources Report", prepared by Rocks Biological Consulting, November 2019.
20. [Title 9, 1998] "Title 9, Division 5 Zoning Areas Established, Chapter 20 Government/Special", Imperial County Planning & Development Services, November 1998.

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VI. MITIGATED NEGATIVE DECLARATION – County of Imperial

The following Mitigated Negative Declaration is being circulated for public review in accordance with the California Environmental Quality Act Section 21091 and 21092 of the Public Resources Code.

Project Name: Imperial Solid Waste Site Final Closure

Project Applicant: Imperial County Department of Public Works

Project Location: 1705 W. Worthington Road, Imperial, California 92251

Description of Project: The ISWS property is owned and operated by the Imperial County Department of Public Works (ICDPW). The ISWS was in operation as an illegal disposal Site until approximately 1970 when it received its waste discharge requirements (WDRs). The landfill is located on approximately 69 acres with a total disposal area footprint of approximately 18 acres. The landfill ceased operation on 29 July 2018 and was converted to a transfer station on 1 March 2019. The landfill has reached the maximum permitted capacity and therefore requires closure in accordance with California Code of Regulations, Title 27 (27 CCR) Section 21110.

This proposed project is for the closure of the Imperial Solid Waste Site, as such, closure will include waste relocation, cover soil import, engineered fill placement and compaction, and installation of stormwater management features. Relocated waste will be placed in areas to promote positive drainage and limit engineered fill import. The source for final cover at the ISWS is anticipated to be imported material from the Holtville Borrow Source. Imported engineered fill material will be placed to provide drainage and will meet project criteria to support the construction of the final cover design. Earthen diversion berms and surface channels will be constructed to divert stormwater runoff away from the slopes toward the nearest drainage conveyance. The purpose of the final soil cover is to minimize surface water intrusion, accommodate settlement and subsidence, isolate waters from the surface, and reduce the potential for odors and gas emissions. Equipment used for construction will include but are not limited to the following: motor graders, soil compactors, front-end loaders, bulldozers and skid steers. The estimated time frame to complete the closure tasks described for the site is approximately 4 to 6 months.

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VII. FINDINGS

This is to advise that the County of Imperial, acting as the lead agency, has conducted an Initial Study to determine if the project may have a significant effect on the environmental and is proposing this Mitigated Negative Declaration based upon the following findings:

☐ The Initial Study shows that there is no substantial evidence that the project may have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ The Initial Study identifies potentially significant effects but:

(1) Proposals made or agreed to by the applicant before this proposed Mitigated Negative Declaration was released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.

(2) There is no substantial evidence before the agency that the project may have a significant effect on the environment.

(3) Mitigation measures are required to ensure all potentially significant impacts are reduced to levels of insignificance.

A MITIGATED NEGATIVE DECLARATION will be prepared.

If adopted, the Mitigated Negative Declaration means that an Environmental Impact Report will not be required. Reasons to support this finding are included in the attached Initial Study. The project file and all related documents are available for review at the County of Imperial, Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 (442) 265-1736.

NOTICE

The public is invited to comment on the proposed Mitigated Negative Declaration during the review period.

7/23/20 _____
Date of Determination Jim Minnick, Director of Planning & Development Services

The Applicant hereby acknowledges and accepts the results of the Environmental Evaluation Committee (EEC) and hereby agrees to implement all Mitigation Measures, if applicable, as outlined in the MMRP.

_____ 7/31/2020
Applicant Signature Date

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SECTION 4

VIII. RESPONSE TO COMMENTS

(ATTACH DOCUMENTS, IF ANY, HERE)

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IX. MITIGATION MONITORING & REPORTING PROGRAM (MMRP)

AIR QUALITY

Imperial County is designated by the United States Environmental Protection Agency (USEPA) as non-attainment for the ozone and particulate matter less than ten microns in diameter (PM10) National Ambient Air Quality Standards (NAAQS) with a portion of the County designated as non-attainment for the particulate matter less than 2.5 microns in diameter (PM2.5) NAAQS. Similarly, the area does not attain California ambient air quality standards (CAAQS) for ozone, PM10 and PM2.5. Due to the size of the project site greater than 5 acres, per Rule 801 – Construction and Earthmoving Activities, a dust control plan will be included and will include the following:

MM AQ-1: Dust emissions are anticipated to decrease once the final cover is complete. Project construction is anticipated to occur over a period of 71 days. The main construction activities that contribute to emissions are as follows:

- Grubbing
- Excavation
- Waste relocation
- Soil import and placement
- Grading
- Temporary electricity generation

MM AQ-2: Preparation of a Dust Control Plan in accordance with Rule 801 of the Imperial County Air Pollution Control District requirements with written notification to the Air District 10 days prior to construction/earthmoving commencement. [Monitoring Responsibility: Imperial County Department of Public Works (ICDPW) & Imperial County Air Pollution Control District (ICAPCD, Timing: prior to construction as noted]

MM AQ-3: Cover soil in haul trucks. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-4: Cover or wet debris, soil, and other sources of fugitive dust when not in use. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-5: Minimize drop heights during loading and unloading. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-6: Clean vehicles and tires. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-7: Sweep adjacent streets of oils and mud if needed. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-8: Water exposed areas at least three times per day. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-9: Limit vehicle speeds on unpaved roads to 15 miles per hour. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-10: Apply water or soil stabilizer on unpaved roads. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-11: Suspend earth-moving or dust producing activities during periods of winds greater than 25 miles

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per hour as needed to meet the exemption provided by ICAPCD Rule 801, Section D.2. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

In accordance with California Code of Regulations, Title 13, Section 2485(c)(1), the following mitigation measures MM AQ-12 and MM AQ-13 will be implemented to reduce exhaust emissions from highway-licensed diesel-fueled vehicles with gross weight rating over 10,000 pounds that are not equipped with alternative technologies listed in Section 2485(c)(2):

MM AQ-12: Diesel engines shall not be permitted to idle for greater than five minutes at any location. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-13: Diesel auxiliary power engines shall not be used to power a heater, air conditioner or any ancillary equipment on the vehicle during sleeping or resting for greater than five minutes at any location when within 100 feet of a restricted area (i.e., residential area). [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-14: Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-15: Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). Should any transformers/generators be used on-site, an Authority to Construct/Permit to Operate application shall be submitted to the APCD. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-16: Construction equipment operating on-site should be equipped with two to four degree engine timing retard or pre-combustion chamber engines. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-17: Construction equipment used for the project should utilize EPA Tier 2 or better engine technology. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-18: Maintain vehicles and equipment to prevent leaks and minimize emissions and encourage employees to do the same. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-19: Cover exposed waste daily with daily cover in accordance with Technical Specification. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-20:Odors will be minimized using odor suppressants. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM AQ-21: During waste excavation, a photoionization detector (PID) will be used to monitor volatile organic compounds (VOCs) emissions. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

BIOLOGICAL RESOURCES

According to the Imperial Solid Waste Site Project Biotic Resources Report prepared by Rocks Biological Consulting (CEQA Project Description Attachment 1, 2019), The following project-specific mitigation/avoidance measures should be conducted due to the potential presence of burrowing owl and nesting birds at the Site:

Burrowing Owl

As noted above, burrowing owls, active burrows, or burrowing owl sign were not observed at the project site during the habitat assessment, and limited suitable habitat is present on site. The potential for burrowing owl to occur on site is moderate, therefore a pre-construction burrowing

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owl survey should be conducted prior to project construction to ensure that burrowing owls have not colonized the site. To avoid impacts on burrowing owl, the following mitigation measure is recommended:

MM BR-1: A qualified biologist(s) will conduct a pre-construction presence/absence survey for burrowing owls 14 days prior to ground disturbing activities and 24 hours immediately before ground disturbing activities. If burrowing owls are documented on site, then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls. [Monitoring Responsibility: ICDPW, Timing: prior to construction phase as noted]

Nesting Birds

As noted above, the project site has the potential to support nesting birds. To avoid impacts on nesting birds the following mitigation measure is recommended:

MM BR-2: Vegetation clearing and ground disturbing activities should be conducted outside of the nesting season (January 15 to August 31). Due to the potential for nesting birds to occur, a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species will have an avoidance buffer of 500 feet and other bird species will have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW. [Monitoring Responsibility: ICDPW, Timing: prior to construction phase as noted]

GREENHOUSE GAS

Greenhouse Gas Emission Generation

As noted above, greenhouse gases have the potential to be emitted through the use of equipment and various construction-related vehicle trips for transport and site access. During waste relocation, methane gas may be emitted when waste is exposed. Through implementation of MM AQ-13 through MM AQ-18, greenhouse gas emissions will be minimized from the project during construction. Additionally, the following mitigation measure is recommended for greenhouse gas minimization:

MM GG-1: Cover exposed waste daily with daily cover in accordance with the Technical Specifications. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

MM GG-2: The landfill cover will minimize surface emissions of landfill gas including methane. Landfill gas will be monitored at perimeter probes for migration as required by CalRecycle in 27 CCR Section 20921 [Bryan A. Stirrat, 2009]. If migration is identified, a control system may be implemented to extract and treat landfill gas. [Monitoring Responsibility: ICDPW & ICAPCD, Timing: during construction phase]

HAZARDS AND HAZARDOUS MATERIALS

Transport, Use, or Disposal of Hazardous Materials

As noted above, the project site has the potential to transport hazardous materials. To avoid impacts to the public and/or environment, the following mitigation measure is recommended:

MM HHM-1: Hazardous materials will not be used during site closure. [Monitoring Responsibility: ICDPW, Timing: during construction phase]

MM HHM-2: The project will adhere to the Waste Relocation Plan [Geosyntec, 2020a] to provide monitoring and contingency planning in the event hazardous wastes are encountered. Hazardous wastes, if encountered, will be segregated and disposed of offsite in accordance with local, state, and federal regulations. [Monitoring Responsibility: ICDPW, Timing: during construction phase]

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HYDROLOGY AND WATER QUALITY

MM HWQ-1: Erosion control measures are implemented in the closure grading design at the site. The uppermost layer of the final cover system on the side slopes will be constructed of a six inch blanket of pit run rock to reduce the potential for erosion from wind and water for the underlying monolithic select soil layer. To help reduce erosion or rill formation on slopes, diversion berms from six inches to twelve inches high will redirect surface water flow. These berms will also be surfaced with rock as required in the Technical Specifications for the erosion protection rock on the side slopes. Surface channels are to be incorporated into the drainage design along access roads in the northwestern corner of the site. The surface channels are lined with rock to protect against scour and reduce erosion. High density polyethylene (HDPE) pipe anchored at regular intervals along the landfill surface convey the stormwater runoff from the top deck and concentrated flow locations along the surface channels to the discharge locations. Riprap energy dissipators are constructed to promote positive drainage toward drainage structures and provide a means for decreasing the amount of erosion. [Monitoring Responsibility: ICDPW, Timing: during construction phase]

MM-HWQ-2: In addition, the landfill drainage facilities must be operational and free of debris. Maintenance of the drainage system is based on the site inspection program to identify potential and existing problems, and the general program of responsible and timely corrective action. Inspections will be performed quarterly and after significant precipitation or seismic events. Inspections will include review of the site for the following conditions:

- Open channels and ditches are draining and free of debris;
- No areas of excessive sedimentation or scour;
- Diversion berms are intact and operable; and/or
- Downdrains are free of debris and vegetation and cracks.

[Monitoring Responsibility: ICDPW, Timing: during construction phase]

MM-HWQ-3: During closure construction, a SWPPP will be developed to identify BMPs to minimize discharge of pollutants to the New River during construction. Following closure, the site will be stabilized to minimize soil erosion. [Monitoring Responsibility: ICDPW, Timing: during construction phase]

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Geosyntec
consultants

ATTACHMENT A

CEQA PROJECT DESCRIPTION

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Geosyntec consultants

engineers | scientists | innovators

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PROJECT DESCRIPTION WITH SUPPORTING INFORMATION

Imperial Solid Waste Site
(Facility No. 13-AA-0001)
1705 West Worthington Road
Imperial, CA 92251

Prepared for

County of Imperial Department of Public Works

Prepared by

Geosyntec Consultants, Inc.
2355 Northside Drive, Ste. 250
San Diego, CA 92108

Project SC0974

Revised June 2020

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1. Site History and Description

The proposed Project includes final closure of the Imperial Solid Waste Site (ISWS or Site) landfill. The proposed Project is located in the south-central portion of Imperial Valley, approximately six miles west of the City of Imperial (Figure 1). The Site address is 1705 W. Worthington Road, Imperial, California 92251.

The ISWS property is owned and operated by the Imperial County Department of Public Works (ICDPW). The ISWS was in operation as an illegal disposal Site until approximately 1970 when it received its waste discharge requirements (WDRs). The landfill is located on approximately 69 acres with a total disposal area footprint of approximately 18 acres. A proposed borrow area, evaluated for use to supply miscellaneous fill for the Site is located across the New River to the west. The landfill ceased operation on 29 July 2018 and was converted to a transfer station on 1 March 2019.

The ISWS is classified as a Class III disposal facility accepting only non-hazardous solid wastes in accordance with waste classification regulations in 27 CCR, Sections 20220 and 20230. The majority of wastes received at the ISWS consisted of non-hazardous residential, commercial, and construction/demolition solid waste. Some triple-rinsed pesticide containers were accepted at the landfill prior to 1994 and disposed of in the Pesticide Disposal Area (Figure 2). Additionally, the Site accepted tires; however, the tires are not landfilled. Accepted E-waste, and other universal wastes were handled and stored in accordance with 22 CCR requirements. The disposal of polychlorinated biphenyl (PCB) or hazardous waste, pesticides or any other toxic wastes at the ISWS was prohibited. The ISWS was not permitted to discharge liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) unless approved by the Regional Water Quality Control Board (RWQCB) Executive Officer.

1.1 Surrounding Land Use and Features

The site, like much of Imperial County, is located in an agricultural area along the eastern bank of the south to north flowing New River. Properties surrounding the Site are generally used for agriculture and owned by private farmers and the Imperial Irrigation District (IID). An unamed tributary/drainage flows south to north into the New River along the southwest portion of the Site. Based on FEMA mapping, the New River floodplain intersects the Site along portions of the west and northwestern slopes adjacent to the river. Naval Air Facility El Centro airstrip is located approximately 1.0 miles south/southeast of the landfill.

2. Closure Details

CalRecycle issued Notice and Order No. EA-2019-03 for the ISWS for submittal of a Final Closure and Post-Closure Maintenance Plan (FCPCMP) by January 25, 2020 and for obtaining regulatory approval of the FCPCPMP by July 25, 2020 and initiating closure in accordance with the schedule described in the approved FCPCMP.

Closure of the ISWS will be performed in accordance with applicable regulatory standards. As discussed, the landfill has been closed since 2018 and currently operates as a transfer station;

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therefore, no impact to municipal public waste disposal is anticipated. The components and systems required for closure of the ISWS include the final grading plan, final cover design, surface water drainage and erosion control systems, landfill gas monitoring system, ground water monitoring system, and site security. Details of closure, including descriptions, permit-level drawings, Technical Specifications, cost estimates, and supporting details are provided in the Final Closure, Post-Closure Maintenance Plan (Geosyntec, 2020).

2.1 Monolithic Cover System

The proposed final cover for the ISWS will consist of a minimum one-foot thick foundation layer composed of soil materials, a three-foot thick layer of select soil material that will comprise the monolithic select soil cover layer, and, along the slopes, a 6-inch layer of pit run erosion protection rock. The existing intermediate cover soils may comprise one foot of the four-foot-thick monolithic soil cover. The final slopes of the ISWS will be no greater than 2H:1V (Horizontal: Vertical). The earthen cover material will be transported to the Site from the Holtville Borrow Site approximately 24 miles east of the Site. Six to eight inches of pit run rock material will be placed on top of the monolithic cover layer along the side slopes to provide erosion protection of the final cover system. Additionally, pit run rock and/or class II aggregate base will be placed in select areas of concentrated stormwater flows. The pit run rock material will enhance stabilization of surface soils and aid in the reduction of wind and water erosion of the final cover. The pit run rock will be obtained from either the Coyote II borrow area owned by ICDPW or from an alternative borrow source north of the Salton Sea.

The final cover for the deck area will generally be set at a minimum gradient of 3 percent to provide adequate drainage from the top deck, while taking into account anticipated landfill settlement. General construction procedures will be utilized to promote lateral run-off of surface water and reduce the effects of the settlement.

Approximately 11,000 CY of waste excavation and relocation within the established footprint of the facility will be included as part of the final closure project. Waste will be excavated along the western side slopes to lower slope grades to no more than 2H:1V. Additionally, waste will be relocated in the south-central portion of the Site to facilitate drainage between the south-eastern depression and south-western depression . Relocated waste will be placed within the footprint of the landfill and covered with a minimum 6-inches of daily cover prior to final landfill cover placement.

During construction of the final cover, equipment and materials for closure will be stored within the landfill property boundaries. Truck traffic will be optimized to reduce roadway congestion and limit emissions in accordance with applicable regulations. Water will be obtained from an Imperial Irrigation District (IID) canal by the Contractor in accordance with local requirements.

2.2 Landfill Stormwater Management

The proposed Project will also include regrading of the previous borrow area to direct stormwater runoff to the existing narrow basin northwest of the previous pesticide disposal area. From there, stormwater will be directed to an energy dissipator daylighting outside of the mapped floodplain. The previous borrow area will receive fill to adjust surface grades for positive drainage. The

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stormwater discharges will flow from the previous borrow through a graded channel towards the narrow basin.

Surface water from the landfill deck will be directed into the southeast depression via surface sheet flow and diversion berms. Sheet flow from the lower portions of the northern slopes and the northern perimeter access road will discharge directly into the New River.

During construction of the site stormwater controls, equipment and materials will be staged within the landfill property in a designated equipment staging area.

2.3 Access and Monitoring Controls

The site is currently fenced. No changes to the fencing are proposed as part of the final closure. Access to the site will be restricted and limited to personnel responsible for closure and post-closure activities. The currently proposed post-closure use for the ISWS is intended to be non-irrigated open space. The final grades will be designed to blend with the surrounding topography to the extent possible and the final elevations will not exceed what was established in the Final Closure Post-Closure Maintenance Plan.

Landfill Gas Perimeter Monitoring Reports for the third and fourth quarters of 2017 and first and second quarters of 2018 indicate the inability to monitor gas probes P01, P02, and P03 due to blockage, and P05 for being full of water, affecting compliance verification with state minimum standards. The Notice of Violation (NOV) Workplan prepared by Geosyntec addresses the violations noted in the NOA (LEA, 2018) and outlines the scope of work to perform a perimeter probe assessment and abandonment of probe P05.

The existing landfill gas and groundwater monitoring systems generally meet the requirements of the California Code of Regulations Title 27 and will only require updating per the NOV workplan submitted to the Lead Enforcement Agency (LEA) pending regulatory approval. These features will be protected from disturbance during construction.

2.4 Waste Relocation

Relocation of waste is anticipated at over steepened areas along the western and southern slopes and where grading for drainage is anticipated between the former borrow and the basin west of the pesticide area. Approximately 11,000 cy of waste is anticipated to be relocated to the top deck of the landfill to facilitate drainage and minimize engineered fill import. Waste relocation including requirements for daily and interim cover and management of unanticipated materials will be conducted per the Waste Relocation Plan included with the FCPCMP.

2.5 Construction Components

Typical construction and grading equipment satisfying California Air Resources Board (CARB) Tier 3 requirements will be used during earthwork activities. BMPs, including fiber rolls, silt fences, stabilized gravel entrance, and other erosion and sediment controls will be installed during construction activities in accordance with the California State Water Resources Control Board's (SWRCB) Construction General Permit Order 2009-0009-DWQ (and its amendments) and the Site's Storm Water Pollution Prevention Plan (SWPPP).

The proposed Project includes the following construction components:

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1. Excavate, load, haul, approximately 79,000 cubic yards (CY) of materials for the monolithic soil cover and engineered fill and approximately 3,500 CY of pit run rock for erosion protection on side slopes. Miscellaneous fill soils will be transported from the proposed borrow area west of the Site. The soil cover materials will be transported from the Holtville Borrow Pit, located off of Norrish Road, approximately 24 miles east of the Site. The pit run rock may be obtained from a variety of sand and gravel borrow sources in the Imperial Valley.

2. Excavate, relocate on Site, and compact approximately 11,000 CY of waste from the northern and western edges of the landfill to the top deck of the landfill.

3. Place and spread 75,000 CY of materials for the monolithic soil cover and foundation layer, 39,600 CY of engineered fill, and 3,500 CY of erosion protection rock, construct and maintain roads.

4. Compact approximately 75,000 CY of materials for the monolithic soil cover and foundation layer, 39,600 CY of engineered fill, and 3,500 CY of of erosion protection rock.

5. Install landfill stormwater conveyance system.

2.6 Schedule

The anticipated duration and associated equipment for each of the proposed Project components is summarized in the following table. The overall duration of construction is anticipated to be approximately 71 days.

Construction Component /Location	Duration (Days)	Number	Equipment Type/Name
1 / Borrow Site Excavation & Loading	71	1	345BL Excavator
		1	D-9R Dozer
		1	4K Water Truck
1 / Borrow Soil & Rock Haul	71	14	20CY Dump Truck
2 / Landfill Waste Relocation	40	1	330CL Excavator
	25	4	TRU32-40 Dump Truck
		1	4K Water Truck
2 / Landfill Waste Recompaction	25	1	825C Soil Compactor
		1	4K Water Truck
3 / Landfill Cover & Rock Spreading & Road Maintenance	71	2	627G Scrapers
		1	4K Water Truck
		1	10K Water Wagon
		1	D7H Dozer
		1	140H Grader
4 / Cover Soil and Rock Compaction	71	1	825H Soil Compactor

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5 / Landfill Stormwater Conveyance System	5	1	320 Excavator
		1	D7R Dozer
		1	140G Blade
		1	4K Water Truck

3. Preliminary Environmental Review

The following sections describe the project components as they specifically relate to CEQA Appendix G, Environmental Checklist Form.

3.1 Aesthetics

There are no scenic resources, scenic vistas, or scenic highways on or near the project boundary. The proposed project will not degrade the existing visual character or quality of the Site or surrounding area, and the proposed project will not create a new source of substantial light. Therefore, the proposed project will have no impact on aesthetic resources.

3.2 Agricultural and Forestry Resources

The Site is located on land designated for government/special (G/S) use purposes and the project will not result in the conversion of adjacent farm land to non-agricultural use. There are no timber resources on or near the proposed project. As a result, the proposed project will have no impact on agricultural or forest resources.

3.3 Air Quality

Imperial County is designated by the United States Environmental Protection Agency (USEPA) as non-attainment for the ozone and particulate matter less than ten microns in diameter (PM10) National Ambient Air Quality Standards (NAAQS) with a portion of the County designated as non-attainment for the particulate matter less than 2.5 microns in diameter (PM2.5) NAAQS. Similarly, the area does not attain California ambient air quality standards (CAAQS) for ozone, PM10 and PM2.5.

Dust emissions are anticipated to decrease once the final cover is complete. Project construction is anticipated to occur over a period of 71 days. The main construction activities that contribute to emissions are as follows:

- Grubbing
- Excavation
- Waste relocation
- Soil import and placement
- Grading
- Temporary electricity generation

The proposed project will incorporate the following dust control measures to reduce fugitive dust emissions during the construction activities:

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- Cover soil in haul trucks;
- Cover or wet debris, soil, and other sources of fugitive dust when not in use;
- Minimize drop heights during loading and unloading;
- Clean vehicles and tires;
- Sweep adjacent streets of oils and mud if needed;
- Water exposed areas at least three times per day;
- Limit vehicle speeds on unpaved roads to 15 miles per hour;
- Apply water or soil stabilizer on unpaved roads; and
- Suspend earth-moving or dust producing activities during periods of winds greater than 25 miles per hour as needed to meet the exemption provided by ICAPCD Rule 801, Section D.2.

Minimal water will be added to relocated waste to suppress dust generation; however, waste will not be saturated.

In accordance with California Code of Regulations, Title 13, Section 2485(c)(1), the following mitigation measures will be implemented to reduce exhaust emissions from highway-licensed diesel-fueled vehicles with gross weight rating over 10,000 pounds that are not equipped with alternative technologies listed in Section 2485(c)(2):

- Diesel engines shall not be permitted to idle for greater than five minutes at any location; and
- Diesel auxiliary power engines shall not be used to power a heater, air conditioner or any ancillary equipment on the vehicle during sleeping or resting for greater than five minutes at any location when within 100 feet of a restricted area (i.e., residential area).

Additionally, the following measures will be implemented to minimize air quality impacts:

- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use;
- Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). Should any transformers/generators be used on-site, an Authority to Construct/Permit to Operate application shall be submitted to the APCD;
- Construction equipment operating on-site should be equipped with two to four degree engine timing retard or pre-combustion chamber engines;
- Construction equipment used for the project should utilize EPA Tier 2 or better engine technology; and
- Maintain vehicles and equipment to prevent leaks and minimize emissions and encourage employees to do the same.

During waste excavation, a photoionization detector (PID) will be used to monitor volatile organic compounds (VOCs) emissions. Additionally, the following measures will be implemented to minimize air quality impacts due to waste materials:

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- Cover exposed waste daily with daily cover in accordance with Technical Specifications; and
- Odors will be minimized using odor suppressants.

It is anticipated that mitigated construction-related emissions will be below the daily threshold of significance for construction activities based on studies prepared for similar earthwork construction projects. As a result, air quality impacts are anticipated to be less than significant.

3.4 Biological Resources

A biological study was performed for the proposed project and is included as Attachment 1. The Biological Study had the following findings:

- There will be a less than significant impact to non-native vegetation communities or habitats due to highly disturbed existing conditions;
- There will be no impact to special-status plants and less-than-significant impact to special-species animals with mitigation described below;
- Impacts to nesting birds will be less-than-significant with mitigation described below;
- Jurisdictional Waters of the U.S. will not be impacted;
- Indirect impacts such as noise will not result in significant impacts as a result of the previous disturbance of the site; and
- Cumulative impacts will be less-than-significant on biological resources.

The Biological Study identified the following mitigation measures to protect biological resources at the Project Site:

- A qualified biologist(s) will conduct a pre-construction presence/absence survey for burrowing owls 14 days prior to ground disturbing activities and 24 hours immediately before ground disturbing activities. If burrowing owls are documented on site, then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls.

- Vegetation clearing and ground disturbing activities should be conducted outside of the nesting season (January 15 to August 31). Due to the potential for nesting birds to occur on site, a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests, depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species will have an avoidance

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buffer of 500 feet and other bird species will have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW.

The biological study concluded that due to the level of disturbance on the project site, the adjacent developed land, and the lack of sensitive biological resources, as well as the implementation of mitigation measures, the proposed project will have less than significant impacts on biological resources.

3.5 Cultural Resources

The project area has been disturbed with the exception of the proposed, optional borrow area. A cultural resources study was performed for the optional borrow source area proposed for project and is included as Attachment 2.

The cultural resources study concluded that no cultural resources were identified within the project boundary. Small amounts of recent refuse were evident from illegal dumping in addition to bullet casings from target practicing. The southern edge of the project area showed evidence of past grading. Exposed banks showed that the project area is composed of fluvial and lake deposits with small amounts of natural freshwater shell. No evidence of buried soils was present, suggesting that the potential for buried cultural resources is low.

The site does not cause substantial adverse change in the significance of an historical resource or an archaeological resource. The site neither directly or indirectly destroys a unique paleontological resource or unique geologic feature. Nor does the site disturb any human remains, including those interred outside of dedicated cemeteries. As a result, the project will have no impact on cultural resources.

3.6 Energy

Construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic; however, no energy will be consumed after landfill closure. Construction is anticipated to occur over approximately 71 business days. Construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with local, state, and federal regulations limiting engine idling times would reduce the amount of transportation fuel demand during project construction. Considering these reductions in transportation fuel use, the proposed project would not result in the wasteful and inefficient use of energy resources during construction and impacts would be less than significant.

3.7 Geology and Soils

Subsurface borings completed at the Site encountered interbedded silt and silty sand from existing grade to a depth of approximately 40 feet (Herzog Associates, 1992). At approximately 40 feet below existing grade, a five- to ten-foot thick layer of low-plasticity clay overlies water bearing strata composed of sandy silt, silty sand and sand to the maximum depths drilled (61.5 feet). Site surficial soils are composed primarily of medium dense silty sand and sandy silt. The site is not prone to landslides and the proposed cover has been designed to minimize slope failure

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through slope inclinations no greater than 2H:1V.

The Site is subject to strong ground motions and liquefaction resulting from seismic events due to its location within the Salton trough, the boundary between the Pacific and North American Tectonic plates. The effects of seismic events on the landfill and closure were evaluated as part of closure design. The analysis was performed for Maximum Credible Earthquake (MCE) in accordance with 27 CCR Section 21750(f)(5). The design event for the Site is a moment magnitude (Mw) 76.7 event on the Superstition Hills Fault located approximately 3 miles from the site. The final cover was evaluated considering the seismic event and estimates of seismically-induced displacement was calculated to be less than currently accepted displacements for unlined landfills. Due to the inland Site location and distance from a large body of water, the potential for a tsunami or seiche to affect the Site is also considered extremely low.

The erosion protection layer on the cover minimizes soil loss due to soil erosion. Soil erosion calculations performed during closure design indicate soil loss less than allowable in accordance with 27 CCR. The Site is not located over any expansive soils and does not have the ability to inadequately support the use of septic tanks or other alternative waste water disposal systems.

As a result, the closure design has been developed and analyzed to confirm the geology and soil environmental impacts are less than significant.

3.8 Greenhouse Gas Emissions

During construction, GHGs would be emitted through the use of equipment and various construction-related vehicle trips for transport and site access. During waste relocation, methane gas may be emitted when waste is exposed. Steps to minimize greenhouse gas emissions during construction include the following:

- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use;
- Construction equipment operating on-site should be equipped with two to four degree engine timing retard or pre-combustion chamber engines;
- Construction equipment used for the project should utilize EPA Tier 2 or better engine technology; and
- Cover exposed waste daily with daily cover in accordance with the Technical Specifications.

After completion of construction, the landfill cover will minimize surface emissions of landfill gas including methane. Landfill gas will be monitored at perimeter probes for migration. If migration is identified, a control system may be implemented to extract and treat landfill gas.

As a result, greenhouse gas emissions are less than significant.

3.9 Hazards and Hazardous Materials

During implementation of the proposed project, municipal solid waste will be relocated within the project boundary to reduce slope inclinations; hazardous waste is not anticipated. The project

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will have site controls to limit public access including during waste relocation. The Waste Relocation Plan dictates controls to be implemented during waste relocation to minimize the potential for release of waste. Relocated waste will be isolated with construction of the final cover and drainage controls will be implemented to prevent erosion that could expose buried waste.

The proposed project is not located at a wildland/urban interface and will not interfere with an adopted emergency response or evacuation plan, or expose people or structures to risk associated with wildfires. The Site is located within one mile of the El Centro Naval Air Facility; however, the site land use will not change resulting in a new safety hazard for people working at the landfill.

Impacts associated with hazards and hazardous materials will be less than significant.

3.10 Hydrology and Water Quality

In general, surface water flows follow existing natural contours into natural drainage courses in a northwesterly direction. Run-off from the site and surrounding tributary areas discharges into the New River, located west of the site.

Groundwater beneath the Site generally occurs between 9 and 44 feet below the top of well casings and flows northwest towards the New River at a hydraulic gradient of approximately 0.036 feet per foot (ft/ft). Analysis of the groundwater samples collected from monitoring wells at the ISWS has shown consistently elevated concentrations of chloride, sulfate, and total dissolved solids (TDS), exceeding State of California secondary drinking water standards. Data from the site's background and compliance wells are relatively consistent upgradient and downgradient and suggest that the concentrations of TDS and chloride are considered to be naturally occurring and not indicative of a release from the landfill (GLA, 2019).

In general, the New River exhibits very poor water quality. Along with agricultural runoff, the river is known to convey community and industrial wastewater, raw and inadequately treated sewage, industrial waste, garbage and other solid wastes, animal wastes, and occasionally geothermal wastewaters (RWQCB, 2006a). Furthermore, the New River is included in the 2014/2016 Clean Water Act Section 303(d) list that identifies significantly polluted waters and proposes total maximum daily loads (TMDL) for specific pollutants contributing to the water's impairment. Four TMDLs have been implemented for the New River for indicator bacteria, organic enrichment/low dissolved oxygen (DO), sediment, and trash. Seventeen TMDLs have also been proposed, including several metals, pesticides, volatile organic compounds (VOCs), and nutrients, to reduce pollutant levels (RWQCB, 2006b).

With closure of the landfill, surface water will generally flow to the north and south where it is collected and conveyed via piping to the New River. Runon from West Worthington Road will be redirected to the roadside drainage north of the Site via water bar at the Site entrance. Riprap outfalls will be provided to minimize erosion and sediment transport to the New River. Further, an erosion protection layer will be placed on the landfill side slopes to minimize erosion of soil. Capping of the landfill with soil will further minimize infiltration and subsequent leachate generation thereby reducing the opportunity for groundwater impacts from the landfill.

The stormwater management system on the landfill is designed to manage the 100-year flood event. Further, the closure disturbances will be outside of the 100-year floodplain along the

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western boundary of the site as identified by the Flood Insurance Rate Maps (FIRM) prepared by Federal Emergency Management Agency (FEMA) . Based on visual inspection, the existing floodplain does not support current topographic elements at the Site, as the floodplain limits do not follow a uniform contour interval but transverse up and down steep slopes in the area where the floodplain crosses the limits of waste.

Geosyntec developed a report detailing the reevaluation of the New River floodplain as part of an application for a Conditional Letter of Map Revision (CLOMR) submitted to FEMA floodplain, including a Letter of Map Revision (LOMR) with FEMA has been prepared and will be submitted to FEMA during closure activities (Geosyntec, 2020a).

During closure construction, a SWPPP will be developed to identify BMPs to minimize discharge of pollutants to the New River during construction. Following closure, the site will be stabilized to minimize soil erosion.

As a result, impacts to hydrology and water quality will be less than significant as a result of the proposed project.

3.11 Land Use and Planning

The project will not change the current land use of the site affect existing communities, or conflict with habitat conservation plans; therefore, there is no impact to land use and planning.

3.12 Mineral Resources

The Site has been an MSW landfill since the 1960's at which point mineral resources, if any, became difficult to access; therefore, there is no change in impact to mineral resources.

3.13 Noise

Noise at the Site may temporarily increase as a result of the Project. Temporary increases may result from traffic to the site and operation of construction equipment. The project is within the vicinity of the El Centro Naval Air Facility; however, due to the nature to the Site being a landfill that has been in place since the 1960's, excessive noise does not pose an issue. The nearest occupied structure is over 1,500-ft from the site; therefore, noise impacts are anticipated to be less than significant.

3.14 Population and Housing

There is no housing at the Site; therefore, there is no impact to population and housing.

3.15 Public Services

The landfill will have no impact to public services such as schools, police, fire, and/or parks.

3.16 Recreation

The Project will not affect parks, or recreational facilities; therefore, the Project has no impact to recreation.

3.17 Transportation

A Traffic Study was performed to evaluate if import of borrow material including cover soil and

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erosion protection rock would impact traffic along the material haul routes. The study indicated no Project or cumulative related significant impacts to traffic were identified and therefore no mitigation measures are necessary. The Traffic Study is included as Attachment 3.

3.18 Tribal Cultural Resources

The site has been disturbed with both landfill and borrow operations since approximately 1960. It is not listed or eligible for listing in the California or local register of Historic Resources. In accordance with Assembly Bill 52 and Section 21080.3.1(d) of the California Public Resources Code, Imperial County Planning and Development Services issued a letter on May 14, 2020 to the Fort Yuma Quechan Indian Tribe for notification of the proposed project. The Tribe was given a time frame to review whether Tribal Cultural Resources are present within the project area. A response from the Tribe is pending the June 22, 2020 due date. However, the project is not anticipated to impact Tribal Cultural Resources.

3.19 Utilities and Service Systems

The landfill ceased operations in 2018 and was converted to a transfer station. Waste will be temporarily relocated to the Calexico Landfill during construction. Following closure completion, the transfer station will be reestablished at ISWS. The Project will not generate wastewater or require new water services except temporary pumps and stand pipes for construction. The stormwater discharged from the site will utilize existing drainage features sized to manage flows. As a result, the Project will have no impact on utilities and public service.

3.20 Wildfires

The Project is not located within or near a very high fire hazard severity zone nor a state responsibility zone; therefore, there will be no wildfire impact.

3.21 Mandatory Findings of Significance

The Project does not have the potential to degrade the quality of the environment, nor substantially reduce the habitat of a fish or wildlife species, nor cause a fish or wildlife population to drop below self-sustaining levels. The Project does not threaten to eliminate a plant or animal community, nor reduce the number or restrict the range of a rare or endangered plant or animal, nor eliminate tribal cultural resources or eliminate important examples of the major periods of California history or prehistory. The Project does not have impacts that are individually limited, but cumulatively considerable. Nor does the Project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. As a result, there are no mandatory findings of significance.

References

GeoLogic Associates, 2019. "County of Imperial Water Quality Monitoring Report, Semiannual (April through September 2019), Colorado River Basin Region, Imperial County, California," dated October.

Geosyntec, 2020. "Final Closure, Post-Closure Maintenance Plan, Imperial Solid Waste Site," January 2020.

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Geosyntec, 2020a. "Letter of Map Revision for New River Floodplain at Imperial Solid Waste Site, Imperial County, California," January.

LEA, 2018. "Issuance of Notice of Order No. EA-2018-002 for the Imperial Solid Waste Site (Facility No. 13-AA-0001), prepared by the Local Enforcement Agency, County of Imperial 2018.

RWQCB, 2016a. "California Regional Water Quality Control Board, Colorado River Basin Region, Order No. R7-2016-0025, Monitoring and Reporting Program for County of Imperial, Owner/Operator Class III Municipal Solid Waste Management Facility, Imperial – Imperial County.

RWQCB, 2016b. "California Regional Water Quality Control Board, Colorado River Basin Region, Order No. R7-2016-0025, Waste Discharge Requirements for County of Imperial, Owner/Operator Class III Municipal Solid Waste Management Facility, Imperial – Imperial County.

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Figures

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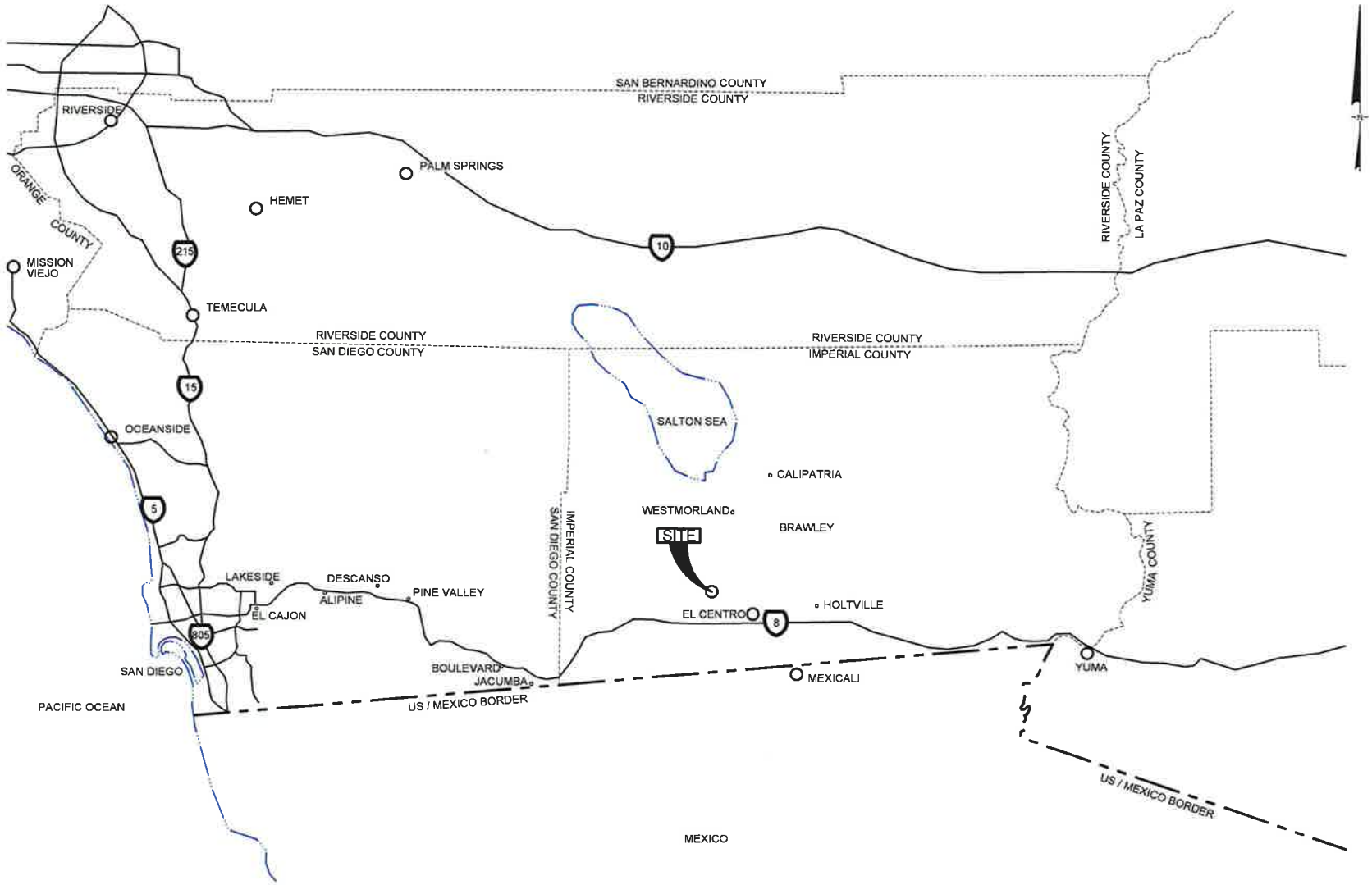

VICINITY MAP
IMPERIAL COUNTY SOLID WASTE SITE
IMPERIAL COUNTY, CALIFORNIA

Geosyntec consultants

DATE: JANUARY 2020

PROJECT NO. SC0974

FIGURE 1

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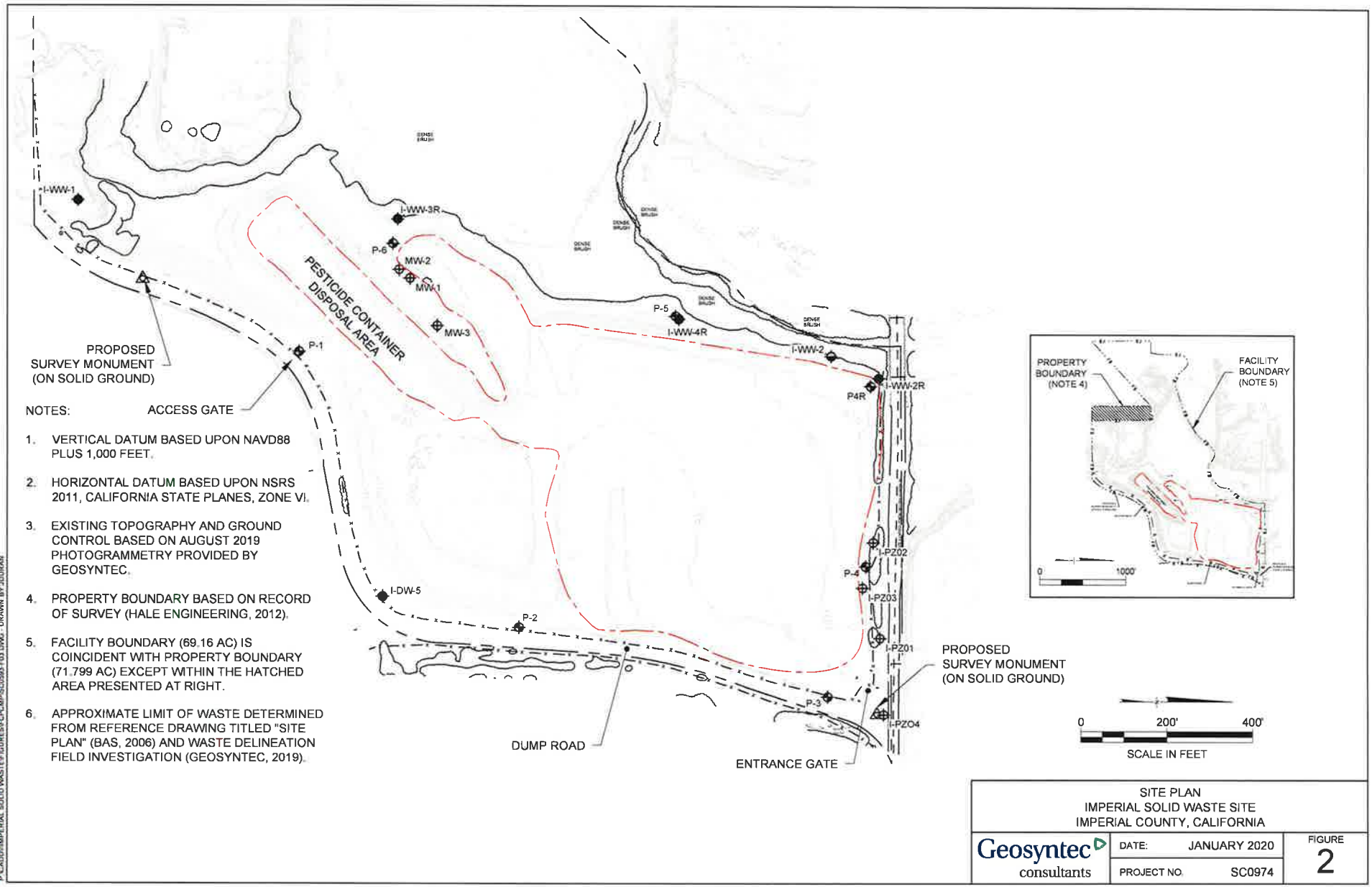

NOTES:

1. VERTICAL DATUM BASED UPON NAVD88 PLUS 1,000 FEET.
2. HORIZONTAL DATUM BASED UPON NSRS 2011, CALIFORNIA STATE PLANES, ZONE VI.
3. EXISTING TOPOGRAPHY AND GROUND CONTROL BASED ON AUGUST 2019 PHOTOGRAMMETRY PROVIDED BY GEOSYNTEC.
4. PROPERTY BOUNDARY BASED ON RECORD OF SURVEY (HALE ENGINEERING, 2012).
5. FACILITY BOUNDARY (69.16 AC) IS COINCIDENT WITH PROPERTY BOUNDARY (71.799 AC) EXCEPT WITHIN THE HATCHED AREA PRESENTED AT RIGHT.
6. APPROXIMATE LIMIT OF WASTE DETERMINED FROM REFERENCE DRAWING TITLED "SITE PLAN" (BAS, 2006) AND WASTE DELINEATION FIELD INVESTIGATION (GEOSYNTEC, 2019).

SITE PLAN
IMPERIAL SOLID WASTE SITE
IMPERIAL COUNTY, CALIFORNIA

Geosyntec consultants	DATE: JANUARY 2020	FIGURE 2
	PROJECT NO. SC0974	

J:\CADD\IMPERIAL SOLID WASTE\FIGURES\PCMP-SC0974TD.DWG - DRAWN BY JDURAN

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Attachment 1

Biological Study

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ROCKS
BIOLOGICAL CONSULTING

IMPERIAL SOLID WASTE SITE PROJECT

BIOTIC RESOURCES REPORT

Imperial County, California

November 2019
UPDATED: June 17, 2020

Prepared for:
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Appendix B. Plant and Wildlife Species Observed
Appendix C. Jurisdictional Delineation Report

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1 SUMMARY

This report is a summary of the results of a biotic resource assessment conducted by Rocks Biological Consulting (RBC) for the Imperial Solid Waste Site Project (project) in the City of Imperial, Imperial County, California. RBC conducted an assessment of the biological survey area (BSA; 40.29 acres), which includes the disposal area footprint (approximately 18 acres), Jurisdictional Delineation Review Area (JDRA), and the borrow site boundary. The BSA primarily supports arrow weed scrub and tamarisk scrub surrounding largely disturbed areas. The site has low potential to support the California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC) burrowing owl (*Athene cunicularia*). The BSA supports features considered jurisdictional by the U.S. Army Corps of Engineers (Corps), CDFW, and/or the Santa Ana Regional Water Quality Control Board (RWQCB), within the JDRA. Impacts on biological resources will be less than significant with implementation of the suggested mitigation measures outlined in this report.

2. INTRODUCTION

2.1 PROJECT LOCATION

The BSA for the project is located north of Naval Air Facility El Centro within the City of Imperial, Imperial County, California (Figure 1). West Worthington Road borders the BSA to the north and the New River travels northeast along portions of the western BSA boundary towards the Salton Sea, located approximately 20 miles north of the BSA.

2.2 PROJECT DESCRIPTION

A portion of the BSA and the property adjacent to the east and south of the BSA have been operating as the Imperial Solid Waste Site since at least 1970. The landfill was closed in July 2018, and converted to operate as a transfer station in March 2019. As part of the site closure process, work may occur within portions of the New River floodplain, although work within the New River will be avoided.

A portion of the BSA designated as the "borrow site" will be graded to promote positive on-site drainage and minimize the potential for ponding adjacent to the refuse disposal area.

2.3 SCOPE OF WORK

This report identifies and evaluates impacts on biological resources associated with the proposed project in the context of the California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.), and state and federal regulations, such as the federal Endangered Species Act (ESA; 16 U.S. Code [USC] § 1531 et seq.), Clean Water Act (CWA; 33 USC § 1251 et seq.), and the California Fish and Game Code (CFGC).

RBC conducted a site visit on September 4, 2019 to assess the project for significant biological resources pursuant to CEQA. The site visit included conducting: (1) general biological surveys; (2) vegetation mapping; (3) habitat assessments for special-status plant species and burrowing owl

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(*Athene cunicularia*, BUOW); and (4) an assessment for areas anticipated to be jurisdictional under the Corps pursuant to Section 404 of the CWA, under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Section 13000 et seq.), and under CDFW pursuant to Section 1602 of the CFGC.

2.4 EXISTING CONDITIONS

The BSA primarily supports disturbed land in the form of the graded landfill, with adjacent habitat including sparse arrow weed (*Pluchea serricea*) scrub, and tamarisk scrub along the New River. Elevations range from approximately -115 to -50 feet above mean sea level (amsl). Site photographs are presented in Appendix A.

2.5 REGULATORY FRAMEWORK

Federal, state, and local agencies have established several regulations to protect and conserve biological resources. The descriptions below provide an overview of the agency regulations that may be applicable to the project. The final determination as to what types of permits are required will be made by the regulating agencies.

2.5.1 FEDERAL REGULATIONS

Federal Endangered Species Act

The ESA provides for the listing of endangered and threatened species of plants and animals and the designation of critical habitat for these listed species. ESA regulates the "taking" of any endangered fish or wildlife species, per Section 9. As development is proposed, the responsible agency or individual landowner is required to consult with the U.S. Fish and Wildlife Service (USFWS) to assess potential impacts on listed species (including plants) or the critical habitat of a listed species, pursuant to Sections 7 and 10 of the ESA. USFWS is required to determine the extent a project would impact a particular species. If USFWS determines that a project is likely to potentially impact a species, measures to avoid or reduce such impacts must be identified. Following consultation and the issuance of a Biological Opinion, USFWS may issue an incidental take statement which allows for the take of a species if it is incidental to another authorized activity and will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties in conjunction with the development of a habitat conservation plan (HCP). Section 7 of the ESA provides for permitting of projects where interagency cooperation is necessary to ensure that a federal action/decision does not jeopardize the existence of a listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 USC § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 Code of Federal Regulations (CFR) 10.13. USFWS enforces the MBTA, which prohibits "by any means or in any manner, to

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pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Appropriation Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (Rivers and Harbors Act; 33 USC § 403) prohibits the discharge of any material into navigable waters of the United States, or tributaries thereof, without a permit. The act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the CWA, discussed below. However, the 1899 act retains relevance and created the structure under which the Corps oversees permitting under CWA § 404.

Clean Water Act

Pursuant to Section 404 of the CWA, the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which includes those waters listed in 33 CFR 328.3 (as amended at 80 Federal Register [FR] 37104, June 29, 2015). The Corps, with oversight from the U.S. Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts on waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, divisions of the State Water Resources Control Board (SWRCB), provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that a proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

2.5.2 STATE REGULATIONS

State of California Endangered Species Act

CESA, in combination with the California Native Plant Protection Act of 1977 (NPPA; CFGC § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists SSC based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish,

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amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the California Fish and Game Commission. Unlike the federal ESA, CESA does not list invertebrate species.

Sections 2080 through 2085 of CESA address the take of threatened, endangered, or candidate species by stating "no person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under CESA, "take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. CFGC §§ 1901 and 1913 provide that notification is required prior to disturbance. CDFW is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

California Environmental Quality Act

CEQA was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.). This statute requires state and local agencies to identify significant environmental impacts related to their actions and to avoid or mitigate those impacts, where feasible.

A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity that must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

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Natural Community Conservation Planning Act

In 1991, the California Natural Community Conservation Planning Act (NCCP Act; CFGC § 1900 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law (CFGC § 2800 et seq.) established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not extend to tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

Within California, fish, wildlife, and native plant resources are protected and managed by CDFW. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act provides for statewide coordination of water quality regulations. The SWRCB was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis.

The SWRCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCBs regulate discharges to surface waters under the CWA. In addition, the RWQCBs are responsible for administering the Porter-Cologne Act.

Pursuant to the Porter-Cologne Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any

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person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 of the CWA is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

3 METHODS

RBC biologists Ian Hirschler and Brenda Bennett visited the project site on September 4, 2019 to conduct general biological surveys, vegetation mapping, and habitat assessments for special-status plant and wildlife species including burrowing owl. RBC used binoculars (10x42) to aid in the observation of species during the survey. RBC biologists identified plant species using *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) and local botanical knowledge. Plant and wildlife species observed on the project site are presented in Appendix B.

3.1 BIOLOGICAL RESOURCE DATABASE REVIEW

RBC queried the CDFW's California Natural Diversity Database (CNDDB) (CDFW 2019), the database of threatened/endangered USFWS species (USFWSa 2019), and the Information for Planning and Consultation (IPaC) database (USFWSb 2019) for a one-mile radius around the BSA. RBC queried the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2019) for the nine USGS 7.5' quadrangles surrounding the project. RBC refined the potential for special-status species to occur within the project site by considering the habitat affinities of each species, the results of field habitat assessments, vegetation mapping, and knowledge of local biological resources.

3.3 BURROWING OWL HABITAT ASSESSMENT

RBC assessed burrowing owl habitat in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (the Guidelines; California Department of Fish and Game 2012). Suitable burrowing owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat; both natural and artificial burrows provide protection, shelter, and nests for burrowing owl (Henny and Blus 1981). Burrowing owl typically use burrows made by rodents, such as ground squirrels or badgers, but may also use human-made structures, such as concrete culverts; concrete, asphalt, or wood debris piles; or openings beneath concrete or asphalt pavement.

3.4 VEGETATION MAPPING AND GENERAL PLANT AND WILDLIFE SURVEYS

Vegetation mapping took place directly on a 150-scale (1" = 150') aerial photograph following *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). RBC mapped vegetation on the project site including a 100-foot buffer and identified all observed flora and fauna for inclusion in plant and wildlife lists for the project site.

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3.5 JURISDICTIONAL DELINEATION REVIEW AREA

A portion of the BSA designated as the Jurisdictional Delineation Review Area (JDRA) exists along the western BSA boundary (Figure 2). On September 3, 2019, RBC conducted a formal jurisdictional delineation per the Corps guidelines within the JDRA only to make a final determination of the jurisdictional status of features within the JDRA.

Prior to the formal jurisdictional delineation, field maps were created using a Geographic Information System (GIS) and a color aerial photograph at a 1:200 scale. RBC staff also reviewed USGS National Hydrography Dataset (NHD) and topography data and USFWS National Wetlands Inventory (NWI) data to further determine the potential locations of jurisdictional aquatic resources. RBC also utilized Google Earth to assess current and historic presence or absence of flow in the JDRA. The JDRA includes the westernmost portion of the northern extent of the project site and extended into the New River as well as the associated floodplain for a total of 7.86 acres. Areas with depressions, drainage patterns, and/or wetland vegetation within the JDRA were evaluated for potential jurisdictional status, with a focus on the presence of defined channels and/or wetland vegetation, soils, and hydrology. Field staff examined potential jurisdictional wetland areas using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the Corps 1987 *Wetland Delineation Manual* (Wetland Manual; Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (Arid West Supplement; Corps 2008a). Complete methods are presented in the *Imperial Solid Waste Site Jurisdictional Delineation Report* (RBC 2019; Appendix C).

4 RESULTS

4.1 BIOLOGICAL RESOURCE DATABASE REVIEW RESULTS

The CNDDB results include historical occurrences of three special-status wildlife species within one mile of the project site (Figure 3; Table 1). The CNPS Electronic Inventory search results included 21 plant species with a California Rare Plant Ranking (CRPR). Table 1 provides details regarding the potential for these special-status species to occur on site.

There are no USFWS historical occurrences of special-status species or designated critical habitat within one mile of the project site.

4.3 BURROWING OWL HABITAT ASSESSMENT RESULTS

The project site does not support suitable burrowing owl habitat. No burrowing owls, active burrows, or burrowing owl sign were observed during the habitat assessment. RBC did not conduct focused surveys for burrowing owl within the BSA. Recommendations for pre-construction burrowing owl surveys are outlined in Section 6.1.

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Table 1. Special-Status Plant and Wildlife Species – Potential for Occurrence

Species	Status*	Habitat Description	Potential for Occurrence within Project Site
PLANTS			
Chaparral sand verbena (*Abronia villosa var. aurita*)	CRPR 1B.1	Annual herb. Blooms between March and September. Sandy chaparral, coastal scrub and desert dunes. Elev. 245-5250 ft.	None. No suitable habitat is present within the BSA.
Abram's spurge (*Euphorbia abramsiana*)	CRPR 2B.2	Annual herb. Blooms September-November. Mojavean and Sonoran Desert scrub in sandy soils. Elev. -15-4,300 ft.	Low. Historical collections in the vicinity of the BSA.
Annual rock-nettle (*Eucnide rupestris*)	CRPR 2B.2	Annual herb. Blooms December-April. Sonoran Desert scrub. Elev. 1640-1970 ft.	None. No suitable habitat is present within the BSA.
Baja California ipomopsis (*Ipomopsis effusa*)	CRPR 2B.1	Annual herb. Blooms April-June. Chaparral, Sonoran Desert scrub in sandy soils (alluvial fan). Elev. 0-330 ft.	None. No suitable habitat is present within the BSA.
Brown turbans (*Malperia tenuis*)	CRPR 2B.3	Annual herb. Blooms March-April. Sonoran Desert scrub in sandy and gravelly soils. Elev. 45-1100 ft.	None. No suitable habitat is present within the BSA.
California satintail (*Imperata brevifolia*)	CRPR 2B.1	Perennial rhizomatous herb. Blooms September-May. Mesic areas within chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub. Elev. 0-3985 ft.	Low. Suitable habitat on the project site is minimal and disturbed.
Emory's crucifixion-thorn (*Castela emoryi*)	CRPR 2B.2	Perennial deciduous shrub. Blooms June-July. Mojavean and Sonoran Desert scrub and playas in gravelly soils. Elev. 295-2380 ft.	None. No suitable habitat is present within the BSA.
Flat-seeded spurge (*Euphorbia platysperma*)	CRPR 1B.2	Annual herb. Blooms February-September. Desert dunes and Sonoran Desert scrub in sandy soils. Elev. 210-330 ft.	None. No suitable habitat is present within the BSA.

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Species	Status*	Habitat Description	Potential for Occurrence within Project Site
Gravel milk-vetch (*Astragalus sabulonum*)	CRPR: 2B.2	Annual/perennial herb. Blooms between February and June. Sonoran and Mojavean desert scrub and desert dunes in sandy or gravelly soils in flats, washes, and roadsides. Elev. -197-3051 ft.	Low. Suitable habitat on the project site is minimal and disturbed.
Hairy stickyleaf (*Mentzelia hirsutissima*)	CRPR 2B.3	Annual herb. Blooms March-May. Sonoran Desert scrub in rocky soils. Elev. 0-2295 ft.	None. No suitable habitat is present within the BSA.
Mud nama (*Nama stenocarpa*)	CRPR 2B.2	Annual/perennial herb. Blooms January-July. Marshes and swamps (lake margin, riverbanks). Elev. 15-1640 ft.	Low. Suitable habitat on the project site is minimal and disturbed.
Parish's desert-thorn (*Lycium parishii*)	CRPR 2B.3	Perennial shrub. Blooms March-April. Coastal scrub, Sonoran Desert scrub. Elev. 440-3280 ft.	None. No suitable habitat is present within the BSA.
Pink fairy-duster (*Calliandra eriophylla*)	CRPR 2B.3	Perennial deciduous shrub. Blooms January-March. Sonoran Desert scrub in sandy or rocky soils. Elev. 390-4920 ft.	None. Not observed during project surveys.
Ribbed cryptantha (*Johnstonella costata*)	CRPR 4.3	Annual herb. Blooms February-may. Desert dunes, Mojavean and Sonoran Desert scrub in sandy soils. Elev. -195-1,640 ft.	None. No suitable habitat is present within the BSA.
Salton milk-vetch (*Astragalus crotalariae*)	CRPR 4.3	Perennial herb. Blooms January-April. Sonoran Desert scrub in sandy or gravelly soils Elev. -195-820 ft.	None. No suitable habitat is present within the BSA.
Thurber's pilostyles (*Pilostyles thurberi*)	CRPR 2B.2	Perennial herb (parasitic). Blooms December-April. Sonoran Desert scrub. Elev. 0-1200 ft.	None. No suitable habitat is present within the BSA.
Utah vine milkweed (*Funastrum utahense*)	CRPR 4.2	Perennial herb. Blooms April-June. Mojavean and Sonoran Desert scrub in sandy or gravelly soils. Elev. 325-4710 ft.	None. No suitable habitat is present within the BSA.
Watson's amaranth (*Amaranthus watsonii*)	CRPR 4.3	Annual herb. Blooms April-September. Mojavean and Sonoran desert scrub sometimes in wetland and riparian areas. Elev. 65-5575 ft.	Low. Suitable habitat on the project site is minimal and disturbed.

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Species	Status*	Habitat Description	Potential for Occurrence within Project Site
Wiggins' croton (*Croton wigginsii*)	CRPR 2B.2	Perennial shrub. Blooms March-May. Desert dunes and sandy Sonoran Desert scrub. Elev. 160-330 ft.	None. No suitable habitat is present within the BSA.
Winged cryptantha (*Johnstonella holoptera*)	CRPR 4.3	Annual herb. Blooms March-April. Mojavean and Sonoran Desert scrub. Elev. 325-5,545 ft.	None. No suitable habitat is present within the BSA.
Wolf's cholla (*Cylindropuntia wolfii*)	CRPR 4.3	Perennial stem succulent. Blooms March-May. Sonoran Desert scrub. Elev. 325-3935 ft.	None. Not observed during project surveys.
REPTILES			
Flat-tailed horned lizard (*Phrynosoma mcallii*)	SSC	Found in desert scrub on sandy flats and valleys.	None. Suitable habitat not present within the BSA.
AMPHIBIANS			
Lowland leopard frog (*Lithobates yavapaiensis*)	SSC	Found in streams, riverside channels, springs, ponds, and stock ponds in desert scrub, grassland, and woodland.	None. Presumed extirpated in California.
MAMMALS			
Colorado Valley woodrat (*Neotoma albigula venusta*)	S1	Found in Sonoran and Chihuahuan desert grasslands and desert shrub habitats.	Low. Suitable habitat minimal within the BSA.
BIRDS			
Black-tailed gnatcatcher (*Polioptila melanura*)	WL	Found in semiarid and desert scrub habitats, often among creosote bush, ocotillo, mesquite or tamarisk.	Present. Observed in arrow weed scrub within the BSA.
Burrowing owl (*Athene cunicularia*)	SSC	Found in grasslands and open scrub from coast to foothills. Strongly associated with California ground squirrel and other fossorial mammal burrows.	Low. No BUOW or sign observed during project surveys.
Loggerhead shrike (*Lanius ludovicianus*)	SSC (nesting)	Found in open country with short vegetation and well-spaced shrubs or trees. Found in agricultural fields, desert scrublands, riparian habitat and savannahs.	Present. Observed within the BSA during project surveys (not observed nesting).

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Species	Status*	Habitat Description	Potential for Occurrence within Project Site
White-faced ibis (*Plegadis chihi*)	WL (nesting colony)	Breeds colonially in marshes, usually in bushes or low trees. Found in dense marshland vegetation, including bulrushes or cattails,	Present. Observed flying low over the BSA during project surveys (not observed nesting).
Yuma Ridgway's Rail (*Rallus obsoletus yumanensis*)	FE, ST, FP	Found in saltmarshes with extensive vegetation. Prefer coastal wetlands dominated by pickleweed, cordgrass, or mangroves.	Low. Suitable marshland habitat is minimal within the BSA.

*CRPR – California Rare Plant Rank
1B – Plants rare, threatened, or endangered in California and elsewhere
2B – Plants rare, threatened, or endangered in California but more common elsewhere
3 – Review List: Plants about which more information is needed
4 – Plants of limited distribution
Threat Ranks
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
FE – Federally Endangered (USFWS)
FP – Fully Protected (CDFW)
SSC – Species of Special Concern (CDFW)
ST – State threatened (CDFW)
S1 – State Ranking (Critically Imperiled in the state because of extreme rarity or because of factors such as very steep declines making it vulnerable to extirpation from the state; CDFW)
WL – Watch List (CDFW)

Black-tailed Gnatcatcher (Polioptila melanura)

Black-tailed gnatcatcher is a CDFW Watch List species. This species is non-migratory, year-round resident of the southwestern United States and northern Mexico, and primarily occurs in the Lower Sonoran Zone within semiarid or desert scrub. Black-tailed gnatcatchers nest in dense arroyos and washes, often dominated by creosote bush (*Larrea tridentata*) and saltbush (*Atriplex* spp.). This species nests in the forks of branches of dense shrubs or trees with ample shade and cover (Farquhar and Ritchie 2002).

A single black-tailed gnatcatcher individual was observed in arrow weed (*Pluchea serricea*) scrub on the east side of the BSA (Figure 2).

Burrowing Owl (Athene cunicularia)

Burrowing owl is a CDFW SSC at nesting sites and some wintering sites and is federally protected by the Migratory Bird Treaty Act (MBTA). The western subspecies of burrowing owl (*A. c. hypugaea*) breeds from southern Canada to the western half of the United States and into Baja California and central Mexico. In California, suitable habitat for burrowing owl is generally characterized by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils, such as naturally occurring grassland, shrub steppe, and desert habitats (Haug et al. 1993). Burrowing owls may also occur in agricultural areas, ruderal grassy fields, vacant lots, and

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pastures containing suitable vegetation composition and functional burrows with foraging habitat in close proximity (Gervais et al. 2008). Burrowing owls usually use burrows dug by California ground squirrel (*Otospermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*), and dens or holes dug by other fossorial species including badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (e.g., San Joaquin kit fox (*Vulpes macrotis mutica*)) (Ronan 2002). Burrowing owls also frequently use natural rock cavities, debris piles, culverts, and pipes for nesting and roosting (Rosenberg et al. 2004) and have been documented using artificial burrows for nesting and cover (Smith and Belthoff 2001).

Burrowing owls have declined throughout much of their range due to habitat loss attributed to urbanization, agricultural conversion, and destruction of ground squirrel colonies (Remsen 1978). The incidental poisoning of burrowing owls and the destruction of their burrows during eradication programs aimed at rodent colonies have also contributed to their decline (Collins 1979; Remsen 1978). Although burrowing owls are relatively tolerant of lower levels of human activity, human related effects such as shooting and introduction of non-native predators have negative population effects. Burrowing owls often nest and perch near roads, where they are vulnerable to roadside shooting, fatal car strikes, and general anthropogenic harassment (Remsen 1978).

No burrowing owls, active burrows, or burrowing owl sign were observed during the habitat assessment on September 4, 2019. While burrowing owls are known to occur in the area, there is no suitable habitat within the BSA. Therefore, the burrowing owl has a low potential to occur on the project site.

Loggerhead Shrike (Lanius ludovicianus)

Loggerhead shrike is a CDFW SSC when nesting. This species is a (non-migratory) year-round resident in southern California. Loggerhead shrike prefer open habitats, typically with short vegetation and scattered shrubs.

This species consumes a diet consisting primarily of insects, and also feeds on reptiles, birds and small mammals. Loggerhead shrike utilize spiny vegetation or fences to impale prey, in order to secure prey for consumption and storage. Thus, loggerhead shrike suitable habitat requires vegetation with spines or thorns (Yosef 1996), or artificial objects, such as barbed wire.

Leading causes of decline for this species include urban development and ingestion of pesticide-laden prey. Loggerhead shrike numbers remain fairly large across North America; however, the species has dramatically declined over the past century (Yosef 1996).

Suitable nesting habitat occurs within the BSA in the form of mesquite trees that occur along the boundaries of the BSA. An individual loggerhead shrike was documented within the BSA at the southern end of the project area (Figure 2).

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White-faced Ibis (Plegadis chihi)

White-faced ibis is a CDFW Watch List species when nesting. This species breeds colonially in marshes and wetlands, typically nesting in adjacent, shrubs or low trees. White-faced ibis breeding range extends from the western United States, south, through Mexico (Ryder and Manry 1994).

This species has a varied diet, consisting mainly of invertebrates such as insects, snails, and crayfish, though will sometimes consume vertebrates such as fish and frogs.

Suitable nesting habitat occurs within the BSA in the form of common reed marsh adjacent to tamarisk scrub. An individual white-faced ibis was observed flying south over the BSA (Figure 2).

4.4 VEGETATION MAPPING AND GENERAL PLANT AND WILDLIFE SURVEYS

The BSA is comprised of five vegetation communities and land uses including; arrow weed scrub, common reed marsh, disturbed habitat, open water and tamarisk scrub (Figure 2). The vegetation communities/land uses that occur within the BSA are summarized in Table 2 and described below.

Table 2. Vegetation Communities/Land Uses

Land Use (Map Code)	Acres
Arrow weed scrub	0.39
Common reed marsh	0.87
Disturbed habitat	35.22
Open Water	0.36
Tamarisk scrub	3.45
Total	40.29

Arrow Weed Scrub

Arrow weed scrub typically occurs around springs, seeps, irrigation ditches, canyon bottoms, stream borders, and seasonally flooded washes in alluvial-derived alkaline soils. Arrow weed scrub on site consists of moderate to dense thickets dominated by arrow weed (*Pluchea sericea*), with emergent tamarisk (*Tamarix ramosissima*) and mesquite trees (*Prosopis glandulosa* var. *torreyana*), and a sparse herbaceous layer. Arrow weed scrub occurs in the center of the BSA adjacent to tamarisk scrub and common reed marsh within the New River floodplain (Figure 2).

Common Reed Marsh

Common reed marsh typically occurs in semi-permanently flooded, slightly brackish marshes and ditches in poorly aerated soils. Common reed marsh occurs within the New River floodplain and is dominated by common reed (*Phragmites australis*) with intermittent tamarisk, arrow weed, and other native herbaceous plants (Figure 2).

Disturbed Habitat

Disturbed habitat within the survey area has been graded, cleared, or used to the point where the land cannot support native vegetation. These areas consist of bare soils and non-native species.

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Disturbed habitat occurs within the eastern half of the BSA and on dirt roadways throughout the site (Figure 2).

Open Water

Open water habitat within the survey area occurs within the New River, in the northwestern portion of the BSA (Figure 2). Open water habitats generally unvegetated and do not support terrestrial plant species.

Tamarisk Scrub

Tamarisk scrub typically occurs on sandy or gravelly soils, within or in close proximity to washes or streams, and often becomes established following major disturbance. Tamarisk scrub occurs as dense stands along the New River and is strongly dominated by tamarisk, with a small number of individual mesquite trees scattered throughout (Figure 2).

4.5 JURISDICTIONAL WATERS AND STREAMBED

The formal jurisdictional delineation determined that approximately 3.96 acres of wetland waters of the U.S./State associated with the floodplain of the New River (Wetland 1 [W-1]) occur within the JDRA and are expected to be considered jurisdictional by the Corps, RWQCB, and CDFW. Approximately 0.36 acre (612 linear feet) of non-wetland waters (Non-Wetland Waters [NWW-1]), which comprise the open water portion of the New River, occur within the JDRA and are expected to be considered perennial, non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB, and perennial streambed, jurisdictional by CDFW. Complete results are presented under separate cover in the Jurisdictional Delineation Report (Appendix C).

Permitting for impacts on the delineated jurisdictional areas will require permitting through the Corps, RWQCB, and CDFW.

5 IMPACTS

Direct impacts refer to any alteration, disturbance, or destruction of biological resources caused by and occurring at the same time and place as the project. Examples include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; the crushing of adult plants, bulbs, or seeds; the diversion of natural surface water flows; injury, death, and/or harassment of listed and/or special-status species; and the destruction of habitats necessary for species breeding, feeding, or sheltering.

Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants.

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Cumulative impacts are the direct and indirect impacts of a proposed project which, when considered alone, would not be deemed substantial, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. 'Related projects' refers to past, present, and reasonably foreseeable future projects which would have similar impacts on the proposed project.

CEQA Guidelines Form J thresholds of significance have been used to determine whether project implementation would result in a significant direct, indirect, and/or cumulative impact. These thresholds are based on Appendix G of the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000–15387). A significant biological resources impact would occur if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federal protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance;
- Conflict with the provisions of an adopted HCP; Natural Community Conservation Plan; or other approved local, regional, or state habitat conservation plan.

5.1 VEGETATION AND LAND USE IMPACT ANALYSIS

The project will impact 19.66 acres of disturbed habitat within the project boundary, and an additional 5.36 acres of disturbed habitat within the borrow site. As noted above, the entire property is highly disturbed and does not support substantial vegetation. Impacts on non-native vegetation communities or habitats would be less than significant.

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Table 3. Project Impacts on Vegetation Communities/Land Uses

Land Use	Impacts within Project Boundary (Acres)	Impacts within Borrow Site (Acres)
Disturbed habitat	19.66	5.36
Total	19.66	5.36

5.2 SPECIAL-STATUS PLANTS IMPACT ANALYSIS

There are no special-status plant species with moderate or high potential to occur on the project site. The project will not impact special-status plants due to a lack of suitable habitat for all species and the high level of site disturbance.

5.3 SPECIAL-STATUS ANIMALS IMPACT ANALYSIS

The project site has low potential to support the CDFW SSC burrowing owl, and does not have moderate or high potential to support federally or state-listed threatened or endangered wildlife species.

Three special-status bird species, black-tailed gnatcatcher (WL), loggerhead shrike (SSC when nesting) and white-faced ibis (WL when nesting), were documented within the BSA during project surveys. Through compliance with the project-specific mitigation measures in Section 6 of this report, project impacts on special-status animals would be less than significant.

5.4 NESTING BIRD IMPACT ANALYSIS

The project has the potential to impact active bird nests if vegetation is removed or ground disturbing activities occur during the nesting season (January 15 to August 31). Impacts on nesting birds are prohibited by the MBTA and CFGC. A project-specific mitigation measure that will avoid project impacts on nesting birds is identified in Section 6.2 of this report. With implementation of this measure, impacts on nesting birds would be less than significant.

5.5 JURISDICTIONAL WATERS OF THE U.S./STATE IMPACT ANALYSIS

The project, as currently proposed, will not impact perennial, non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB, and perennial streambed jurisdictional by CDFW, within the JDRA and associated with the New River. The project will not impact wetland waters of the U.S./State jurisdictional by the Corps, RWQCB, and CDFW within the JDRA and associated with the floodplain of the New River. Note that project impacts are based on preliminary project designs; project impacts may change once project designs are finalized.

5.6 INDIRECT IMPACT ANALYSIS

In the context of biological resources, indirect impacts are effects associated with construction activities adjacent to native open space. Potential indirect impacts associated with development include water quality impacts from drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and impacts

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from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect impacts may also occur as a result of construction-related activities. Since the project site is adjacent to previously developed or disturbed areas, the project will not result in significant indirect impacts on biological resources.

5.7 CUMULATIVE IMPACT ANALYSIS

Due to the level of disturbance on the project site, the adjacent developed land, and the lack of sensitive biological resources, the project will not result in any significant cumulative impacts on biological resources.

6 MITIGATION AND AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts on special-status biological resources.

6.1 BURROWING OWL

As noted above, burrowing owls, active burrows, or burrowing owl sign were not observed on the project site during the habitat assessment and limited suitable habitat is present on site. Although the potential for burrowing owl to occur on site is low, a pre-construction burrowing owl survey should be conducted prior to project construction to ensure that burrowing owl have not colonized the site. To avoid impacts on burrowing owls, the following mitigation measure is recommended:

> **MM-1:** A qualified biologist(s) will conduct a pre-construction presence/absence survey for burrowing owls 14 days prior to ground disturbing activities and 24 hours immediately before ground disturbing activities. If burrowing owls are documented on site, then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls.

6.2 NESTING BIRDS

As noted above, the project site has the potential to support nesting birds. To avoid impacts on nesting birds, the following mitigation measure is recommended:

> **MM-2:** Vegetation clearing and ground disturbing activities should be conducted outside of the nesting season (January 15 to August 31). Due to the potential for nesting birds to occur on site, a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests, depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species will have an avoidance buffer of 500 feet and other bird species will have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW.

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6.3 JURISDICTIONAL WATERS AND STREAMBEDS

As noted above, the project will not impact non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB; streambed jurisdictional by CDFW; and wetland waters of the U.S./State jurisdictional by the Corps, RWQCB, and CDFW.

7 CONCLUSION

The project site is highly disturbed and no special-status plant, wildlife, or habitat were observed within the project site. The potential for special-status plants and animals is low. Several special-status wildlife species, most notably burrowing owl, have low potential to occur based on their current distribution and habitat requirements. No burrowing owl, burrowing owl sign, or active burrows were observed during the habitat assessment. However, a pre-construction burrowing owl survey should be conducted to document the presence or absence of burrowing owl on the project site (see recommended MM-1). Suitable avian nesting habitat is present on site. A pre-construction clearance survey for nesting birds should be conducted to ensure no impacts on nesting birds occur (see recommended MM-2). The project, as currently proposed, would not impact non-wetland waters of the U.S./State jurisdictional by the Corps and RWQCB streambed jurisdictional by CDFW; and wetland waters of the U.S./State jurisdictional by the Corps, RWQCB, and CDFW.

The project will not result in significant impacts on biological resources with the implementation of MM-1 and MM-2 in Section 6. The project will not impact jurisdictional wetlands/waters of the U.S. or State.

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FIGURE 1

Project Location

IMPERIAL SOLID WASTE SITE
IMPERIAL COUNTY, CA

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri

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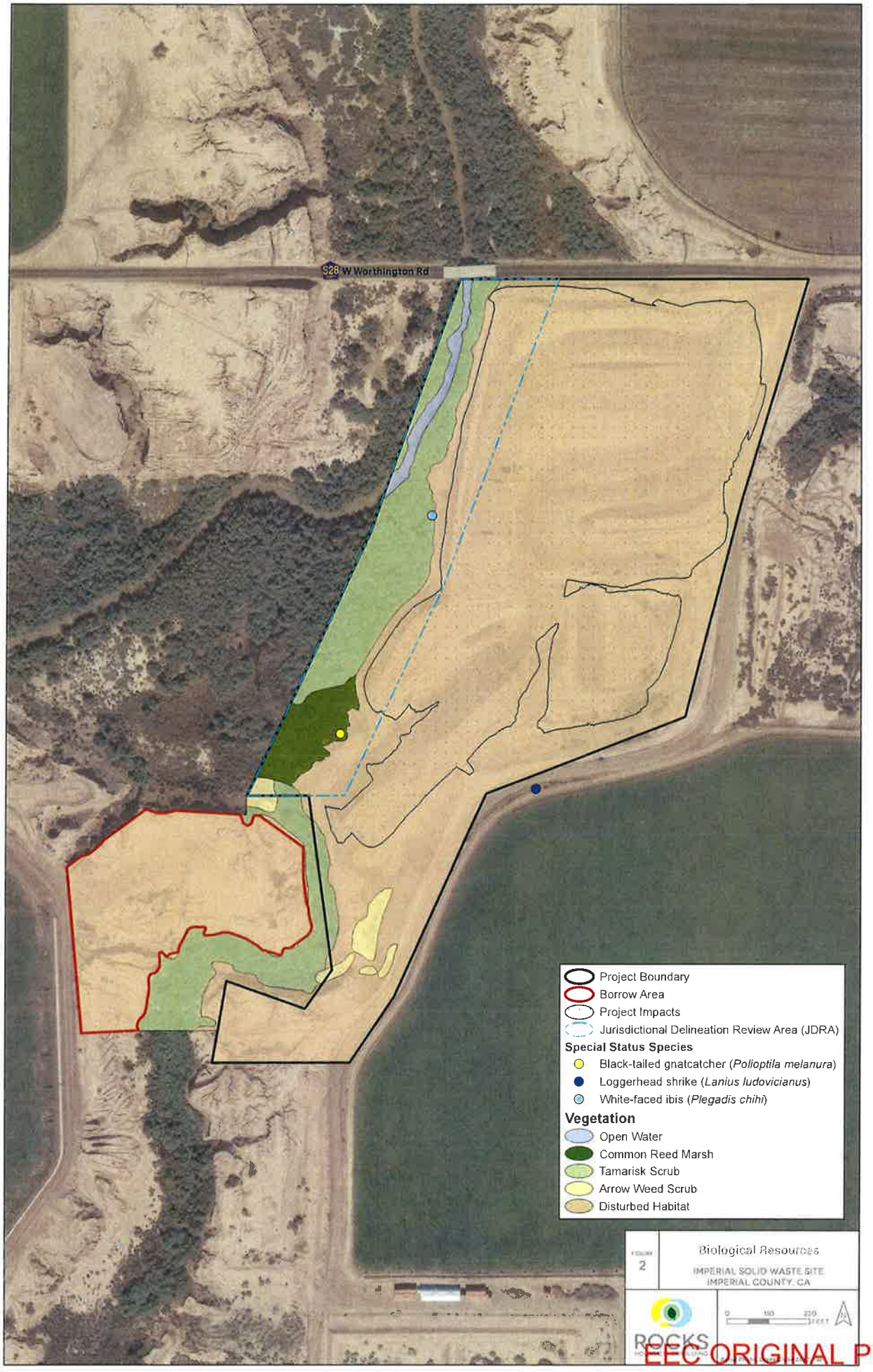

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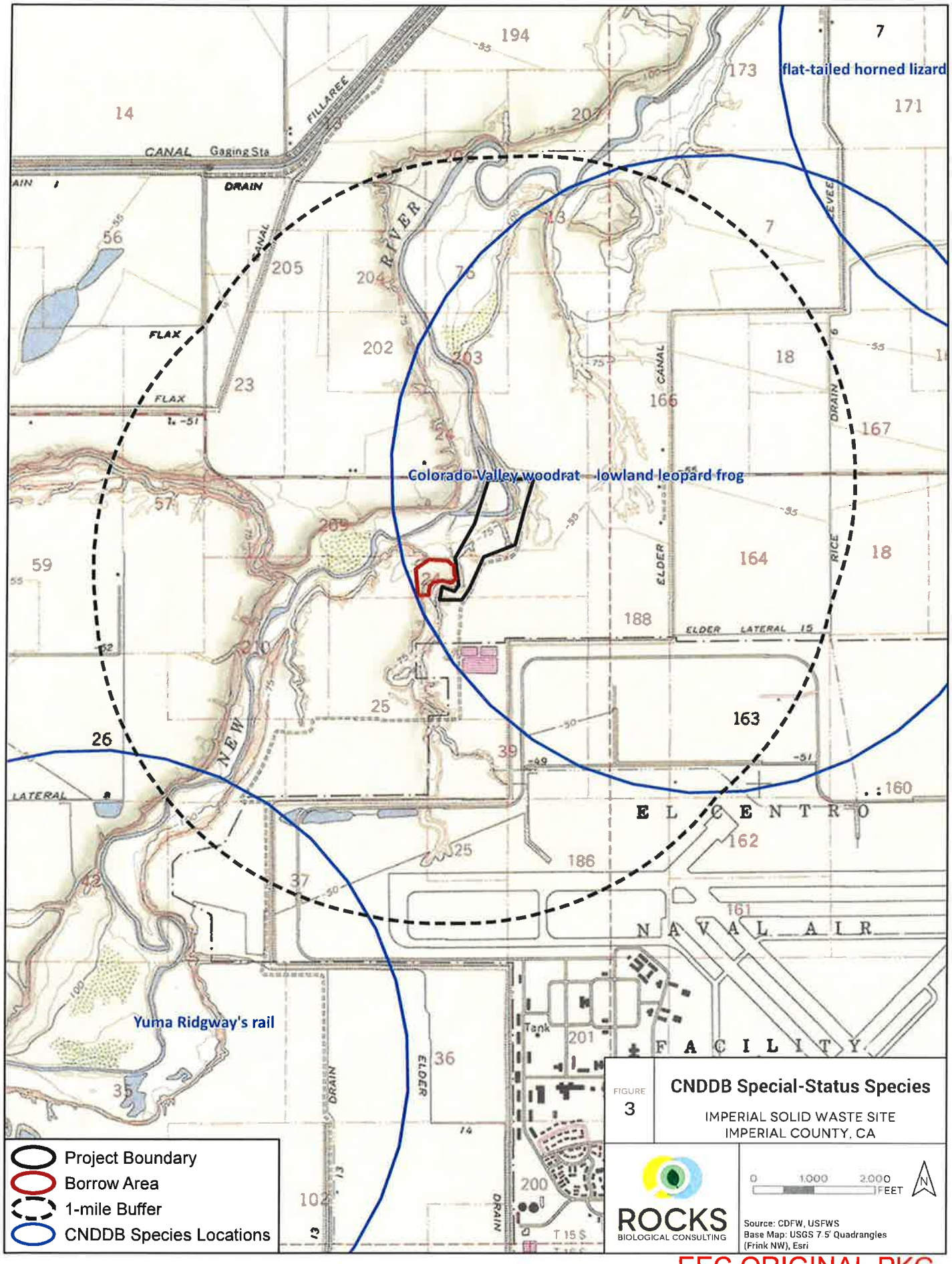

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Appendix A

Site Photographs – September 4, 2019

Photo 1. View of tamarisk (*Tamarix ramosissima*) scrub on the west side of the survey area, facing southwest.

Photo 2. View of arrow weed (*Pluchea sericea*) scrub on west side of the study area, facing east.

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Photo 3. View of the disturbed habitat and arrow weed scrub on the west side of the study area, facing south.

Photo 4. View of the disturbed land towards the center of the landfill, facing northeast.

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Photo 5. View of the disturbed landfill (foreground) and tamarisk thicket (background), facing southeast.

Photo 6. View of disturbed road on the east side of the study area, facing south.

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Photo 7. View disturbed land at the southern end of the study area, facing northwest.

Photo 8. View of the borrow site on the west side of the study area, facing east.

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Appendix B

Plant and Wildlife Species Observed

Family	Scientific Name	Common Name
PLANTS		
Arecaceae	*Phoenix canariensis**	Canary Island date palm
Asteraceae	*Pluchea sericea*	Arrow Weed
Chenopodiaceae	*Atriplex lentiformis*	Big saltbush
Chenopodiaceae	*Suaeda nigra*	Bush seepweed
Chenopodiaceae	*Atriplex canescens var. canescens*	Four-wing saltbush
Fabaceae	*Prosopis glandulosa var. glandulosa*	Mesquite
Poaceae	*Phragmites australis*	Common reed
Poaceae	*Cynodon dactylon*	Bermuda grass
Tamaricaceae	*Tamarix ramosissima**	Saltcedar
Viscaceae	*Phoradendron californicum*	Desert mistletoe
INVERTEBRATES		
Hesperiidae	*Hylephila phyleus*	Fiery skipper
Pieridae	*Colias eurytheme*	Orange sulphur
BIRDS		
Aegithalidae	*Psaltriparus minimus*	Bushtit
Ardeidae	*Butorides virescens*	Green heron
Charadriidae	*Charadrius vociferous*	Killdeer
Columbidae	*Zenaida macroura*	Mourning dove
Cuculidae	*Geococcyx californianus*	Greater roadrunner
Falconidae	*Falco sparverius*	American kestrel
Fringillidae	*Spinus psaltria*	Lesser goldfinch
Fringillidae	*Haemorhous mexicanus*	House finch
Icteridae	*Sturnella neglecta*	Western meadowlark
Laniidae	*Lanius ludovicianus*	Loggerhead shrike
Mimidae	*Mimus polyglottos*	Northern mockingbird
Parulidae	*Oreothlypis celata*	Orange-crowned warbler
Parulidae	*Geothlypis trichas*	Common yellowthroat
Passerellidae	*Melozone crissalis*	California towhee
Polioptilidae	*Polioptila melanura*	Black-tailed gnatcatcher
Threskiornithidae	*Plegadis chihi*	White-faced ibis
Trochilidae	*Calypte anna*	Anna's hummingbird
Troglodytidae	*Cistothorus palustris*	Marsh wren
Tyrannidae	*Sayornis nigricans*	Black phoebe
Vireonidae	*Vireo gilvus*	Warbling vireo
MAMMALS		
Leporidae	*Sylvillagus audubonii*	desert cottontail
* Non-native species		

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APPENDIX C

JURISDICTIONAL DELINEATION REPORT

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ROCKS
BIOLOGICAL CONSULTING

IMPERIAL SOLID WASTE SITE
JURISDICTIONAL DELINEATION REPORT

Imperial County, California

January 20, 2020

Prepared for:
County of Imperial Public Works
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1 INTRODUCTION

Rocks Biological Consulting (RBC) conducted a formal jurisdictional delineation for the Imperial Solid Waste Site Project (project) to identify areas that may be considered jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act; jurisdictional under the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and streambed and riparian habitats under California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code on behalf of the County of Imperial Public Works. This information is necessary to define jurisdictional areas within the review area, pending the agencies' concurrence, and can also be used by the the project applicant and agencies to assess project conformance with state and federal regulations and to estimate potential project impacts and associated permitting requirements. Furthermore, the information contained in this report is in compliance with the Corps Los Angeles District's *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (Corps 2017b).

2 SITE DESCRIPTION, LANDSCAPE SETTING

2.1 PROJECT LOCATION

The jurisdictional delineation review area is located on and adjacent to the Imperial Solid Waste Site at 1705 West Worthington Road, north of Naval Air Facility El Centro within the City of Imperial, Imperial County, California (Figure 1). West Worthington Road borders the review area to the north, and the New River travels northeast along portions of the western review area boundary towards the Salton Sea, located approximately 20 miles north of the review area. The latitude and longitude of the approximate center of the review area is 32.845429, -115.682754. The review area sits on Township 15 South, Range 12 East, and Section 24-25 within the Seeley 7.5-minute quadrangles, as mapped by the U.S. Geological Survey (USGS; Figure 2).

2.2 TOPOGRAPHY

The review area is primarily flat within the floodplain but hilly within the surrounding landfill areas with elevations ranging from approximately 879 to 926 feet above mean sea level (amsl) (Figure 2).

2.3 WATERSHED

The review area is within the Salton Sea Hydrologic Unit Code (HUC) 8 (18100204), New River HUC 10 (1810020411), and Middle New River HUC 12 (181002041103) watersheds (Figure 3). The Salton Sea HUC 8 watershed is approximately 8,360 square miles and is comprised of several major waterbodies and waterways such as the Salton Sea, the New and Alamo Rivers, and the intricate Imperial Valley Agricultural Drains (Ag Drain system) and Coachella Valley Stormwater Channel systems (Colorado River Regional Water Quality Control Board [CRRWQCB] 2017).

The New River HUC 10 watershed is approximately 624.98 square miles (California Water Indicators Portal [CWIP] n.d.). The New River headwaters originate in Mexico and continue northbound approximately 20 miles through the City of Mexicali, Mexico before crossing the

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international border near Calexico, California and eventually discharging into the Salton Sea (CRRWQCB 2017).

3 METHODS

3.1 PRE-FIELD REVIEW

Prior to the on-site delineation, field maps were created using a Geographic Information System (GIS) and a color aerial photograph at a 1:200 scale. RBC staff also reviewed USGS NHD and topography data (Figure 2) and U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data (Figure 4) to further determine the potential locations of jurisdictional aquatic resources. Google Earth was also utilized to assess current and historic presence or absence of flow in the review area.

Per the review of on-line data sources, USGS NHD maps "blue-line streams" within the northern portion, crossing through the central portion, and along the southern boundary of the review area, which are categorized as stream/river (USGS 2018) (Figure 2). USFWS NWI maps the New River as a Riverine Lower Perennial Unconsolidated Bottom Permanently flooded (R2UBH, Riverine) feature through the western portion of the review area, maps a Riverine Intermittent Streambed Seasonally Flooded (R4SBC, Riverine) feature through the southwestern corner of the review area, and maps several Palustrine Scrub-Shrub Broad-Leaved Deciduous Seasonally Flooded (PSS1C, Freshwater Forested/Shrub Wetland) features throughout the review area (USFWS 2019) (Figure 4).

3.2 ON-SITE DELINEATION AND MAPPING

Shanti Santulli and Sarah Krejca of RBC conducted a jurisdictional delineation field visit on September 3, 2019 from 0800 to 1130. Field survey conditions at the beginning of the field visit were 90°F with 2% cloud cover and winds at approximately 0 to 1 mile per hour (mph). Field conditions at the end of the field visit were 101°F with 0% cloud cover and winds at approximately 0 to 1 mph. The review area totals approximately 7.86 acres as depicted on Figure 1 and Figures 5A-5C.

Areas with depressions, drainage patterns, and/or wetland vegetation within the review area were evaluated for potential jurisdictional status, with focus on the presence of defined channels and/or wetland vegetation, soils, and hydrology.

While in the field, potentially jurisdictional features were recorded using a hand-held Global Positioning System (GPS) unit with a level of accuracy ranging from five to eight feet. RBC staff refined the data using aerial photographs and topo maps with two-foot contours to ensure accuracy.

All figures generated for this jurisdictional delineation report follow the Corps' *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (Corps 2016).

3.2.1 CORPS

Wetland Delineation

Field staff examined potential Corps jurisdictional wetland areas using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the Corps 1987 *Wetland Delineation*

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Manual (Wetland Manual) (Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (Arid West Supplement) (Corps 2008a). As detailed in the Wetland Manual, the Corps defines wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Environmental Laboratory 1987).

Areas that met the three parameters per the Arid West Supplement (i.e., hydrophytic vegetation, hydric soils, and wetland hydrology) were considered wetland waters of the U.S./State. RBC staff based wetland plant indicator status (i.e., Obligate [OBL], occurs 99+% in wetlands; Facultative Wetland [FACW], occurs 67-99% in wetlands; Facultative [FAC], occurs 34-66% in wetlands; Facultative Upland [FACU], occurs 1-33% in wetlands; Upland [UPL], occurs 99+% in uplands; Not Listed [NL], considered UPL for wetland delineation purposes) on the *National Wetland Plant List* (NWPL; Corps 2016) and hydric soils indicators on *Field Indicators of Hydric Soils in the United States, Version 8.2* (NRCS 2018). Soil chromas were identified in the field according to *Munsell's Soil Color Charts* (Munsell Color 2015) and using protocols per the Wetland Manual and Arid West Supplement. Plants were identified according to The Jepson Manual 2nd edition (Baldwin et al. 2012) and nomenclature follows Jepson eFlora (Jepson Flora Project 2019).

Ordinary High Water Mark Delineation

An OHWM is defined in 33 CFR 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas." RBC staff used *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (OHWM Field Guide; Corps 2008b) and guidance provided in Regulatory Guidance Letter (RGL) 05-05 to estimate the extent of an OHWM in the field. For each feature exhibiting the potential presence of an OHWM, RBC completed a 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet following the guidance provided in the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (OHWM Datasheet; Corps 2010). Per the 2010 OHWM Datasheet, common indicators of an OHWM include a break in slope (i.e., abrupt cut in bank slope created by hydrogeomorphic processes across the landscape), changes in average sediment texture between floodplain units (i.e., low-flow, active floodplain, low terrace), and changes in vegetation species and/or cover between floodplain units.

3.2.2 RWQCB

Wetland Delineation

Note that in April 2019 the State Water Resources Control Board adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (the Procedures) which will become effective on May 28, 2020, nine months after the Office of Administrative Law approved the Procedures on August 28, 2019. As detailed in the Procedures, the State Water Resources Control Board and RWQCBs (Water Boards) define a

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wetland as follows: "An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation."

Although the Procedures are not yet applicable to this project, the Procedures provide that RWQCB shall rely on a wetland area delineation from a final aquatic resource report verified by the Corps to determine the extent of wetland waters of the State. If any potential wetland areas have not been delineated in a final aquatic resources report verified by the Corps, the limits of such potential wetland waters of the State shall be identified using the same wetland delineation methods per the Corps as described in Section 5.2.1, except that a lack of vegetation (i.e., less than 5 percent areal coverage of plants during the peak of the growing season) does not preclude an area from meeting the definition of a wetland waters of the State.

Ordinary High Water Mark Delineation

Field staff identified the lateral limits of potential non-wetland waters of the State using the same methods for determining an OHWM per the Corps as described in Section 5.2.1.

3.2.3 CDFW

Wetland Habitat Delineation

CDFW follows the USFWS wetland definition and classification system, which defines a wetland as transitional land between terrestrial and aquatic systems having one or more of the following attributes: "(1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (USFWS 1979). A wetland is presumed when all three attributes are present; if less than three attributes are present the presumption of a wetland must be supported by "the demonstrable use of wetland areas by wetland associated fish or wildlife resources, related biological activity, and wetland habitat values" (CFGC 1994).

Potential CDFW-jurisdictional wetland boundaries were determined based on the presence of wetland areas supported by a lake or streambed. Wetland delineation methods to determine the presence of one or more wetland attributes included the same methods per the Corps as described in Section 5.2.1.

Streambed and Riparian Habitat Delineation

CDFW potential jurisdictional non-wetland boundaries were determined based on the presence of lake and/or streambed and riparian habitat. Lakes include "natural lakes or man-made reservoirs" (14 California Code of Regulations [CCR] § 1.56). Streambeds considered within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (14 CCR § 1.72). Riparian habitat refers to vegetation and habitat associated with a stream. The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream. Isolated riparian habitat (i.e.,

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where riparian vegetation did not appear associated with an ephemeral wash) were not considered CDFW-jurisdictional.

4 SITE ALTERATIONS, CURRENT AND PAST LAND USE

A portion of the review area and the property adjacent to the east and south of the review area has been operating as the Imperial Solid Waste Site since at least 1970. The landfill was closed in March 2019 and currently operates as a transfer station. The following sections provide additional details regarding site alterations and land use specific to on-site soils, hydrology, and vegetation.

4.1 SOILS

Based on the Natural Resources Conservation Service (NRCS) map (Figure 4), the soils outlined below in Table 1 occur within the review area:

Table 1. Soils Mapped within Review Area

Soil Map Unit	Soil Series/Unit	Geomorphic Surface	Taxonomic Class	NRCS Hydric Status
Badland	N/A	Eroded areas	N/A	No
Fluvaquents, saline	N/A	Floodplains, alluvial basins	N/A	Yes, Criteria 4
Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes	Imperial	Floodplains, old lake beds	Fine, smectitic, calcareous, hyperthermic Vertic Torrifluvents	No
Indio-Vint complex	Indio	Alluvial fans, lacustrine, basins, floodplains	Coarse-silty, mixed, superactive, calcareous, hyperthermic Typic Torrifluvents	No
Water	N/A	Streams, lakes, ponds, estuaries	N/A	No

The National Technical Committee for Hydric Soils defines hydric soils; *Changes in Hydric Soils Database Selection Criteria* (77 Federal Register 12234) outline the current four hydric soil criteria. NRCS lists only one soil map unit within the review area, Fluvaquents, saline, as hydric. The NRCS lists Fluvaquents, saline as hydric under Criteria 4, meaning this map unit contains "components that are frequently flooded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soils meet the definition of a hydric soil" (77 FR 12234).

The soils outlined above in Table 1 are further described below per the USDA's *NRCS Official Soil Series Description and Series Classification* database (NRCS 2019b); the *Soil Survey of*

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Imperial County, California Imperial Valley Area (USDA 1981); and the *USDA Soil Survey Manual* (Soil Science Division Staff 2017):

Badland – Badland consists of very steep, excessively drained, severely eroded areas broken by numerous deeply entrenched channels and steep side drainages with raw bands or freshly exposed material. Badland is composed of slightly consolidated sandy alluvium capped with a very thin mantle of loose sand and is primarily used for watershed, wildlife habitat, and recreation. The NRCS does not list Badland, which occurs on site, as hydric.

Fluvaquents, saline – The Fluvaquents, saline unit consists of deep, nearly level soils on floodplains and alluvial basins of the New and Alamo Rivers near the Salton Sea (USDA 1981). Fluvaquent soils contain slow to ponded surface runoff and range in texture from silty clay to fine sand. These soils are poor for cropland and urban development due to their high salinity, poor drainage, and flooding hazard.The NRCS list Fluvaquents, saline, as hydric under Criteria 4, as discussed above.

Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes – The Imperial series consists of well and moderately well drained soils of calcareous, silty clay to depths of 60 inches or more. These soils are found on floodplains and in old lake beds on nearly level to gently sloping areas at elevations between 235 feet bmsl to 300 feet amsl. Imperial soils contain slow or very slow runoff except on low scarps and very slow permeability. The Glenbar series consists of very deep, well drained soils that formed in stratified stream alluvium. These soils are found on floodplains and alluvial fans on nearly level areas. Glenbar soils contain medium to slow runoff and moderately slow permeability. The NRCS does not list Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes as hydric.

Indio-Vint complex – The Indio series consists of very deep, well or moderately well drained soils formed in alluvium derived from mixed rock sources. These soils are found on alluvial fans, lacustrine basins, and floodplains on nearly level areas. Indio soils contain slow runoff and moderate permeability. The Vint series consists of very deep, somewhat excessively drained soils formed in stratified stream alluvium. These soils are found on floodplains on nearly level areas. Vint soils contain very slow runoff and moderately rapid permeability. The NRCS does not list Indio-Vint complex as hydric.

Water – The Water map unit is defined as areas with streams, lakes, ponds, or estuaries that sustain deep enough or moving water that sufficiently prevents the growth of rooted vegetation. Water map unit areas are typically covered with water throughout the year (Soil Science Division Staff 2017).

As stated in the Arid West Supplement, RBC used the hydric soils list as a tool and made final hydric soils determinations based on field-collected data at representative wetland delineation sample points deemed appropriate on site as recorded on the attached Arid West Wetland Determination Data Forms (Wetland Data Forms; Appendix A) discussed further in Section 6.1.

4.2 HYDROLOGY

Based on observations during the site visit, on-site features appear to receive surface flows from direct precipitation and runoff from adjacent developed areas, including the adjacent landfill and upstream agricultural operations. The U.S. Geological Survey (USGS) National

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Hydrography Dataset (NHD) web map indicates flows from the New River continue northward for approximately 36 miles into the Salton Sea (USGS 2018).

The present day New River was created in 1905-07 when the Colorado River broke through diversionary work and created the New River, the Alamo River, and the present day Salton Sea (Gruenberg 1998). Historically, the New River did not sustain continuous flows (Setmire 1984); however, flows increased in correlation to an increase in population and agricultural land uses throughout the Imperial Valley and Mexico (Gruenberg 1998). Since the late 1940s, the New River has been known to carry large amounts of urban runoff and untreated and partially treated industrial and municipal waste from Mexico as well as industrial and domestic waste, and urban and agricultural runoff from Imperial Valley, California (CRRWQCB 2017). The Imperial Valley Ag Drain system is comprised of over 1,450 miles of surface drains and discharges an average of 830,000 acre-feet/year into the Salton Sea, either directly, or through the New and Alamo Rivers (CRRWQCB 2017). The New River previously flowed through the western portion of the present-day location of the Imperial Solid Waste Site. Based on a review of historic aerials (Appendix D), it appears the New River was rerouted to the west of the Imperial Solid Waste Site prior to 1953.

Furthermore, aside from the New River mainstem hydrology, an unnamed tributary flows into the New River floodplain in the southwest portion of the review area.

4.3 VEGETATION

The review area is dominated by tamarisk scrub and disturbed habitat associated with the Imperial Solid Waste Site. Table 2 provides the vegetation community acreages within the review area (Figure 6). The vegetation community classifications follow Holland (1986).

Table 2. Vegetation Communities within Review Area

Vegetation Community	Acre(s)*
Arrow weed scrub	0.06
Common reed marsh	0.87
Disturbed habitat	3.54
Open water	0.36
Tamarisk scrub	3.03
Total	**7.86**

**Acreages rounded to the hundredths based on raw numbers provided during GIS analysis of the project, which are available upon request.*

Arrow Weed Scrub

Arrow weed scrub typically occurs around springs, seeps, irrigation ditches, canyon bottoms, stream borders, and seasonally flooded washes in alluvial derived alkaline soils. Arrow weed scrub on site consists of moderate to dense thickets dominated by arrow weed (*Pluchea sericea*, FACW) with emergent saltcedar (*Tamarix ramosissima*; NL but treated as FAC since saltcedar is understood to hybridize and function similar to five-stamen tamarisk [*Tamarix chinensis*; FAC]) and mesquite trees (*Prosopis glandulosa* var. *torreyana*; FACU), and a sparse

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herbaceous layer. Arrow weed scrub occurs in the southwestern corner of the review area adjacent to tamarisk scrub and common reed marsh within the New River floodplain.

Common Reed Marsh

Common reed marsh typically occurs in semi-permanently flooded, slightly brackish marshes and ditches in poorly aerated soils. and is dominated by common reed (*Phragmites australis*; FACW) with intermittent tamarisk and arrow weed, along with other native herbaceous plants. Common reed marsh occurs within the southwestern corner of the review area within the New River floodplain.

Disturbed Habitat

Disturbed habitat within the review area has been graded, cleared, or used to the point where the land cannot support native vegetation. These areas consist of bare soils and non-native species. Disturbed habitat occurs within the eastern half of the review area and includes dirt roadways.

Open Water

Open water typically includes reservoirs, lakes, ponds, and relatively large sloughs, channels, and rivers or streambeds that contain water throughout the year. Open water was mapped within the banks of the New River.

Tamarisk Scrub

Tamarisk scrub typically occurs on sandy or gravelly soils within or in close proximity to washes or streams and often becomes established in these areas following major disturbance. Tamarisk scrub occurs as dense stands of saltcedar along the New River and is strongly dominated by tamarisk with a few individuals of mesquite trees scattered throughout.

5 PRECIPITATION DATA AND ANALYSIS

RBC utilized the NRCS Agricultural Applied Climate Information System (AgACIS) database for the Imperial, California National Weather Service (NWS) station to access precipitation and Wetlands (WETS) Climate Tables data. WETS tables are utilized to define the range of normal precipitation and growing season for NWS stations. WETS tables define the "normal" range at the 30th and 70th percentile of all the data in the precipitation record for that station. RBC requested data for the past 30 years (1988-2019) to provide the pertinent pre-site visit precipitation data. Appendix C and Table 3 utilize the Imperial, California NWS station due to its comprehensive historical data and proximity to the review area (i.e., approximately 6.7 miles northeast).

5.1 CLIMATE AND GROWING SEASON

Imperial County is characterized by hot, arid summers and cool, dry winters. The Imperial, California NWS station lists the maximum averaged daily maximum temperature over the past 30 years as 106.4°F in July and the minimum averaged daily minimum temperature as 41.5 °F in December (NRCS 2019a). The NRCS does not calculate a growing season length at 24°F,

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28°F, and 32°F for this station since the threshold temperatures were not recorded throughout the 30-year period (i.e., year-round growing season).

5.2 PRECIPITATION AND NRCS WETS TABLE SUMMARY

Table 3 describes the estimated monthly total precipitation for the review area from October 2018 to September 2019 to provide the pertinent pre-site visit precipitation data from the NRCS AgACIS database for the Imperial, California NWS station.

Table 3. Precipitation Data for October 2018 to September 2019

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
Monthly Total Precip. (inch[es])	0.11	0.00	1.19	0.57	0.16	0.13	0.04	M*	0.00	0.00	0.00	0.56

*Per AgACIS database: "Values of 'M' indicate missing data."

Table 3 and Appendix C indicate that the field survey date of September 3, 2019 occurred after a year of normal precipitation for 2018; a normal precipitation period for June, July, and August 2019; and an above average precipitation period for September 2019.

6 DESCRIPTION OF ALL WETLANDS AND OTHER NON-WETLAND WATERS

The following descriptions of observed aquatic resources within the review area document the presence or absence of aquatic resource indicators per the methodologies discussed in Section 3.

The two aquatic resource features observed during the jurisdictional delineation site visit were the New River and the associated floodplain wetland areas within the review area, discussed further below. Appendix B provides site photographs of the features within the review area; Figures 5A, 5B, and 5C display representative photo points.

6.1 WETLANDS

Wetland 1

Wetland 1 (W-1) occurred throughout the review area as floodplain wetlands on both sides of the New River main channel. RBC investigated four wetland sampling points (WSP 1 to 4) to determine the extent of the wetland boundary (Figures 5A, 5B, and 5C; Appendix A, Wetland Data Forms). WSP 1 and WSP 3 met all three wetland parameters (hydrophytic vegetation, hydric soils, and wetland hydrology); WSP 2 and WSP 4 only met the wetland hydrology parameter. RBC investigated WSP 2 in association with WSP 1 and investigated WSP 4 in association with WSP 3 in order to determine the wetland/non-wetland boundary.

Overall, the delineated limits of W-1 occurred within a landscape position that collects or concentrates water along the floodplain of the New River (but not within the active floodplain). W-1 is also located at the toe slope of the surrounding landfill, which results in extensive runoff from the surrounding roads and hills collecting in W-1, and receives hydrologic input from an

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unnamed tributary to the south of the review area. Furthermore, field staff observed an abrupt shift between areas exhibiting strong evidence of hydrology/inundation directly associated with an area heavily dominated by hydrophytic vegetation in comparison with adjacent, sparsely vegetated to unvegated upland areas with weak or no hydrology indicators.

6.2 NON-WETLAND WATERS OF THE U.S./STATE

Non-Wetland Waters 1

Non-Wetland Waters 1 (NWW-1) is a perennial, non-wetland stream confined by steeply sloped banks. More specifically, NWW-1 comprises the open water portion of the New River. NWW-1 enters the review area along the western boundary and travels north before continuing off-site and crossing under West Worthington Road. Note that the estimated OHWM and bank-to-bank width for NWW-1 measured approximately 30 feet and was defined by flowing water, an abrupt and nearly vertical break in bank slope transitioning to a 45 degree angle, and a change in vegetation cover (Figures 5A, 5B, and 5C; Appendix A, OHWM Data Form). No vegetation was present within the active floodplain, whereas the adjacent upland was densely vegetated primarily with saltcedar (Section 4.3). Since no vegetation was present within the active floodplain, this area would not meet the hydrophytic vegetation parameter (i.e., does not have a minimum of five percent plant cover in any stratum to qualify as a vegetation stratum for sampling purposes per section 2 of the Arid West Manual).

6.3 OTHER FEATURES

Field staff did not observe areas beyond W-1 and NWW-1 with potential aquatic resource indicators, including swales or other areas showing evidence of drainage, ponding, or flow patterns. Data collected for W-1 and NWW-1, discussed in Sections 6.1 and 6.2, defined the extent of aquatic resource and upland areas within the review area.

7 DEVIATION FROM NWI AND NHD

The delineated extent of NWW-1 generally occurred within the area designated as the New River (*R2UBH, Riverine*) by the USFWS NWI. The delineated extent of W-1 overlapped with and extended beyond the limits of the USFWS NWI mapping of the *PSS1C, Freshwater Forested/Shrub Wetland* areas along the New River. Specifically, W-1 extended further north, into areas designated as the New River by the USFWS NWI within the northern portion of the review area. W-1 also extended further south, into areas with no designation by the USFWS NWI as well as into the area designated by the USFWS NWI as *R4SBC, Riverine* within the southwestern portion of the review area. While RBC did observe W-1 within the *R4SBC, Riverine* area, RBC did not observe any evidence of a riverine feature within the *R4SBC, Riverine* area (i.e., did not observe any clearly defined bed and bank within or above the wetland boundary).

The delineated extent of NWW-1 generally occurred within the area mapped by the USGS NHD as a "blue-line stream" traveling through the northern portion of the review area. NWW-1 did not extend into the "blue-line stream" area that runs through the central portion or along the southern boundary of the review area. Instead, a portion of the "blue-line stream" mapped through the central portion of the review area and all of the area mapped as "blue-line stream"

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along the southern boundary of the review area occurred within W-1. In fact, the portion of the "blue-line stream" that runs through the central portion of the review area appears to align with the location of the New River before it was rerouted to the west of the Imperial Solid Waste Site prior to 1953 (Appendix D).

8 RESULTS AND CONCLUSIONS

The results provided in this section include RBC's anticipated extent of jurisdictional aquatic resources within the review area based on observed field indicators of waters of the U.S./State (Corps/RWQCB), and streambed and associated wetland or riparian habitat (CDFW) per the methodologies discussed in Section 3.

This section, however, does not analyze the jurisdictional status of the delineated features per current Corps regulatory law, guidance, and standard operating procedures. A jurisdictional analysis for an approved jurisdictional determination (AJD) for the Corps can be provided separately if deemed necessary.

8.1 CORPS

NWW-1 exhibited a clear OHWM whereas W-1 met the three federal wetland parameters. Approximately 0.36 acre (612 linear feet) of non-wetland waters of the U.S. and 3.96 acres of wetland waters of the U.S. associated with the floodplain of the NWW-1 occur within the review area. These areas are expected to be considered jurisdictional by the Corps. Impacts within these jurisdictional areas would require Section 404 authorization from the Corps.

Table 4 provides the approximate acreage, linear feet, and dominant vegetation of the aquatic resources within the review area within a defined OHWM or three-parameter wetland area as shown on Figure 5A.

Table 4. Aquatic Resource Summary Table: Corps

Aquatic Resource Name	Acre(s)*	Linear Feet	Presence of OHWM/Wetland	Cowardin Code	Dominant Vegetation	Location (lat, long)
NWW-1	0.36	612	Yes/No	R2	Open water	32.846460, -115.682544
W-1	3.96	N/A	No/Yes	PSS	Tamarisk scrub	32.845196, -115.683029
Total	4.32	612				

*Acreages rounded to the hundredths based on raw numbers provided during GIS analysis, which are available upon request.

8.2 RWQCB

NWW-1 exhibited a clear OHWM whereas W-1 met the three federal wetland parameters. Approximately 0.36 acre (612 linear feet) of non-wetland waters of the State/surface waters and 3.96 acres of wetland waters of the State associated with the floodplain of the NWW-1 occur within the review area. These areas are expected to be considered jurisdictional by the RWQCB. Impacts within these jurisdictional areas would require Section 401 water quality certification from the RWQCB.

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Table 5 provides the approximate acreage, linear feet, and dominant vegetation of the aquatic resources within the review area within a defined OHWM or three-parameter wetland area as shown on Figure 5B.

Table 5. Aquatic Resource Summary Table: RWQCB

Aquatic Resource Name	Acre(s)*	Linear Feet	Presence of OHWM/Wetland	Cowardin Code	Dominant Vegetation	Location (lat, long)
NWW-1	0.36	612	Yes/No	R2	Open water	32.846460, -115.682544
W-1	3.96	N/A	No/Yes	PSS	Tamarisk scrub	32.845196, -115.683029
Total	4.32	612				

*Acreages rounded to the hundredths based on raw numbers provided during GIS analysis, which are available upon request.

8.3 CDFW

NWW-1 exhibited a clear bed and bank whereas W-1 met the three federal wetland parameters. Approximately 0.36 acre (612 linear feet) of unvegetated streambed and 3.96 acres of wetland/riparian habitat associated with the floodplain of the NWW-1 occur within the review area. These areas are expected to be considered jurisdictional by the CDFW. Impacts within these jurisdictional areas would require a Streambed Alteration Agreement from the CDFW.

Table 6 provides the approximate acreage, linear feet, and dominant vegetation of the aquatic resources within the review area with a clear bed and bank or within a three-parameter wetland area as shown on Figure 5C.

Table 6. Aquatic Resource Summary Table: CDFW

Aquatic Resource Name	Aquatic Resource Type	Dominant Vegetation	Acre(s)*	Linear Feet	Location (lat, long)
NWW-1	Streambed	Open water	0.36	612	32.846460, -115.682544
W-1	Wetland/Riparian	Tamarisk scrub	3.96	N/A	32.845196, -115.683029
Total			4.32	612	

*Acreages rounded to the hundredths based on raw numbers provided during GIS analysis, which are available upon request.

8.4 DISCLAIMER STATEMENT

The jurisdictional acreages and linear feet estimated in this section represent the existing conditions during the time of the field surveys. Please note that the applicable agencies will make final jurisdictional determinations. RBC recommends early coordination with the resource agencies to determine the final jurisdictional boundaries, applicable permitting processes, compensatory mitigation requirements, and other potential permitting issues specific to the proposed project. Agency representatives may request to access the site to field-verify the results of this jurisdictional delineation report with the project applicant, or a designated representative.

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The information provided in this report should remain valid for up to five years from the date of the field effort for the jurisdictional delineation unless site conditions change substantially, or a regulatory agency requires an updated report.

9 CONTACT INFORMATION

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619-674-8067

Agency access to the review area can be coordinated with the applicant and/or agent upon request.

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FIGURE 1

Project Location

IMPERIAL SOLID WASTE SITE
IMPERIAL COUNTY, CA

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

Date: 10/28/2019
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri

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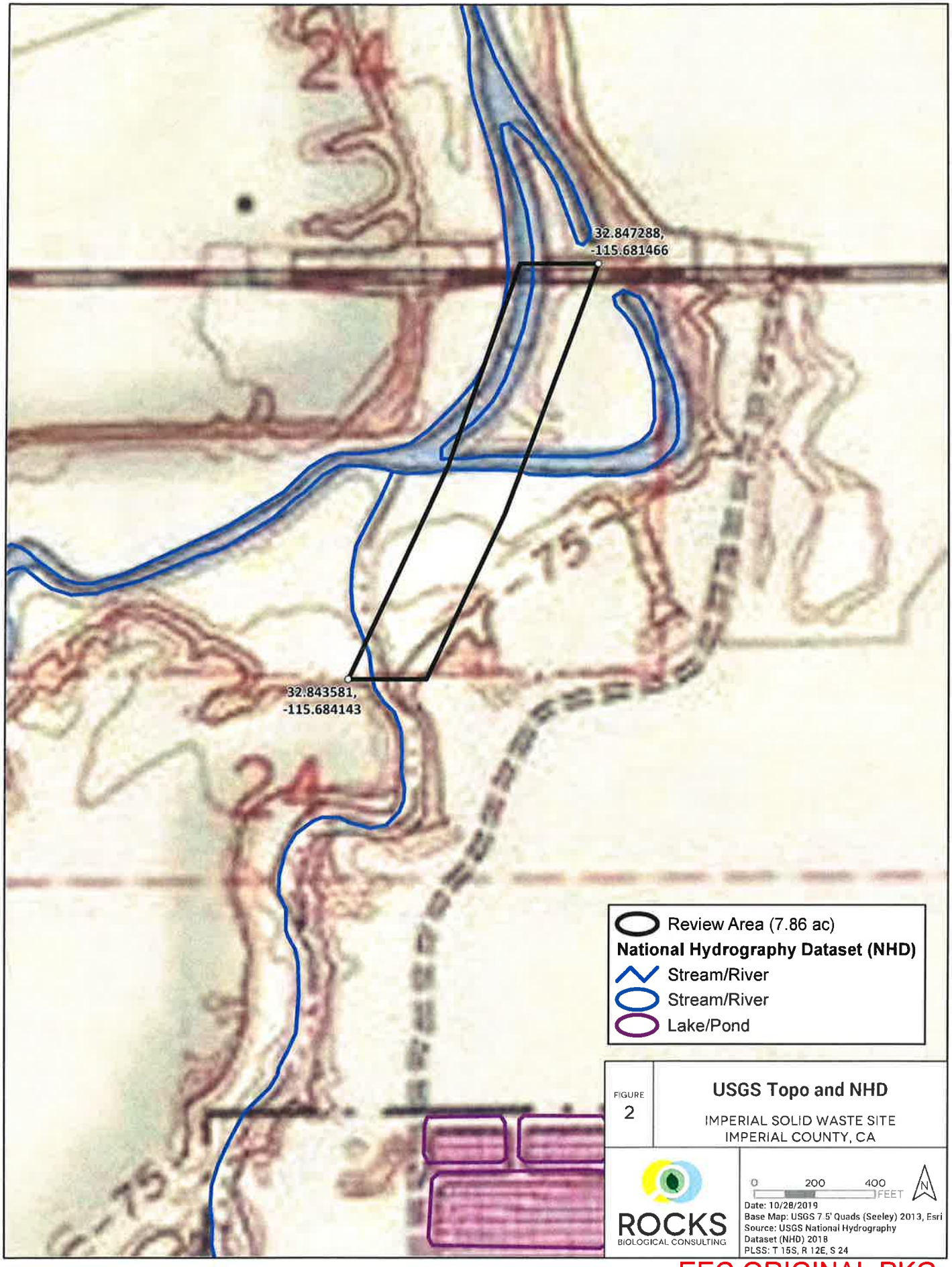

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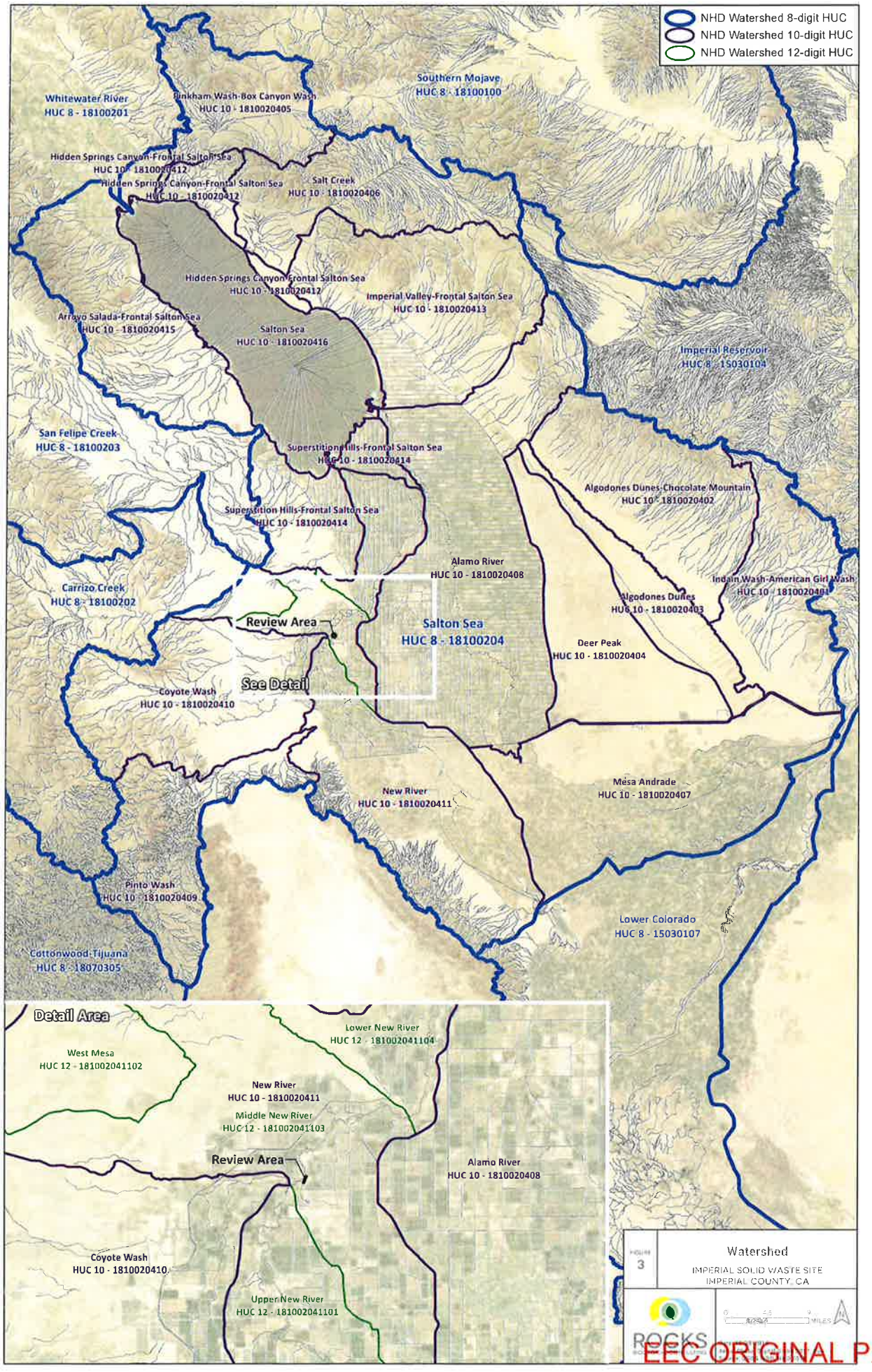

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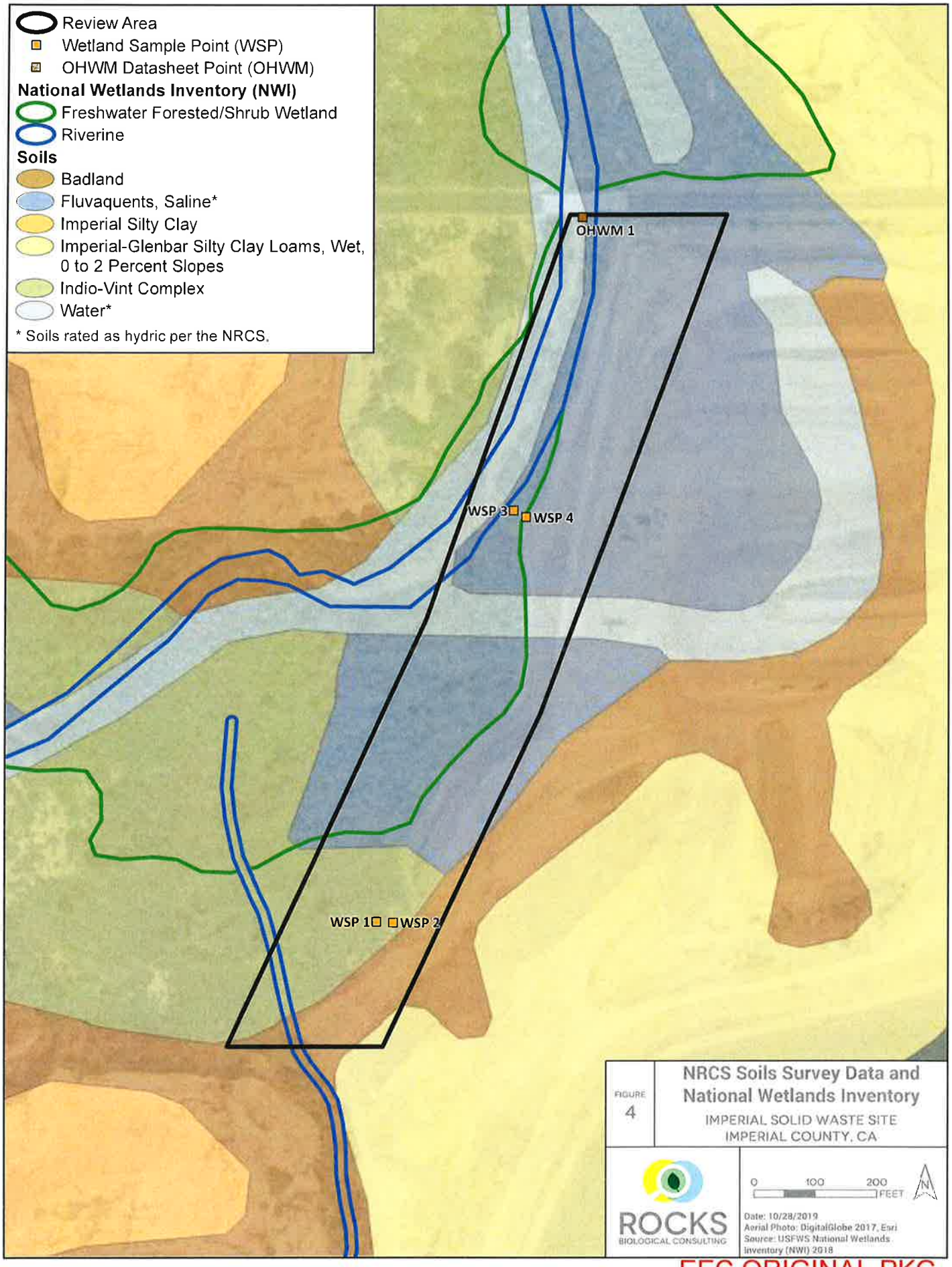

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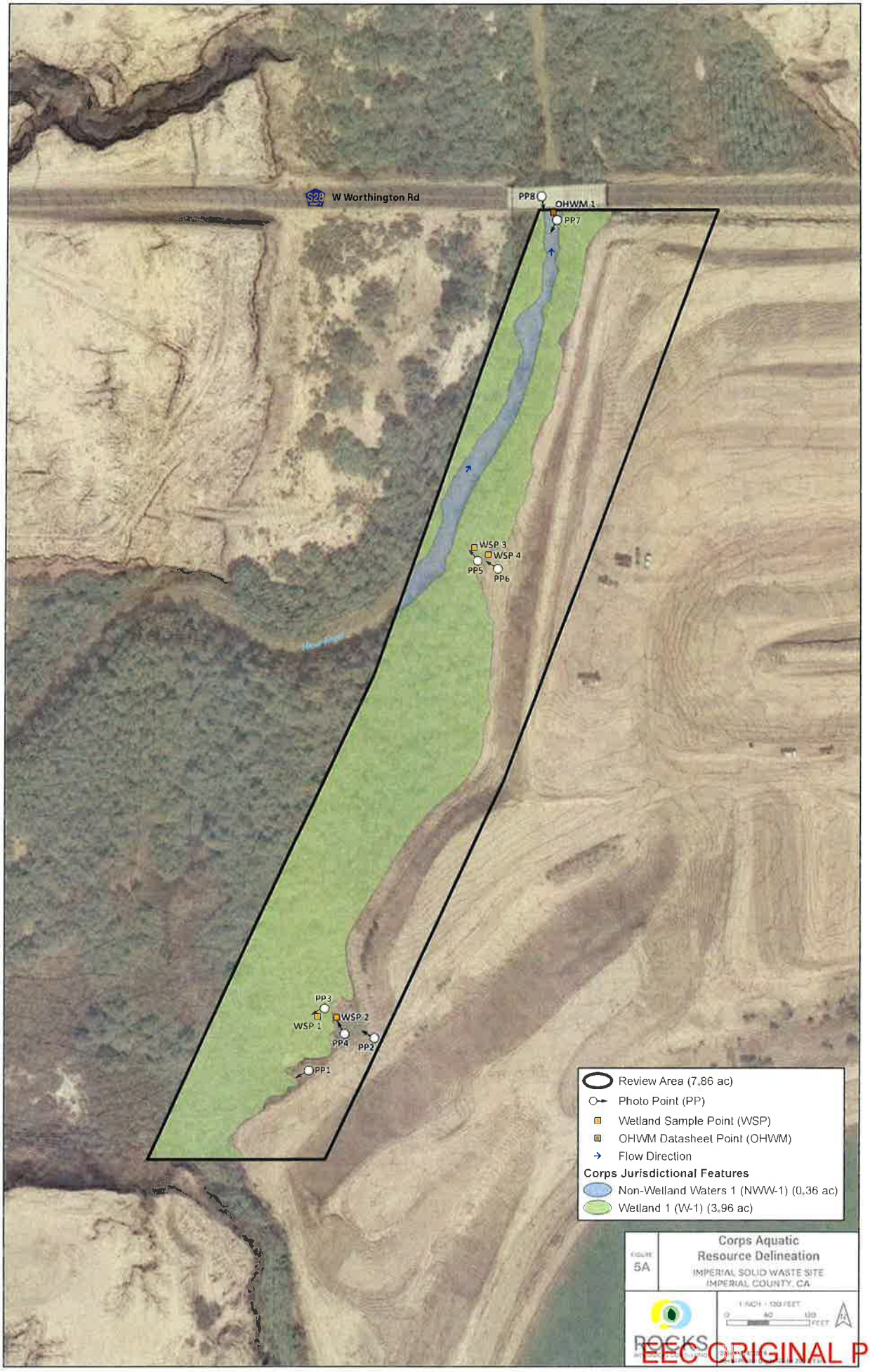

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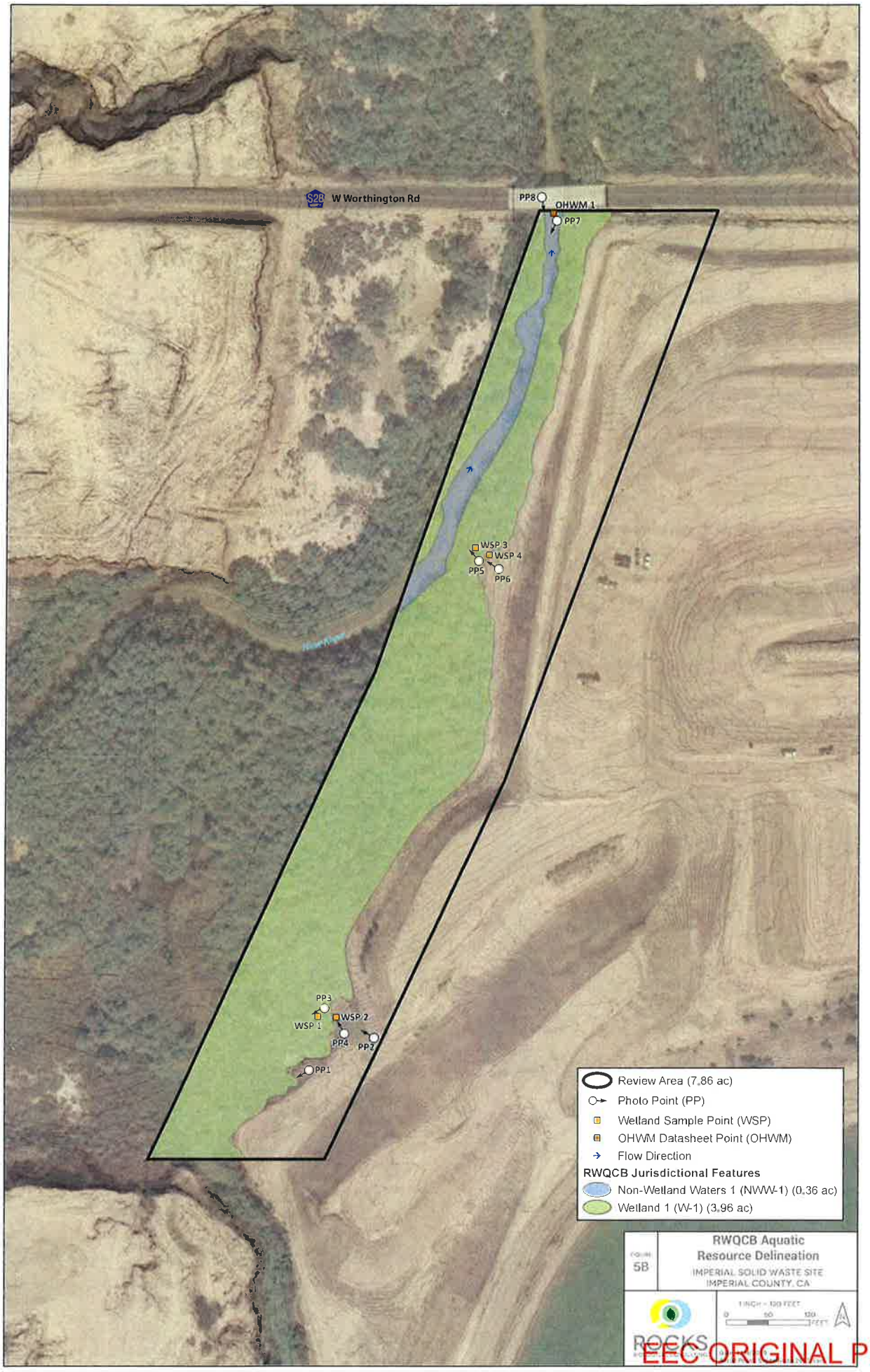

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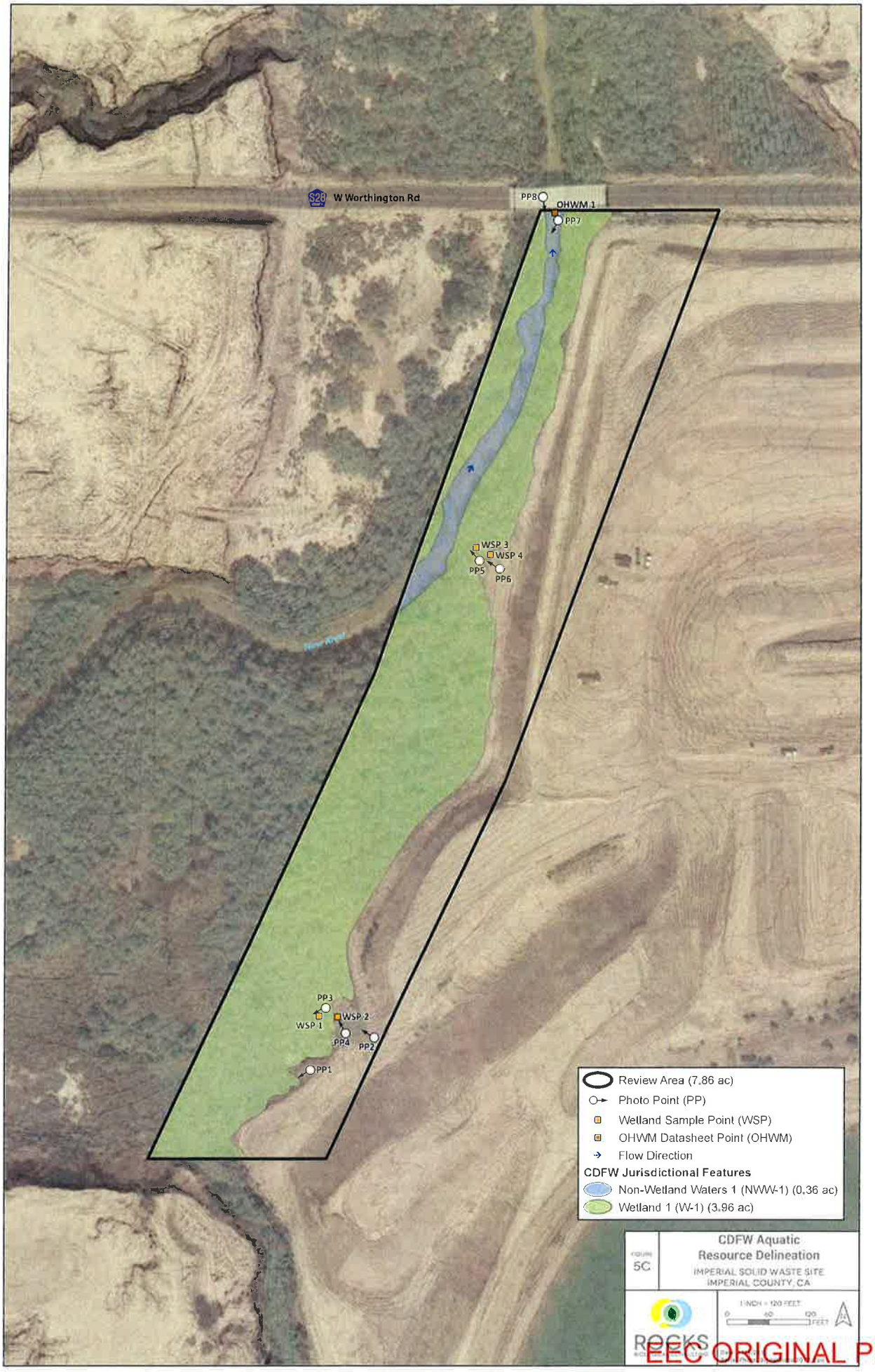
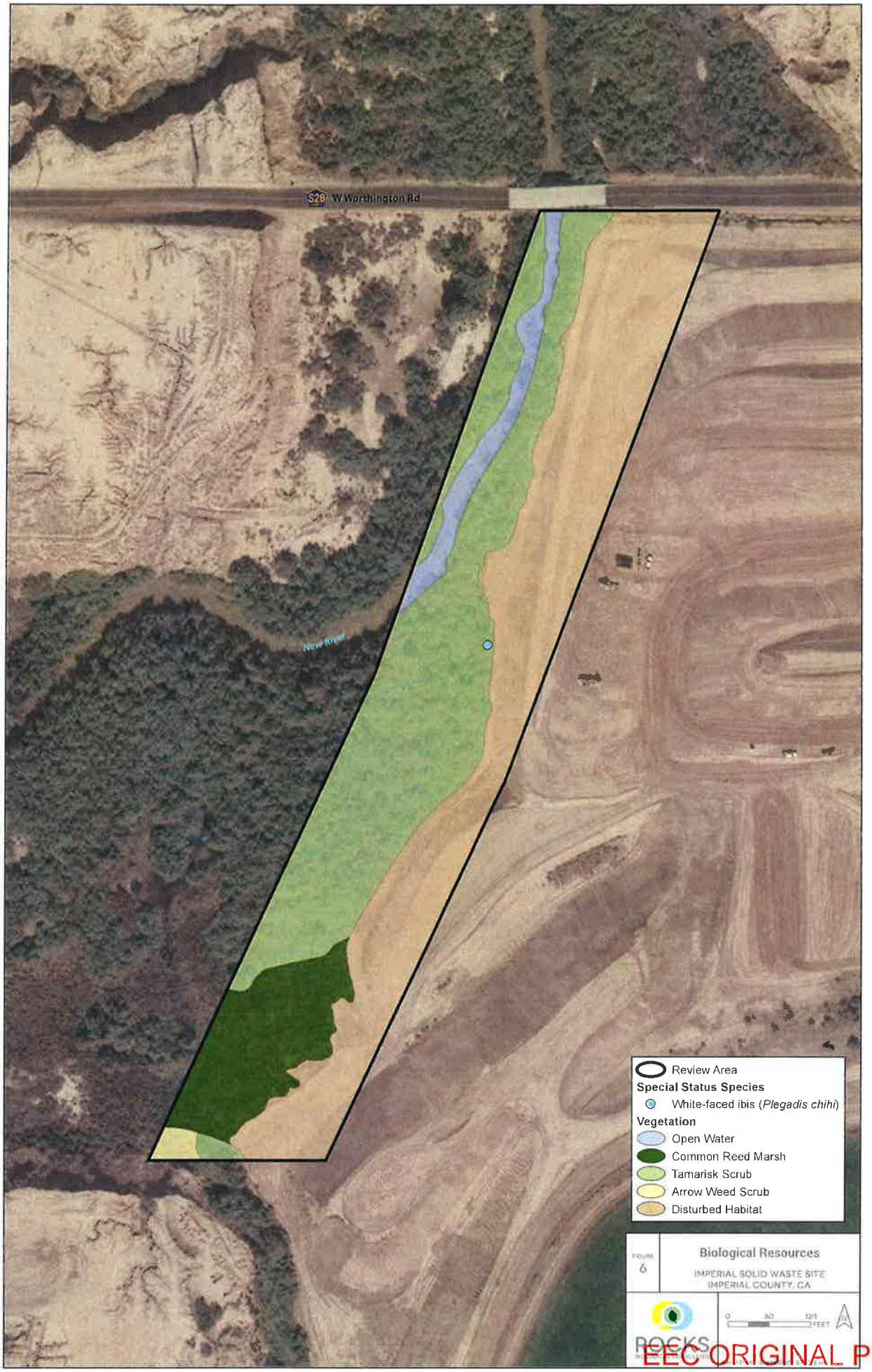


EEC ORIGINAL PKG



EEC ORIGINAL PKG

APPENDIX A

ARID WEST WETLAND DETERMINATION DATA FORMS AND EPHEMERAL AND INTERMITTENT STREAMS OHWM DATASHEETS

EEC ORIGINAL PKG

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Imperial Solid Waste Site
Project Number: --
Stream: OHWM 1
Investigator(s): Shanti Santulli, Sarah Krejca

Date: 09/03/2019 **Time:** 0826
Town: Imperial **State:** CA
Photo begin file#: -- **Photo end file#:** --

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:

Projection: -- **Datum:** WGS 84
Coordinates: See below

Potential anthropogenic influences on the channel system:

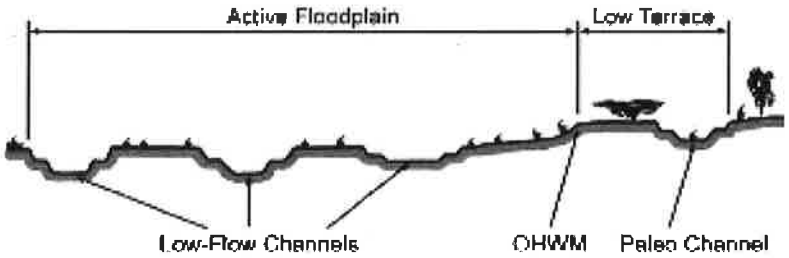
Brief site description:

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

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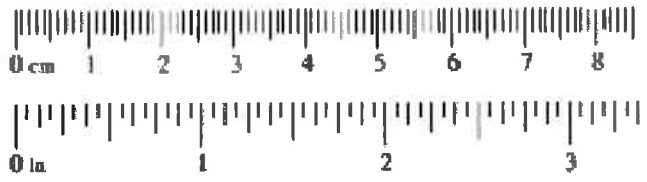
Wentworth Size Classes

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	
2.56	64	Cobble	Gravel
0.157	4	Pebble	
0.079	2.00	Granule	
0.039	1.00	Very coarse sand	
0.020	0.50	Coarse sand	
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	
1/8 0.0025	0.0625	Very fine sand	
1/16 0.0012	0.031	Coarse silt	
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	
1/128 0.00015	0.0039	Very fine silt	
		Clay	Mud



EEC ORIGINAL PKG

Project ID: Imperial SWS **Cross section ID:** OHWM 1 **Date:** 09/03/2019 **Time:** 0826

Cross section drawing:

OHWM

GPS point: _____

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☑ Other: _____
- ☐ Other: _____

Comments:

30-foot wide OHWM

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

N/A. Water flowing to lower extent of active floodplain during survey.

EEC ORIGINAL PKG

Project ID: Imperial SWS **Cross section ID:** OHWM 1 **Date:** 09/03/2019 **Time:** 0826

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☑ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Abrupt cut slope; steep, nearly vertical banks. 30-foot-wide active floodplain within vertical break in slope. Flowing water present; sediment texture difficult to discern (i.e., deep flowing water present during site visit, accessibility difficult), but appeared to be more coarse than adjacent upland soils.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☑ Other: _____
- ☑ Other: _____
- ☐ Other: _____

Comments:

Low terrace defined as upland; dense vegetation dominated by Tamarix ramosissima.

EEC ORIGINAL PKG

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Imperial Solid Waste Site City/County: Imperial/Imperial Sampling Date: 09/03/2019

Applicant/Owner: County of Imperial Public Works State: CA Sampling Point: 1

Investigator(s): Shanti Santulli, Sarah Krejca Section, Township, Range: S 24 & 25, T 15S, R12E

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): LRR C - Mediterranean California Lat: 32.844141 Long: -115.683360 Datum: WGS84

Soil Map Unit Name: Indio-Vint Complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✔, or Hydrology ✔ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Heavy disturbance from adjacent landfill and downstream agricultural use. New River floodplain at WSP location may contain some fill (silt) from adjacent landfill use. Normal circumstances present given river has carried large amounts of urban and agricultural runoff, and industrial and municipal waste since the late 1940s and would require extensive restoration to return to pre-disturbance condition.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Tamarix ramosissima	5	Y	FAC
2.			
3.			
4.			
	5	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. Pluchea sericea	40	Y	FACW
2.			
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: 15')			
1. Phragmites australis	60	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	60	= Total Cover	
Woody Vine Stratum (Plot size: 15')			
1. N/A			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Dense vegetation cover. Tamarix ramosissima (NL/UPL) is understood to hybridize and function similarly to Tamarix chinensis (FAC); therefore, Tamarix ramosissima is treated as FAC.

EEC ORIGINAL PKG

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	5YR 4/2	95	5YR 5/8	5	C	M	silty clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes ✔ No ___

Remarks:

Soil most during survey. Redox features as soft masses observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ✔ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): N/A

Water Table Present? Yes ___ No ✔ Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): N/A

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

WSP within floodplain area associated with New River; vegetated floodplain/fringe wetland area. No break in slope indicative of an OHWM observed.

EEC ORIGINAL PKG

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Imperial Solid Waste Site City/County: Imperial/Imperial Sampling Date: 09/03/2019

Applicant/Owner: County of Imperial Public Works State: CA Sampling Point: 2

Investigator(s): Shanti Santulli, Sarah Krejca Section, Township, Range: S 24 & 25, T 15S, R12E

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): LRR C - Mediterranean California Lat: 32.844137 Long: -115.683272 Datum: WGS84

Soil Map Unit Name: Indio-Vint Complex NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✔, or Hydrology ✔ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Heavy disturbance from adjacent landfill and downstream agricultural use. New River floodplain adjacent to WSP location may contain some fill (silt) from adjacent landfill use. Normal circumstances present given river has carried large amounts of urban and agricultural runoff, and industrial and municipal waste since the late 1940s and would require extensive restoration to return to pre-disturbance condition. Associated with WSP 1.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. N/A			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 15')			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: 15')			
1. N/A			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Unvegetated area within developed area (i.e., landfill and associated dirt roadways).

EEC ORIGINAL PKG

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	5YR 4/3	100	N/A	N/A	N/A	N/A	silty clay	no redox features observed

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes ___ No ✔

Remarks:

No redox features observed. Uniform matrix color.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ✔ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): N/A

Water Table Present? Yes ___ No ✔ Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): N/A

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

WSP directly adjacent to densely vegetated floodplain area associated with New River.

EEC ORIGINAL PKG

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Imperial Solid Waste Site City/County: Imperial/Imperial Sampling Date: 09/03/2019

Applicant/Owner: County of Imperial Public Works State: CA Sampling Point: 3

Investigator(s): Shanti Santulli, Sarah Krejca Section, Township, Range: S 24 & 25, T 15S, R12E

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): LRR C - Mediterranean California Lat: 32.845973 Long: -115.682622 Datum: WGS84

Soil Map Unit Name: Fluvaquents, Saline (rated as hydric per the NRCS) NWI classification: freshwater forested/shrub wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✔, or Hydrology ✔ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔ No _____	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

Heavy disturbance from adjacent landfill and downstream agricultural use. New River floodplain at WSP location may contain some fill (silt) from adjacent landfill use. Normal circumstances present given river has carried large amounts of urban and agricultural runoff, and industrial and municipal waste since the late 1940s and would require extensive restoration to return to pre-disturbance condition.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Tamarix ramosissima	85	Y	FAC
2.			
3.			
4.			
	85	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Tamarix ramosissima	15	Y	FAC
2.			
3.			
4.			
5.			
	15	= Total Cover	
Herb Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	_____	= Total Cover	

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Tamarix ramosissima (NL/UPL) is understood to hybridize and function similarly to Tamarix chinensis (FAC); therefore, Tamarix ramosissima is treated as FAC.

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SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	5YR 4/2	95	5YR 6/8	5	C	M	silty clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes ✔ No ___

Remarks:

Soil most during survey. Redox features as soft masses observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ✔ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): N/A

Water Table Present? Yes ___ No ✔ Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): N/A

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

WSP within floodplain area associated with New River; vegetated floodplain/fringe wetland area. No break in slope indicative of an OHWM observed.

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Imperial Solid Waste Site City/County: Imperial/Imperial Sampling Date: 09/03/2019

Applicant/Owner: County of Imperial Public Works State: CA Sampling Point: 4

Investigator(s): Shanti Santulli, Sarah Krejca Section, Township, Range: S 24 & 25, T 15S, R12E

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): LRR C - Mediterranean California Lat: 32.845945 Long: -115.682556 Datum: WGS84

Soil Map Unit Name: Fluvaquents, Saline (rated as hydric per the NRCS) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✔, or Hydrology ✔ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Heavy disturbance from adjacent landfill and downstream agricultural use. New River floodplain adjacent to WSP location may contain some fill (silt) from adjacent landfill use. Normal circumstances present given river has carried large amounts of urban and agricultural runoff, and industrial and municipal waste since the late 1940s and would require extensive restoration to return to pre-disturbance condition. Associated with WSP 3.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

WSP 4 unvegetated; located within area mapped as disturbed habitat.

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SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	5YR 3/3	100	N/A	N/A	N/A	N/A	silty clay	no redox features observed

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes _____ No ✔

Remarks:

No redox features observed. Uniform soil color.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ✔ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): N/A

Water Table Present? Yes _____ No ✔ Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): N/A

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

WSP directly adjacent to floodplain area associated with New River.

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APPENDIX B

SITE PHOTOGRAPHS

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Appendix B. Site Photographs*

Imperial Solid Waste Site Jurisdictional Delineation – September 3, 2019

Photo 1. Representative photo of surface soil cracks and salt crust near Wetland Sample Point (WSP) 1 and WSP 2.

Photo 2. Overview of Wetland 1 (W-1) near WSP 1.

Photo 3. View of WSP 1 (denoted by white arrow) within W-1. WSP 1 met the hydrophytic vegetation, hydric soil, and wetland hydrology parameters.

Photo 4. View of WSP 2 (denoted by white arrow) taken to determine the wetland/non-wetland boundary associated with WSP 1. Indicators of wetland hydrology were observed; however, WSP 2 did not meet the hydrophytic vegetation or hydric soil parameters.

* See corresponding Figure 5A-C for Photo Point Locations. See Jurisdictional Delineation Report Section 8 for a discussion of jurisdictional status of each feature.

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Photo 5. WSP 3 (denoted by white arrow) taken along Non-Wetland Waters 1 (NWW-1) within area mapped as tamarisk scrub. WSP 3 met the hydrophytic vegetation, hydric soil, and wetland hydrology parameters.

Photo 6. WSP 4 (denoted by white arrow) taken to determine the wetland/non-wetland boundary associated with WSP 3. Indicators of wetland hydrology were observed; however, WSP 4 did not meet the hydrophytic vegetation or hydric soil parameters.

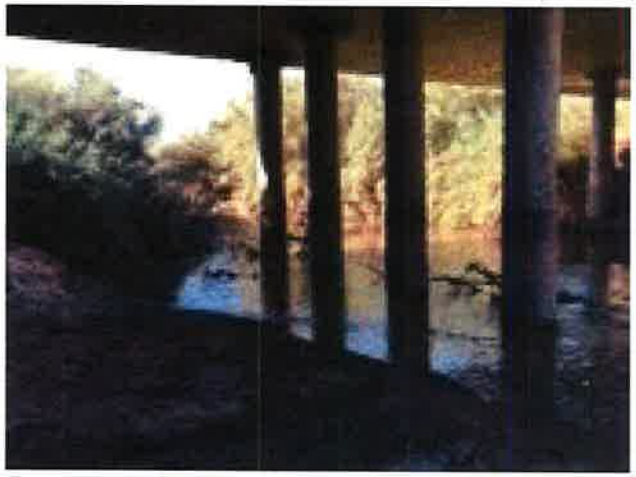

Photo 7. Upstream view of Ordinary High Water Mark Datasheet Point (OHWM) 1 within NWW-1, facing south Review area begins upstream/south of bridge in photo.

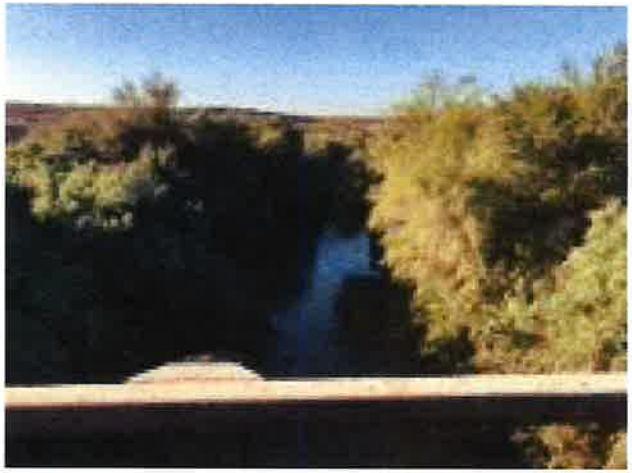

Photo 8. Upstream view of NWW-1 from West Worthington Road/northern boundary of the review area.

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APPENDIX C

WETS TABLE

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Appendix C. WETS Table

Imperial Solid Waste Site Jurisdictional Delineation

WETS Station: IMPERIAL, CA

Requested years: 1988 - 2019

Month	Avg. Max Temp	Avg. Min Temp	Avg. Mean Temp	Avg. Precip	30% chance precip less than	30% chance precip more than	Avg. number days precip 0.10 or more	Avg. Snowfall
Jan	70.5	42.4	56.4	0.47	0.10	0.39	1	0.00
Feb	74.1	45.9	60.0	0.42	0.14	0.41	1	0.00
Mar	80.7	51.3	66.0	0.26	0.06	0.21	1	0.00
Apr	86.5	56.3	71.4	0.06	0.00	0.06	0	0.00
May	93.7	62.5	78.1	0.06	0.00	0.00	0	0.00
Jun	103.0	69.9	86.5	0.00	0.00	0.00	0	0.00
Jul	106.4	77.2	91.8	0.13	0.00	0.07	0	0.00
Aug	105.9	77.6	91.7	0.20	0.00	0.15	1	0.00
Sep	101.4	72.2	86.8	0.25	0.00	0.19	0	0.00
Oct	90.8	61.0	75.9	0.22	0.00	0.10	0	0.00
Nov	78.5	49.0	63.7	0.17	0.00	0.10	0	0.00
Dec	69.1	41.5	55.3	0.35	0.00	0.29	1	0.00
Annual					1.60	3.08		
Average	88.4	58.9	73.6	-	-	-	-	-
Total	-	-	-	2.59			6	0.00

GROWING SEASON DATES

Years with missing data:	24 deg = 2	28 deg = 3	32 deg = 3
Years with no occurrence:	24 deg = 28	28 deg = 26	32 deg = 19
Data years used:	24 deg = 30	28 deg = 29	32 deg = 29
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent*	No occurrence	No occurrence	No occurrence
70 percent*	No occurrence	No occurrence	No occurrence

*Percentage chance of the growing season occurring at the Beginning and Ending dates.

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APPENDIX D

RECENT AND HISTORIC AERIAL IMAGERY ANALYSIS

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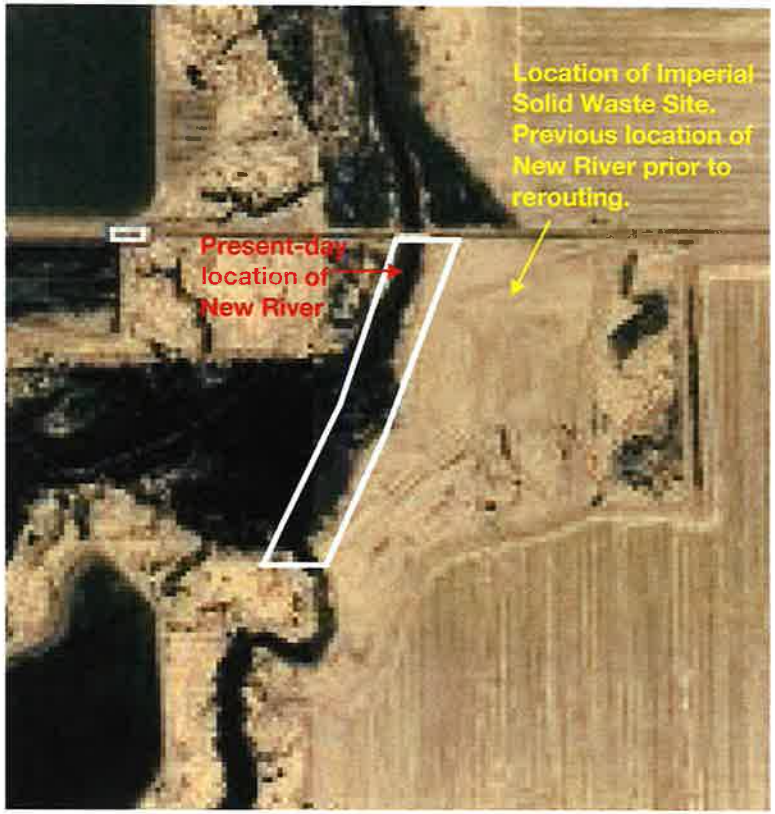
Appendix D. Recent and Historic Aerial Imagery Analysis

Imperial Solid Waste Site Jurisdictional Delineation

Sources: Google Earth and NetrOnline

The following information provides a review of recent and historic aerial images to provide a better understanding of the historic and present-day location of the New River within the Imperial Solid Waste Site.

1953 – Historically, the New River was located within the present-day location of the Imperial Solid Waste Site. Rerouting of the New River to the west of the Imperial Solid Waste Site appears to have started prior to 1953, as shown by the unvegetated segment indicated by the red arrow.



1996 – The New River no longer travels through the Imperial Solid Waste Site with flows now entirely directed to the west.

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APPENDIX E

APPLICABLE AQUATIC RESOURCE PROTECTION REGULATIONS

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APPENDIX E. APPLICABLE AQUATIC RESOURCE PROTECTION REGULATIONS

Several regulations have been established by federal, state, and local agencies to protect and conserve aquatic resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project.

Executive Order 11990

Executive Order 11990 aims to avoid direct or indirect impacts on wetlands from federal or federally approved projects when a practicable alternative is available. If wetland impacts cannot be avoided, all practicable measures to minimize harm must be included.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act (33 U.S. Code [USC] § 1251 et seq.; CWA), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 Code of Federal Regulations (CFR) 328.3 (as amended at 80 Federal Register [FR] 37104, June 29, 2015). The Corps, with oversight from the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, a division of the State Water Resources Control Board, provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to surface waters under the federal CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

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California Fish and Game Code Section 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Game Code (CFGC), CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources (e.g., riparian or wetland areas not supported by a river, lake, or stream). CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and applicant is the Lake or Streambed Alteration Agreement.

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APPENDIX F

LITERATURE CITATIONS AND REFERENCES

EEC ORIGINAL PKG

APPENDIX F. LITERATURE CITATIONS AND REFERENCES

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Attachment 2

Cultural Study

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CULTURAL RESOURCE SURVEY
FOR THE
IMPERIAL SOLID WASTE SITE BORROW AREA,
IMPERIAL COUNTY, CALIFORNIA

Prepared for:

Ms. Rebecca Oliver
Geosyntec Consultants
2355 Northside Drive, Suite 250
San Diego, California 92108

Prepared by:

Laguna Mountain Environmental, Inc.
7969 Engineer Road, Suite 208
San Diego, California 92111

Andrew R. Pigniolo

Andrew R. Pigniolo, RPA

November 2019

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CULTURAL RESOURCE SURVEY
FOR THE
IMPERIAL SOLID WASTE SITE BORROW AREA,
IMPERIAL COUNTY, CALIFORNIA

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National Archaeological Data Base Information
Type of Study: Cultural Resource Survey
USGS Quadrangle: El Centro 7.5'
Area: Approximately 5 Acres
Key Words: Imperial Valley, Cultural Resource Survey, Negative Results

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ABSTRACT

Laguna Mountain Environmental, Inc. (Laguna Mountain) conducted an archaeological survey of an approximately 5-acre parcel located northwest of El Centro in the southwestern portion of Imperial County. This investigation included a records search, literature review, examination of historic maps, and archaeological field inventory of the property.

Cultural resource work was conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA), the California Environmental Quality Act (CEQA), the policies and procedures of the Imperial County Planning and Development Services. The Imperial County will serve as lead agency for the project CEQA compliance while the U.S. Army Corps of Engineers (ACOE) will serve as Federal lead agency for the project and Section 106 compliance.

A records search at the South Coastal Information Center indicated that the project area had not been previously surveyed for cultural resources. At least five archaeological investigations have taken place in the vicinity of the project since 1979. As a result of these studies, 10 cultural resources had been previously recorded within a one-mile radius of the project. Three of the resources are prehistoric cremations on the north side of the river. The remaining sites are all historic age.

The current inventory of the project area was conducted on November 11, 2019 by Mr. Andrew Pigniolo. The project area was surveyed on foot in 5 to 10 meter transect intervals. Most of the project area was previously disturbed, and included both graded and heavily eroded areas. Surface visibility was approximately 95 percent over most of the project area due to both lack of vegetation and eroded slopes. The survey of the project adequately served to identify cultural resources without constraints.

No cultural resources were identified within the project boundary. Small amounts of recent refuse were evident from dumping, in addition to bullet casings from target practice activities. Exposed banks showed lake deposits with small amounts of natural freshwater shell. No evidence of buried soils was present. Photographs and project records for this inventory will be temporarily curated at Laguna Mountain until final curation arrangements can be made at an appropriate regional repository.

The potential for unanticipated buried archaeological resources is low due to excellent slope visibility and lacustrine sediment deposits without evidence of buried surface soils. The project will therefore result in no effect on historic properties and no further work is recommended.

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I. INTRODUCTION

A. Project Description

The project area is located in Imperial County, northwest of El Centro and north of Seeley on the southeast side of the New River (Figure 1). The area of potential effects (APE) includes an approximately 5-acre area north of Interstate-8, south of West Worthington Road (Highway S28), east of the Salt Creek Slough and northwest of Naval Air Station, El Centro in Township 15 South, Range 12 East in the center of Section 24 (Figure 2). The APE includes the entire borrow site area (Figure 3).

Cultural resource work was conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA), the California Environmental Quality Act (CEQA), and the policies and procedures of the Imperial County Planning and Development Services. Imperial County will serve as lead agency for the project and CEQA compliance while the ACOE will serve as Federal lead agency for the project and Section 106 compliance. The archaeological survey was conducted to determine if any cultural resources eligible for inclusion in the National Register of Historic Places (National Register) or California Register of Historic Resources (California Register) will be affected by this project.

B. Project Personnel

The cultural resource inventory has been conducted by Laguna Mountain Environmental, Inc. (Laguna Mountain), whose cultural resources staff meets Federal, state, and local requirements. Mr. Andrew R. Pigniolo served as Principal Investigator for the project. Mr. Pigniolo is a member of the Register of Professional Archaeologists (RPA) and meets the Secretary of the Interior's standards for qualified archaeologists. Mr. Pigniolo has an MA in Anthropology from San Diego State University and has more than 39 years of experience in the Imperial County and southern California region. The resume of the Principal Investigator is included in Appendix A.

Ms. Carol Serr performed the record search, prepared the report graphics, and formatted the report. She has a B.A. in Anthropology from San Diego State University and more than 39 years of experience in southern California archaeology.

C. Structure of the Report

This report follows the State Historic Preservation Office's guidelines for Archaeological Resource Management Reports (ARMR). The report introduction provides a description of the project and associated personnel. Section II provides background on the project area and previous research. Section III describes the research design and survey methods, while Section IV describes the survey results. Section V presents a summary and recommendations. Section VI includes the references used in the technical report.

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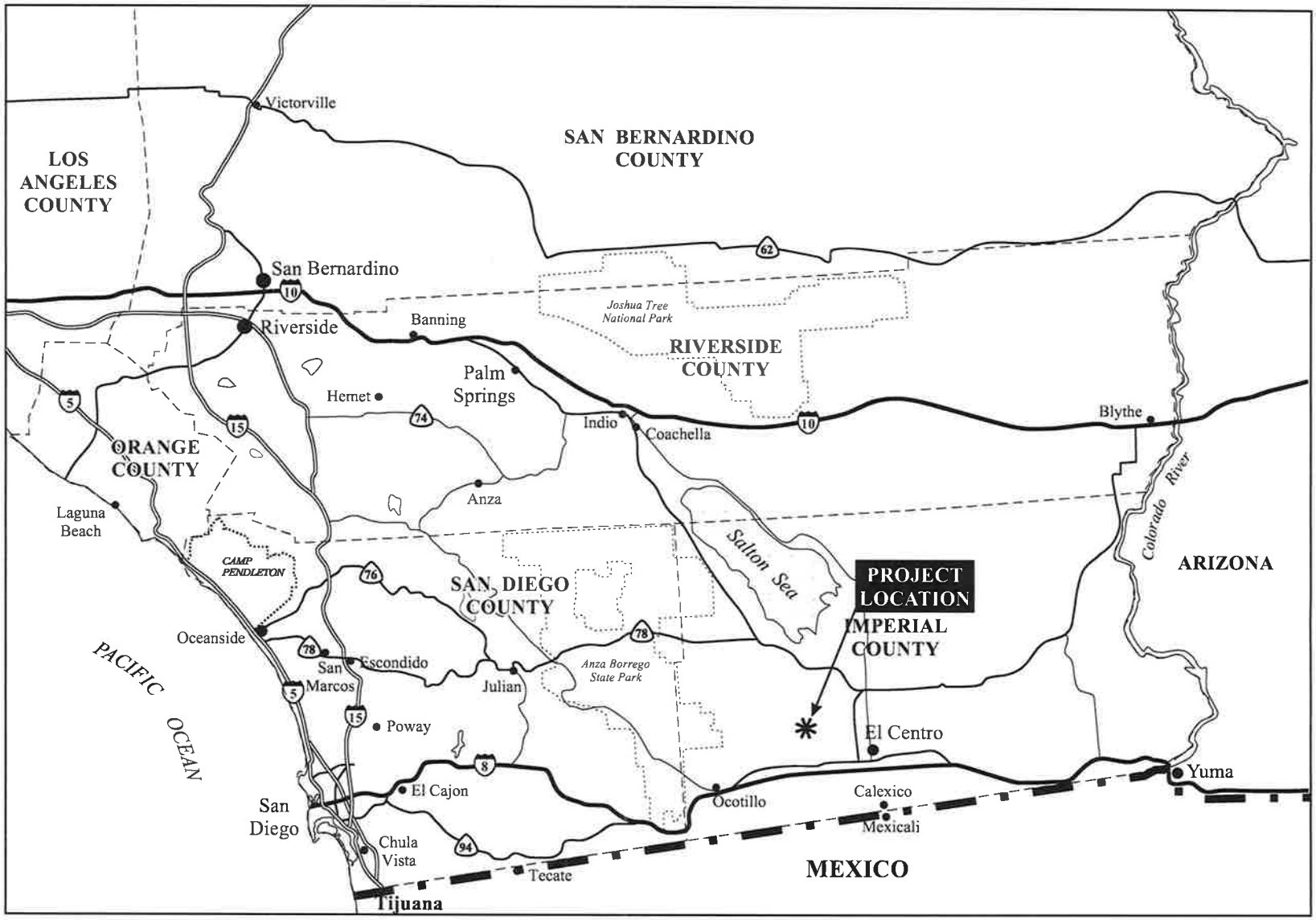

Figure 1
Regional Location Map

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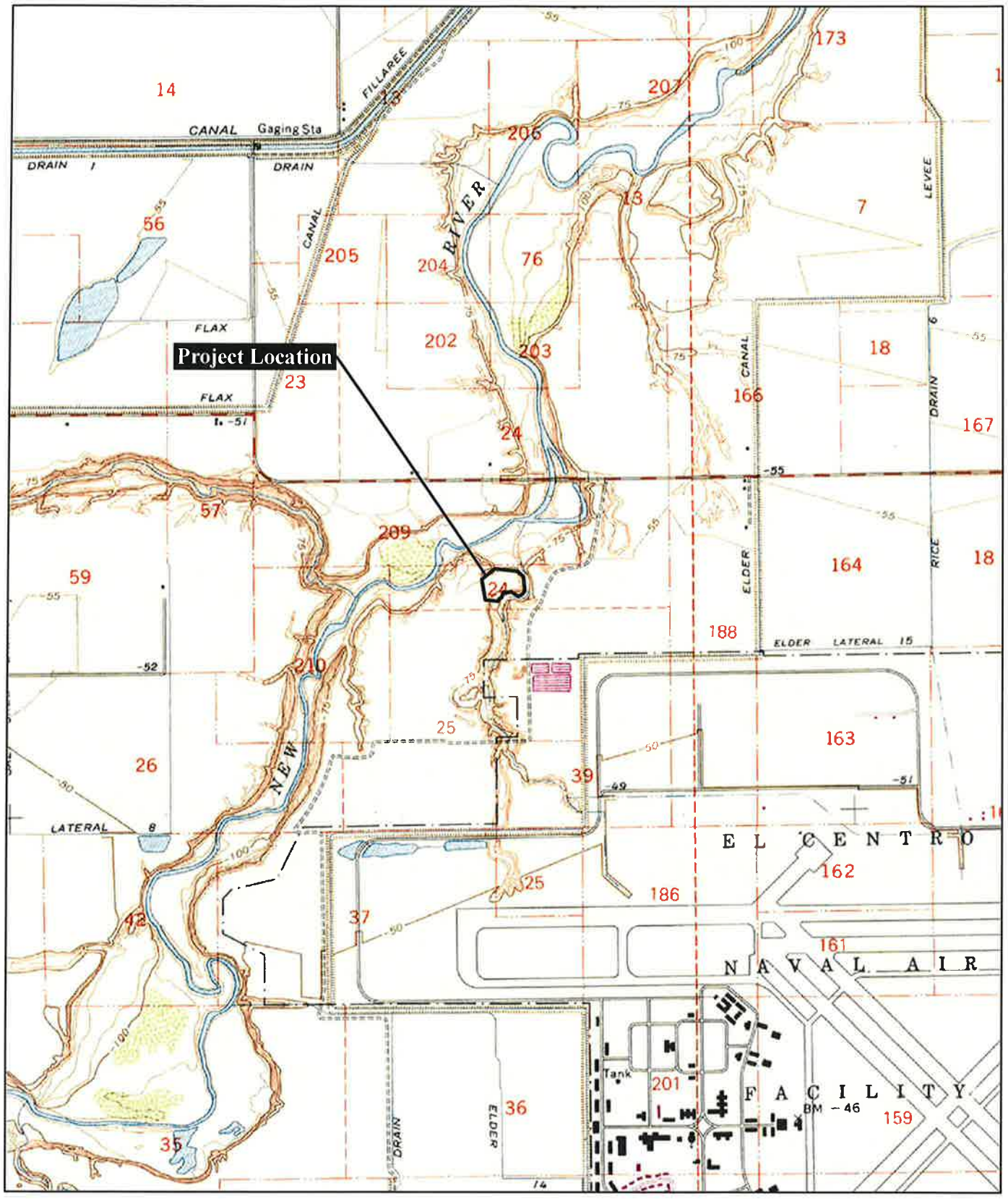

Source: USGS 7.5' Seeley Quadrangle

Figure 2
Project Location

0 1,000 2,000 Feet

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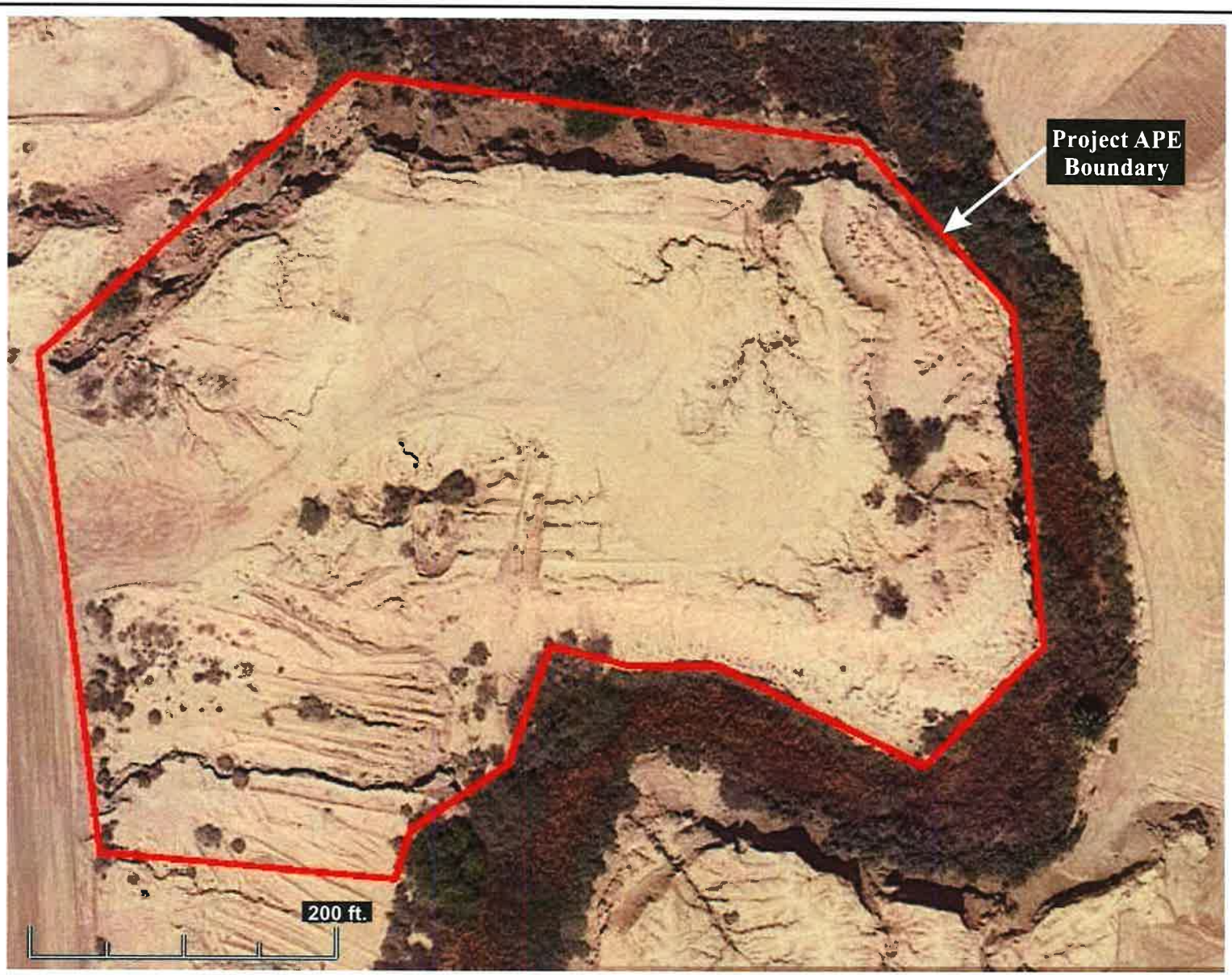

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Figure 3
Project Area of Potential Effects

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II. NATURAL AND CULTURAL SETTING

The following environmental and cultural background provides a context for the cultural resource inventory.

A. Natural Setting

The project area is located in the southwestern portion of Imperial County, southeast of the New River. The project parcel is currently vacant and has been partially graded and heavily eroded in the past. The general area surrounding the APE is largely used for agriculture, but a landfill is also located to the east. The Imperial Valley has been in agricultural use since the early 1900s and consists of Holocene age lake alluvium and sand. The elevation is approximately 75 feet below sea level.

The geomorphology of the project area is largely a product of the region's geologic history. During the Jurassic and late Cretaceous (>100 million years ago) a series of volcanic islands paralleled the current coastline in the southern California region. The remnants of these islands stand as Mount Helix, Black Mountain, and the Jamul Mountains among others. This island arc of volcanoes spewed out vast layers of tuff (volcanic ash) and breccia that have since been metamorphosed into hard rock of the Santiago Peak Volcanic formation. These fine-grained rocks provided a regionally important resource for Native American flaked stone tools.

At about the same time, a granitic and gabbroic batholith was being formed under and east of these volcanoes. This batholith was uplifted and forms the granitic rocks and outcrops of the Peninsular Range and the foothills that comprise the mountains west of the project area. In San Diego County the large and varied crystals of these granitic rocks provided particularly good abrasive surfaces for Native American seed processing. These outcrops were frequently used for bedrock milling of seeds. The batholith contains numerous pegmatite dikes. This was a good source of quartz, a material used by Native Americans for flaked stone tools and ceremonial purposes.

As the Peninsular Batholith rose, it warped and metamorphosed the overlying sediments, forming the Julian Schist (Remeika and Lindsay 1992). This formation contains quartzite, a material also used for Native American flaked stone tools. Its relatively poor flaking qualities made this quartzite less popular for tool making than the quartz and Santiago Peak materials.

The Imperial Valley between the East and West Mesas consists of Quaternary lake deposits from Ancient Lake Cahuilla. These lake deposits extend to 40 feet below sea level and are underlain by clay and silt deposits. Shoreline deposits a few hundred feet wide surround the Salton Basin and are unconsolidated sand and fine gravel. Towards the basin, these soils grade into silt and clay. The Lake Cahuilla deposits are less than 100 feet thick (Morton 1977).

The geology of the project area includes areas mapped as lakebeds and includes sediments of ancient Lake Cahuilla and playa lakes (Morton 1977). Soils mapped in the APE include the Imperial Series. The Imperial Series consists of well- and moderately well-drained soils which include silty clay to depths of 60 inches or more. Typically Imperial soils are located on nearly

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level to gently sloping terrain on flood plains and in old lakebeds below and above sea level. The typical soil type in this series is Imperial silty clay, which is mostly uncultivated (NRCS 2019). This soil is generally used for irrigated agriculture and unirrigated native desert plants.

Lake Cahuilla originated from periodic overflows and diversions of the Colorado River into the Salton Basin. This lake was in existence as recently as several hundred years ago, but the main stage of its existence is likely older, dating to the Wisconsin or early postglacial periods.

The climate of the region can generally be described as arid, with cool, dry winters and hot, dry summers. Rainfall limits vegetation growth. The project area is dominated by desert scrub. Components of these communities provided important resources to Native Americans in the region. Seeds, yucca, mesquite, and other native grasses formed important food resources to Late Prehistoric Native Americans.

Animal resources in the region include deer, fox, raccoon, skunk, bobcats, coyotes, rabbits, and various rodent, reptile, and bird species. Small game, dominated by rabbits, is relatively abundant.

B. Cultural Setting

Paleoindian Period

The earliest well documented prehistoric sites in southern California are identified as belonging to the Paleoindian period, which has locally been termed the San Dieguito complex/tradition. The Paleoindian period is thought to have occurred between 9,000 years ago, or earlier, and 8,000 years ago in this region. Although varying from the well-defined fluted point complexes such as Clovis, the San Dieguito complex is still seen as a hunting focused economy with limited use of seed grinding technology. The economy is generally seen to focus on highly ranked resources such as large mammals. The people of the San Dieguito complex were highly mobile, which may be related to following large game. Archaeological evidence associated with this period has been found around inland dry lakes, on old terrace deposits of the California desert, and also near the coast where it was first documented at the Harris Site.

Archaic Period

Native Americans during the Archaic period had a generalized economy that focused on hunting and gathering. Along the Colorado River, Native Americans chose to replace this economy with types based on horticulture and agriculture. California desert economies remained largely based on wild resource use until European contact (Willey and Phillips 1958). Changes in hunting technology and other important elements of material culture have created two distinct subdivisions within the Archaic period in southern California.

The Early Archaic period is differentiated from the earlier Paleoindian period by a shift to a more generalized economy and an increased focus on the use of grinding and seed processing technology. At sites dated between approximately 8,000 and 1,500 years before present (BP), the increased use of groundstone artifacts and atlatl dart points, along with a mixed core-based

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tool assemblage, show increased use of a more diversified set of plant and animal resources. Variations of the Pinto and Elko series projectile points, large bifaces, manos and portable metates, core tools, and heavy use of marine invertebrates in coastal areas are characteristic of this period, but many coastal sites show limited use of diagnostic atlatl points. Major changes in technology within this relatively long chronological unit appear limited. Several scientists have considered changes in projectile point styles and artifact frequencies within the Early Archaic period to be indicative of population movements or units of cultural change (Moratto 1984), but these units are poorly defined locally due to poor site preservation.

Late Prehistoric Period

Around 2,000 BP, Yuman-speaking people from the eastern Colorado River region began migrating into southern California, representing what is called the Late Prehistoric Period. The Late Prehistoric Period in San Diego County is recognized archaeologically by smaller projectile points, the replacement of flexed inhumations with cremation, the introduction of ceramics, and an emphasis on inland plant food collection and processing, especially acorns (True 1966). Inland semi-sedentary villages were established along major water courses, and montane areas were seasonally occupied to exploit acorns and piñon nuts, resulting in permanent milling features on bedrock outcrops. Mortars for acorn processing increased in frequency relative to seed grinding basins. This period is known archaeologically in southern San Diego County as the Yuman (Rogers 1945) or the Cuyamaca Complex (True 1970).

The Kumeyaay (formerly referred to as Diegueño) who inhabited the southern region of San Diego County, western and central Imperial County, and northern Baja California (Almstedt 1982; Gifford 1931; Hedges 1975; Luomala 1976; Shipek 1982; Spier 1923) are the direct descendants of the early Yuman hunter-gatherers. Kumeyaay territory encompassed a large and diverse environment which included marine, foothill, mountain, and desert resource zones. Their language is a dialect of the Yuman language which is related to the large Hokan super family.

There seems to have been considerable variability in the level of social organization and settlement variance. The Kumeyaay were organized by patrilineal, patrilocal lineages that claimed prescribed territories, but did not own the resources except for some minor plants and eagle aeries (Luomala 1976; Spier 1923). Some lineages occupied procurement ranges that required considerable residential mobility, such as those in the deserts (Hicks 1963). In the mountains, some of the larger groups occupied a few large residential bases that would be occupied biannually, such as those occupied in Cuyamaca in the summer and fall, and in Guatay or Descanso during the rest of the year (Almstedt 1982; Rensch 1975). According to Spier (1923), many Eastern Kumeyaay spent the period of time from spring through autumn in larger residential bases in the upland procurement ranges, and wintered in mixed groups in residential bases along the eastern foothills on the edge of the desert (i.e., Jacumba and Mountain Springs). This variability in settlement mobility and organization reflects the great range of environments in the territory.

Acorns were the single most important food source used by the Kumeyaay. Their villages were usually located near water, which was necessary for leaching acorn meal. Other storable resources such as mesquite or agave were equally valuable to groups inhabiting desert areas, at least during certain seasons (Hicks 1963; Shackley 1984). Seeds from grasses, manzanita, sage, sunflowers, lemonadeberry, chia and other plants were also used along with various wild greens

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and fruits. Deer, small game and birds were hunted and fish and marine foods were eaten. Houses were arranged in the village without apparent pattern. The houses in primary villages were conical structures covered with tule bundles, having excavated floors and central hearths. Houses constructed at the mountain camps generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas and acorn granaries. The material culture included ceramic cooking and storage vessels, baskets, flaked lithic and ground stone tools, arrow shaft straighteners, stone, bone, and shell ornaments.

Hunting implements included the bow and arrow, curved throwing sticks, nets and snares. Shell and bone fishhooks, as well as nets, were used for fishing. Lithic materials including quartz and metavolcanics were commonly available throughout much of the Kumeyaay territory. Other lithic resources, such as obsidian, chert, chalcedony and steatite, occur in more localized areas and were acquired through direct procurement or exchange. Projectile points including the Cottonwood Series points and Desert Side-notched points were commonly produced.

Kumeyaay culture and society remained stable until the advent of missionization and displacement by Hispanic populations during the eighteenth century. The effects of missionization, along with the introduction of European diseases, greatly reduced the native population of southern California. By the early 1820s, California was under Mexico's rule. The establishment of ranchos under the Mexican land grant program further disrupted the way of life of the native inhabitants.

Ethnohistoric Period

The Ethnohistoric period refers to a brief period when Native American culture was initially being affected by Euroamerican culture. Historical records on Native American activities are limited. When the Spanish colonists began to settle California, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay or Northern and Southern Diegueño because of their association with the San Diego Mission. The Kumeyaay as a whole speak a Yuman language which differentiates them from the Luiseño to the north, who speak a Takic language (Kroeber 1925). Both of these groups were hunter-gatherers with highly developed social systems. European contact introduced diseases that dramatically reduced the Native American population and helped to break down cultural institutions. The transition to a largely Euroamerican lifestyle occurred relatively rapidly in the nineteenth century.

Historic Period

Cultural activities within San Diego County between the late 1700s and the present provide a record of Native American, Spanish, Mexican, and American control, occupation, and land use. An abbreviated history of San Diego County is presented for the purpose of providing a background on the presence, chronological significance, and historical relationship of cultural resources within the county.

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Native American control of the southern California region ended in the political views of western nations with Spanish colonization of the area beginning in 1769. De facto Native American control of the majority of the population of California did not end until several decades later. In southern California, Euroamerican control was firmly established by the end of the Garra uprising in the early 1850s (Phillips 1975).

Spanish

The Spanish Period (1769-1821) represents a period of Euroamerican exploration and settlement. Dual military and religious contingents established the San Diego Presidio and the San Diego and San Luis Rey Missions. The Mission system used Native American labor for greater European settlement. The Mission system also introduced horses, cattle, other agricultural goods and implements; and provided construction methods and new architectural styles. The cultural and institutional systems established by the Spanish continued beyond the year 1821, when California came under Mexican rule.

Mexican

The Mexican Period (1821-1848) includes the retention of many Spanish institutions and laws. The mission system was secularized in 1834, which dispossessed many Native Americans and increased Mexican settlement. After secularization, large tracts of land were granted to individuals and families and the rancho system was established. Cattle ranching dominated other agricultural activities and the development of the hide and tallow trade with the United States increased during the early part of this period. The Pueblo of San Diego was established during this period and Native American influence and control greatly declined. The Mexican Period ended when Mexico ceded California to the United States after the Mexican-American War of 1846-48.

American

Soon after American control was established (1848-present), gold was discovered in California. The tremendous influx of American and Europeans that resulted quickly reduced much of the Spanish and Mexican cultural influences and eliminated the last vestiges of de facto Native American control. Few Mexican ranchos remained intact because of land claim disputes and the homestead system increased American settlement beyond the coastal plain.

The modern history of the Imperial Valley began in the 1890s with the arrival of the first permanent settlers in the valley. The towns of Seeley, El Centro, Calexico, Brawley, Niland, Holtville, and Imperial have detailed histories revolving around the development of the agricultural and animal husbandry industries. However, a majority of the area was not developed until the Imperial Canal (Alamo Canal) was constructed in 1901. In 1907, the cities of El Centro, Brawley and Holtville were formed. By the mid-1920s 500,000 acres in the Imperial Valley were being irrigated and in 1934 construction began on a new irrigation canal system - the All-American Canal. In the 1950s and 1960s farmers were encouraged to level and till their fields, and install concrete ditches. There were approximately 1,550 farmers in the Imperial Valley during this time, today there are approximately 500 farmers in the valley. (Mitchell 2010).

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C. Prior Research

The archaeological inventory included archival and other background studies in addition to Laguna Mountain's field survey of the project area. The archival research consisted of literature and record searches at local archaeological repositories, in addition to an examination of historic maps, and historic site inventories. This information was used to identify previous recorded resources and determine the types of resources that might occur in the survey area. The methods and results of the archival research are described below.

The records and literature search for the project was conducted at the South Coastal Information Center at San Diego State University (Appendix B). The records search included a one-mile radius of the project area to provide background on the types of sites that would be expected in the region. Copies of historic maps were provided by the South Coastal Information Center.

At least five archaeological investigations have taken place in the vicinity of the project since 1979 (Table 1). The project area has not been previously surveyed.

Table 1. Archaeological Investigations within One Mile of the Project Area

Author(s)	Report Title	Year
Dolan and Allen	Archaeological Investigations of Two Historic Sites for the Naval Air Facility, El Centro	1996
Gonzalez	Evidence Supporting the Establishment of a Mexican Military Outpost in 1826 in the Colorado Desert	1979
McCorkle-Apple	Historic and Archaeological Resources Protection Plan for Naval Air Facility, El Centro	1994
Naval Air Facility	Environmental Assessment for New Ordnance Storage, Assembly, Loading Facilities, and Perimeter Fencing at the Naval Air Facility, El Centro	1997
Stuart	Draft Environmental Impact Report Airport Land Use Plan	1982

The 10 cultural resources identified since 1977 located within a one-mile radius are summarized on Table 2. The previously recorded sites in the region provide an idea of the types of cultural resources that might be expected within the APE. Three of the resources are prehistoric cremations on the north side of the river. The remaining sites are all historic age. Three of these consist of refuse deposits, three are related to the neighboring Marine Base (Naval Air Station), and one is the Salt Creek Drain 2 channel to the west. The Marine Base fence is the closest resource, at approximately 500 feet southeast of the project area.

Table 2. Recorded Cultural Resources within One Mile of the Project Area

Resource No.	Resource Type	Recorder (Year)
P-13-000792	Two Cremations	Miller (1977)
P-13-000793	Cremation	Miller (1977)
P-13-000794	Cremation	Miller (1977)
P-13-006451	Historic Debris	Phillips & Briggs (1990); Apple et al. (1994)
P-13-006994	Historic Debris	Lilburn & Whitehouse (1994)
P-13-007002	Historic Debris	Lilburn & Whitehouse (1994)
P-13-007919	Marine Base Fence	Van Wormer & Newland (1994)
P-13-007959	Marine Base Ready Magazine	Van Wormer & Newland (1994)
P-13-007967	Marine Base High Explosives Magazines	Van Wormer & Newland (1994)
P-13-012691	Salt Creek Drain 2	Hollins (2009)

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Additional historic research included an examination of a variety of resources. The current listings of the National Register of Historic Places were checked, as well as the National Register of Historic Places website. The California Inventory of Historic Resources (State of California 1976) and the California Historical Landmarks (State of California 1992) were also checked for historic resources. Historic maps of the area were also examined. No historically significant structures occur within or near the project area. Historic aerial photographs in 1953 show the area as largely without vegetation, similar to current conditions (NETR 1953). By the 1996 aerial photograph, some surface disturbance has occurred particularly along the southern edge (NETR 1996).

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III. RESEARCH DESIGN AND METHODS

A. Survey Research Design

The goal of this study is to identify any cultural resources located within the project area so that the effects of the project on these resources can be assessed. To accomplish this goal, background information was examined and assessed, and a field survey was conducted to identify cultural remains. Based on the records search and historic map check, most of the cultural resources within the project are likely to be historic resources, likely associated with the military facility to the southeast.

B. Survey Methods

The records and literature search for the project was conducted at the South Coastal Information Center. This records search included site records and reports for the project area and a one-mile radius of the project along with information on potential historic resources.

The current inventory of the project area was conducted on November 11, 2019 by Mr. Andrew Pigniolo. The project area was surveyed on foot in 5 to 10 meter transect intervals. The project area was largely previously disturbed and included both graded and heavily eroded areas. Surface visibility was approximately 95 percent over most of the project area due to both lack of vegetation and eroded slopes. The survey of the project adequately served to identify cultural resources without constraints.

Photographs and project records for this inventory will be temporarily curated at Laguna Mountain until final curation arrangements can be made at an appropriate regional repository.

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IV. SURVEY RESULTS

No cultural resources were identified within the project boundary. The area was open and includes both a flat terrace and steep slopes (Figure 4). Small amounts of recent refuse were evident from illegal dumping in addition to bullet casings from target practicing. The southern edge of the project area showed evidence of past grading. Exposed banks showed that the project area is composed of fluvial and lake deposits with small amounts of natural freshwater shell. No evidence of buried soils was present, suggesting that the potential for buried cultural resources is low.

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A. Terrace Overview, Looking East (PR-06921-001)

b. Slope Overview, Looking East (PR-06921-004)

Figure 4
Project Area Overview Photographs

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V. EVALUATION CRITERIA, SIGNIFICANCE, AND RECOMMENDATIONS

A. Evaluation Criteria

The evaluation criteria used to determine site significance are provided below.

The Federal criteria used to evaluate cultural resources are specified by the National Register criteria within NHPA. The National Register criteria are presented in 36 CFR 60 as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) That are associated with the lives of persons significant in our past; or
>
> (c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) That have yielded, or may be likely to yield, information important in prehistory or history.

Criterion D could potentially apply to small prehistoric sites like CA-IMP-12060.

The State evaluation criteria are defined in CEQA. According to CEQA (§15064.5a), the term "historical resource" includes the following:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR. Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code, shall be presumed to be historically of culturally significant. Public agencies must treat any such resources as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

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(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Tile 14, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
(B) Is associated with the lives of person important in our past;
(C) Embodies the distinctive characteristics of a type, period, region, or individual, or possesses high artistic value; or
(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined eligible for listing the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in sections 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

B. Significance

The goal of the project was to identify resources that may be impacted by the proposed project. The current survey failed to locate prehistoric or historic cultural material within the project APE. In addition, the potential for unanticipated buried prehistoric and historic archaeological resources is low.

C. Recommendations and Effects

The potential for unanticipated buried archaeological resources is low due to excellent slope cut visibility and lacustrine sediment deposits without evidence of buried surface soils. The project will therefore result in no effect on historic properties and no further work is recommended.

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APPENDICES

A. Resume of Principal Personnel
B. Records Search Confirmation

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APPENDIX A

RESUME OF PRINCIPAL PERSONNEL

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ANDREW R. PIGNIOLO, M.A., RPA

Principal Archaeologist
Laguna Mountain Environmental, Inc.

Education

San Diego State University, Master of Arts, Anthropology, 1992
San Diego State University, Bachelor of Arts, Anthropology, 1985

Professional Experience

2002-Present	Principal Archaeologist/President, Laguna Mountain Environmental, Inc., San Diego
1997-2002	Senior Archaeologist, Tierra Environmental Services, San Diego
1994-1997	Senior Archaeologist, KEA Environmental, Inc., San Diego
1985-1994	Project Archaeologist/Senior Archaeologist, Ogden Environmental and Energy Services, San Diego
1982-1985	Reports Archivist, Cultural Resource Management Center (now the South Coastal Information Center), San Diego State University
1980-1985	Archaeological Consultant, San Diego, California

Professional Affiliations

Register of Professional Archaeologists (RPA), 1992-present
Qualified Archaeology Consultant, San Diego County
Qualified Archaeology Consultant, City of San Diego
Qualified Archaeology Consultant, City of Chula Vista
Qualified Archaeology Consultant, Riverside County
Society for American Archaeology
Society for California Archaeology
Pacific Coast Archaeological Society
San Diego County Archaeological Society

Qualifications

Mr. Andrew Pigniolo is a certified archaeology consultant for the County and City of San Diego. Mr. Pigniolo has more than 38 years of experience as an archaeologist, and has conducted more than 800 projects throughout southern California and western Arizona. His archaeological investigations have been conducted for a wide variety of development and resource management projects including water resource facilities, energy utilities, commercial and residential developments, military installations, transportation projects, and projects involving Indian Reservation lands. Mr. Pigniolo has conducted the complete range of technical studies including archaeological overviews and management plans, ethnographic studies, archaeological surveys, test excavations, historical research, evaluations of significance under CEQA and Section 106, data recovery programs, and monitoring projects. He has received 40 hour HAZWOPPER training and holds an active card for hazardous material work.

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REPRESENTATIVE PROJECTS

Proposed SDG&E Sunrise Powerlink Project, San Diego to Imperial Valley, California *(San Diego Gas and Electric).* Mr. Pigniolo served as the Principal Investigator and archaeological monitor for this project whose purpose is the installation of a new transmission line corridor running from San Diego to Imperial Valley. This phase of the project included the preliminary reporting of any cultural resources observed during field visits to the proposed impact areas. Mr. Pigniolo recorded sites encountered during monitoring, and collected GPS points and photographs of the sites for future review. Mr. Pigniolo also conducted the cultural resources portion of the environmental training for this project.

Princess Street Monitoring and Data Recovery Project at the Spindrift Site *(City of San Diego).* Mr. Pigniolo served as a Principal Investigator of an archaeological monitoring and data recovery program at the Spindrift Site in the community of La Jolla. The effort was initially to provide archaeological monitoring of a utility undergrounding project. The presence of the major prehistoric village site within the project alignment quickly became evident prior to construction monitoring and a data recovery plan was prepared prior to the start of work. Data recovery included the excavation of 25 controlled units and the water screening of 100 percent of the archaeological site material impacted during trenching. More than 40 fragmented human burials were encountered. Working with Native American monitors and representatives, the remains were repatriated.

Cultural Resource Survey, Geotechnical Monitoring, and Testing for the La Jolla View Reservoir Project, La Jolla, City of San Diego, California (*IEC*). Mr. Pigniolo served as Principal Investigator and conducted an archaeological survey on an approximately 15-acre study area, in the La Jolla Natural Park area on Mount Soledad above La. In addition to the field survey, geotechnical work was monitored by an archaeologist and Native American monitor. One small prehistoric cobble procurement site (CA-SDI-20843) was tested to determine site significance. Due to surface visibility constraints from dense vegetation, monitoring by an archaeological and a Native American monitor during construction excavation and grading was recommended to ensure sensitive features not identified during the survey are not present or impacted by the project.

City of San Diego Sever Group 783 Project, San Diego, California *(Orion Construction Company.)* Mr. Pigniolo was the Principal Investigator for an archaeological monitoring project for a sewer line replacement in the eastern portion of the City of San Diego. The project included archaeological construction monitoring in an urban environment.

Cultural Resource Monitoring and Treatment of CA-SDI-20861 for the 1941-1945 Columbia Street Project, City of San Diego, California (*Jeff Svitak Inc.*) Mr. Pigniolo served as Principal Investigator of an archival research and an archaeological and Native American monitoring program of building demolition and construction excavation for a multi-family dwelling in the Little Italy community of the City of San Diego. The project consisted of archaeological and historical research prior to fieldwork, archaeological monitoring of foundation removal and construction excavation, and the recovery and analysis of historic artifacts discovered during monitoring. Site CA-SDI-20861 was treated as a significant cultural resource and the recovery and analysis of the cultural material served as mitigation for the project impacts to the site.

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Cultural Resource Salvage and Monitoring within a Portion of CA-SDI-39/17372 at 1891 Viking Way, La Jolla, City of San Diego, California (*Ayers General Contracting, Inc.*) Mr. Pigniolo served as Principal Investigator of an archaeological salvage and documentation program in addition to construction monitoring for the residence located at 1891 Viking Way, in the La Jolla. The project included the demolition and replacement of an existing retaining wall, and the replacement of additional yard hardscape. The City of San Diego archaeologist determined that construction work was occurring within site CA-SDI-39 and required work to stop and a treatment plan to partially mitigate impacts to the site be prepared. The project included a salvage effort to partially mitigate impacts to this portion of the site, through documentation and artifact recovery and to recover any impacted human remains as part of mitigation. Three phases of treatment were conducted including a 100 percent recovery program for human remains and associated grave goods and monitoring of final construction disturbance and backfilling.

Muller Residence Archaeological Survey, Testing, and Evaluation, Carmel Valley, City of San Diego, California (*Mr. Rolf Muller*) Mr. Pigniolo served as Principal Investigator and Project Manager of a cultural resource survey and testing and evaluation program of a residential parcel proposed for development. The survey indicated the presence of a portion of a prehistoric shell midden within the project area. The testing program indicated a deeply buried archaeological deposit with a high level of integrity. Impact avoidance through redesign was recommended under City of San Diego Historical Resources Guidelines.

Cultural Resource Monitoring for The San Diego County Administration Center Waterfront Park Project, San Diego, California (*McCarthy Building Companies, Inc.*) Mr. Pigniolo served as Principal Investigator of a cultural resource monitoring program for the Water Front Park Project at the San Diego County Administration Building in the City of San Diego. The monitoring program included excavation near the dredge fill/native ground contact. Historic maps indicated that the entire project area was located on man-made land created from bay dredge spoils. The monitoring program identified a small historic-age boat that probably sank in the bayfront prior to filling of the area. Based on the current County guidelines, this resource qualifies as significant for its information potential and has been treated as such. The boat was documented and avoided, and left in place.

13th and C Streets Evaluation Project, City of San Diego, California (*WM Builders*) Mr. Pigniolo served as Principal Investigator of a archaeological/historical resource assessment for a commercial development project in the City of San Diego. The project area is in the downtown portion of San Diego. A records search, literature review, examination of historic maps, records, and city directories was used to assess the potential for buried historic resources within the project area. Potential buried historic resource locations were identified and a testing plan was developed.

U. S. Army Yuma Proving Ground (YPG) Native American Consultation Plan, Yuma, Arizona (*Yuma Proving Ground*). Mr. Pigniolo served as principal author of a Native American consultation plan for YPG to provide guidance and information to U.S. Army commanders and Army resource managers at YPG for consultation with Native American groups. Consultation was conducted in a manner that is consistent with federal laws and regulations that mandate consultation and the consultation plan was designed to ensure the participation of Native American groups early in the planning process.

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All American 105 Race Project, West Mesa, Imperial County, California (*Legacy 106, Inc.*). Mr. Pigniolo served as Principal Investigator, report author, and crew chief for an archaeological survey for a proposed off-road vehicle race course in the West Mesa area of Imperial County. The survey covered Bureau of Land Management (BLM) lands and included close coordination with BLM staff. The survey included a proposed 7.5 mile course with a very short time-frame. The goal was project alignment adjustment and realignment to avoid resource impacts where possible. A variety of prehistoric cultural resources including 10 sites and seven isolates were encountered. Human remains were identified and avoided. The race route was realigned to avoid significant resource impacts allowing the race to proceed on schedule.

Alpine Fire Safe Council Brush Management Monitoring Project, Alpine Region, San Diego County, California (*Alpine Fire Safe Council*) Mr. Pigniolo served as Principal Investigator for a cultural resources monitoring and protection program on four project areas surrounding Alpine. Cultural resources identified during previous surveys within the vegetation treatment areas were flagged for avoidance. The project included hand clearing and chaparral mastication near residential structures to create a fire buffer zone. Vegetation removal was monitored to ensure cultural resources obscured by heavy vegetation were not impacted by the project and that all recorded cultural resources were avoided. The Bureau of Land Management served as Lead Agency for the project.

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APPENDIX B

RECORDS SEARCH CONFIRMATION

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South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
scic@mail.sdsu.edu

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM
CLIENT IN-HOUSE RECORDS SEARCH

Company: Laguna Mtn Enviro

Company Representative: Carol Serr

Date: 11/6/2019

Project Identification: Imperial solid Waste Site Borrow #1941

Search Radius: 1 mile

Historical Resources: SELF

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: SELF

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: SELF

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: SELF

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Copies: 2

Hours: 1

Carol Serr

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Attachment 3

Traffic Study

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LINSCOTT LAW & GREENSPAN engineers

TRANSPORTATION IMPACT ANALYSIS

IMPERIAL SOLID WASTE SITE CLOSURE

Imperial County, California
April 7, 2020

LLG Ref. 3-19-3179

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TRANSPORTATION IMPACT ANALYSIS

IMPERIAL SOLID WASTE SITE CLOSURE

Imperial County, California
April 7, 2020

1.0 INTRODUCTION

The following transportation study has been prepared to determine and evaluate the traffic impacts on the local circulation system due to the Imperial Solid Waste Site Closure (Project) in Imperial County. The purpose of this transportation study is to assess the potential impacts to the local circulation system as a result of the Project.

Included in this traffic study are the following:

- Project Description
- Existing Conditions Discussion
- Project Study Area, Analysis Approach and Methodology
- Significance Criteria
- Analysis of Existing Conditions
- Project Trip Generation & Assignment
- Cumulative Traffic
- Analysis of Capacity
- Significance of Impacts and Mitigation Measures

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2.0 PROJECT DESCRIPTION

2.1 Project Locations

The Imperial Solid Waste Site is located in the south-central portion of Imperial Valley, approximately six miles west of the City of Imperial. The site address is 1705 W. Worthington Road, Imperial, California 92251.

Pit run rock and miscellaneous fill soil will be transported from up to three different locations: Holtville Borrow Pit, Coyote II borrow site, and Brawley Rock source site. (See section 2.2 for more detail) The Holtville Borrow Pit is located off Norrish Road and is approximately 37 miles east of the site. Coyote II borrow site is located approximately 35 miles southwest of the Project site and is off State Route 98. The Brawley Rock source site is located approximately 74 miles from the site in Riverside County, north of Imperial County.

Figure 2–1 depicts the locations of these four sites.

2.2 Project Description

The Imperial Solid Waste landfill is located on approximately 69 acres with a total disposal area footprint of approximately 18 acres. A proposed borrow area, evaluated for use to supply miscellaneous fill for the site is located across the New River to the west. Trucks will transport pit run rock and miscellaneous fill soil from the Holtville Borrow Pit, Coyote II borrow site, and Brawley Rock source site to the Imperial Solid Waste landfill.

The proposed Project includes the following construction components:

1. Excavate, load, haul, approximately 79,000 cubic yards (CY) of materials for the monolithic soil cover and engineered fill and approximately 3,500 CY of pit run rock for erosion protection on side slopes. Miscellaneous fill soils will be transported from the proposed borrow area west of the Site.

2. Excavate, relocate on Site, and compact approximately 11,000 CY of waste from the northern and western edges of the landfill to the top deck of the landfill.

3. Place and spread 75,000 CY of materials for the monolithic soil cover and foundation layer, 39,600 CY of engineered fill, and 3,500 CY of erosion protection rock, construct and maintain roads.

4. Compact approximately 75,000 CY of materials for the monolithic soil cover and foundation layer, 39,600 CY of engineered fill, and 3,500 CY of erosion protection rock.

5. Install landfill stormwater conveyance system

The site, like much of Imperial County, is located in an agricultural area along the eastern bank of the south to north flowing New River. Properties surrounding the site are generally used for agriculture and owned by private farmers and the Imperial Irrigation District (IID). A tributary/drainage flows south to north into the New River along the southwest portion of the site.

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The site is currently fenced. No changes to the fencing are proposed as part of the final closure. Access to the site will be restricted and limited to personnel responsible for closure and post-closure activities. The currently proposed post-closure use for the Imperial Solid Waste Site landfill is intended to be non-irrigated open space.

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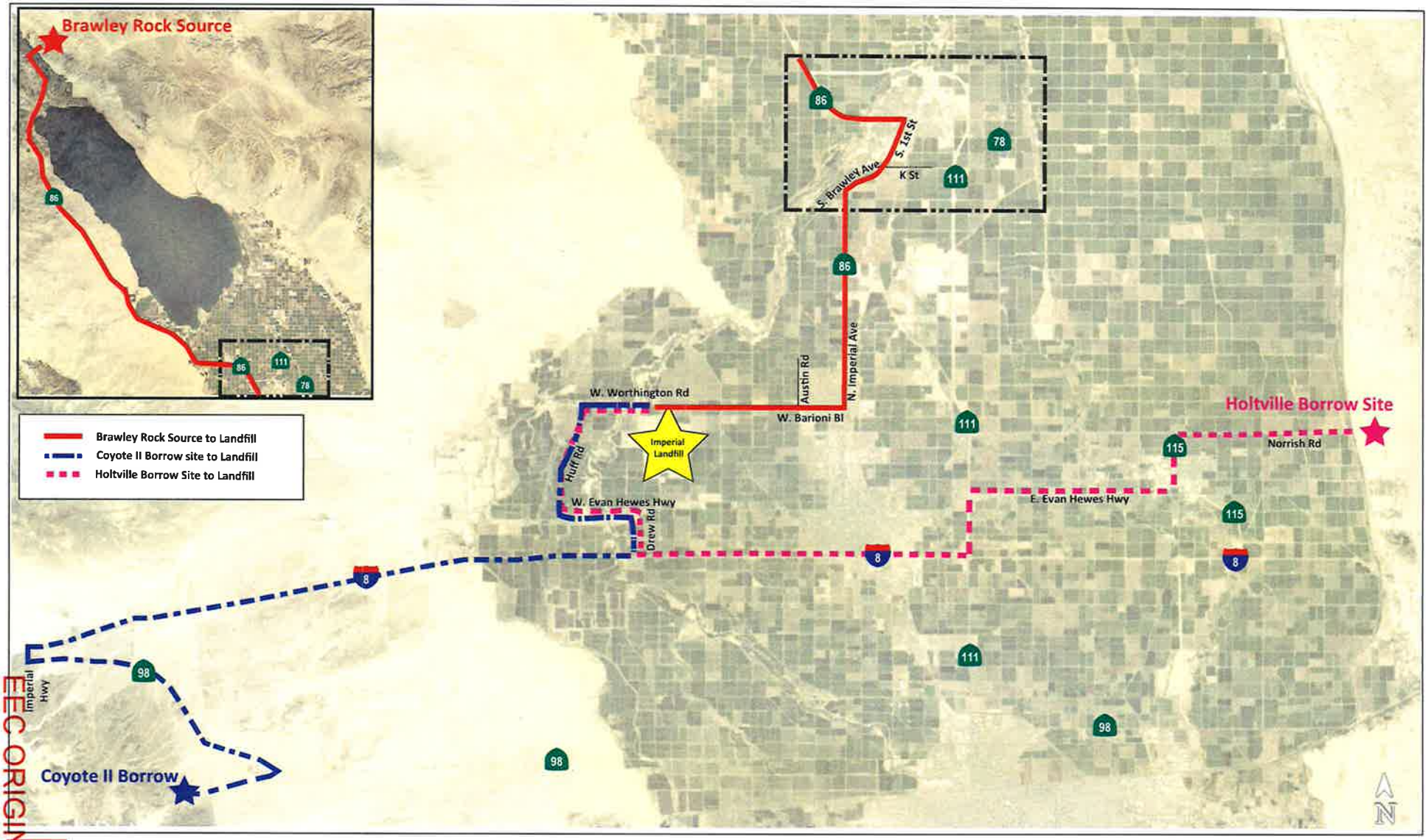

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Figure 2-1

Site Locations

Imperial Solid Waste Site

3.0 EXISTING CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the project area. ***Figure 3–1*** depicts the existing conditions in the Project study area.

3.1 Existing Street Network

The following is a description of the existing street network that will be utilized by project traffic.

State Route 86 (SR 86) is classified as a Major Arterial on the City of Brawley Circulation Element. Within the Project Study area, SR 86 is constructed as a four-lane divided roadway that runs north/south and serves much of Imperial County. Bike lanes and bus stops are not provided, and the posted speed limit is 65 mph. Curbside parking is prohibited along both sides of the roadway.

State Route 78 (SR 78) is classified and built as a four-lane divided expressway on the County of Imperial Circulation Element. Within the study area, SR 78 is an east/west route and serves the norther portion of Brawley connecting SR 86 to SR 111. Bike lanes and bus stops are not provided. The posted speed limit is 65 mph. Curbside parking is prohibited along both sides of the roadway.

Interstate 8 (I-8) is classified and built as a four-lane divided interstate route on the County of Imperial Circulation Element. Within the study area, I-8 is the primary east/west route through Imperial County between San Diego, California and Yuma. Bike lanes and bus routes are not provided along the roadway within the study area. The posted speed limit is 70 mph and curbside parking is prohibited along both sides of the roadway.

State Route 98 (SR 98) is classified as an east/west two-lane conventional highway route per County of Imperial Circulation Element. SR-98 is constructed as a two-lane undivided roadway from the Coyote II Borrow Site to Imperial Highway. Within the study area, bike lanes and bus stops are not provided, and the posted speed limit is 55 mph. Curbside parking is prohibited along both sides of the roadway.

State Route 111 (SR 111) is classified as an Expressway on the City of Brawley Circulation Element. It is currently built as a north-south four-lane divided roadway from Evan Hewes Hwy to I-8. Bike lanes or bus stops are not provided, and the posted speed limit is 65 mph. Curbside parking is prohibited along both sides of the roadway.

State Route 115 (SR 115) is a two-lane undivided state highway from Norrish Rd to Evan Hewes Hwy and per the County of Imperial Circulation Element is classified as a Major Collector. The posted speed limit is 65 mph. Curbside parking is prohibited along the highway. No bicycle facilities currently exist.

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Evan Hewes Highway is an east-west two-lane undivided highway from Drew Road to Huff Road and a four-lane divided highway from SR 115 to SR 111. Within the study area, Evan Hewes Highway is classified as a Major Collector per the County of Imperial Circulation Element. Bus stops or bike lanes are not provided. The posted speed limit is 65 mph and parking is prohibited along the highway.

Imperial Highway is classified as a two-lane collector per the County of Imperial Circulation Element. From SR 98 to I-8, Imperial Highway is constructed as a two-lane undivided roadway. The posted speed limit is 35 mph from I-8 to Frontage Road and 55 mph from Frontage Road to SR 98. Curbside parking is not permitted, and no bicycle facilities currently exist.

Barioni Boulevard is classified as a two-lane collector that runs east/west per the County of Imperial Circulation Element. It is constructed as a two-lane roadway from Austin Rd to SR 86/N. Imperial Ave. Bike lanes and bus stops are not provided and the posted speed limit ranges from 15 to 25 mph. Curbside parking is generally permitted along both sides of the roadway.

Drew Road is classified and built as a north-south two-lane undivided roadway from the I-8 Northbound Ramps to W. Evan Hewes Hwy per the County of Imperial Circulation Element. Within the study area, bike lanes and bus stops are not provided, and the speed limit is posted at 55 mph per County Ordinance. Curbside parking is not permitted along both sides of the roadway.

Huff Road is classified as two-lane collector per the County of Imperial Circulation Element. It is built as a two-lane undivided roadway from W. Evan Hewes Hwy to W. Worthington Rd. The speed limit is 55 mph per County Ordinance. Curbside parking is not permitted, and no bicycle facilities currently exist.

Norrish Road is classified as a two-lane collector from Holtville Borrow Site to SR 115 per the County of Imperial Circulation Element. Within the study area, it is currently built as a two-lane undivided roadway. The assumed speed limit is 45 mph. Bike lanes and bus stops are not provided, and curbside parking is not permitted on either side of the roadway.

W. Worthington Road is classified as a two-lane collector per the County of Imperial Circulation Element. Worthington Road is a two-lane undivided roadway from Huff Rd to Austin Rd that runs east/west. Within the study area, bike lanes and bus stops are not provided. The speed limit is 55 mph per County Ordinance. Curbside parking is not permitted along both sides of the roadway.

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3.2 Existing Traffic Volumes

Daily traffic counts along Drew Road, Huff Road, Norrish Road, Imperial Highway, W. Worthington Road, W. Barioni Road, and 1st Street were conducted in November 2019. These roadways are the routes that trucks will take to have direct access to the Project site.

In addition, average daily traffic (ADT) counts along SR 86, SR 98, SR 111 and I-8 were obtained from the Caltrans 2017 Traffic Volumes document, which provided the most recent data available at the time this report was prepared. Based on previous traffic studies conducted in the area, the peak 2017 volumes were adjusted upward by 2% per year for two years to estimate the 2019 baseline volumes.

Figure 3–2 depicts the Existing Traffic Volumes.

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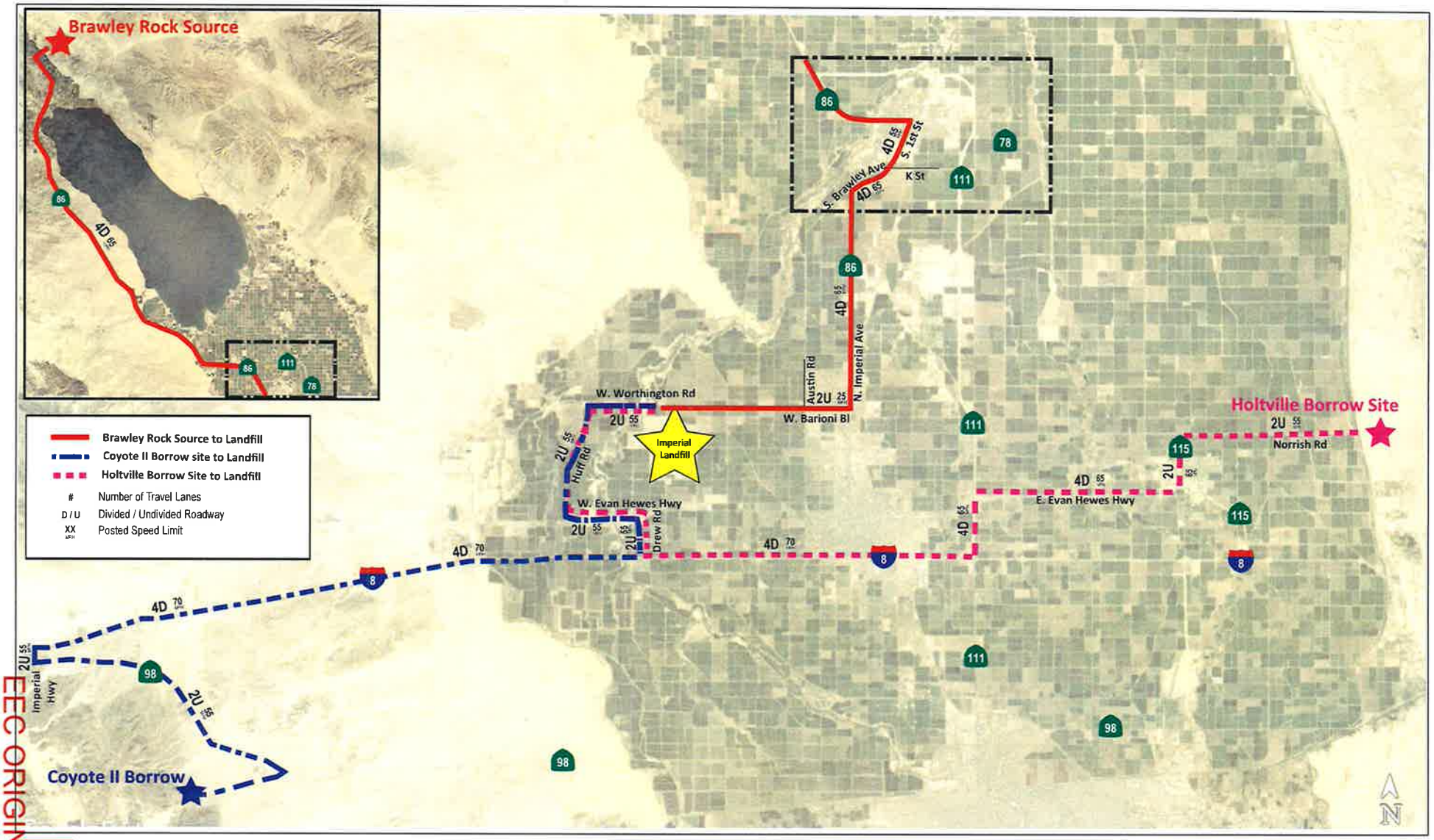

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Figure 3-1

Existing Conditions Diagram

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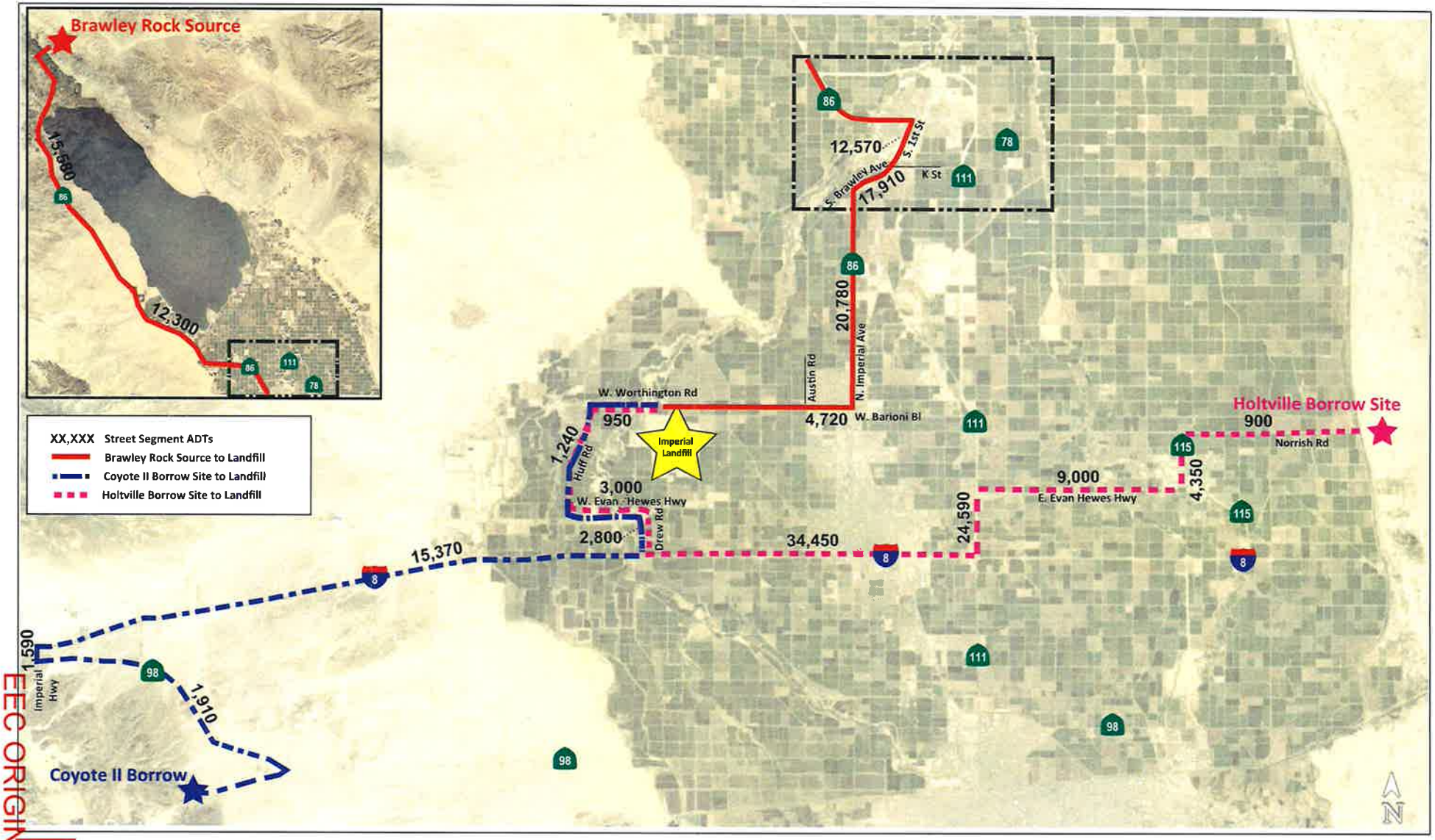

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Figure 3-2

Existing Traffic Volumes

Imperial Solid Waste Site

4.0 PROJECT STUDY AREA, ANALYSIS SCENARIOS AND METHODOLOGY

4.1 Project Study Area

The following segments were analyzed in this study and were chosen since they will carry the majority of project traffic.

Segments:

State Route 98:

- Coyote II Borrow Road (Site) to Imperial Highway

Imperial Highway:

- SR 98 to I-8

Drew Road:

- I-8 Northbound Ramps to W. Evan Hewes Hwy

W. Evan Hewes Highway:

- Drew Rd to Huff Rd

Huff Road:

- W. Evan Hewes Hwy to W. Worthington Rd

Norrish Road:

- Graeser Rd to SR 115

State Route 115:

- Norrish Rd to E. Evan Hewes Hwy

E. Evan Hewes Highway:

- SR 115 to SR 111

State Route 111:

- Evan Hewes Hwy to I-8

W. Worthington Road:

- Huff Road to Austin Road

W. Barioni Boulevard:

- Austin Rd to SR 86/N. Imperial Ave

SR 86/N. Imperial Avenue:

- W. Barioni Blvd to Brawley City Limits

Brawley Avenue:

- Brawley City Limits to 1st St

1st Street:

- K St to SR 86

Interstate 8:

- Imperial Highway to Drew Road
- Drew Rd to SR 111

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State Route 86:

- SR 78 to Air Park Dr
- Imperial/Riverside County Line to 81st Ave

4.2 Analysis Scenarios

The following scenarios are analyzed in this report:

- Existing
- Existing + Project
- Existing + Project + Cumulative Traffic

Analysis of ADT Segments (24-hour) was conducted for the analysis scenarios listed above since these are the times where Project related traffic is expected to be most prevalent.

4.3 Analysis Methodology

The operations of the project area intersections and segments are characterized using the concept of "Level of Service" (LOS). LOS is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A through F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.3.1 *Street Segments*

Street segments were analyzed based upon the comparison of ADT to the County of Imperial *Roadway Classifications, Levels of Service (LOS) and Average Daily Traffic (ADT)* table (see ***Table 4–3*** below). ***Table 4–3*** provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. The segment capacities were originally developed based on observations of weekday traffic volumes, and therefore, only an analysis of weekday conditions was conducted. Segment analysis is a comparison of ADT volumes and an approximate daily capacity on the subject roadway.

The Expressway capacity for Imperial County is for a six (6) lane facility and a four (4) lane expressway capacity does not exist. The expressways in the study area consists of four (4) lanes only. Therefore, the LOS E capacity of 50,000 based on the City of San Diego Roadway Classifications table (See Appendix C) was utilized.

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TABLE 4–3
IMPERIAL COUNTY STANDARD STREET CLASSIFICATION AVERAGE DAILY VEHICLE TRIPS

Road		Level of Service W/ADT*				
Class	**X-Section**	**A**	**B**	**C**	**D**	**E**
Expressway (6-lane)	128 / 210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106 / 136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82 / 102	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	64 / 84	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	40 / 70	1,900	4,100	7,100	10,900	16,200
Residential Street	40 / 60	*	*	< 1,500	*	*
Residential Cul-de-Sac / Loop Street	40/60	*	*	< 1,500	*	*
Industrial Collector	76 / 96	5,000	10,000	14,000	17,000	20,000
Industrial Local Street	44 / 64	2,500	5,000	7,000	8,500	10,000

* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

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5.0 SIGNIFICANCE CRITERIA

The County of Imperial does not have published significance criteria. However, the County General Plan does state that the level of service (LOS) goal for intersections and roadway segments is to operate at LOS C or better. Therefore, a segment degrades from LOS C or better to LOS D or worse with the addition of project traffic, the impact is considered significant. If the location operates at LOS D or worse with and without project traffic, the impact is considered significant if the project causes the intersection delta to increase by more than two (2) seconds, or the V/C ratio to increase by more than 0.02. These amounts are consistent with those used in the City of El Centro and the County of Imperial in numerous traffic studies.

TABLE 5–1
TRAFFIC IMPACT SIGNIFICANT THRESHOLDS

Level of Service with Project [a]	Allowable Increase Due to Project Impacts [b]					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
D, E & F (*or ramp meter delays above 15 minutes*)	0.01	1	0.02	1	2	2[c]

Footnotes:

a. All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume. The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

b. If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are deemed to be significant. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigations (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note a above), or if the project adds a significant amount of peak hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating significant impact changes.

c. The allowable increase in delay at a ramp meter with more than 15 minutes of delay and freeway LOS E is 2 minutes and at LOS F is 1 minute.

General Notes:

1. V/C = Volume to Capacity Ratio
2. Speed = Arterial speed measured in miles per hour
3. Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters.
4. LOS = Level of Service

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6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Daily Street Segment Levels of Service

Table 6–1 summarizes the existing segment operations. As seen in ***Table 6–1***, all study area segments are calculated to currently operate at LOS C or better.

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TABLE 6–1
EXISTING STREET SEGMENT OPERATIONS

Street Segment	LOS E [a] Capacity	ADT [b]	LOS [c]	V/C [d]
State Route 98				
Coyote II Borrow (Site) to Imperial Highway	16,200	1,910	B	0.118
Imperial Highway				
SR 98 to I-8	16,200	1,590	A	0.098
Drew Road				
I-8 Northbound Ramps to W. Evan Hewes Hwy	16,200	2,800	B	0.173
W. Evan Hewes Highway				
Drew Rd to Huff Rd	16,200	3,000	B	0.185
Huff Road				
W. Evan Hewes Hwy to W. Worthington Rd	16,200	1,240	A	0.077
Norrish Road				
Graeser Rd to SR 115	16,200	900	A	0.077
State Route 115				
Norrish Rd to E. Evan Hewes Hwy	16,200	4,350	C	0.269
E. Evan Hewes Highway				
SR 115 to SR 111	34,200	9,000	A	0.263
State Route 111				
Evan Hewes Hwy to I-8	50,000[e]	24,590	C	0.492
W. Worthington Road				
Huff Rd to Austin Rd	16,200	950	A	0.059
W. Barioni Boulevard				
Austin Rd to SR 86/ N. Imperial Ave	16,200	4,720	C	0.291
SR 86/ N. Imperial Avenue				
W. Barioni Blvd to Brawley City Limits	50,000[e]	20,780	B	0.416
Brawley Avenue				
Brawley City Limits to 1st St	34,200	17,910	B	0.524
1st street				
K St to SR 86	34,200	12,570	A	0.368
Interstate 8				
Imperial Highway to Drew Rd	80,000	15,370	A	0.192
Drew Rd to State Route 111	80,000	34,450	B	0.431

Continued on Next Page

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Street Segment	LOS E [a] Capacity	ADT [b]	LOS [c]	V/C [d]
Continued from Previous Page				
State Route 86				
State Route 78 to Air Park Dr	50,000[e]	12,300	A	0.246
Imperial/Riverside County Line to 81st Ave	50,000[e]	15,580	B	0.312

Footnotes:

a. The capacity of the roadway at Level of Service E.
b. Average Daily Traffic
c. Level of Service.
d. The Volume to Capacity ratio.
e. Roadway functions as a 4-lane expressway. County of Imperial does not have a capacity for a 4-lane expressway. Therefore, City of San Diego standards were used.

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7.0 TRIP GENERATION/ASSIGNMENT

7.1 Trip Generation

Project traffic generation is based on site-specific trip generating characteristics provided by the applicant. The Project consists of construction activities that are expected to commence as early as Q1 2020 and extend for approximately 71 days. During periods of peak construction activity, a maximum of 10 workers are anticipated to be on-site and work 10-hour days. It is assumed that there are six heavy equipment operators, three laborers for spotters for vehicles and checking grades, and one surveyor.

Forty (40) inbound trucks per day were assumed from each of the sites. In calculating daily trip generation based on this level of activity, it is assumed that all workers will arrive/depart in the AM/PM peak hours, respectively. While detailed construction schedules have yet to be established, these assumptions are based on experience and evaluation of similar projects. These conservative assumptions are intended to represent a reasonably worst-case scenario for AM/PM peak hour traffic.

Based on these assumptions, construction of the Project would generate a maximum of 20 ADT by employees, with 10 inbound trips during the AM peak hour and 10 outbound trips during the PM peak hour. It would also generate 200 ADT by trucks (40 trucks, 2 ADT per truck (In + Out) + a PCE of 2.5), with 10 inbound and 10 outbound trips during the AM and PM peak hours, respectively. A passenger car equivalence factor (PCE) was applied to the truck trips to account for the reduced performance characteristics (stopping, starting, maneuvering, etc.) of heavy vehicles in traffic flow. Finally, ADT generates 64 miscellaneous trips such as deliveries was accounted for.

Table 7–1 tabulates the total construction trip generation.

7.2 Truck Routes

The following are the assumed truck routes for the three different locations to the Project site.

1. **Holtville Borrow Site → Imperial Landfill:** Norrish Rd → Highway 115 → E. Evan Hewes Highway → SR 111 → I-8 West → Drew Rd → W. Evan Hewes Hwy → Huff Rd → W. Worthington Rd
2. **Coyote II Borrow → Imperial Landfill:** SR 98 → Imperial Hwy → I-8 East → Drew Rd → W. Evan Hewes Hwy → Huff Rd → W. Worthington Rd
3. **Brawley Rock Source → Imperial Landfill:** Airport Blvd → SR 86 → S. 1st Street → S. Brawley Ave → SR 86 → N. Imperial Avenue → W. Barioni Blvd → W. Worthington Road

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7.3 Trip Assignment

The assignment of traffic was completed using these truck routes.

Figure 7-1 depicts the assignment of project traffic from the Holtville Borrow Site. ***Figure 7-2*** depicts the assignment of project traffic from the Coyote II Borrow. ***Figure 7-3*** depicts the assignment of project traffic from the Brawley Rock source site.

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Table 7-1

Construction Trip Generation

Trip Type	Inbound Amount	PCE[c]	Daily Total (ADT) [a]	AM Peak Hour			PM Peak Hour		
				In	Out	*Total*	In	Out	*Total*
Employees[b]	10	–	20	10	0	10	0	10	10
Trucks	40	2.5	200	10	10	20	10	10	20
Misc. Trips	10	–	20	2	2	4	1	1	2
Total	***60***		***240***	***22***	***12***	***34***	***11***	***21***	***32***

Footnotes:

a. ADT = Average Daily Traffic (Inbound + Outbound)

b. Assumes all employees begin or leave shift during peak hour.

c. PCE = Passenger Car Equivalent (2.5), used to reflect the additional impacts of heavy vehicles in the technical analyses.

(40 Inbound Trucks + 40 Outbound Trucks) * 2.5 (PCE) = 200 total trips

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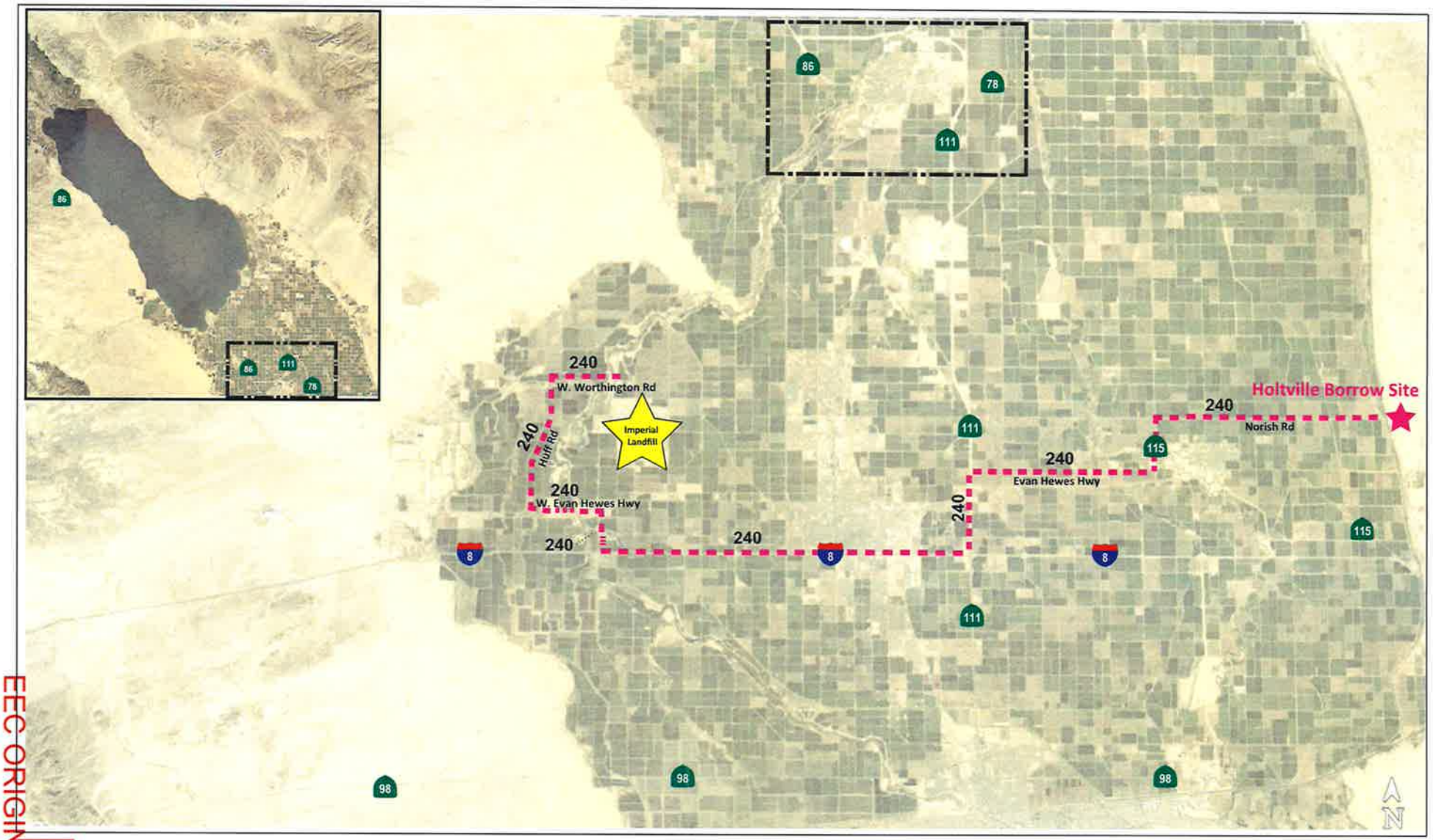

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Figure 7-1

Construction Project Traffic Assignment - Holtville Borrow Site

Imperial Solid Waste Site

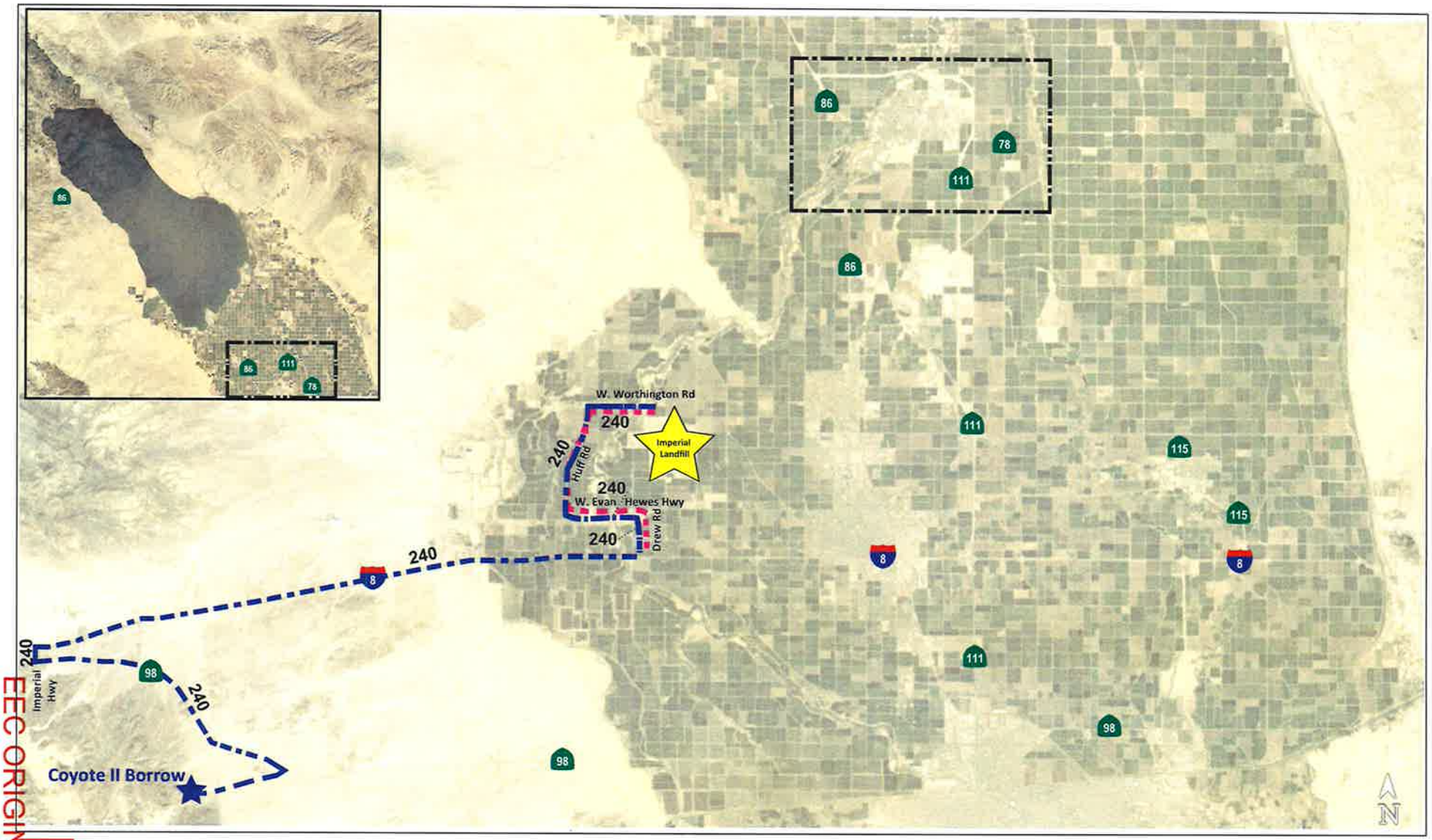

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Figure 7-2

Construction Project Traffic Assignment - Coyote II Borrow Site

Imperial Solid Waste Site

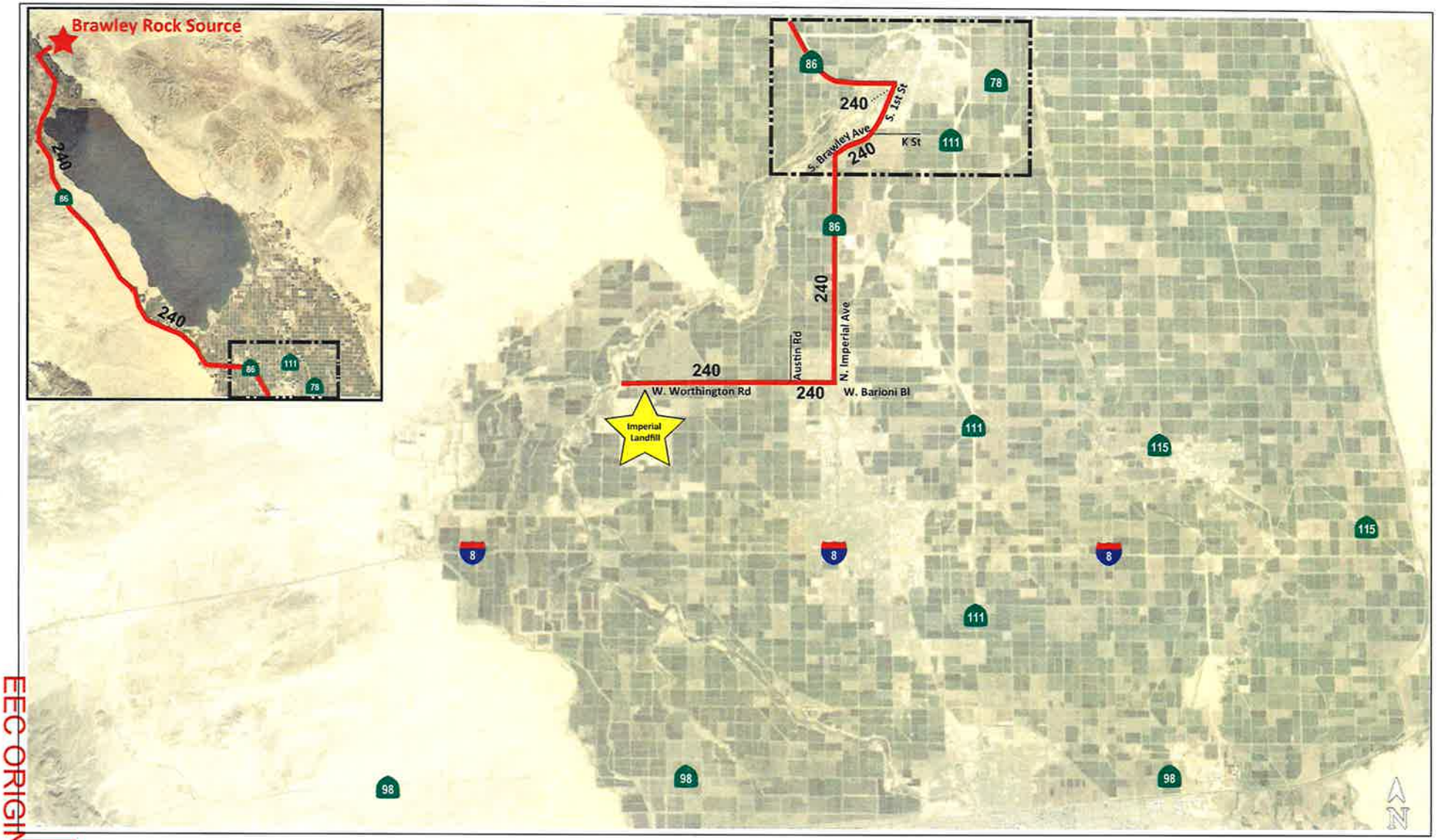

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Figure 7-3

Construction Project Traffic Assignment - Brawley Rock

Imperial Solid Waste Site

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8.0 CUMULATIVE TRAFFIC

No specific near-term cumulative projects were identified in the Project vicinity. Therefore, based on previous traffic studies conducted in the area, the 2019 volumes were adjusted upward by 10% to estimate Cumulative traffic volumes.

Figure 8-1 depicts the Cumulative traffic volumes.

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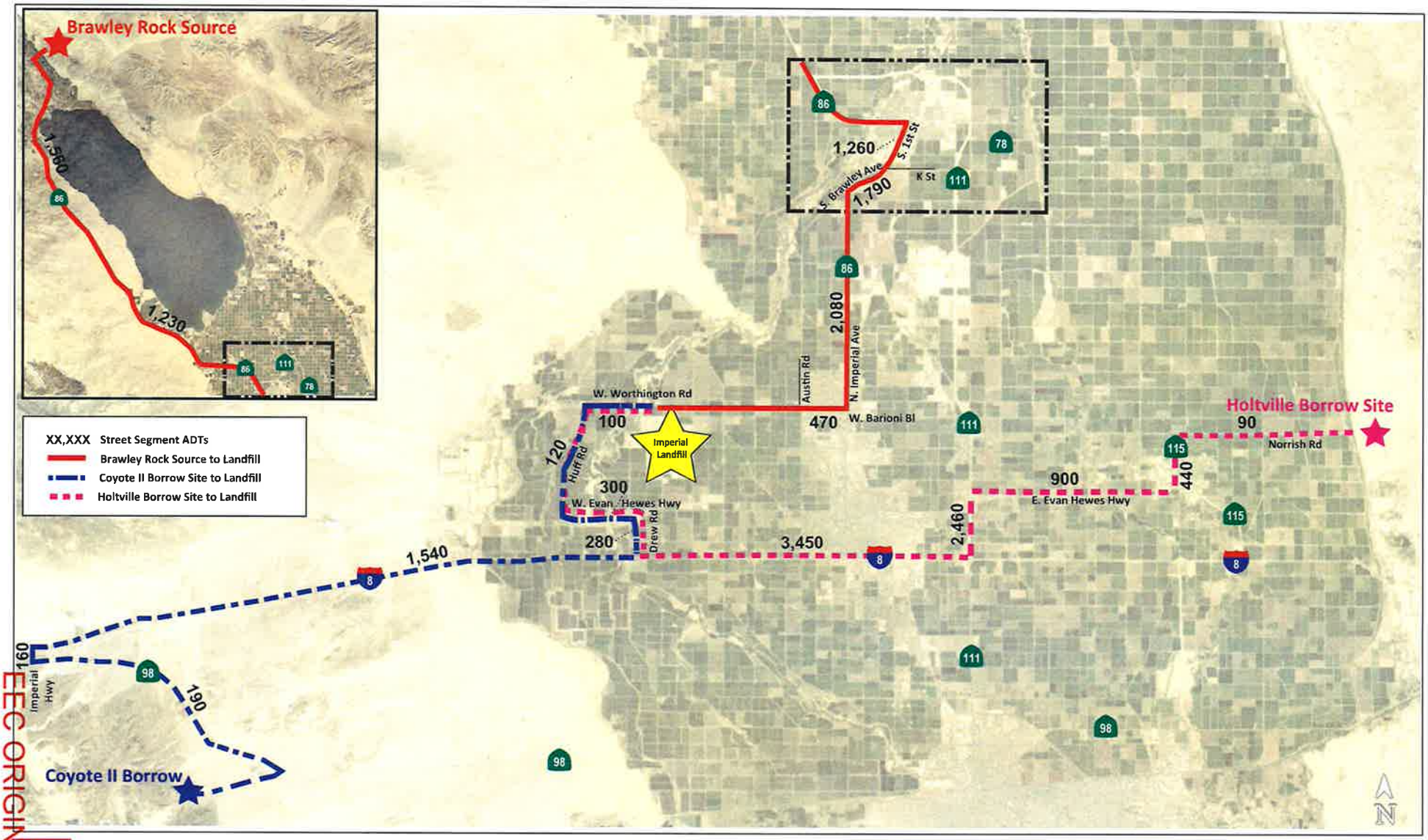

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Figure 8-1

Cumulative Traffic Volumes

Imperial Solid Waste Site

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9.0 ANALYSIS OF NEAR-TERM SCENARIOS

9.1 Existing + Project

9.1.1 *Segment Operations*

Table 9–1 summarizes the Existing + Project segment operations. As seen in ***Table 9–1***, with the addition of Project traffic, the study area segments are calculated to continue to operate at LOS C or better. No significant impacts are identified.

9.2 Existing + Project + Cumulative Projects

9.2.1 *Segment Operations*

Table 9–1 summarizes the Existing + Project + Cumulative projects segment operations. As seen in ***Table 9–1***, with the addition of Project traffic and cumulative projects traffic, the study area segments are calculated to continue to operate at LOS C or better. No significant impacts are identified.

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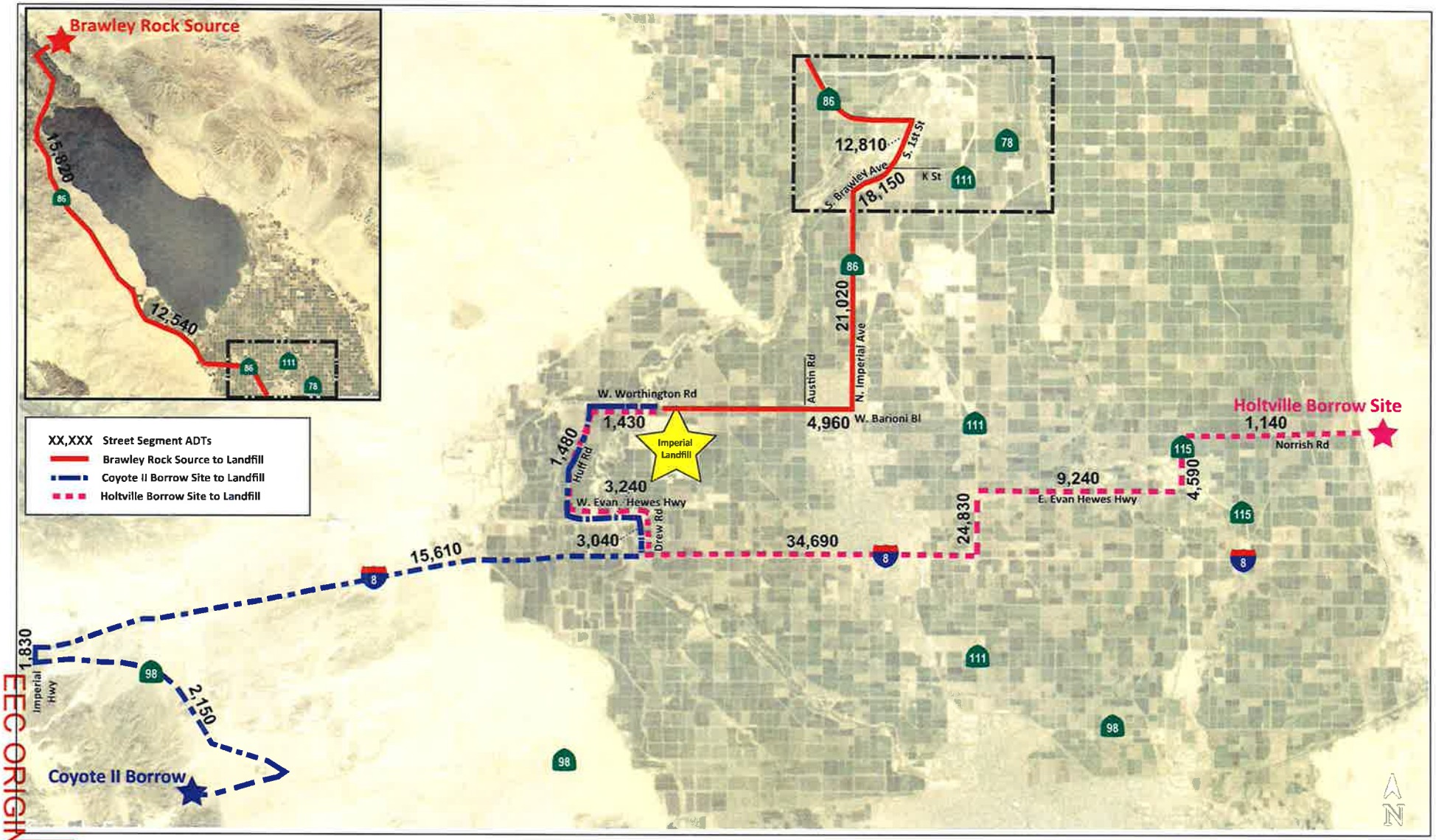

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Figure 9-1

Existing + Project Traffic Volumes

Imperial Solid Waste Site

EEC ORIGINAL PKG

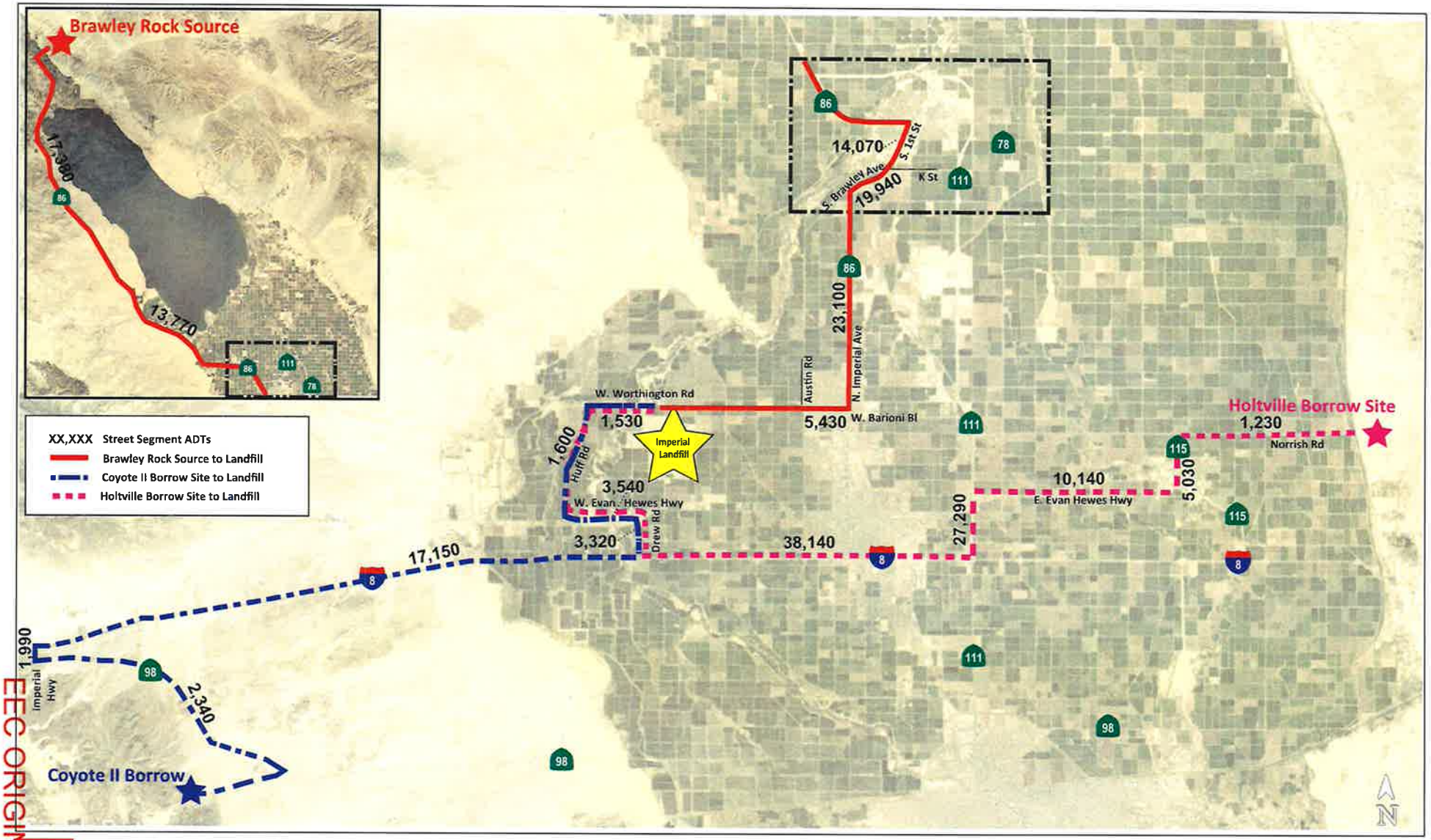

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Figure 9-2

Existing + Project + Cumulative Traffic Volumes

Imperial Solid Waste Site

TABLE 9–1
NEAR-TERM STREET SEGMENT OPERATIONS

Street Segment	Existing Capacity (LOS E)[a]	Existing			Existing + Project			Existing + Project + Cumulative Projects			Δ[e]	Impact Type
		ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C	ADT	LOS	V/C		
State Route 98												
Coyote II Borrow (Site) to Imperial Highway	16,200	1,910	B	0.118	2,150	B	0.133	2,340	B	0.144	0.026	None
Imperial Highway												
SR 98 to I-8	16,200	1,590	A	0.098	1,830	A	0.113	1,990	B	0.123	0.025	None
Drew Road												
I-8 Northbound Ramps to W. Evan Hewes Hwy	16,200	2,800	B	0.173	3,040	B	0.188	3,320	B	0.205	0.032	None
W. Evan Hewes Highway												
Drew Rd to Huff Rd	16,200	3,000	B	0.185	3,240	B	0.200	3,540	B	0.219	0.034	None
Huff Road												
W. Evan Hewes Hwy to W. Worthington Rd	16,200	1,240	A	0.077	1,480	A	0.091	1,600	A	0.099	0.022	None
Norrish Road												
Graeser Rd to SR 115	16,200	900	A	0.056	1,140	A	0.070	1,230	A	0.076	0.020	None
State Route 115												
Norrish Rd to E. Evan Hewes Hwy	16,200	4,350	C	0.269	4,590	C	0.283	5,030	C	0.310	0.041	None
E. Evan Hewes Highway												
SR 115 to SR 111	34,200	9,000	A	0.263	9,240	A	0.270	10,140	A	0.296	0.033	None
State Route 111												
Evan Hewes Hwy to I-8	50,000[e]	24,590	C	0.492	24,830	C	0.497	27,290	C	0.546	0.054	None

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TABLE 9–1
NEAR-TERM STREET SEGMENT OPERATIONS

Street Segment	Existing Capacity (LOS E)[a]	Existing			Existing + Project			Existing + Project + Cumulative Projects			Δ[e]	Impact Type
		ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C	ADT	LOS	V/C		
Continued from Previous Page												
W. Worthington Road												
Huff Rd to Austin Rd	16,200	950	A	0.059	1,430	A	0.088	1,530	A	0.094	0.035	None
W. Barioni Boulevard												
Austin Rd to SR 86/ N. Imperial Ave	16,200	4,720	C	0.291	4,960	C	0.306	5,430	C	0.335	0.044	None
SR 86/ N. Imperial Avenue												
W. Barioni Blvd to Brawley City Limits	50,000[e]	20,780	B	0.416	21,020	C	0.420	23,100	C	0.462	0.046	None
Brawley Avenue												
Brawley City Limits to 1st St	34,200	17,910	B	0.524	18,150	B	0.531	19,940	B	0.583	0.059	None
1st Street												
K St to SR 86	34,200	12,570	A	0.368	12,810	A	0.375	14,070	B	0.411	0.043	None
Interstate 8												
Imperial Highway to Drew Rd	80,000	15,370	A	0.192	15,610	A	0.195	17,150	A	0.214	0.022	None
Drew Rd to State Route 111	80,000	34,450	B	0.431	34,690	B	0.434	38,140	B	0.477	0.046	None
State Route 86												
State Route 78 to Air Park Dr	50,000[e]	12,300	A	0.246	12,540	A	0.251	13,770	B	0.275	0.029	None
Imperial/Riverside County Line to 81st Ave	50,000[e]	15,580	B	0.312	15,820	B	0.316	17,380	B	0.348	0.036	None

Footnotes:

a. The capacity of the roadway at Level of Service E.
b. Average Daily Traffic
c. Level of Service
d. The Volume to Capacity ratio.
e. Increase in V/C ratio due to the addition of project traffic.
f. Roadway functions as a 4-lane expressway. County of Imperial does not have a capacity for a 4-lane expressway. Therefore, City of San Diego standards were used.

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10.0 SIGNIFICANCE OF IMPACTS

Per the significance thresholds and analysis methodology presented in this report, no Project or cumulative related significant impacts are identified and therefore no mitigation measures are necessary.

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TECHNICAL APPENDICES

IMPERIAL SOLID WASTE SITE CLOSURE

Imperial County, California
January 17, 2020

LLG Ref. 3-19-3179

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APPENDICES

APPENDIX

A. Segment Count Sheets, Caltrans Data

B. County of Imperial Roadway Classification

C. City of San Diego Roadway Classifications

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APPENDIX A

SEGMENT COUNT SHEETS, CALTRANS DATA

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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Drew Road, between I-8 Northbound Ramps and W. Evans Hewes Hwy**

Date: **Tuesday, November 26, 2019** Total Daily Volume: **2801** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
25	15	13	29	31	168	173	186	151	135	153	168	169	215	217	212	203	147	86	69	54	79	80	23
6	3	5	6	4	17	35	34	37	32	42	40	41	48	62	58	70	41	20	17	20	19	41	8
11	3	4	7	10	41	40	38	28	41	34	38	38	62	59	48	45	34	27	20	11	23	25	8
5	4	3	7	5	62	58	48	38	31	42	44	38	59	36	52	42	42	23	15	15	19	6	5
3	5	1	9	12	48	40	66	48	31	35	46	52	46	60	54	46	30	16	17	8	18	8	2

Date: **Tuesday, November 26, 2019** Total Daily Volume: **1403** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
18	14	7	16	18	128	108	113	68	61	60	82	74	120	78	77	81	73	45	35	33	55	28	11
5	3	3	4	1	10	25	18	19	14	12	19	20	24	20	18	24	25	9	6	11	14	8	1
8	3	2	5	7	39	21	25	10	16	17	22	18	43	15	18	24	15	13	11	6	20	9	6
2	4	2	4	3	46	39	29	17	14	19	21	13	24	15	19	14	21	13	7	10	16	4	3
3	4	0	3	7	33	23	41	22	17	12	20	23	29	28	22	19	12	10	11	6	5	7	1

Date: **Tuesday, November 26, 2019** Total Daily Volume: **1398** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
7	1	6	13	13	40	65	73	83	74	93	86	95	95	139	135	122	74	41	34	21	24	52	12
1	0	2	2	3	7	10	16	18	18	30	21	21	24	42	40	46	16	11	11	9	5	33	7
3	0	2	2	3	2	19	13	18	25	17	16	20	19	44	30	21	19	14	9	5	3	16	2
3	0	1	3	2	16	19	19	21	17	23	23	25	35	21	33	28	21	10	8	5	3	2	2
0	1	1	6	5	15	17	25	26	14	23	26	29	17	32	32	27	18	6	6	2	13	1	1

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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Huff Road, between W. Evans Hewes Hwy and W. Worthington Road**

Date: **Tuesday, November 26, 2019** Total Daily Volume: **1236** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
18	4	4	17	12	91	75	85	65	63	77	53	79	92	101	97	82	63	45	20	27	36	16	14
3	1	3	1	1	9	14	14	26	14	15	12	24	22	35	25	32	20	21	1	5	7	8	3
11	1	0	5	4	17	18	19	10	14	23	7	20	22	30	16	16	20	7	9	8	10	6	3
1	1	0	5	3	37	27	24	15	18	20	15	11	30	22	27	22	15	7	5	5	9	2	3
3	1	1	6	4	28	16	28	14	17	19	19	24	18	14	29	12	8	10	5	9	10	0	5

Date: **Tuesday, November 26, 2019** Total Daily Volume: **641** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
14	4	2	8	6	23	26	18	29	30	41	31	42	48	76	56	58	28	32	15	20	15	14	5
1	1	2	1	1	3	9	4	12	5	9	8	16	11	23	17	25	9	14	0	5	4	6	1
10	1	0	2	3	2	6	7	2	9	14	5	11	11	24	10	12	11	5	6	6	3	6	2
1	1	0	2	2	9	7	2	9	8	12	6	5	16	17	8	14	4	5	5	2	2	2	0
2	1	0	3	0	9	4	5	6	8	6	12	10	10	12	21	7	4	8	4	7	6	0	2

Date: **Tuesday, November 26, 2019** Total Daily Volume: **595** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
4	0	2	9	6	68	49	67	36	33	36	22	37	44	25	41	24	35	13	5	7	21	2	9
2	0	1	0	0	6	5	10	14	9	6	4	8	11	12	8	7	11	7	1	0	3	2	2
1	0	0	3	1	15	12	12	8	5	9	2	9	11	6	6	4	9	2	3	2	7	0	1
0	0	0	3	1	28	20	22	6	10	8	9	6	14	5	19	8	11	2	0	3	7	0	3
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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Norrish Road, between Graeser Road and Highway 115**

Date: **Tuesday, November 26, 2019** Total Daily Volume: **897** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	5	9	10	18	117	53	36	38	46	37	45	50	48	91	74	81	34	35	22	11	10	10	8
2	2	1	2	4	14	10	10	12	11	7	12	9	11	17	26	29	17	15	6	1	4	3	4
5	1	2	4	1	27	24	5	4	13	4	9	11	12	39	13	20	1	7	8	2	2	2	1
1	1	3	2	6	28	12	7	10	8	13	11	13	11	21	19	14	11	8	5	0	2	4	3
1	1	3	2	7	48	7	14	12	14	13	13	17	14	14	16	18	5	5	3	8	2	1	0

Date: **Tuesday, November 26, 2019** Total Daily Volume: **426** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	2	6	7	10	101	31	15	14	23	20	17	21	22	17	24	23	16	11	12	8	3	7	7
2	0	1	2	1	9	8	4	5	5	3	7	3	4	6	10	2	6	2	2	0	2	2	3
5	0	0	4	0	25	12	2	2	6	3	2	6	7	3	3	5	1	3	5	2	0	2	1
1	1	3	1	3	22	5	4	1	5	7	4	3	7	6	6	7	6	5	3	0	0	3	3
1	1	2	0	6	45	6	5	6	7	7	4	9	4	2	5	9	3	1	2	6	1	0	0

Date: **Tuesday, November 26, 2019** Total Daily Volume: **471** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0	3	3	3	8	16	22	21	24	23	17	28	29	26	74	50	58	18	24	10	3	7	3	1
0	2	0	0	3	5	2	6	7	6	4	5	6	7	11	16	27	11	13	4	1	2	1	1
0	1	2	0	1	2	12	3	2	7	1	7	5	5	36	10	15	0	4	3	0	2	0	0
0	0	0	1	3	6	7	3	9	3	6	7	10	4	15	13	7	5	3	2	0	2	1	0
0	0	1	2	1	3	1	9	6	7	6	9	8	10	12	11	9	2	4	1	2	1	1	0

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EEC ORIGINAL PKG

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **W. Worthington Road, between Huff Road and Forrester Road**

Date: **Tuesday, November 26, 2019** Total Daily Volume: **945** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
16	7	6	14	21	74	84	73	34	53	51	45	54	54	61	68	79	44	26	16	21	18	16	10
3	0	1	5	6	9	21	11	5	6	15	11	11	7	28	21	25	13	6	3	9	5	4	4
3	1	3	4	6	21	26	20	9	13	14	11	16	16	15	17	24	13	3	4	3	8	4	2
4	4	2	2	5	27	14	28	8	17	15	15	17	11	13	16	16	10	9	5	5	3	4	2
6	2	0	3	4	17	23	14	12	17	7	8	10	20	5	14	14	8	8	4	4	2	4	2

Date: **Tuesday, November 26, 2019** Total Daily Volume: **443** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
7	1	2	4	5	13	31	19	13	25	21	28	31	23	48	38	56	23	15	11	10	3	10	6
1	0	0	1	1	3	2	6	1	0	1	7	8	3	23	14	18	6	2	2	6	1	3	2
2	0	2	1	1	1	11	4	4	4	8	6	12	5	12	8	20	5	1	1	2	2	3	1
1	0	0	0	2	4	7	5	2	12	8	10	8	3	9	9	12	7	6	5	2	0	3	2
3	1	0	2	1	5	11	4	6	9	4	5	3	12	4	7	6	5	6	3	0	0	1	1

Date: **Tuesday, November 26, 2019** Total Daily Volume: **502** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	6	4	10	16	61	53	54	21	28	30	17	23	31	13	30	23	21	11	5	11	15	6	4
2	0	1	4	5	6	19	5	4	6	14	4	3	4	5	7	7	7	4	1	3	4	1	2
1	1	1	3	5	20	15	16	5	9	6	5	4	11	3	9	4	8	2	3	1	6	1	1
3	4	2	2	3	23	7	23	6	5	7	5	9	8	4	7	4	3	3	0	3	3	1	0
3	1	0	1	3	12	12	10	6	8	3	3	7	8	1	7	8	3	2	1	4	2	3	1

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EEC ORIGINAL PKG

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **W. Barioni Boulevard, between Austin Road and SR 86**

Date: **Tuesday, November 26, 2019** Total Daily Volume: **4721** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
31	15	8	16	46	129	154	228	241	242	268	283	295	261	295	343	375	381	321	252	179	171	122	65
8	5	6	4	9	20	40	49	50	52	91	67	79	76	74	83	84	94	87	72	51	39	33	18
11	2	0	2	8	26	34	65	57	58	64	69	66	55	67	83	92	84	90	58	41	54	35	19
5	4	1	5	15	39	40	56	54	61	57	74	72	58	77	69	81	95	78	55	47	40	28	13
7	4	1	5	14	44	40	58	80	71	56	73	78	72	77	108	118	108	66	67	40	38	26	15

Date: **Tuesday, November 26, 2019** Total Daily Volume: **2380** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
13	7	3	10	23	65	79	122	136	135	144	155	154	130	153	185	191	170	164	110	70	75	52	34
4	3	3	2	3	7	20	29	28	30	52	45	46	45	37	41	40	46	45	27	21	21	13	8
5	0	0	1	4	11	18	27	34	35	36	34	33	29	38	43	51	37	48	32	19	20	13	9
0	2	0	2	9	19	25	32	28	32	29	40	36	23	36	35	41	40	37	23	18	18	12	8
4	2	0	5	7	28	16	34	46	38	27	36	39	33	42	66	59	47	34	28	12	16	14	9

Date: **Tuesday, November 26, 2019** Total Daily Volume: **2341** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
18	8	5	6	23	64	75	106	105	107	124	128	141	131	142	158	184	211	157	142	109	96	70	31
4	2	3	2	6	13	20	20	22	22	39	22	33	31	37	42	44	48	42	45	30	18	20	10
6	2	0	1	4	15	16	38	23	23	28	35	33	26	29	40	41	47	42	26	22	34	22	10
5	2	1	3	6	20	15	24	26	29	28	34	36	35	41	34	40	55	41	32	29	22	16	5
3	2	1	0	7	16	24	24	34	33	29	37	39	39	35	42	59	61	32	39	28	22	12	6

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EEC ORIGINAL PKG

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **1st Street, between K Street and SR 86**

Date: **Tuesday, November 26, 2019** Total Daily Volume: **12569** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
112	62	68	84	156	299	342	508	645	721	756	851	865	785	863	901	907	1013	742	599	495	362	253	180
39	22	20	14	30	59	57	107	188	146	196	238	187	218	197	228	221	260	216	148	138	100	77	59
27	15	14	23	38	86	86	124	141	178	162	198	243	195	215	215	229	262	172	141	131	89	75	35
20	15	23	24	49	78	90	136	133	195	207	213	217	207	210	216	239	237	168	172	122	79	52	42
26	10	11	23	39	76	109	141	183	202	191	202	218	165	241	242	218	254	186	138	104	94	49	44

Date: **Tuesday, November 26, 2019** Total Daily Volume: **6938** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
60	34	41	41	88	191	173	256	324	358	371	476	491	460	483	530	490	597	431	340	277	203	127	96
19	10	9	5	18	40	24	61	93	81	96	140	105	133	112	139	109	147	126	81	80	51	40	28
17	12	11	7	26	57	47	65	78	84	79	104	143	125	112	118	124	157	101	89	76	61	32	19
13	9	14	18	27	49	47	57	58	103	113	117	115	106	117	124	135	126	99	87	58	41	30	22
11	3	7	11	17	45	55	73	95	90	83	115	128	96	142	149	122	167	105	83	63	50	25	27

Date: **Tuesday, November 26, 2019** Total Daily Volume: **5631** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
52	28	27	43	68	108	169	252	321	363	385	375	374	325	380	371	417	416	311	259	218	159	126	84
20	12	11	9	12	19	33	46	95	65	100	98	82	85	85	89	112	113	90	67	58	49	37	31
10	3	3	16	12	29	39	59	63	94	83	94	100	70	103	97	105	105	71	52	55	28	43	16
7	6	9	6	22	29	43	79	75	92	94	96	102	101	93	92	104	111	69	85	64	38	22	20
15	7	4	12	22	31	54	68	88	112	108	87	90	69	99	93	96	87	81	55	41	44	24	17

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EEC ORIGINAL PKG

P3806

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	D	R		CNT	P	PM		DESCRIPTION	BAC	BACK_	BACI	AHEAD_I	AHEAD_PE	AHEAD_A
859	11	007		IMP	S	0.000		BEGIN SPUR RTE 7 AT U.S. CUSTOMS STATION				1350	16900	15900
860	11	007		IMP	S	0.239		MENVIELLE ROAD	1350	16900	15900	890	11200	10600
861	11	007		IMP	S	0.449		JCT. RTE. 7	660	8600	8100	660	8600	8100
862	11	007		IMP	S	0.536		END SPUR RTE 7; BEGIN ROUTE 7, U.S./MEXICO INT'L BNDRY	400	5000	4600			
863	11	007		IMP		0.000		BEGIN ROUTE 7, U.S./MEXICO INT'L BOUNDARY				220	2750	2500
864	11	007		IMP		0.040		POE TRUCKS COMM VEHICLE INSPECTION	220	2750	2500	220	2750	2500
865	11	007		IMP		0.264		CALEXICO VEHICLE INSPECTION	220	2750	2500	520	6600	6200
866	11	007		IMP		0.672		MAGGIO ROAD	700	9300	8500	760	8500	8400
867	11	007		IMP		1.188		CALEXICO, JCT. RTE. 98	760	8500	8400	660	7100	6700
868	11	007		IMP		6.718		JCT. RTE. 8	650	7300	6700	250	3650	3600
869	11	007		IMP		6.823		END OF ROUTE 7	250	3650	3600			
918	11	008		IMP	R	0.000	R	SAN DIEGO/IMPERIAL COUNTY LINE				850	8700	8000
919	11	008		IMP	R	0.000	L	SAN DIEGO/IMPERIAL COUNTY LINE				850	8700	8000
920	11	008		IMP	R	3.091	R	MOUNTAIN SPRINGS, RIGHT ALIGN				810	8200	7600
921	11	008		IMP	R	9.515	R	END RIGHT ALIGN	810	8200	7600			
922	11	008		IMP	R	3.048	L	MOUNTAIN SPRINGS ROAD, LEFT ALIGN				1000	8000	7500
923	11	008		IMP	R	9.796	L	END LEFT ALIGN	1000	8000	7500			
924	11	008		IMP	R	10.010		JCT. RTE. 98	2100	17100	15200	1950	15600	13700
925	11	008		IMP	R	11.918		OCOTILLO, IMPERIAL HIGHWAY	1950	15600	13700	1950	15600	13700
926	11	008		IMP	R	23.480		DUNAWAY ROAD	2000	16000	13600	2000	17600	14500
927	11	008		IMP	R	29.933		DREW ROAD	2000	17600	14500	2400	17800	16300
928	11	008		IMP	R	33.991		FORRESTER ROAD	2400	17800	16300	1950	20200	17100
929	11	008		IMP	R	36.973		IMPERIAL AVENUE	1950	20200	17100	3800	34000	31000
930	11	008		IMP	R	37.972		JCT. RTE. 86	3800	34000	31000	4050	34000	33000
931	11	008		IMP	R	38.964		DOGWOOD ROAD	4050	34000	33000	3100	35000	32500
932	11	008		IMP	R	40.944		JCT. RTE. 111	3100	35000	32500	1700	19700	18600
933	11	008		IMP	R	42.539		BOWKER ROAD	1700	19700	18600	1600	18000	16900
934	11	008		IMP	R	47.783		JCT. RTE. 7/OCHARD ROAD	1600	18000	16900	1350	14500	14000
935	11	008		IMP	R	50.492		BONDS CORNER ROAD	1350	14500	14000	1250	14100	13700
936	11	008		IMP	R	53.497		JCT. RTE. 115 NORTH	1250	14100	13700	2150	19900	14400

ORIGINAL PKG

W3475

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	D	R		CNT	F	PM		DESCRIPTION	BAC	BACK_	BACI	AHEAD_I	AHEAD_PI	AHEAD_A
3458	11	086		IMP		7.240		EL CENTRO, STATE STREET	2800	30000	29000	2550	29000	28000
3459	11	086		IMP	L	7.308		MAIN STREET	2550	29000	28000	1700	20600	19000
3460	11	086		IMP	L	8.028		EL CENTRO, EIGHTH STREET	1700	20600	19000	1550	18100	17100
3461	11	086		IMP	L	8.525		ADAMS/IMPERIAL AVENUES	1550	18100	17100	2600	31500	28500
3462	11	086		IMP		7.430		EL CENTRO, EUCLID/HOGAR AVENUE	2600	31500	28500	2400	28000	26000
3463	11	086		IMP		7.490		EL CENTRO, WOODWARD AVENUE	2400	28000	26000	2450	29000	26500
3464	11	086		IMP		7.643		SCOTT AVENUE	2450	29000	26500	2450	30500	27500
3465	11	086		IMP		7.930		PICO AVENUE	2450	30500	27500	2450	29000	26500
3466	11	086		IMP		8.180		EL DORADO AVENUE	2450	29000	26500	2000	23800	22100
3467	11	086		IMP		15.320		KEYSTONE ROAD	1250	14300	13500	1350	16000	14200
3468	11	086		IMP		19.190		LEGION ROAD	1400	16300	14500	1950	21700	19600
3469	11	086		IMP		20.080		BRAWLEY, WESTERN AVENUE	1950	21700	19600	1700	19100	16900
3470	11	086		IMP		20.250		BRAWLEY, K STREET	1700	19100	16900	1100	12900	12200
3471	11	086		IMP		20.627		SOUTH JCT. RTE. 78	1100	12900	12200	1550	17900	17200
3472	11	086		IMP		20.990		BRAWLEY, RIO VISTA AVENUE	1550	17900	17200	1800	20900	20000
3473	11	086		IMP		21.250		LAS FLORES DRIVE	1800	20900	20000	1000	12300	11700
3474	11	086		IMP	R	22.882		KALIN ROAD	1000	12300	11700	500	6300	5400
3475	11	086		IMP	R	24.057		JCT. RTE. 78	500	6300	5400	850	10300	9700
3476	11	086		IMP	R	27.211		WESTMORLAND, B STREET	850	10300	9700	850	9700	9100
3477	11	086		IMP		27.510		WESTMORLAND, CENTER STREET	850	9700	9100	1150	14700	13900
3478	11	086		IMP		27.760		WESTMORLAND, WEST CITY LIMITS/ H STREET	1150	14700	13900	1050	12400	11700
3479	11	086		IMP		28.006		MARTIN ROAD	1050	12400	11700	1000	12500	11300
3480	11	086		IMP	R	29.005		LACK ROAD	1000	12500	11300	1250	19000	17300
3481	11	086		IMP	R	33.757		BANNISTER ROAD	1250	19000	17300	1150	14900	13200
3482	11	086		IMP		43.559		NORTH JCT. RTE. 78	1150	14900	13200	1050	12800	10900
3483	11	086		IMP		53.900		AIR PARK DRIVE	1050	13000	11600	2150	19000	17500
3484	11	086		IMP		56.120		SALTON CITY, SOUTH MARINA DRIVE	2150	19000	17500	2050	18900	17300
3485	11	086		IMP		63.630		SALTON SEA BEACH ROAD	2050	18900	17300	1400	17000	14400
3486	11	086		IMP		66.143		DESERT SHORES DRIVE	1400	17000	14400	1400	16900	14700
3487	11	086		IMP		67.824		IMPERIAL/RIVERSIDE COUNTY LINE	1400	16900	14700			
3802	11	098		IMP	R	0.000		BEGIN ROUTE				190	1700	1550
3803	11	098		IMP	R	0.304		WEST JCT. RTE. 8	190	1700	1550	190	1700	1550
3804	11	098		IMP		1.518		IMPERIAL HIGHWAY	190	1700	1550	180	1900	1800
3805	11	098		IMP		22.197		DREW ROAD	240	2100	2000	210	2100	2000
3806	11	098		IMP		27.210		FERRELL ROAD	210	2100	2000	280	2750	2550
3807	11	098		IMP		28.740		CLARK ROAD	280	2750	2550	380	4150	4000
3808	11	098		IMP		30.270		DOGWOOD ROAD	380	4150	4000	740	9700	8900

SEE CROSS REFERENCE

P3806

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	D	R		CNT	F	PM		DESCRIPTION	BAC	BACK	BACI	AHEAD_I	AHEAD_PE	AHEAD_A
4739	11	111		IMP	R	0.000		CALEXICO, SOUTH CITY LIMITS, AT MEXICAN BOUNDARY				2300	32000	29500
4740	11	111		IMP	R	0.200		CALEXICO, SECOND STREET	2300	32000	29500	2300	32000	29500
4741	11	111		IMP	R	0.273		THIRD ST	2300	32000	29500	2600	35500	34000
4742	11	111		IMP		0.836		CALEXICO, GRANT STREET (EIGHTH STREET)	2600	35500	34000	2600	35500	34000
4743	11	111		IMP	R	1.183		JCT. RTE. 98	2600	35500	34000	2850	36000	35000
4744	11	111		IMP	R	2.211		COLE ROAD	2850	36000	35000	3150	41500	38500
4745	11	111		IMP	R	4.741		JCT. RTE. 86 WEST	3150	41500	38500	3000	36500	35500
4746	11	111		IMP	R	6.242		MC CABE ROAD	3000	36500	35500	2750	37000	35000
4747	11	111		IMP	R	7.714		JCT. RTE. 8	2750	37000	35000	2800	31500	29500
4748	11	111		IMP	R	9.503		EVAN HEWES HWY	2100	28500	23200	2100	26500	22800
4749	11	111		IMP	R	11.299		ATEN RD	2100	26500	22800	1300	17400	16900
4750	11	111		IMP	R	12.874		WORTHINGTON ROAD	1300	17400	16900	1400	17100	15500
4751	11	111		IMP	R	17.385		KEYSTONE ROAD	1400	17100	15500	1450	17900	15400
4752	11	111		IMP	R	22.015		JCT. RTE. 78	1450	17900	15400	890	8100	7600
4753	11	111		IMP		23.538		SHANK ROAD	890	8100	7600	630	6600	6100
4754	11	111		IMP		23.787		DEL RIO RD. RT. Y	630	6600	6100	630	6600	6100
4755	11	111		IMP		24.682		ANDRE RD. F	630	6600	6100	720	6900	5400
4756	11	111		IMP		26.670		RUTHERFORD ROAD	810	7700	6000	900	8600	6800
4757	11	111		IMP		32.010		CALIPATRIA, SOUTH CITY LIMITS	800	7700	6100	790	7600	6000
4758	11	111		IMP		32.513		JCT. RTE. 115 EAST	750	7200	5700	710	6700	5400
4759	11	111		IMP		32.740		CALIFORNIA STREET	710	6700	5400	860	7800	5900
4760	11	111		IMP		36.090		SINCLAIR ROAD	860	7800	5900	620	5600	3500
4761	11	111		IMP		39.820		NILAND AVENUE	620	5600	3500	400	3550	2800
4762	11	111		IMP		40.400		THIRD STREET	400	3550	2800	470	4100	3150
4763	11	111		IMP		40.710		BEAL ROAD	470	4100	3150	320	3150	2350
4764	11	111		IMP		42.470		ENGLISH ROAD	310	2950	2250	300	2800	2200
4765	11	111		IMP		57.625		BOMBAY BEACH ROAD	250	2000	1650	240	1900	1650
4766	11	111		IMP		65.394		IMPERIAL/RIVERSIDE COUNTY LINE	240	1900	1650	240	1900	1650
4824	11	115		IMP	R	3.201		JCT. RTE. 8				140	1400	1100
4825	11	115		IMP	R	7.190		KAVANAUGH ROAD	140	1400	1100	210	2300	1350
4826	11	115		IMP	R	9.255		GRAPE AVENUE	210	2300	1350	370	4250	2600
4827	11	115		IMP	L	9.540		WALNUT AVENUE/5TH STREET	370	4250	2600	740	7600	6200
4828	11	115		IMP	L	9.756		HOLT AVENUE	740	7600	6200	570	6400	5500
4829	11	115		IMP	L	10.116		FOURTH STREET	570	6400	5500	530	5900	5500
4830	11	115		IMP	L	11.395		WEST JUNCTION, EVAN HEWES HIGHWAY	820	9100	7400	380	4750	4100
4831	11	115		IMP		21.180		JCT. RTE. 78	250	2650	2450	160	1600	1350
4832	11	115		IMP		25.990		RUTHERFORD ROAD	160	1600	1350	100	980	890
4833	11	115		IMP		30.086		ALBRIGHT ROAD	100	980	890	100	930	860

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APPENDIX B

COUNTY OF IMPERIAL ROADWAY CLASSIFICATION

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IMPERIAL COUNTY STANDARD STREET CLASSIFICATION
AVERAGE DAILY VEHICLE TRIPS

ROAD		LEVEL OF SERVICE				
CLASS	X-SECTION	A	B	C	D	E
Expressway	154/210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106/136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Collector	64/84	13,700	22,800	27,400	30,800	34,200
Local Collector	40/70	1,900	4,100	7,100	10,900	16,200
Residential Street	40/60	*	*	<1,500	*	*
Residential Cul-de-Sac / Loop Street	40/60	*	*	< 200	*	*
Industrial Collector	76/96	5,000	10,000	14,000	17,000	20,000
Industrial Local Street	44/64	2,500	5,000	7,000	8,500	10,000

* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

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APPENDIX C

CITY OF SAN DIEGO ROADWAY CLASSIFICATION

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TABLE 2 (MODIFIED)

City of San Diego Roadway Classifications, Levels of Service (LOS) and Average Daily Traffic (ADT)

		LEVEL OF SERVICE[a]				
Street Classification	**Lanes**	**A**	**B**	**C**	**D**	**E**
Freeway	8 lanes	60,000	84,000	120,000	140,000	150,000
Freeway	6 lanes	45,000	63,000	90,000	110,000	120,000
Freeway	4 lanes	30,000	42,000	60,000	70,000	80,000
Expressway	6 lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial	11 lanes	32,000	44,750	63,750	74,500	85,000
Prime Arterial	10 lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial	9 lanes	28,750	40,250	57,500	66,250	75,000
Prime Arterial	8 lanes	27,500	38,500	55,000	62,500	70,000
Prime Arterial	7 lanes	26,250	36,750	52,500	58,750	65,000
Prime Arterial	6 lanes	25,000	35,000	50,000	55,000	60,000
Prime Arterial	5 lanes	23,000	32,000	45,000	50,000	55,000
Major Arterial	6 lanes	20,000	28,000	40,000	45,000	50,000
Prime Arterial[4]	4 lanes[4]	20,000	28,000	40,000	45,000	50,000
Major Arterial	5 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial	4 lanes	15,000	21,000	30,000	35,000	40,000
Collector	5 lanes	12,500	17,500	25,000	30,000	35,000
Collector (continuous left-turn lane)	4 lanes	10,000	14,000	20,000	25,000	30,000
Major Arterial (one-way)	4 lanes	11,400	15,600	20,000	27,000	33,400
	3 lanes	8,500	11,750	15,000	20,000	25,000
	2 lanes	5,700	7,800	10,000	13,500	16,700
Collector (no Center lane) (continuous left-turn lane)	4 lanes 3 lanes 2 lanes	5,000	7,000	10,000	13,000	15,000
Collector (one-way)	2 lanes	4,500	6,250	8,750	11,000	12,500
Collector (no fronting property)	2 lanes	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2 lanes	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2 lanes	2,500	3,500	5,000	6,500	8,000
Sub-collector (single-family)	2 lanes	—	—	2,200	—	—

Footnotes:

a. Approximate recommended ADT based on City of San Diego Street Design Manual.

General Notes:

1. The volumes and the average daily level of service listed above are only intended as a general planning guideline.
2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.
3. ***Shaded areas indicate LLG-derived ADT capacities.***
4. Classification and capacity derived specifically for Kearny Villa Road in order to reflect the unique characteristics of this roadway.

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Attachment A.

Comment Letters

EEC ORIGINAL PKG

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

RECEIVED
JUL 07 2020
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

July 7, 2020

Jim Minnick, Director
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243

SUBJECT: Notice of Intent for a Mitigated Negative Declarations regarding Initial Study 20-0009— Imperial Solid Waste Landfill Site Final Closure

Dear Mr. Minnick:

The Imperial County Air Pollution Control District ("Air District") would like to thank you for the opportunity to review and comment on Initial Study (IS) 20-0009 regarding the Imperial Solid Waste Site Final Closure ("Project"). The proposed project includes final closure of the Imperial Solid Waste Landfill site which will include waste relocation, cover soil import, engineered fill placement and compaction, and installation of storm water management facilities. The project is located at 1705 Worthington Road in Imperial, California and further identified as Assessor Parcel Number (APN) 034-320-050-000.

The Air District finds that since the project footprint exceeds five (5) acres, per Rule 801—Construction and Earthmoving Activities, a Dust Control Plan will be required. Written notification must be provided to the Air District 10 days prior to the commencement of construction/earthmoving activities. If any generators greater than 50 brake horsepower are to be used at the project site they must be permitted by the Engineering & Permitting Division. The Air District may be reached at (442) 265-1800.

Sincerely,

Curtis Blondell
Environmental Coordinator

Reviewed By,
Monica Soucier
APC Division Manager

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

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Valerie Grijalva

From: Mario Salinas
Sent: Tuesday, July 7, 2020 4:22 PM
To: Valerie Grijalva; Carlos Ortiz
Cc: Diana Robinson; Carina Gomez; Gabriela Robb; John Robb; Kimberly Noriega; Maria Scoville; Rosa Soto
Subject: RE: Request for Comments IS20-0009

Good afternoon Valerie,

Pertaining to Initial Study #20-0009, Division of Environmental Health does not have any comments at this time. However, our division reserves the right to comment in the near future if an issue that needs to be addressed arises.

Thank you,

Mario Salinas, MBA
Environmental Health Compliance Specialist I
Imperial County Public Health Department
Division of Environmental Health
797 Main Street Suite B, El Centro, CA 92243
mariosalinas@co.imperial.ca.us
Phone: (442) 265-1888
Fax: (442) 265-1903
www.icphd.org

RECEIVED
JUL 07 2020
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

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From: Valerie Grijalva <ValerieGrijalva@co.imperial.ca.us>
Sent: Wednesday, June 24, 2020 9:08 AM
To: Carlos Ortiz <CarlosOrtiz@co.imperial.ca.us>; Sandra Mendivil <SandraMendivil@co.imperial.ca.us>; Matt Dessert <MattDessert@co.imperial.ca.us>; Monica Soucier <MonicaSoucier@co.imperial.ca.us>; Michael Kelley <MichaelKelley@co.imperial.ca.us>; Sandy Gutierrez <sandygutierrez@co.imperial.ca.us>; Esperanza Colio <EsperanzaColio@co.imperial.ca.us>; Jeff Lamoure <JeffLamoure@co.imperial.ca.us>; Mario Salinas <MarioSalinas@co.imperial.ca.us>; Robert Malek <RobertMalek@co.imperial.ca.us>; Andrew Loper <AndrewLoper@co.imperial.ca.us>; John Gay <JohnGay@co.imperial.ca.us>; Carlos Yee <CarlosYee@co.imperial.ca.us>; rbenavidez@icso.org; scottsheppard@icso.org; dvargas@iid.com; hildy@calexicochamber.net; mvasquez@calexico.ca.gov; ceo@imperialchamber.org; ltylenda@cityofimperial.org; maurice.eaton@dot.ca.gov; Kai.Dunn@waterboards.ca.gov; caroll.mortenson@calrecycle.ca.gov; pac@cpuc.ca.gov; dlrp@conservation.ca.gov; hhaines@augustinetribe.com; rgoff@campo-nsn.gov; chairman@cit-nsn.gov; cocotcsec@cocopah.com; tashina.harper@crit-nsn.gov; wmicklin@leaningrock.net; historicpreservation@quechantribe.com; frankbrown@viejas-

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nsn.gov; tribalsecretary@quechantribe.com; ljbirdsinger@aol.com; lp13boots@aol.com; Thomas.tortez@torresmartinez-nsn.gov; joseph.mirelez@torresmartinez-nsn.gov; katy.sanchez@nahc.ca.gov
Cc: Diana Robinson <DianaRobinson@co.imperial.ca.us>; Carina Gomez <CarinaGomez@co.imperial.ca.us>; Gabriela Robb <GabrielaRobb@co.imperial.ca.us>; John Robb <JohnRobb@co.imperial.ca.us>; Kimberly Noriega <KimberlyNoriega@co.imperial.ca.us>; Maria Scoville <mariascoville@co.imperial.ca.us>; Rosa Soto <RosaSoto@co.imperial.ca.us>
Subject: Request for Comments IS20-0009

Good Morning,

Please see attached Request for Comments for IS20-0009 Imperial Solid Waste Final Closure Project. Comments are due by **July 7, 2020 at 5:00 PM.**

In an effort to increase the efficiency at which information is distributed and reduce paper usage, the Request for Comments Packet is being sent to you via this email.

Should you have any questions regarding this project, please feel free to contact Planner Diana Robinson at (442)265-1736 ext. 1751 or submit your comment letters to icpdscommentletters@co.imperial.ca.us

Thank you,

Valerie Grijalva
Office Assistant II
Planning and Development Services
801 Main Street
El Centro, CA 92243
Office: (442)265-1779
Fax: (442) 265-1735

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Jeanine Ramos

From:	Quechan Historic Preservation <historicpreservation@quechantribe.com>
Sent:	Thursday, July 2, 2020 12:08 PM
To:	Valerie Grijalva
Cc:	ICPDSCommentLetters
Subject:	RE: Request for Comments IS20-0009

CAUTION: This email originated outside our organization; please use caution.

This email is to inform you that we do not wish to comment on this project.

From: Valerie Grijalva [mailto:ValerieGrijalva@co.imperial.ca.us]
Sent: Wednesday, June 24, 2020 9:08 AM
To: Carlos Ortiz; Sandra Mendivil; Matt Dessert; Monica Soucier; Michael Kelley; Sandy Gutierrez; Esperanza Colio; Jeff Lamoure; Mario Salinas; Robert Malek; Andrew Loper; John Gay; Carlos Yee; rbenavidez@icso.org; scottsheppard@icso.org; dvargas@iid.com; hildy@calexicochamber.net; mvasquez@calexico.ca.gov; ceo@imperialchamber.org; ltylenda@cityofimperial.org; maurice.eaton@dot.ca.gov; Kai.Dunn@waterboards.ca.gov; caroll.mortenson@calrecycle.ca.gov; pac@cpuc.ca.gov; dlrp@conservation.ca.gov; hhaines@augustinetribe.com; rgoff@campo-nsn.gov; chairman@cit-nsn.gov; cocotcsec@cocopah.com; tashina.harper@crit-nsn.gov; wmicklin@leaningrock.net; historicpreservation@quechantribe.com; frankbrown@viejas-nsn.gov; tribalsecretary@quechantribe.com; ljbirdsinger@aol.com; lp13boots@aol.com; Thomas.tortez@torresmartinez-nsn.gov; joseph.mirelez@torresmartinez-nsn.gov; katy.sanchez@nahc.ca.gov
Cc: Diana Robinson; Carina Gomez; Gabriela Robb; John Robb; Kimberly Noriega; Maria Scoville; Rosa Soto
Subject: Request for Comments IS20-0009

Good Morning,

Please see attached Request for Comments for IS20-0009 Imperial Solid Waste Final Closure Project. Comments are due by **July 7, 2020 at 5:00 PM.**

In an effort to increase the efficiency at which information is distributed and reduce paper usage, the Request for Comments Packet is being sent to you via this email.

Should you have any questions regarding this project, please feel free to contact Planner Diana Robinson at (442)265-1736 ext. 1751 or submit your comment letters to icpdscommentletters@co.imperial.ca.us

Thank you,

Valerie Grijalva
Office Assistant II
Planning and Development Services
801 Main Street
El Centro, CA 92243
Office: (442)265-1779
Fax: (442) 265-1735

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California Environmental Protection Agency

CalRecycle
Department of
Resources Recycling and Recovery

Gavin Newsom
California Governor

Jared Blumenfeld
Secretary for Environmental Protection

Ken DaRosa
CalRecycle Acting Director

July 17, 2020

RECEIVED
JUL 17 2020
IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

Ms. Diana Robinson, Planner III
ICPDScommentletters@co.imperial.ca.us
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243

Subject: Request for Review and Comment Letter for Initial Study #20-0009, Imperial Solid Waste Site Final Closure Project, Facility No. 13-AA-0001

Dear Ms. Robinson:

Thank you for allowing the Department of Resources Recycling and Recovery (CalRecycle) staff to provide comments on the proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

PROJECT DESCRIPTION

The County of Imperial, acting as Lead Agency, has prepared and requesting for review and comment an Initial Study in order to comply with CEQA and to provide information to, and solicit consultation with, Responsible Agencies in the approval of the proposed project.

The Imperial Solid Waste Site is located at 1705 W. Worthington Road, Imperial, California. The site consists of Assessor Parcel Number (APN) 034-320-050-000 and is designated as Special Purpose Facility and is zoned Government/Special Public (G-S). The site is located in an agricultural area along the eastern bank of the south to north flowing New River and surrounded by agricultural uses and the Imperial Irrigation District.

The proposed project is for the closure of the Imperial Solid Waste Site (ISWS). The ISWS is located on approximately 69 acres with a total disposal area for approximately 18 acres and ceased disposal operations in July 2018. The closure will include waste relocation, cover soil import, engineered fill placement and compaction, and installation of storm water management facilities. The landfill has reached the permitted capacity and requires closure in accordance with Title 27, California Code of Regulations (27 CCR), Section 21110.

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COMMENTS

CalRecycle staff's comments on the proposed project are listed below. Where a specific location in the document is noted for the comment, please ensure the comment is addressed throughout all sections of the Draft IS, in addition to the specific location noted. Comments on the IS are summarized below:

The environmental document will need to be circulated through the Office of Planning and Research's State Clearinghouse.

Page 3, Section B – The box is checked for the preparation of a Mitigated Negative Declaration (MND), however, the subsequent text indicates a Negative Declaration (ND) is the appropriate document and will be prepared. Please clarify if a MND or ND will be prepared and accurately reflected throughout the document.

Page 25, Fire Protection – The explanation makes reference to Title 27, California Code of Regulations (CCR) 17351, however, 27 CCR does not include a section 17351. There is a 14 CCR 17351, but this relates to waste tire storage not a disposal site. Title 27 CCR 21140 includes requirements for final cover and maintenance or vegetation to be maintained per the final closure and postclosure maintenance plans.

Page 28, Mandatory Findings of Significance not completed.

Page 31, Negative Declaration – Based on the analysis and mitigation measures to be implemented, this should be referred to as a MND not a ND.

Page 32, Findings – The finding makes reference to a ND, but based on the analysis, this should be referring to a MND.

Page 34, Mitigation Monitoring & Reporting Program (MMRP) – Based on the analysis in the IS checklist, 'potentially significant unless mitigation incorporated' were also identified for Greenhouse Gas Emissions, Hazard and Hazardous Materials, Utilities and Service Systems sections, which should also be included in the MMRP.

Solid Waste Regulatory Oversight

The Imperial County Environmental Health Services is the LEA for Imperial County and responsible for providing regulatory oversight of solid waste handling and disposal activities. Please contact the LEA, Jorge Perez at 442.265.1888, to discuss potential solid waste requirements for the proposed project.

CONCLUSION

CalRecycle staff thanks the Lead Agency for the opportunity to review and comment on the IS and hopes that this comment letter will be useful to the Lead Agency preparing the environmental document and in carrying out their responsibilities in the CEQA process.

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CalRecycle staff requests copies of any subsequent environmental documents, copies of public notices and any Notices of Determination for this proposed project.

If the environmental document is adopted during a public hearing, CalRecycle staff requests 10 days advance notice of this hearing. If the document is adopted without a public hearing, CalRecycle staff requests 10 days advance notification of the date of the adoption and proposed project approval by the decision-making body.

If you have any questions regarding these comments, please contact me at 916.341.6413 or by e-mail at jeff.hackett@calrecycle.ca.gov.

Sincerely,

Jeff Hackett, Manager
Permits & Assistance South Section
Waste Permitting, Compliance & Mitigation Division

cc: Benjamin Escotto, CalRecycle
Jorge Perez, Imperial County Environmental Health Services, LEA

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