

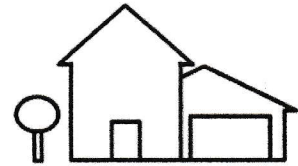
APPENDIX K

*Stormwater Quality Management Plan
JVR Energy Park Project*



County of San Diego
Stormwater Quality Management Plan (SWQMP)
For Standard Projects

Use for all Standard Projects (see Storm Water Intake Form, Part 5)



Standard Project

Project Information	
Project Name	JVR Energy Park
Project Address	Old Highway 80, California
Assessor's Parcel # (APN)	614-110-04, 614-100-20, 614-100-21, 660-170-09, 660-150-04, 660-150-07, 660-150-08, 660-150-10, 660-150-14, 660-150-16, 660-150-17, 660-150-18, 660-150-21, 660-140-06, 660-140-08, 660-020-05, 660-020-06, 661-060-12, 661-060-22, 661-010-02, 661-010-15, 661-010-26, 661-010-27, 661-010-30
Permit # / Record ID	PDS2018-MUP-022


Project Applicant / Project Proponent	
Name	JVR Energy Park, LLC (Contact Person: George Gunnoe)
Address	17901 Von Karman Ave, Suite 1050
Phone	(832) 303-2477
Email:	george.gunnoe@baywa-re.com

SWQMP Preparer	
Name	David Bossu
Company (if applicable)	Kimley-Horn
Address	765 The City Drive, Suite 200
Phone	(714) 705-1347
Email:	david.bossu@kimley-horn.com
PE Number (if applicable)	78103

Preparer's Certification

I understand that the County of San Diego has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the County of San Diego BMP Design Manual. The BMP Design Manual is a design manual for compliance with local County of San Diego Watershed Protection Ordinance (Sections 67.801 et seq.) and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100) requirements for storm water management.

This SWQMP is intended to comply with applicable requirements of the BMP Design Manual. I certify that it has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this SWQMP by County staff is confined to a review and does not relieve me as the person in charge of overseeing the selection and design of storm water BMPs for this project, of my responsibilities for project design.

Signature 	Date 3/16/2020
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COUNTY ACCEPTED SWQMP Approved By: _____	Approval Date: _____
* Note* Approval does not constitute compliance with regulatory requirements.	

General Directions

Note: These directions may be omitted from the final SWQMP submittal.

See *Standard SWQMP Form Instructions* for additional, more detailed guidance and explanation of terms.

Attachment 1: Stormwater Intake Form (Required)

Include a copy of your completed *Storm Water Intake Form* as **Attachment 1** to this submittal.

Table 1: BMPs for Existing Natural Features and Proposed Site Features

Complete **Table 1** to document existing and proposed site features and the BMPs to be implemented for them. Except where otherwise noted, all BMPs must be implemented *where applicable and feasible*.

- **Full implementation** means a BMP will be fully implemented everywhere that the feature exists on the site. For example, all existing water bodies will be fully conserved.
- **Partial implementation** means that some BMP implementation will occur, but the BMP will NOT be fully implemented everywhere that the feature exists. For example, only one of two existing water bodies will be conserved, or not all rooftop runoff will be dispersed to vegetated areas.
- **Infeasible** means a BMP cannot be either partially or fully implemented. Infeasibility can be based both on technical factors (soil type, site layout, etc.) and economic considerations (material or labor costs, etc.). However, technical factors should generally be given greater weight.

Provide justifications for not fully implementing BMPs in Table 4, Part 1.

Table 2: Source Control BMPs for Pollutant-generating Sources

All projects must complete **Table 2, Part A**. **Part B** is required unless the project is a Small Residential Project OR none of the features listed in the table are proposed for the project. *Small Residential Projects* are those requiring *either*: a Building Permit, Minor Residential Grading Permit, or Site Plan Permit for a single family home; *or* a Tentative Parcel Map Permit for up to 4 single family homes and a remainder parcel.

Each BMP must be implemented *where applicable and feasible*. Leaving a BMP unselected means it will not be implemented (either partially or fully). Provide infeasibility and partial feasibility justifications in Table 4, Part 1. Also describe in Table 4, Part 1 any proposed sources and/or BMPs not listed in Table 3.

If requested, complete and submit a **Source Control BMP Worksheet (Attachment 3)**.

Table 3: Temporary Construction Phase BMPs

Complete **Table 3** to document which BMPs will be implemented for each construction activity on the site. For each applicable activity, all BMPs listed must be fully implemented *where applicable and feasible*. Provide justifications for not fully implementing BMPs in Table 4, Part 2.

Table 4: Required Explanations

Use **Table 4** to provide justifications for Table 1, 2, and 3 BMPs as shown below.

Feature or Activity	Mandatory Justification	Justify if Requested
<ul style="list-style-type: none"> • Table 1 and 2 Site Features & Sources • Table 3 Construction Activities 	Any feature or activity for which NO BMPs are selected (you must explain why all BMPs are infeasible)	Individual BMPs that will either not be implemented, or will only be partially implemented

Table 5: Construction Plan Set Requirements

Complete **Table 5** to verify that the construction plans incorporate all applicable site features, activities, and BMPs identified in this SWQMP (**Tables 1, 2, and 3**).

Table 1 – Baseline BMPs for Existing and Proposed Site Features

Site Features Select each feature that applies.	BMP Implementation Describe BMP implementation for each selected site feature.							
Group 1: Existing Natural Site Features [See BMPDM Sections 4.3.1 and 4.3.2]								
	Maintain & conserve natural features (SD-G)		Establish buffers for waterbodies (SD-H)					
	Full	Partial	Full	Partial				
<input checked="" type="checkbox"/> Natural waterbodies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
<input checked="" type="checkbox"/> Natural storage reservoirs & drainage corridors	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
<input checked="" type="checkbox"/> Natural areas, soils, & vegetation (incl. trees)	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Group 2: Common Impervious Outdoor Site Features [See BMPDM Sections 4.3.3 and 4.3.5]								
	Disperse impervious areas (SD-B)		Use permeable materials (SD-D)		Minimize impervious areas (SD-I)			
	Full	Partial	Full	Partial	<input type="checkbox"/> Check here to confirm that impervious surfaces have been minimized where applicable and feasible for all outdoor impervious areas. If not, explain in Table 4.			
<input checked="" type="checkbox"/> Streets and roads	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Sidewalks & walkways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Parking areas & lots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input checked="" type="checkbox"/> Driveways	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Patios, decks, & courtyards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Hardcourt recreation areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Group 3: Other Outdoor Site Features [See BMPDM Sections 4.2.6, 4.3.4, 4.3.5, 4.3.7, and 4.3.8]								
<input checked="" type="checkbox"/> Rooftop areas	Disperse rooftop runoff (SD-B)		Install green roofs (optional; SD-C)		Use rain barrels to capture runoff (optional; SD-E)			
	Full	Partial	Full	Partial	Full Partial			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			
<input checked="" type="checkbox"/> Landscaped areas	Use water-efficient landscaping (SD-J)		Install efficient irrigation systems (SD-K)		Minimize erosion of slopes and surfaces (SD-L)			
	Full	Partial	Full	Partial	Full Partial			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>			
<input type="checkbox"/> Water features (pools, spas, etc.)	Provide a designated washing area (SC-A)		Drain feature to the sanitary sewer (if allowed) (SC-B)		Drain feature to a stormwater BMP (SC-C)			
	Full	Partial	Full	Partial	Full Partial			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			

Note: Table 4 justifications are required for any feature not selecting at least one BMP (either full or partial implementation). For Group 2 features this means not selecting either SD-B or SD-D. Additional justifications may be required on request by County staff. Also use Table 4 to describe sources or BMPs other than those listed.

Table 2 – Baseline BMPs for Pollutant-generating Sources (Group 4)

<p>A. Requirements for Documentation Select either or both as applicable.</p>	<p>Completion of Part B is <u>not</u> required because: <input type="checkbox"/> This is a Small Residential Project, OR <input type="checkbox"/> None of these sources or features are proposed.</p>								<p><input type="checkbox"/> Source Control BMP Requirements Worksheet E.1-1 (SC in Appendix E of the BMP Design Manual) is included as Attachment 3 (optional unless requested by County staff).</p>
<p>B. Sources and BMPs Select all proposed sources and features below. Then select the BMPs on the right to be implemented for each.</p>	<p>SC-B Plumb to sanitary sewer</p>	<p>SC-C Drain feature to a pervious area</p>	<p>SC-D Provide containment for spills and discharges</p>	<p>SC-E Prevent contact with rainfall</p>	<p>SC-F Isolate flows from adjacent areas</p>	<p>SC-G Prevent wind dispersal</p>	<p>SC-H Label with stencils or signs</p>		
<p>Common Source Areas</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---		
<p><input type="checkbox"/> Trash & Refuse Storage</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---		
<p><input type="checkbox"/> Materials & Equipment Storage</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---		
<p><input type="checkbox"/> Loading & Unloading</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---		
<p><input type="checkbox"/> Fueling</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---		
<p><input checked="" type="checkbox"/> Maintenance & Repair</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---		
<p><input type="checkbox"/> Vehicle & Equipment Cleaning</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---		
<p><input type="checkbox"/> Food Preparation or Service</p>	<input type="checkbox"/>	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---		
<p>Distributed Features</p>	---	---	---	---	---	---	<input type="checkbox"/>		
<p><input type="checkbox"/> Storm drain inlets & catch basins</p>	<input type="checkbox"/>	---	---	---	---	---	---		
<p><input type="checkbox"/> Interior floor drains and sumps</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---	---	---		
<p><input type="checkbox"/> Drain lines (air conditioning, etc.)</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---	---	---		
<p><input type="checkbox"/> Fire test sprinkler discharges</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	---	---	---	---		

Provide the following in Table 4, Part 1: (1) justification of any source area or feature with NO BMPs selected, (2) justification of individual unselected BMPs if requested by County staff, and (3) identification of any proposed pollutant-generating sources and BMPs not listed here.

Note: Pollutant-generating sources and features may not discharge directly to the MS4.

Table 3 –Minimum Construction Stormwater BMPs

Minimum Required BMPs by Activity Type Select all applicable activities and at least one BMP for each	References	
	Caltrans ¹	County of San Diego
<input checked="" type="checkbox"/> Erosion Control for Disturbed Slopes (choose at least 1 per season) <ul style="list-style-type: none"> <input type="checkbox"/> Vegetation Stabilization Planting² (Summer) <input checked="" type="checkbox"/> Hydraulic Stabilization Hydroseeding⁶ (Summer) <input type="checkbox"/> Bonded Fiber Matrix or Stabilized Fiber Matrix³ (Winter) <input type="checkbox"/> Physical Stabilization Erosion Control Blanket⁷ (Winter) 	SS-2, SS-4 SS-4 SS-3 SS-7	
<input checked="" type="checkbox"/> Erosion control for disturbed flat areas (slope < 5%) <ul style="list-style-type: none"> <input type="checkbox"/> County Standard Lot Perimeter Protection Detail <input checked="" type="checkbox"/> Use of Item A erosion control measures on flat areas <input type="checkbox"/> County Standard Desilting Basin (must treat all site runoff) <input type="checkbox"/> Mulch, straw, wood chips, soil application 	SC-2 SS-3, SS-4, SS-7 SC-2 SS-6, SS-8	PDS 659 ⁴ PDS 660 ⁵
<input type="checkbox"/> Energy dissipation (required to control velocity for concentrated runoff or dewatering discharge) <ul style="list-style-type: none"> <input type="checkbox"/> Energy Dissipater Outlet Protection 	SS-10	RSD D-40 ⁶
<input checked="" type="checkbox"/> Sediment control for all disturbed areas <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Silt Fence <input checked="" type="checkbox"/> Fiber Rolls (Straw Wattles) <input type="checkbox"/> Gravel & Sand Bags <input type="checkbox"/> Dewatering Filtration <input type="checkbox"/> Storm Drain Inlet Protection <input type="checkbox"/> Engineered Desilting Basin (sized for 10-year flow) 	SC-1 SC-5 SC-6, SC-8 NS-2 SC-10 SC-2	
<input checked="" type="checkbox"/> Preventing offsite tracking of sediment <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Construction Road Stabilization <input type="checkbox"/> Entrance/Exit Tire Wash <input type="checkbox"/> Entrance/Exit Inspection & Cleaning Facility <input checked="" type="checkbox"/> Street Sweeping and Vacuuming 	TC-1 TC-2 TC-3 TC-1 SC-7	
<input checked="" type="checkbox"/> Materials Management <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Material Delivery & Storage <input checked="" type="checkbox"/> Spill Prevention and Control 	WM-1 WM-4	
<input checked="" type="checkbox"/> Waste Management⁷ <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Waste Management Concrete Waste Management <input checked="" type="checkbox"/> Solid Waste Management <input checked="" type="checkbox"/> Sanitary Waste Management <input type="checkbox"/> Hazardous Waste Management 	WM-8 WM-5 WM-9 WM-6	

¹ See Caltrans 2017 Storm Water Quality Handbooks, Construction Site BMP Manual, available at:

(<http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>)

² Planting or Hydroseeding may be installed between May 1st and August 15th. Slope irrigation must be in place and operable for slopes >3 feet. Vegetation must be watered and established prior to October 1st. A contingency physical BMP must be implemented by August 15th if vegetation is not established by that date. If landscaping is proposed, erosion control measures must also be used while landscaping is being established. Established vegetation must have a subsurface mat of intertwined mature roots with a uniform vegetative coverage of 70 percent of the natural vegetative coverage or more on all disturbed areas.

³ All slopes over three feet must have established vegetative cover prior to final permit approval.

⁴ County PDS 659. Standard Lot Perimeter Protection Design System (Bldg. Division)

⁵ County PDS 660. County Standard Desilting Basin for Disturbed Areas of 1 Acre or Less Bldg. Division

⁶ Regional Standard Drawing D-40 – Rip Rap Energy Dissipater (also acceptable for velocity reduction)

⁷ Applicants are responsible to apply appropriate BMPs for specific wastes (e.g., BMP WM-8 for concrete).

Table 4 – Required Explanations

Part 1: Permanent Post-construction BMPs (from Tables 1 and 2)		
<ul style="list-style-type: none"> • Required Justifications: If NO BMPs are selected for a source or feature, justify why <u>all</u> BMPs are either not applicable or are infeasible. For Group 2 features NO BMPs means not selecting either SD-B or SD-D. • If Requested: Justify why individual BMPs will not be implemented or will only be partially implemented. • Additional Explanation: Describe any proposed features and/or BMPs not listed in Tables 1 or 2. 		
BMP-Feature Combination	Explanation	
Feature	Energy Dissipation	Energy dissipation will be proposed for the concentrated flow at the swales located around the switchyard and substation.
BMP	Energy Dissipation Outlet Protection	
Feature	Stabilization Seeding	Stabilization Seeding will be used in the Winter months.
BMP		
Feature	Maintenance & Repair	No BMP was selected since deionized water will be used to wash panels.
BMP		
Part 2: Justifications for Temporary Construction Phase BMPs (from Table 3)		
<ul style="list-style-type: none"> • Required Justifications: Justify all construction activity types for which NO BMPs were selected. • If Requested: Justify why specific individual BMPs were not selected. • Additional Explanation: Describe any proposed features and/or BMPs not listed in Table 3. 		
BMP-Activity Combination	Explanation	
Activity Type	Energy Dissipation	No construction activity types for energy dissipation were selected because the temporary site modifications are not proposing to concentrate stormwater during construction.
BMP	Energy Dissipation Outlet Protection	
Activity Type	Stockpile Management & Vehicle and Equipment maintenance	Stockpile management will be used to minimize or eliminate the potential of air and stormwater pollution from stockpile of materials. NS-10 standards will be used to minimize or eliminate the potential discharge of pollutants from vehicles and equipment that is to be maintained and stored on site during the construction period.
BMP	WM-3 & NS-10	

Table 5 – Construction Plan Set Requirements⁸

Use this checklist to confirm that the required information is included on the construction plans.
<input checked="" type="checkbox"/> Include all source control and site design measures described in the SWQMP.
<input checked="" type="checkbox"/> Include all construction BMPs described in the SWQMP.

⁸ For Building Permit Applications, refer to Form PDS 272, <https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/pds272.pdf>



County of San Diego
 Stormwater Quality Management Plan (SWQMP)
Attachment 1: Storm Water Intake Form for All Permit Applications

This form establishes Stormwater Quality Management Plan (SWQMP) requirements for Development Projects per Sections 67.809 and 67.811 of the County of San Diego Watershed Protection Ordinance (WPO). See **Storm Water Intake Form Instructions** for additional guidance and explanation of terms.

Part 1. Project Information			
Project Name:			
Record ID (Permit) No(s):			
Assessor's Parcel No(s):			
Street Address (or Intersection):			
City, State, Zip:			
Part 2. Applicant / Project Proponent Information			
Name:			
Company:			
Street Address:			
City, State, Zip:			
Phone Number:			
Email:			
Part 3. Required Information for All Development Projects			
(A)	1. Existing (pre-development) impervious surfaces (ft²)	2. Created or replaced impervious surfaces (ft²)	3. Total disturbed area (acres or ft²)
(B)	<input type="checkbox"/> Check here and provide a WDID# if this project is subject to the California Construction General Permit (Order No. 2009-0009-DWQ) ¹		WDID # (if issued)

<i>For County Use Only</i>	Reviewed By:	Review Date:
<input type="checkbox"/> Standard SWQMP	<input type="checkbox"/> PDP SWQMP	<input type="checkbox"/> Green Streets PDP Exemption SWQMP

¹ Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html

Part 4. Priority Classification & SWQMP Form Selection**(A) If your project is the following ... (select one)****(B) You must complete ...** **Standard Project****→ Standard SWQMP Form**

- a. Project is East of the Pacific/Salton Sea Divide
- b. None of the PDP criteria below applies

 Priority Development Project (PDP)**→ PDP SWQMP Form**

1. Project is part of an existing PDP, OR
2. Project does any of the following:
- a. Creates or replaces a total of 10,000 ft² or more of impervious surface
 - b. Creates or replaces a combined total of 5,000 ft² or more of impervious surface within one or more of the following uses: (1) parking lots; (2) streets, roads, highways, freeways, and/or driveways; (3) restaurants; and (4) hillsides
 - c. Creates or replaces a combined total of 5,000 ft² or more of impervious surface within one or more of the following uses: (1) automotive repair shops; and (2) retail gasoline outlets
 - d. Discharges directly to an Environmentally Sensitive Area (ESA) AND creates or replaces 2,500 ft² or more of impervious surface
 - e. Disturbs one or more acres of land (43,560 ft²) and is expected to generate pollutants post-construction
 - f. Is a redevelopment project that creates or replaces 5,000 ft² or more of impervious surface on a site already having at least 10,000 ft² of impervious surface

 Green Streets PDP Exemption²**→ Green Streets PDP Exemption SWQMP Form****Part 5. Applicant Signature***I have reviewed the information in this form, and it is true and correct to the best of my knowledge.*

Applicant / Project Proponent Signature:



Date:

- **Upon completion** submit this form to the County.
- **If requested**, attach supporting documentation to justify selections made or exemptions claimed.
- **If this is a PDP that is part of a larger existing PDP**, you will be required to attach a copy of the existing SWQMP to the newer SWQMP submittal.

² **Green Streets PDP Exemption Projects** are those claiming exemption from PDP classification per WPO Section 67.811(b)(2) because they consist exclusively of *either* 1) development of new sidewalks, bike lanes, and/or trails; *or* 2) improvements to existing roads, sidewalks, bike lanes, and/or trails.

Waste Discharge Identification Number (WDID#)

All projects subject to the Construction General Permit must obtain a WDID# from the SWRCB.

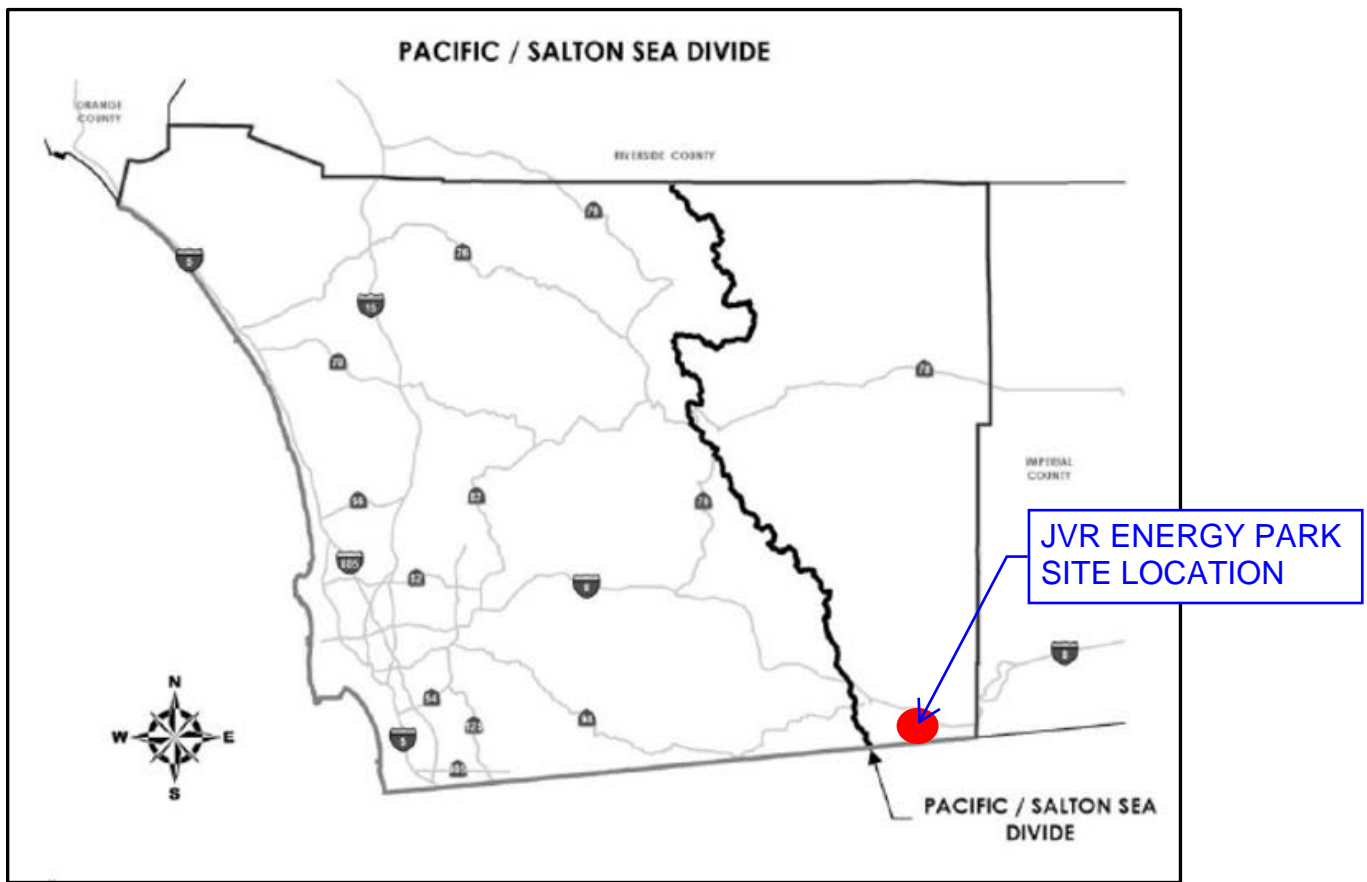
- Include the WDID# in the space provided if it is known at the time of Stormwater Intake Form completion.
- If a WDID# has not yet been issued, indicate this in the box.
- The WDID# will also later be required on construction plan sheets.

Part 4. Priority Classification and SWQMP Form Selection

Select one of the three possible choices for priority classifications listed on the far left-hand side of the page.

Standard Projects

- **A project is a Standard Project if it is located east of the Pacific/Salton Sea Divide.**
Determine your project location by placing its approximate location on the map below. If the project is located to the right of the Pacific/Salton Sea Divide (the thick line), it is a Standard Project.

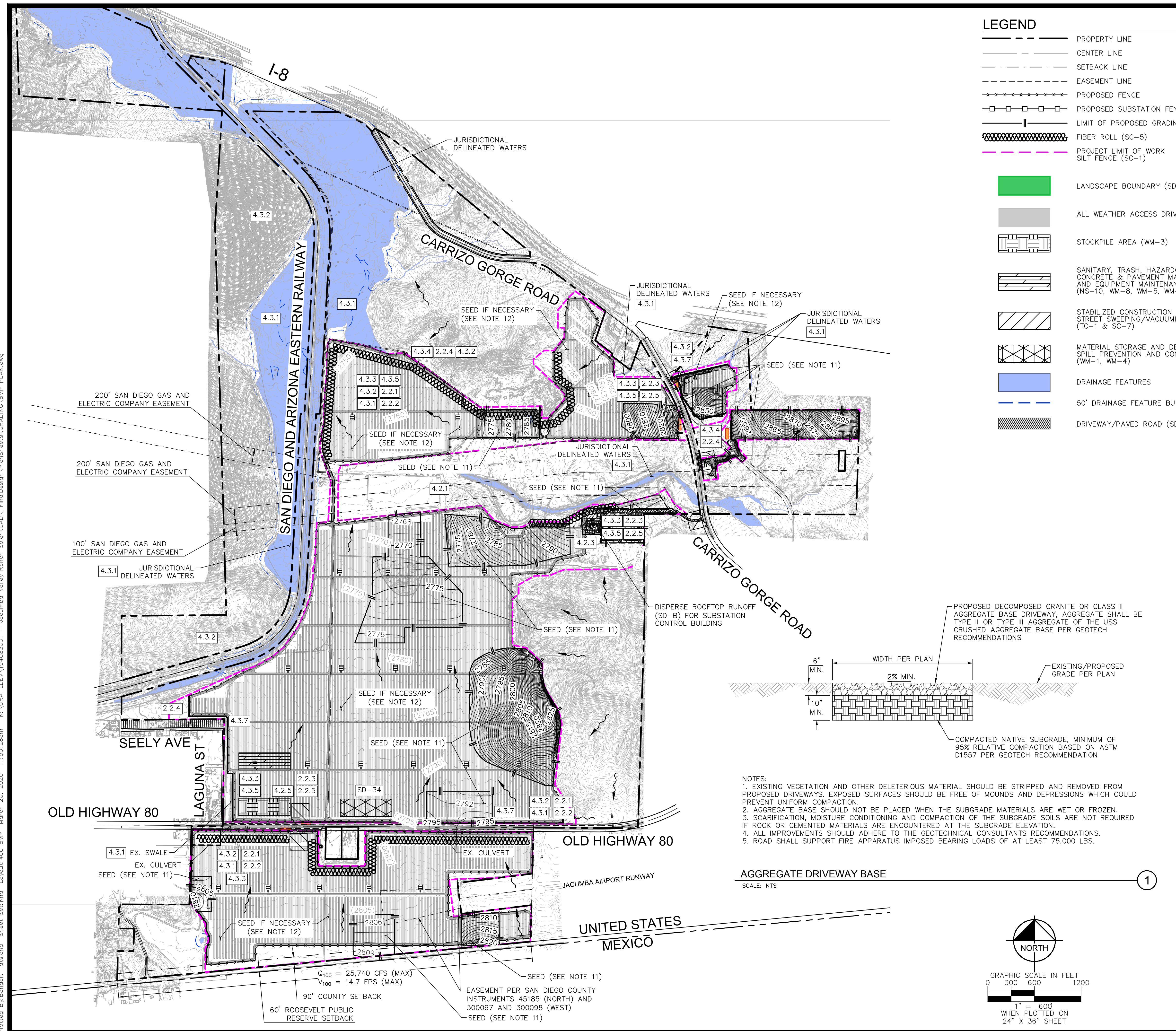


- **If the project is NOT located east of the Pacific/Salton Sea Divide**, evaluate the remaining criteria described below for Priority Development Projects (PDPs) and/or Green Streets PDP Exemption Projects. If none of these criteria apply, it is a Standard Project.

If this is a **Standard Project**...

 Complete a **Standard SWQMP Form** available on the County Development Resources Page at:

 <https://www.sandiegocounty.gov/dpw/watersheds/DevelopmentandConstruction.html>



LEGEND

- PROPERTY LINE
- CENTER LINE
- SETBACK LINE
- EASEMENT LINE
- PROPOSED FENCE
- PROPOSED SUBSTATION FENCE
- LIMIT OF PROPOSED GRADING
- FIBER ROLL (SC-5)
- PROJECT LIMIT OF WORK SILT FENCE (SC-1)
- LANDSCAPE BOUNDARY (SD-J AND SD-K)
- ALL WEATHER ACCESS DRIVE (SD-B)
- STOCKPILE AREA (WM-3)
- SANITARY, TRASH, HAZARDOUS MATERIAL, AND CONCRETE & PAVEMENT MANAGEMENT, VEHICLE AND EQUIPMENT MAINTENANCE AREA (NS-10, WM-8, WM-5, WM-9)
- STABILIZED CONSTRUCTION ENTRANCE AND STREET SWEEPING/VACUUMING (TC-1 & SC-7)
- MATERIAL STORAGE AND DELIVERY AREA AND SPILL PREVENTION AND CONTROL (WM-1, WM-4)
- DRAINAGE FEATURES
- 50' DRAINAGE FEATURE BUFFER
- DRIVEWAY/PAVED ROAD (SD-B)

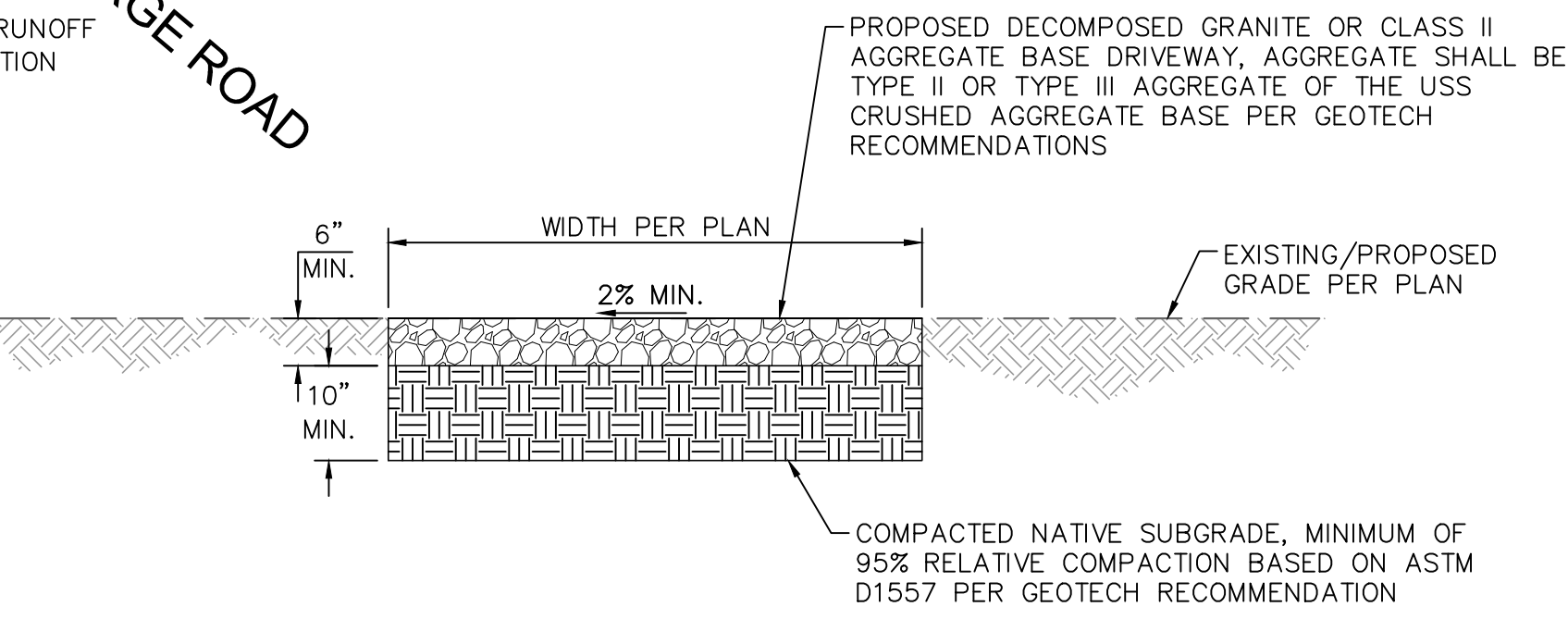
- ### NOTES
- GROSS (PROPERTY) AREA: 1,355.84 ACRES
 - MUP BOUNDARY ("DEVELOPED") AREA: 643± ACRES
 - FENCED AREA (INCLUDES PROJECT COLLECTOR SUBSTATION AND SWITCHYARD): 573.45± ACRES
 - GENERAL PLAN: SPECIFIC PLAN AREA
 - REGIONAL CATEGORY: MOUNTAIN EMPIRE SUBREGIONAL PLAN
 - TOPOGRAPHIC SOURCE: KIMLEY-HORN FIELD SURVEY COMPLETED 8/8/2018
 - THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.
 - ALL DISTURBED AREAS SHALL BE COVERED WITH ORGANIC MULCH OR APPROVED EQUAL TO REDUCE DUST, SEEDED, AND WATERED REGULARLY DURING CONSTRUCTION.
 - PILE DRIVING OPERATIONS: IN ORDER TO LIMIT TEMPORARY CONSTRUCTION NOISE, ALL PILE DRIVING OPERATIONS SHALL BE LOCATED A MINIMUM SETBACK OF 215 FEET FROM ANY OCCUPIED RESIDENTIAL PROPERTY LINE. IF PILE DRIVING OPERATIONS ARE TO OCCUR WITHIN 215 FEET, THEN THESE OPERATIONS SHALL BE LIMITED TO OPERATE 25% OF THE HOURLY OR DAILY DURATION.
 - EXISTING STORM DRAIN PIPES TO BE RESTORED OR REPLACED IF NECESSARY.
 - ALL AREAS BEING CLEARED AND GRUBBED SHALL BE SEEDED WITH HYDRAULIC STABILIZATION SEEDING DURING THE SUMMER AND WINTER PER 2017 CALTRANS STANDARD (OR LATEST) CONSTRUCTION SITE BMP MANUAL.
 - IF AREAS BEING CLEARED AND NOT GRUBBED DO NOT SHOW SIGNS OF VEGETATIVE GROWTH IN A TIMELY MANNER, CONTRACTOR SHOULD SEED AS NEEDED TO ACHIEVE STABILIZATION.
 - ALL DISTURBED FLAT AREAS (SLOPES < 5%) SHALL USE ITEM A EROSION CONTROL MEASURES (SS-3, SS-4, SS-7).

- ### SUMMARY OF LID/SITE DESIGN BMPs
- PER SAN DIEGO COUNTY STORMWATER BEST MANAGEMENT PRACTICES REFERENCE GUIDE
- 2.2.1 CONSERVATION OF NATURAL DRAINAGES AND SIGNIFICANT VEGETATION
 - 2.2.2 MINIMIZE DISTURBANCES TO NATURAL DRAINAGES
 - 2.2.3 MINIMIZE & DISCONNECT IMPERVIOUS SURFACES
 - 2.2.4 MINIMIZE SOIL COMPACTION
 - 2.2.5 DRAIN RUNOFF FROM IMPERVIOUS SURFACES TO PERVIOUS AREAS
 - 4.2.3 PERMEABLE PAVEMENT DESIGN AT SUBSTATION (GRAVEL YARD)
 - 3.1.3 LID ONSITE ACCESS ROADS (OMITTED FOR CLARITY)
 - 4.2.1 PREVENTION OF ILLICIT DISCHARGES INTO THE MS4
 - 4.2.5 PROTECT TRASH STORAGE AREAS FROM RAINFALL, RUN-ON, RUNOFF, AND WIND DISPERSAL
 - 4.3.1 MAINTAIN NATURAL DRAINAGE PATHWAYS AND HYDROLOGIC FEATURES
 - 4.3.2 CONSERVE NATURAL AREAS, SOILS, AND VEGETATION
 - 4.3.3 MINIMIZE IMPERVIOUS AREA
 - 4.3.4 MINIMIZE SOIL COMPACTION
 - 4.3.5 IMPERVIOUS AREA DISPERSION
 - 4.3.7 LANDSCAPING WITH NATIVE OR DROUGHT TOLERANT SPECIES

- ### SUMMARY OF SOURCE CONTROL BMPs
- SD-34 PROPER DESIGN OF OUTDOOR MATERIAL STORAGE AREAS

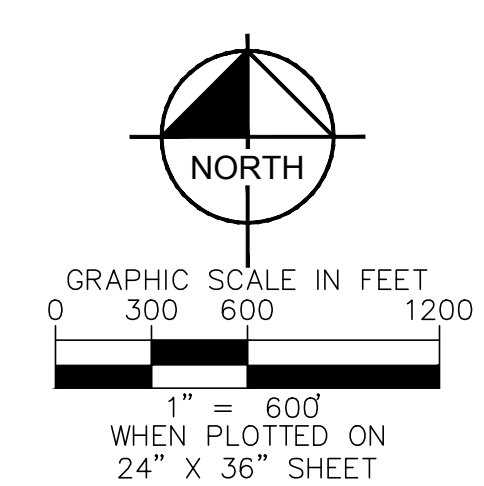
IMPERVIOUS SURFACES

ITEM	AREA (SF)
PILES	
PV TRACKERS	708 SF
INVERTER SKIDS	8 SF
BATTERY STORAGE CONTAINERS	75,124 SF
SUBSTATION (WITHIN FENCED AREA)	23,150 SF
SWITCHYARD (WITHIN FENCED AREA)	133,004 SF
AC DRIVEWAYS/PUBLIC IMPROVEMENTS	55,643 SF
TOTAL	287,637 SF



- ### NOTES:
- EXISTING VEGETATION AND OTHER DELETERIOUS MATERIAL SHOULD BE STRIPPED AND REMOVED FROM PROPOSED DRIVEWAYS. EXPOSED SURFACES SHOULD BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
 - AGGREGATE BASE SHOULD NOT BE PLACED WHEN THE SUBGRADE MATERIALS ARE WET OR FROZEN.
 - SCARIFICATION, MOISTURE CONDITIONING AND COMPACTION OF THE SUBGRADE SOILS ARE NOT REQUIRED IF ROCK OR CEMENTED MATERIALS ARE ENCOUNTERED AT THE SUBGRADE ELEVATION.
 - ALL IMPROVEMENTS SHOULD ADHERE TO THE GEOTECHNICAL CONSULTANTS RECOMMENDATIONS.
 - ROAD SHALL SUPPORT FIRE APPARATUS IMPOSED BEARING LOADS OF AT LEAST 75,000 LBS.

AGGREGATE DRIVEWAY BASE
SCALE: NTS



400 - BMP PLAN		
COUNTY APPROVED CHANGES		PRIVATE CONTRACT
DESCRIPTION:	APPROVED BY:	DATE:
SHEET 4		COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 13 SHEETS
GRADING PLAN FOR: JVR ENERGY PARK		
CALIFORNIA COORDINATE INDEX SYSTEM 83, ZONE 6, NAD83 EPOCH 2010.00		
APPROVED FOR WILLIAM P. MORGAN, COUNTY ENGINEER	ENGINEER OF WORK: DAVID M. BOSSU (78103) R.C.E.	
PURPOSE OF GRADING: PREPARE THE SITE FOR PV SOLAR FACILITY WITH SAT RACKING, BATTERIES, SUBSTATIONS, ETC.		
GRADING PERMIT NO.: PDS2019-LDGRMJ-30240		

Plotted By: Boudier, Tolosano, Sheet Set: 190a, Layout: 400 - BMP, March 20, 2020, 11:50:26am, K:\VPEA_LDEV\194083001 - Jacumba Valley Ranch Solar CAD - Final Design\Plan Sheets\Grading\BMP_PLAN.dwg

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