Hallmark-Barham Specific Plan EIR Technical Appendices

Appendix E.4

Jurisdictional Findings

Memorandum

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Date: May 27, 2020

To: Ms. Mariana McGrain

Hallmark Communities, Inc.

740 Lomas Santa Fe Drive, Suite 204

Solana Beach, CA 92075

From: Stacy Nigro

Subject: Jurisdictional Findings for 943 Barham Drive Project Site, San Marcos, CA

HELIX Proj. No.: HMC-16

Message: Dear Ms. McGrain,

This memo summarizes the jurisdictional findings from field work conducted on the property located at 943 Barham Drive, San Marcos, California.

Methods

HELIX Environmental Planning, Inc. (HELIX) biologists Stacy Nigro and Jason Kurnow conducted a site visit on April 24, 2020 to assess the property for potential wetland habitats that could be potentially subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA, and/or habitats regulated by the California Department of Fish and Wildlife (CDFW) pursuant to Section 1600 of the California Fish and Game Code.

Prior to beginning fieldwork, aerial imagery (Google Earth), the local soil survey, and National Wetland Inventory (U.S. Fish and Wildlife Service 2020) and U.S. Geological Survey quadrangle maps were reviewed to determine the location of potential jurisdictional areas within the project site.

Plants were identified according to The Jepson Manual: Vascular Plants of California (Baldwin et al. [2012]). Wetland affiliations of plant species follow the National Wetland Plant List (Lichvar et al. 2016). Soils information was taken from the U.S. Department of Agriculture's (USDA's) Web Soil Survey (2020) and USDA Hydric Soil Lists (1992). Soil colors were identified according to Munsell's Soil Color Charts (Kollmorgen 1994).

Potential USACE and RWQCB wetlands were determined using three criteria (vegetation, hydrology, and soils) established for wetland delineations as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Arid West Regional Supplement (USACE 2008). Potential CDFW wetlands were determined based on the presence of riparian vegetation or a stream.

Memorandum (cont.)

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Four sampling points were studied, and soil pits were excavated at each of these locations. Photographs taken of the sampling points are included in Attachment A. Standard USACE wetland determination data forms were completed for each sampling point in the field, and are included in Attachment B.

Results

None of the four sampling points were determined to be wetland. The results for each sampling point are summarized below and further details can be found in Attachment B. Normal circumstances were present and neither vegetation, soil, or hydrology were significantly disturbed or naturally problematic. In addition, soil map units on site are not on the USDA Hydric Soils List and the National Wetlands Inventory does not show any features on the site.

Sampling Point 1A

Sampling Point 1A was taken in a low area of non-native grassland in the central portion of the site. Ripgut grass (*Bromus diandrus*), an upland species, was the dominant species present, thus the hydrophytic vegetation criterion was not met. A soil pit excavated to 19 inches did not reveal the presence of hydric soil indicators, thus the hydric soil criterion was not met. No secondary or primary indicators of wetland hydrology were observed; thus, the wetland hydrology criterion was not met. This sampling point did not meet any of the three wetland criteria for the USACE or RWQCB, nor is it a CDFW wetland or riparian habitat.

Sampling Point 1B

Sampling Point 1B was taken in non-native grassland in the central portion of the site, near to and upslope of Sampling Point 1A. Two upland species: ripgut grass and oats (*Avena* sp.), were the dominant species present, thus the hydrophytic vegetation criterion was not met. A soil pit excavated to 18 inches did not reveal the presence of hydric soil indicators, thus the hydric soil criterion was not met. No secondary or primary indicators of wetland hydrology were observed; thus, the wetland hydrology criterion was not met. This sampling point did not meet any of the three wetland criteria for the USACE or RWQCB, nor is it a CDFW wetland or riparian habitat.

Sampling Point 2

Sampling Point 2 was taken in non-native grassland in the southern portion of the site. One upland species: rattail fescue (*Festuca myuros*), was the dominant species present, thus the hydrophytic vegetation criterion was not met. A soil pit excavated to 8 inches did not reveal the presence of hydric soil indicators, thus the hydric soil criterion was not met. Deeper excavation was precluded by the presence of an underlying rock layer. No secondary or primary indicators of wetland hydrology were observed; thus, the wetland hydrology criterion was not met. This sampling point did not meet any of the three wetland criteria for the USACE or RWQCB, nor is it a CDFW wetland or riparian habitat.

Memorandum (cont.)

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Sampling Point 3

Sampling Point 3 was taken in non-native grassland in the central portion of the site. One upland species (ripgut grass) and one wetland species (curly dock [Rumex crispus]) were the dominant species present, thus the hydrophytic vegetation criterion was not met as it failed both the dominance test and the prevalence index. While curly dock can occur in wetland habitat, it also is frequently observed in upland habitat, particularly in grassland. Curly dock is rated as a facultative (FAC) species, which has equal likelihood of occurring in an upland as it does in a wetland; it is not a strongly hydrophytic species. A soil pit excavated to 20 inches did not reveal the presence of hydric soil indicators, thus the hydric soil criterion was not met. No secondary or primary indicators of wetland hydrology were observed; thus, the wetland hydrology criterion was not met. This sampling point did not meet any of the three wetland criteria for the USACE or RWQCB, nor is it a CDFW wetland or riparian habitat.

In summary, all sampling points were determined to be upland, wetlands were not observed on the project site.

If you have any questions about the content of this memo, please call me at 760-517-9054 or 619-462-1515.

Sincerely,

Stacy Nigro Principal Biologist

Enclosures

Figure 1 Sampling Point Locations Attachment A Sampling Point Photos

Attachment B Wetland Determination Data Forms

Memorandum (cont.)

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References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.
- Kollmorgen Instruments Corporation (Kollmorgen). 1994. Munsell Soil Color Charts, Revised edition. Baltimore, MD.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 Wetland Ratings. Phytoneuron 2016-30: 1–17. Published 28 April. Retrieved from: http://wetland_plants.usace.army.mil/
- U.S. Army Corps of Engineers (USACE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture (USDA). 2020. Natural Resource Agency. Web Soil Survey. Retrieved from: http://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx
 - 1992. Field Office Official List of Hydric Soil Map Units for San Diego Area, California.
- U.S. Fish and Wildlife Service. 2020. National Wetlands Inventory. April 23. Available at https://www.fws.gov/wetlands/data/mapper.html.



Attachment A

Sampling Point Photos



Photo 1. Looking north at Sampling Point (SP-) 1A taken April 24, 2020 in the central portion of the site. SP-1A is in a low area within non-native grassland; it did not meet USACE, RWQCB, or CDFW wetland criteria.



Photo 2. Looking north at SP-1B taken April 24, 2020 in the central portion of the site. SP-1B is near SP-1A but located slightly upslope and to the east. This SP is non-native grassland; it did not meet USACE, RWQCB, or CDFW wetland criteria.



Photo 3. Looking north at SP-2 taken April 24, 2020 in the southern portion of the site. SP-2 is located on a north-facing slope in non-native grassland. This SP did not meet USACE, RWQCB, or CDFW wetland criteria.

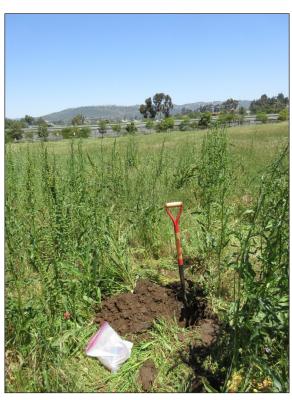


Photo 4. Looking north at SP-3 taken April 24, 2020 in the central portion of the site. SP-3 is in a low area of non-native grassland habitat; it did not meet USACE, RWQCB, or CDFW wetland criteria.

Attachment B

Wetland Determination Data Forms

Project/Site: 943 E Barham Dr - JO# HMC-16		City/C	ounty	: San Marc	cos/San Diego	San	npling Date	: 4/24	1/2020
Applicant/Owner:					State: C	:A Sam	npling Poin	t:	1A
Investigator(s): S. Nigro/J. Kurnow		Section	n, To	wnship, Rar	nge: <u>18/12S/2W</u>	San Marc	os quadra	angle	
Landform (hillslope, terrace, etc.): low spot		Local	relief	(concave, o	convex, none): slig	htly conca	ave S	lope (%)	: 0
Subregion (LRR): C	Lat: 33.	1358	4546	84	Long: -117.138	713486	Da	tum: W0	SS 1984
Soil Map Unit Name: VsC - Vista coarse sandy loam, 5									
Are climatic / hydrologic conditions on the site typical for th									
Are Vegetation, Soil, or Hydrology	-				Normal Circumstar			✓ N	lo
Are Vegetation, Soil, or Hydrology					eded, explain any				
SUMMARY OF FINDINGS – Attach site map									s. etc.
			•	<u> </u>					
Hydrophytic Vegetation Present? Yes I Hydric Soil Present? Yes I	No <u>▼</u>			e Sampled			,		
Wetland Hydrology Present? Yes	No ✓		with	in a Wetlan	ıd? Yes	·	No <u>√</u>		
Remarks:									
SP taken in low area in non-native grassland at bottom of 2 copotentially contribute runoff to this area. In addition, the area VEGETATION – Use scientific names of plan	received muc				•				eria.
VEGETATION - Ose scientific flames of plan	Absolute	Don	inant	Indicator	Dominance Tes	t workshoo	.4.		
Tree Stratum (Plot size:r=25')	% Cover				Number of Domin				
1					That Are OBL, F			0	(A)
2					Total Number of	Dominant			
3					Species Across A			1	(B)
4					Percent of Domir	nant Specie	s		
Sapling/Shrub Stratum (Plot size: r=25')	0	_ = To	tal Co	ver	That Are OBL, F	ACW, or FA	.C:	0	(A/B)
1					Prevalence Inde	x workshe	et:		
2.					Total % Cov	er of:	Mult	iply by:	
3					OBL species	0	_ x 1 =	0	
4					FACW species	0	x 2 =	0	_
5					FAC species				
Herb Stratum (Plot size: r=8')	0	_ = To	tal Co	ver	FACU species				_
1. Bromus diandrus	70	,	X	UPL	· -	102		510	_ (5)
2. Avena sp.				UPL	Column Totals:	115	_ (A)	560	(B)
3. Hordeum murinum				FACU	Prevalence	Index = B/	'A =	4.9	_
4. Carduus pycnocephalus	5			UPL	Hydrophytic Ve	getation In	dicators:		
5. Anagallis arvensis	5			UPL	Dominance				
6. Rumex crispus	_ 2			FAC	Prevalence I				
7. Brassica nigra				UPL	Morphologic	al Adaptatio emarks or o	ons¹ (Provid	de suppo	rting
8. <u>Lactuca serriola</u>	1			FACU	Problematic				
Woody Vine Stratum (Plot size: r=25')	115	_ = To	tal Co	ver		,		(=,,pic	····•,
1					¹ Indicators of hyd	ric soil and	wetland hy	drology	must
2					be present, unles	s disturbed	or problen	natic.	
	0	= To	tal Co	ver	Hydrophytic				
% Bare Ground in Herb Stratum0 % Cove	er of Biotic C	rust	٢)	Vegetation Present?	Yes	No	✓	
Remarks:	o. o. biolic o			·	. 10061111	.63			
		1		l	:		d = = - ·		_
Upland vegetation is dominant. Sampling suitable for wetland) supporting a few Ru	•					•			n

vegetation (= non-native [annual] grassland) and does not support a dominance of hydrophytic vegetation.

US Army Corps of Engineers

Arid West – Version 2.0

SOIL Sampling Point: 1A

(inches)	Matrix			Features			_	
(IIICIIC3)	Color (moist)	<u> %</u> C	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-5	10YR 2/2	<u> 100 - </u>					clay loam	moist
5-19	10YR 3/3	100 -		-			clay loam	moist + saturated in lower part
	oncentration, D=De					ed Sand G		cation: PL=Pore Lining, M=Matrix.
-	Indicators: (Appl				ed.)			for Problematic Hydric Soils ³ :
Histosol	` '		Sandy Redox	. ,				Muck (A9) (LRR C)
	oipedon (A2)		Stripped Mat		. (54)			Muck (A10) (LRR B)
	istic (A3)		Loamy Muck	-	. ,			ced Vertic (F18)
	en Sulfide (A4)	. 0)	Loamy Gleye		(F2)			Parent Material (TF2)
	d Layers (A5) (LRR	(C)	Depleted Mar		(FO)		Other	(Explain in Remarks)
	ick (A9) (LRR D)	(0.4.4)	Redox Dark S					
	d Below Dark Surfa	ice (ATT)	Depleted Dar				3Indicators	of hydrophytic vegetation and
	ark Surface (A12)	•	Redox Depre		-8)			of hydrophytic vegetation and
-	Mucky Mineral (S1)	•	Vernal Pools	(F9)				hydrology must be present,
	Bleyed Matrix (S4) Layer (if present):						uniess c	disturbed or problematic.
_								
								,
• •	ches):						Hydric Soil	Present? Yes No _✓
Depth (in Remarks:	ches):						Hydric Soil	I Present? Yes No _✓
Depth (in Remarks: No hydric s Observed p		sent.	-	oocket g	opher m	ound 5' f	1 -	I Present? Yes No <u>√</u>
Depth (in Remarks: No hydric s Observed p Photos 1-7	oil indicators pre	sent.	-	oocket g	opher m	ound 5' f	1 -	I Present? Yes No _√
Depth (in Remarks: No hydric s Observed p Photos 1-7	oil indicators pre	sent. worms in excav	-	oocket g	opher m	ound 5' f	1 -	I Present? Yes No <u>√</u>
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Depth (in Remarks: No hydric s Dbserved p Photos 1-7 YDROLO Wetland Hy Primary India Surface High Wa Saturatia Water N Sedimea Drift Dep Surface Inundati Water-S Field Obser Gurface Wat Water Table	ches):	sent. worms in excaves: cone required; chemical considerine) erine) I Imagery (B7) Yes No Yes No	eck all that apply Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Explant)	B11) (B12) ertebrate sulfide Oc nizospher f Reductio Surface (ain in Re nes):	s (B13) dor (C1) res along d Iron (C4 on in Tille C7) marks)	Living Roo 4) d Soils (Co	Secon pit. Secon	ndary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: No hydric s Observed per Photos 1-7 IYDROLO Wetland Hy Primary India Surface High Was Saturatia Water Mater Mater Surface Inundatia Water-S Field Obser Surface Water Table Saturation P (includes cap	ches):	sent. worms in excave s: one required; che erine) onriverine) erine) I Imagery (B7) Yes No _ Yes No _ Yes No _	eck all that apply Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) ertebrate culfide Oc nizospher f Reduce Reductic Surface (ain in Re nes):	s (B13) dor (C1) res along rd Iron (C4 on in Tille C7) marks)	Living Roo 4) d Soils (Co	Secondary Second	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (Castallow Aquitard (D3)
Depth (in Remarks: No hydric sobserved pohotos 1-7 YDROLO Wetland Hy Primary India Surface High Was Saturatia Water M Sedimel Drift Del Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cal	ches):	sent. worms in excave s: one required; che erine) onriverine) erine) I Imagery (B7) Yes No _ Yes No _ Yes No _	eck all that apply Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) ertebrate culfide Oc nizospher f Reduce Reductic Surface (ain in Re nes):	s (B13) dor (C1) res along rd Iron (C4 on in Tille C7) marks)	Living Roo 4) d Soils (Co	Secondary Second	ndary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: No hydric sobserved pohotos 1-7 YDROLO Wetland Hy Primary India Surface High Was Saturatia Water M Sedimel Drift Del Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cal	ches):	sent. worms in excave s: one required; che erine) onriverine) erine) I Imagery (B7) Yes No _ Yes No _ Yes No _	eck all that apply Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) ertebrate culfide Oc nizospher f Reduce Reductic Surface (ain in Re nes):	s (B13) dor (C1) res along rd Iron (C4 on in Tille C7) marks)	Living Roo 4) d Soils (Co	Secondary Second	ndary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: No hydric s Dbserved p Photos 1-7 YDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimel Drift Del Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P Cincludes cal Describe Re	ches):	sent. worms in excave serine) one required; che erine) I Imagery (B7) Yes No _ Yes No _ Yes No _ m gauge, monitor indicators observed	eck all that apply Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Explain Depth (inch Depth (inch	B11) (B12) ertebrate culfide Oc nizosphei f Reduce Reductic Surface (ain in Re nes): nes): _14 notos, pro	s (B13) dor (C1) res along d Iron (C4 on in Tille C7) marks) evious ins	Living Roo 4) d Soils (C6 ——————— Wetl spections),	Secon pit. Secon	ndary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: 943 E Barham Dr - JO# HMC-16	C	ity/County:	San Mar	cos/San Diego	Sampling Date:	1/24/2020
Applicant/Owner:				State: CA	Sampling Point:	1B
				nge: <u>18/12S/2W_San N</u>		
Landform (hillslope, terrace, etc.): just upslope of SP-1A				_		
Subregion (LRR): C						
Soil Map Unit Name: <u>VsC - Vista coarse sandy loam, 5-9</u>						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sig						_ No
Are Vegetation, Soil, or Hydrology na				eded, explain any answe		
SUMMARY OF FINDINGS – Attach site map s	howing s	sampling	g point l	ocations, transects	, important feat	ures, etc.
Hydrophytic Vegetation Present? Yes No	✓					
Hydric Soil Present? Yes No			e Sampled		No. of	
Wetland Hydrology Present? Yes No		withi	n a wetian	nd? Yes	No <u>√</u>	
Remarks:		•				
SP taken approximately 15' from SP-1A, in a	slightly h	igher la	ndscape	position. The area	received much	higher
than average rainfall in March and April. SP of	does not	meet w	etland cr	riteria.		_
VEGETATION – Use scientific names of plants	s.					
	Absolute	Dominant	Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:r=25')	% Cover	Species?	Status	Number of Dominant Sp	pecies	
1				That Are OBL, FACW, o	or FAC: 0	(A)
2				Total Number of Domin		
3				Species Across All Stra	ıta: <u>2</u>	(B)
4				Percent of Dominant Sp		
Sapling/Shrub Stratum (Plot size: r=25')	=	= Total Cov	/er	That Are OBL, FACW, o	or FAC:0_	(A/B)
1				Prevalence Index wor	ksheet:	
2				Total % Cover of:	Multiply b	ıy:
3				OBL species 0		
4				FACW species 0		
5				FAC species 0		
Herb Stratum (Plot size:r=8')	=	= Total Cov	/er	FACU species 1		
1. Bromus diandrus	80	Х	UPL	UPL species 114		
2. Avena sp.	25			Column Totals:11	<u>.5</u> (A) <u>57</u>	<u>74</u> (B)
3. Anagallis arvensis			UPL	Prevalence Index	= B/A = 5.0	
4. Carduus pycnocephalus			UPL	Hydrophytic Vegetation	on Indicators:	
5. Lactuca serriola	1		FACU	Dominance Test is	>50%	
6. Amsinckia intermedia	1		UPL	Prevalence Index is		
7				Morphological Adap	ptations¹ (Provide su s or on a separate sh	pporting
8				Problematic Hydro		
Woody Vine Stratum (Plot size:r=25')	115=	= Total Cov	/er	r robiematic riyaroj	priyate vegetation (E	xpiaiii)
1				¹ Indicators of hydric soi	I and wetland hydrolo	oav must
2				be present, unless distu		
		= Total Cov	/er	Hydrophytic		
% Bare Ground in Herb Stratum 0	of Riotic Cru	ıst Λ		Vegetation Present? Yes	s No_ <u>√</u>	
Remarks:	J. DIOGO OTO	.50		. 1000111: 16:	<u> </u>	
		·	17	1 1		
Area is dominated by upland vegetation (= I	non-nati	ve [anni	ual] gras	siand).		

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SOIL Sampling Point: 1B

Profile Desc	cription: (Describ	e to the depth				or confirn	n the absence	of indicators.)
Depth (inches)	Matrix			ox Features		1.5.2	T	Demonto
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-18	10YR 3/2	<u> 100 -</u>					<u>clay loam</u>	moist
¹ Type: C=Co	oncentration, D=De	epletion, RM=R	educed Matrix, C	S=Covered	l or Coate	d Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators: (Appl	icable to all LF	RRs, unless othe	rwise note	ed.)		Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red				1 cm l	Muck (A9) (LRR C)
-	oipedon (A2)		Stripped M					Muck (A10) (LRR B)
	stic (A3)		Loamy Mu					ced Vertic (F18)
	en Sulfide (A4)	- a'	Loamy Gle	-	(F2)			Parent Material (TF2)
	d Layers (A5) (LRF	R (C)	Depleted N	. ,	F6)		Other	(Explain in Remarks)
	ıck (A9) (LRR D) d Below Dark Surfa	ace (A11)	Redox Dar Depleted D	,				
	ark Surface (A12)	acc (ATT)	Redox Dep				3Indicators	of hydrophytic vegetation and
	Mucky Mineral (S1)	ı	Vernal Poo		O)			hydrology must be present,
-	Gleyed Matrix (S4)			, ,				disturbed or problematic.
Restrictive I	Layer (if present):							
Type:			_					
Depth (inc	ches):		<u> </u>				Hydric Soil	I Present? Yes No✓
Remarks:								
No hydric sa	oil indicators pre	sent Soil moi	sture likely due	to much	higher th	nan avera	ge rainfall in	March and April, and landscape
	ar the bottom of							Water and April, and landscape
Photos 12-1			g ccp co c c.	6 - 6		.		
HYDROLO	CV							
	drology Indicator	<u> </u>						
_	cators (minimum of		abook all that ann	ls ()			Cooo	nder (Indicators (2 or more required)
		rone required, o						ndary Indicators (2 or more required)
Surface	` ,		Salt Crus	` '				Vater Marks (B1) (Riverine)
Filgh wa	ater Table (A2)		Biotic Cru		o (D12)			Sediment Deposits (B2) (Riverine)
	` ,	orino)	Aquatic Ir					Orift Deposits (B3) (Riverine) Orainage Patterns (B10)
	larks (B1) (Nonriv e nt Deposits (B2) (N		Hydrogen			Livina Boo		Dry-Season Water Table (C2)
	posits (B3) (Nonriv		Oxidized Presence					Crayfish Burrows (C8)
	Soil Cracks (B6)	verifie)	Recent Ire		•	,		Saturation Visible on Aerial Imagery (C9)
	on Visible on Aeria	al Imageny (B7)	Thin Muc			u 00113 (00		Shallow Aquitard (D3)
	tained Leaves (B9		Other (Ex	`	,			FAC-Neutral Test (D5)
Field Observ	•	,	Outer (Ex	plani in ite	marks)			AO-Nediai Test (Do)
Surface Water		Yes No	o✓_ Depth (ir	iches).				
Water Table			Depth (ir Depth (ir					
							and Undrala	Ur Bresent? Ves No.
Saturation Procession (includes cap		Yes No	Depth (ir	icnes):		_ weti	and Hydrolog	y Present? Yes No _√
	corded Data (strea	ım gauge, moni	toring well, aerial	photos, pre	evious ins	pections),	if available:	
Remarks:								
No prima	ry or seconda	ry hydrolog	v indicators	ohserve	М			
-	•		•	ODSEI VE	u.			
rac-neut	ral test: W:U=	-u.z (negat	ive).					

Project/Site: 943 E Barham Dr - JO# HMC-16		City/Count	ty: <u>San Mar</u>	cos/San Diego	Samp	oling Date:	4/24/	/2020
Applicant/Owner:				State:	CA Samp	oling Point:		2
Investigator(s): S. Nigro/J. Kurnow								
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave, o	convex, none): <u>nc</u>	ne	Slo	ope (%):	30
Subregion (LRR): C								
Soil Map Unit Name: VSE2 - Vista coarse sandy loam, 2								
Are climatic / hydrologic conditions on the site typical for thi				_				
Are Vegetation, Soil, or Hydrologys				Normal Circumsta			✓ No)
Are Vegetation, Soil, or Hydrologyı				eded, explain any				
SUMMARY OF FINDINGS – Attach site map	showing	sampli	ng point le	ocations, tran	sects, imp	ortant fe	eatures	s, etc.
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N Remarks:	lo <u> </u>		the Sampled thin a Wetlar		es I	No <u>√</u>	_	
SP taken on non-native grassland slope with than average rainfall in March and April. SP		_		•	area receiv	ed mucl	h highe	er
VEGETATION – Use scientific names of plan	ıts.							
Tree Stratum (Plot size:r=25') 1	% Cover	Species'	nt Indicator ? Status	Number of Dom That Are OBL, F	inant Species		0	(A)
2				Total Number of Species Across			1	(B)
4				Percent of Domi	inant Species			
Sapling/Shrub Stratum (Plot size:r=25')							<u> </u>	(A/D)
1				Prevalence Ind				
2					ver of:			
3				OBL species				
4				FACW species FAC species				
5	0	= Total C	over	FACU species				-
Herb Stratum (Plot size: 10' X 4')		10ta10	OVCI	UPL species				-
1. Festuca myuros	45	X	FACU	Column Totals:		(A)	362	– (B)
2. Bromus hordeaceus	15		FACU			` ,		_
3. Logfia gallica	10		<u>UPL</u>		e Index = B/A		4.3	_
4. <u>Deinandra fasciculata (seedlings)</u>			UPL	Hydrophytic Ve	_			
5. Erodium sp.	_ 5		UPL	l 	Test is >50%			
6. Anagallis arvensis			UPL		Index is ≤3.0 ¹			
7. Juncus bufonius	_ 1		FACW	Morphologio	cal Adaptation Remarks or on	is' (Provide La separate	e support e sheet)	ing
8. Silene gallica + unk herb* (see remarks)	2+2		<u>UPL + ?</u>	Problemation			,	n)
Woody Vine Stratum (Plot size:r=25')	87	= Total C	over		, , ,	Ü	` '	,
1 2				¹ Indicators of hy be present, unle				nust
2	0	= Total C	over	Hydrophytic				
% Bare Ground in Herb Stratum5	r of Biotic C	rust	0	Vegetation Present?	Yes	No _	✓	
Remarks:				•				
Upland vegetation is dominant. *Unknown herb was not flowering or fruit or Cryptantha sp.	ing. Poss	ibly a s	pecies in I	Boraginaceae	, e.g. Ams	inckia in	iterme	dia

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SOIL Sampling Point: 2

Profile Desc	ription: (Describ	e to the dep	th needed to docu	ment the i	indicator	or confirm	n the absence	e of indicators.)
Depth	Matrix	0/		ox Feature		. 2	- .	Б
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/2	60	-				loam	soil completely dry
<u>0-8</u>	10YR 3/3	40	-				<u>loam</u>	soil completely dry
								-
				_				
	-			_				
			=Reduced Matrix, C LRRs, unless other			ed Sand Gr		cation: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ :
_		cable to all			eu.)			<u>-</u>
Histosol	oipedon (A2)		Sandy Red Stripped M	, ,				Muck (A9) (LRR C) Muck (A10) (LRR B)
Black Hi			Loamy Mu		ıl (F1)			ced Vertic (F18)
	en Sulfide (A4)		Loamy Gle	-				Parent Material (TF2)
Stratified	d Layers (A5) (LRF	(C)	Depleted N	1atrix (F3)			Other	(Explain in Remarks)
	ıck (A9) (LRR D)		Redox Dar		. ,			
	d Below Dark Surfa ark Surface (A12)	ice (A11)	Depleted D				3Indicators	of hydrophytic vegetation and
	ark Surface (A12) Nucky Mineral (S1)		Redox Dep Vernal Poo	,	F8)			of hydrophytic vegetation and hydrology must be present,
-	Gleyed Matrix (S4)		veman oc	10 (1 0)				disturbed or problematic.
	Layer (if present):							•
Type: roo	ck layer							
Depth (inc	ches): <u>8</u>						Hydric Soi	I Present? Yes No✓
Remarks:								
Na budula	: ! :		· Cail air danr	مائممنا ما	سييمالم	م من دام مام	مرزما باممت	_
_		s present	t. Soil pit dept	n iimite	a by ur	iaeriying	з госк тауе	r.
Photos 8-	11							
HYDROLO	GY							
	drology Indicators	•						
_			d; check all that app	lv)			Seco	ndary Indicators (2 or more required)
	Water (A1)	One required	Salt Crus	•				Water Marks (B1) (Riverine)
	iter Table (A2)		Biotic Cru	, ,				Sediment Deposits (B2) (Riverine)
Saturation			Aquatic Ir	. ,	es (B13)			Orift Deposits (B3) (Riverine)
	larks (B1) (Nonriv e	erine)	Hydrogen					Orainage Patterns (B10)
	nt Deposits (B2) (N					Living Roo		Ory-Season Water Table (C2)
	oosits (B3) (Nonriv			of Reduce	-	_		Crayfish Burrows (C8)
Surface	Soil Cracks (B6)		Recent Ire	on Reducti	on in Tille	ed Soils (C6	S) S	Saturation Visible on Aerial Imagery (C9)
Inundation	on Visible on Aeria	I Imagery (B	7) Thin Muc	k Surface ((C7)		8	Shallow Aquitard (D3)
Water-S	tained Leaves (B9))	Other (Ex	plain in Re	emarks)		F	FAC-Neutral Test (D5)
Field Observ	vations:							
Surface Water			No <u>✓</u> Depth (ir					
Water Table	Present?	Yes	No <u>√</u> Depth (ir	nches):				
		Yes	No <u>✓</u> Depth (ir	nches):		Wetl	and Hydrolog	yy Present? Yes No _√_
Saturation Pr								
(includes cap	oillary fringe)	m gauge, mo	onitoring well, aerial	photos, pr	evious in:	spections),	if available:	
(includes cap	oillary fringe)	m gauge, mo	onitoring well, aerial	photos, pr	evious in	spections),	if available:	
(includes cap	oillary fringe)	m gauge, mo	onitoring well, aerial	photos, pr	evious in	spections),	if available:	
(includes cap Describe Red Remarks:	oillary fringe) corded Data (strea							uch higher than average rainfall
Cincludes cap Describe Reconstruction Remarks: No primare	oillary fringe) corded Data (strea	hydrology	indicators obse	rved. So	il comp	letely dry	/ despite m	uch higher than average rainfall
(includes cap Describe Red Remarks: No primary in the wee	oillary fringe) corded Data (strea	hydrology o the site v	indicators obse	rved. So	il comp	letely dry	/ despite m	uch higher than average rainfall oril [6.8" while 1.0" is normal]).

Project/Site: 943 E Barham Dr - JO# HMC-16	(City/C	ounty	: San Mar	cos/San Diego	San	npling Date	e: <u>4/2</u> 4	1/2020
Applicant/Owner:					State:	CA San	npling Poir	ıt:	3
					nge: <u>18/12S/2W</u>				
Landform (hillslope, terrace, etc.): low spot					_				:0
Subregion (LRR): C									
Soil Map Unit Name: VsC - Vista coarse sandy loam, 5									
Are climatic / hydrologic conditions on the site typical for thi									
Are Vegetation, Soil, or Hydrology					Normal Circumsta			✓ N	lo
Are Vegetation, Soil, or Hydrology					eded, explain any				
SUMMARY OF FINDINGS – Attach site map				,	, ,		,		s, etc.
Hydrophytic Vegetation Present? Yes N						· ·	•		
Hydric Soil Present? Yes N	10 <u>√</u>			e Sampled					
Wetland Hydrology Present? Yes N	No <u>√</u>		with	in a Wetlan	id? Ye	s	No <u> </u>		
Remarks:									
SP taken in low area in non-native grassland April. SP does not meet wetland criteria.		ea re	ceiv	ed much	higher than a	average r	ainfall ir	n March	n and
VEGETATION – Use scientific names of plar									
<u>Tree Stratum</u> (Plot size: <u>r=25'</u>)	Absolute % Cover				Dominance Tes Number of Dom				
1					That Are OBL, F	ACW, or FA	AC:	1	(A)
2					Total Number of			_	
3					Species Across	All Strata:		2	(B)
4. Sapling/Shrub Stratum (Plot size: r=25')	0				Percent of Domi That Are OBL, F			50	(A/B)
1					Prevalence Ind	ex workshe	et:		
2.					Total % Cov	ver of:	Mul	iply by:	
3					OBL species	3	_ x 1 = _	3	_
4					FACW species				
5					FAC species				_
Herb Stratum (Plot size:r=8')	0	= To	tal Co	ver	FACU species				_
1. Bromus diandrus	40	,	X	UPL	UPL species				_ (5)
2. Rumex crispus	30		χ	FAC	Column Totals:	107	_ (A)	560	(B)
3. Avena sp.	15			UPL	Prevalence	e Index = B	/A =	5.2	
4. Anagallis arvensis	5			UPL	Hydrophytic Ve	getation In	dicators:		
5. Erodium sp.	5			UPL	Dominance	Test is >50°	%		
6. Lythrum hyssopifolium	3			OBL	Prevalence				
7. Silene gallica + Cerastrium glomeratum	3+3			<u>UPL</u>	Morphologic	cal Adaptation	ons¹ (Provi	de suppo	rting
8. <u>Lactuca serriola</u>	3			FACU	Problematic		•	,	
Moody Vino Stratum (Plot size: r=3E')	107	= To	tal Co	ver	i iobiematic	riyaropilya	c vegetation	лі (Схріа	<i>)</i>
Woody Vine Stratum (Plot size: r=25'					¹ Indicators of hy	dric soil and	l wetland h	vdrology	must
1 2.					be present, unle				
		= To	tal Co	ver	Hydrophytic				
% Bare Ground in Herb Stratum0 % Cove	er of Biotic Ci	•			Vegetation Present?	Vas	No	1	
Remarks:	i ui diuliu Ul	ust _		<u>, </u>	rieselltí	168	No		
Upland vegetation is dominant. Sampling suitable for wetland) supporting several R	•					•		•	n

vegetation (= non-native [annual] grassland) and does not support a dominance of hydrophytic vegetation.

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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.)	

	ription: (Describe	to the depth n				or confirm	n the absenc	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features	s Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/2	100 -					clay loam	
						·	<u> </u>	
6-20	10YR 3/3					-	<u>clay loam</u>	moist
							-	
	-			• •			-	
	-			· ·	· 			
				. ———			-	
	oncentration, D=De					ed Sand Gr		ocation: PL=Pore Lining, M=Matrix.
-	Indicators: (Appli	cable to all LRI			ed.)			s for Problematic Hydric Soils ³ :
Histosol	• •		Sandy Redo	. ,				Muck (A9) (LRR C)
	oipedon (A2)		Stripped Ma		L (E 4)			Muck (A10) (LRR B)
Black Hi	stic (A3) n Sulfide (A4)		Loamy Muc					ıced Vertic (F18) Parent Material (TF2)
	d Layers (A5) (LRR	C)	Loamy Gley Depleted Ma		(Г2)			r (Explain in Remarks)
	ick (A9) (LRR D)	C)	Redox Dark		(F6)		Oule	(Explain in Remarks)
	d Below Dark Surfa	ce (A11)	Depleted Da		. ,			
	ark Surface (A12)	,	Redox Depr		, ,		³ Indicator	s of hydrophytic vegetation and
	lucky Mineral (S1)		Vernal Pool		,			d hydrology must be present,
Sandy G	Bleyed Matrix (S4)						unless	disturbed or problematic.
Restrictive I	_ayer (if present):							
Type:			_					
Depth (inc	ches):		<u> </u>				Hydric So	il Present? Yes No _✓
Remarks:								
	ne weeks leading							nbined with much higher than average ril [6.8" while 1.0" is normal]).
HYDROLO	GY							
	drology Indicators	•						
_	cators (minimum of		neck all that anni	w)			Seco	ondary Indicators (2 or more required)
	Water (A1)	one required, ci						· · · · · · · · · · · · · · · · · · ·
	iter Table (A2)		Salt Crust Biotic Crus	. ,				Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
_			· · · · · · · · · · · · · · · · · · ·	, ,	o (D12)			
Saturatio	, ,	rine)	Aquatic Inv					Drift Deposits (B3) (Riverine)
	arks (B1) (Nonrive	•	Hydrogen			Living Boo		Drainage Patterns (B10) Dry-Season Water Table (C2)
	nt Deposits (B2) (No		Oxidized F		_	•		· · ·
	oosits (B3) (Nonriv e Soil Cracks (B6)	erine)	Presence			4) ed Soils (C6	·	Crayfish Burrows (C8)
· · · · · · · · · · · · · · · · · · ·	` '	Imagany (P7)				su Solis (CC		Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
	on Visible on Aerial tained Leaves (B9)		Thin Muck Other (Exp	,				FAC-Neutral Test (D5)
Field Observ			Offici (Exp	Jiani III I (C	illariko)			1 AO-Nedital Test (Do)
		Voo No	/ Donth (in	ob oo):				
Surface Wate			Depth (inc					
Water Table			✓ Depth (inc					
Saturation Procession (includes cap		Yes <u></u> ✓ No	Depth (inc	ches): <u>16</u>	1	Wetl	and Hydrolo	gy Present? Yes No _ ✓
	corded Data (strear	n gauge, monito	oring well, aerial p	ohotos, pr	evious in:	spections),	if available:	
Remarks:								
No primary	y or secondary	hydrology ind	dicators obser	rved. Sat	turation	n at 16" d	lepth durin	g the growing season in a higher
•	•						•	saturation within 12 inches.
	al test: W:U=0:			, -0		,	,	