

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 27, 2015

Waters being assessed on this form: C-1 through C-4

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Jack Fisher Homes , SPK-2014-00740-SG

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Utah** County/parish/borough: **Washington** City:

Center coordinates of site (lat/long in degree decimal format): Lat. **37.144412°**, Long. **-113.5145°**

Universal Transverse Mercator: **12 276669.9 4113852.96**

Name of nearest waterbody:

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **NA**

Name of watershed or Hydrologic Unit Code (HUC): **Upper Virgin. Utah., 15010008**

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form: A-1 through A-9 and B-1 through B-10

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: **January 23, 2015**

Field Determination. Date(s): **January 8, 2015**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet, wide, and/or acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: **Established by OHWM.**

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Drainage features C-1 through C-4 are isolated features that do not connect to any of the downstream washes. They begin and end within the southwest portion of the project boundaries. The area is defined by sandy soils with high infiltration rates flowing down a slope of about 1% and terminating along a network of dirt roads used by off-road vehicles. From the main dirt road south to Drainage network A, the substrate is dominated by bedrock with sparse vegetation. The channels lose definition and do not**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

appear to carry water downstream. The storm events of September 2014 were evident throughout the site, with sediment and debris in all other washes. These four drainages showed no indication that flow had crossed the dirt road and continued down into the Wash A network.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: NA

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **171.49 acres**
Drainage area: **38.0 acres**
Average annual rainfall: **8.18 inches**
Average annual snowfall: **3.1 inches**

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **2** tributaries before entering TNW.

Project waters are **2-5** river miles from TNW. The project waters are approximately 2-5 miles from the Virgin River a Navigable in Fact Interstate Water and Tributary to the Colorado River
Project waters are **1-2** river miles from RPW.
Project waters are **2-5** aerial (straight) miles from TNW.
Project waters are **1-2** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: **The project waters do not serve as or cross a state boundary.**

Identify flow route to TNW⁵: **These four tributaries do not flow to any downstream TNW. They have the potential to enter the Wash A drainage network, then into Mill Creek to the Virgin River.**
Tributary stream order, if known: **4**

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Manipulated (man-altered). Explain: **Washes C-1 through C-4 have been impacted by off-road vehicle usage.**

Tributary properties with respect to top of bank (estimate):

Average width: **2.2** feet
Average depth: **.5** feet
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

- Silts
- Sands
- Concrete
- Cobbles
- Gravel
- Muck
- Bedrock
- Vegetation. Type/% cover:
- Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Condition is stable. These four washes showed no indication of flow during the September events.**

Presence of run/riffle/pool complexes. Explain: **No run/riffle/pool complexes are present within the Wash A system.**

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): **1 %**

(c) Flow:

Tributary provides for: **Ephemeral flow**

Estimate average number of flow events in review area/year: **2-5**

Describe flow regime: **Events in this watershed are extremely localized and occur mainly during summer storm events. In some years, there may be very little flow and in other years there may be multiple events. There were two events in September of 2014.**

Other information on duration and volume: **There is no information on duration or volume for this watershed.**

Surface flow is: **Overland sheetflow.** Characteristics: **Some of the surface flow is confined within the channels, but much of it is overland sheet flow that ultimately is directed into these channels.**

Subsurface flow: **Unknown.** Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - shelving
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - sediment deposition
 - water staining
 - other (list):
- the presence of litter and debris
- destruction of terrestrial vegetation
- the presence of wrack line
- sediment sorting
- scour
- multiple observed or predicted flow events
- abrupt change in plant community

Discontinuous OHWM.⁷ Explain: **These four washes do not appear to connect downstream to the main channel of Wash A. These washes begin about 200 to 400-ft upstream of a well traveled dirt road and lose definition at the dirt road. Any trace of an OHWM and bed and bank are lost at the dirt road. There are multiple dirt roads and evidence that the area is heavily used by ATV'ers.**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- High Tide Line indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - tidal gauges
 - other (list):
- Mean High Water Mark indicated by:
 - survey to available datum;
 - physical markings;
 - vegetation lines/changes in vegetation types.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **When water is present, it is usually sediment laden.**

Identify specific pollutants, if known: **There is no development in the upper watershed and the area is currently in public ownership.**

(iv) Biological Characteristics. Channel supports (check all that apply):

Riparian corridor. Characteristics (type, average width):

Wetland fringe. Characteristics:

Habitat for:

Federally Listed species. Explain findings: **Outside of the proposed project boundary is Desert tortoise habitat.**

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW: **NA**

3. Characteristics of all wetlands adjacent to the tributary (if any): **NA**

C. SIGNIFICANT NEXUS DETERMINATION:

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: **Washes C-1 through C-4 do not have a direct connection to the main channel of Wash A. The two events in September of 2014 left many indicators in other washes on site, especially along the Wash B tributaries. Wash A-2, A-3 and A-4 showed signs of flows during the October 2014 site visit. The substrate in this area is much rockier and there is less erosive soils. The upstream, headwater reaches of these washes travel through a sandy soil with high permeability and infiltration during storm events is most likely rapid. Downstream of the dirt road, the area is very rocky with exposed sandstone formations. There was no evidence of water traveling across the dirt road and down into the Wash A drainages. The washes do not appear to have the capacity to carry pollutants downstream and would not reduce any potential flow into Mill Creek. The habitat has been degraded through use of off-road vehicles and there is little habitat for any species. The lack of vegetation makes it unlikely that there is transfer of nutrients to downstream sources. There was no indication that the area had a physical, chemical or biological connection to Mill Creek.**
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. **DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): NA**

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): NA**

F. **NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: **The waters evaluated on this form have a discontinuous OHWM to downstream sources. After several large storm events in September of 2014, many indicators were apparent on Wash B tributaries and on Wash A tributaries. These indicators included matted down vegetation, debris, scour, sediment sorting and rills across dirt roads. Some Wash B tributaries also had discontinuous OHWM, but these washes showed obvious sheetflow across dirt roads through movement of sediment and debris. These indicators were not present in Washes C-1 through C-4.**
- Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet, _____ wide.
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource:
- Wetlands: _____ acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): **948.05** linear feet, **2.0** wide.
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource:
- Wetlands: _____ acres.

SECTION IV: DATA SOURCES.

A. **SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **1:24K; UT-WASHINGTON**
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): _____
or Other (Name & Date): _____
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Washes C-1 through C-4 began just upstream of a network of dirt roads used for off-road vehicles. These washes flowed down towards the main channel of Wash A, but disappeared within the network of roadways. The soil in the upper reaches of the channels is very sandy and infiltration rates are rapid, therefore, eliminating water from reaching further downstream. Other washes within the project boundary did show signs of flow and were considered to have a downstream connection. There is no evidence along the dirt roads that supports movement of water downstream. In other areas, even with a lack of OHWM indicators, there was debris and sediment deposits across dirt roads. There were no indicators at washes C-1 through C-4 to support this conclusion. There is no interstate commerce connection associated with these four washes. Based on a field review of the site and the lack of indicators of flow, the Corps is declining jurisdiction over the four ephemeral drainages associated with this JD.

HI20131SG-492-1309 Green Springs Residential/Project Data/Sheet_Files/Figures/UD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:45 AM



BRILLO DE SOL

**WASHINGTON PARKWAY
EXIT 13**

GREEN SPRINGS DRIVE

BUENA VISTA BOULEVARD

MAIN STREET

TELEGRAPH

**GREEN SPRINGS DRIVE
EXIT 10**

WASHINGTON PARKWAY

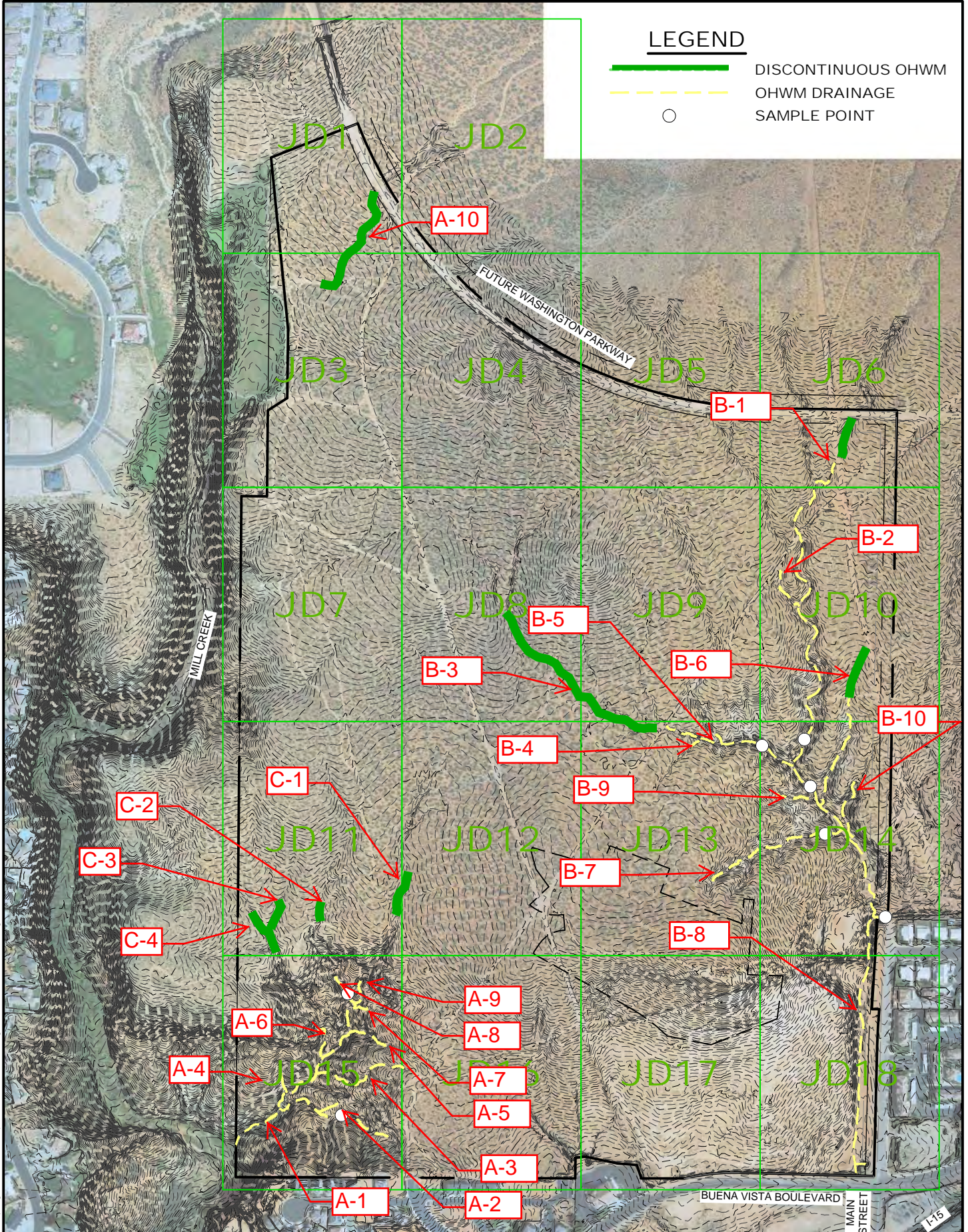
HORROCKS

ENGINEERS
 555 South Bluff Street, Suite 101
 St. George, UT 84790, (435) 986-7888

BRILLO DE SOL

JURISDICTIONAL DETERMINATION

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HORROCKS

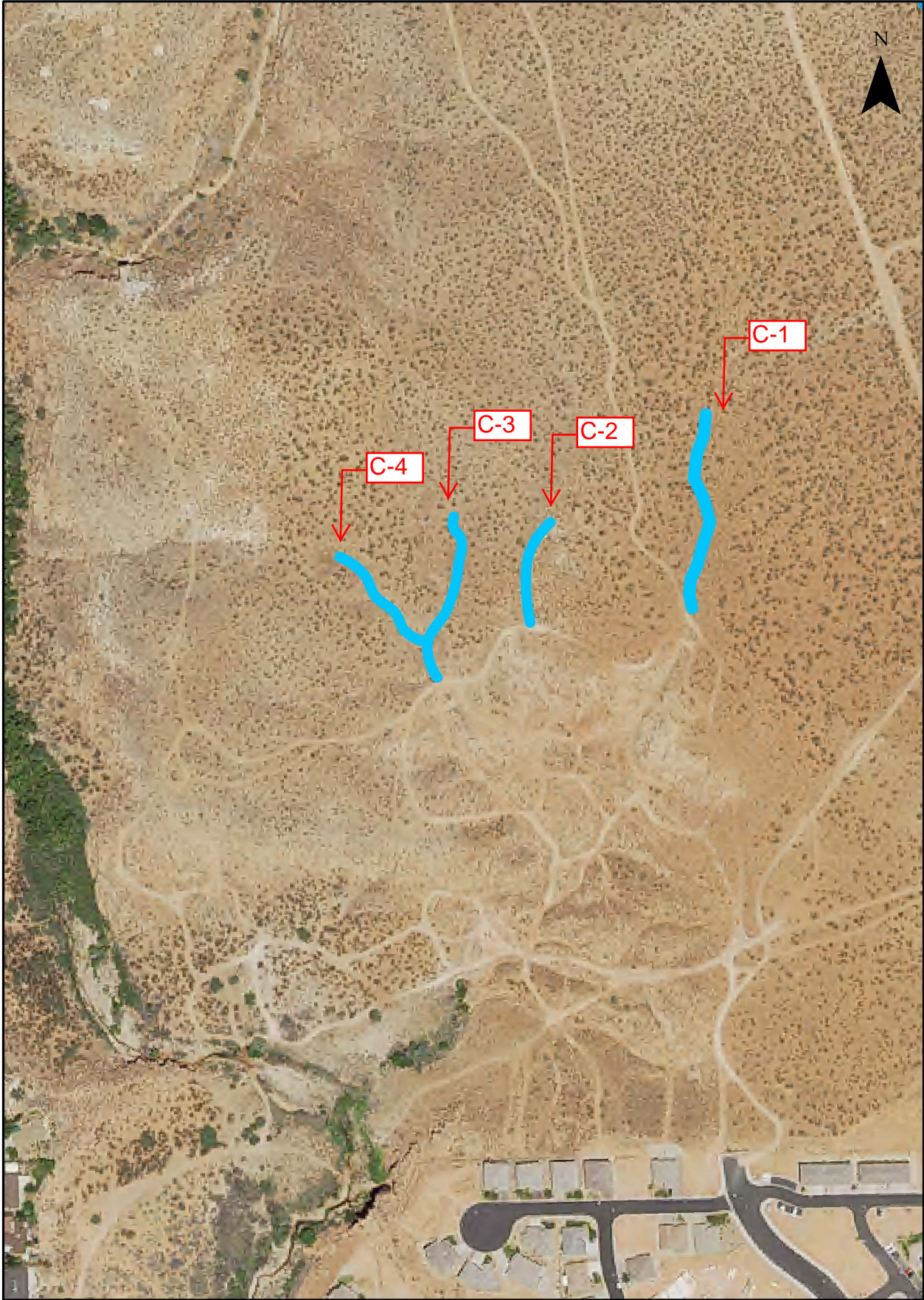
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BRILLO DE SOL

JURISDICTIONAL DETERMINATION

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			DRAWING NO. 2

SPK-2014-00740 Brillo Del Sol Development
JD-11



C-1 through C-4 - Isolated Drainages