

**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 23, 2015
Washes Assessed on this form: A-1 through A-9 and B-1 through B-10

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. **37.1444125956545°**, Long. **-113.51454520717°**
Universal Transverse Mercator: **12 276669.9 4113852.96**

Name of nearest waterbody: **Mill Creek**

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

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: C-1 through C-4

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** "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: **7475** linear feet, **3.16-ft** 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:

SECTION III: CWA ANALYSIS

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.

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: 4190 acres
Drainage area: 4190 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: **Wash A and tributaries flow into Mill Creek, a tributary of the Virgin River, which is a navigable in fact interstate water. Wash B flows down to Buena Vista Blvd, is directed through a culvert and then channelized along I-15 to Mill Creek. The culvert is undersized at Buena Vista and tends to cause some minor flooding issues along the roadway.**

Tributary stream order, if known: 3

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

- Tributary is:
- Natural
 - Artificial (man-made). Explain:
 - Manipulated (man-altered). Explain: **Wash B has been impacted by off-road vehicle usage and channelization along North Main Street.**

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.

Tributary properties with respect to top of bank (estimate): The side slopes along the washes vary from incised channels with 1:1 slopes to very flat (4:1 or greater)
Average width: **3.16** 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: **Most of the tributaries are relatively stable except during exceptionally high flows like the ones in September of 2014, then there is some erosion.**

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 to 2 %**

(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: **Discrete and confined.** 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 the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

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

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

(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.**

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.

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: **Wash A flows directly into Mill Creek, a tributary of the Virgin River. The wash has the potential to carry flood waters with sediment laden waters into Mill Creek and eventually into the Virgin River. The wash also has the ability to retain flood waters on site and alleviate downstream flooding. Although there are no aquatic species within the wash, there is the potential to provide nutrients and organic matter during storm events to downstream foodwebs. The influx of nutrients and organic matter is important to sustaining lifecycle functions of species within the Virgin River, including the endangered woundfin and Virgin River Chub. The wash also provides an avenue for waters to reach the Virgin River, which is an important component of an arid system where water is a scarce resource. Wash B drains an area that has been altered through off-road vehicle use and has the opportunity to contribute sediment to Mill Creek, and, ultimately the Virgin River. Wash B is diverted through a culvert and then channelized along I-15 for approximately 0.50 mile before joining with Mill Creek. There is the potential for Wash B to contribute sediment, nutrients and organic matter to the Virgin River. There is also the potential to alleviate flood flows through on-site retention.**
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):

1. **TNWs and Adjacent Wetlands.** NA

2. **RPWs that flow directly or indirectly into TNWs.** NA

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters: 7475 linear feet, **3.16 (average)** wide.

Other non-wetland waters: acres.

Identify type(s) of waters:

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.** NA

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.** NA

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.** NA

7. **Impoundments of jurisdictional waters.** 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): NA

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. The report indicated that several of the washes had discontinuous OHWM and were, therefore, non-jurisdictional. A field review was done and although the washes did have areas where OHWM was not evident, there were indicators of flow. Movement of sediment and debris were observed in these areas and it was determined that upstream reaches still had a biological, chemical and physical connection to the Virgin River.

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):

⁸See Footnote # 3.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

The confluence of Mill Creek and Wash A is about 2.15 miles upstream of the confluence of Mill Creek with the Virgin River. Mill Creek has a drainage area of 19 square miles with annual precipitation of 11.0 inches. The estimated total discharge per year in acre-feet is 1,000 in groundwater flow into the Central Virgin River Basin from Mill Creek. Wash A is about 2% of the Mill Creek Watershed, and will be the most likely to be impacted by development in the future. Wash A drains a large portion of the project area and flows directly into Mill Creek. Surface flow on the upper portions of the site are mainly overland sheet flow that form into small washes relatively quickly converging into one just above the confluence with Mill Creek. Wash A and tributaries have a continuous OHWM from headwaters to Mill Creek with recent signs of flow following the September 2014 events. It is very likely that surface water from Wash A and tributaries contributes nutrients and organic matter to Mill Creek and ultimately to the Virgin River. Wash B drains approximately 1419.0 acres to the north of I-15 and east of Wash A. As per the document submitted to Washington City by Rosenberg and Associates, the water from Wash B drains south and westward into Mill Creek. The wash has a continuous OHWM from the project site to Mill Creek. Flooding issues at the intersection of Buena Vista and North Main Street indicate that during storm events, a significant amount of water can occur from the drainage. The Corps has determined that there is more than just a speculative connection to the Colorado River and Wash A and B are jurisdictional waters of the U.S.

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

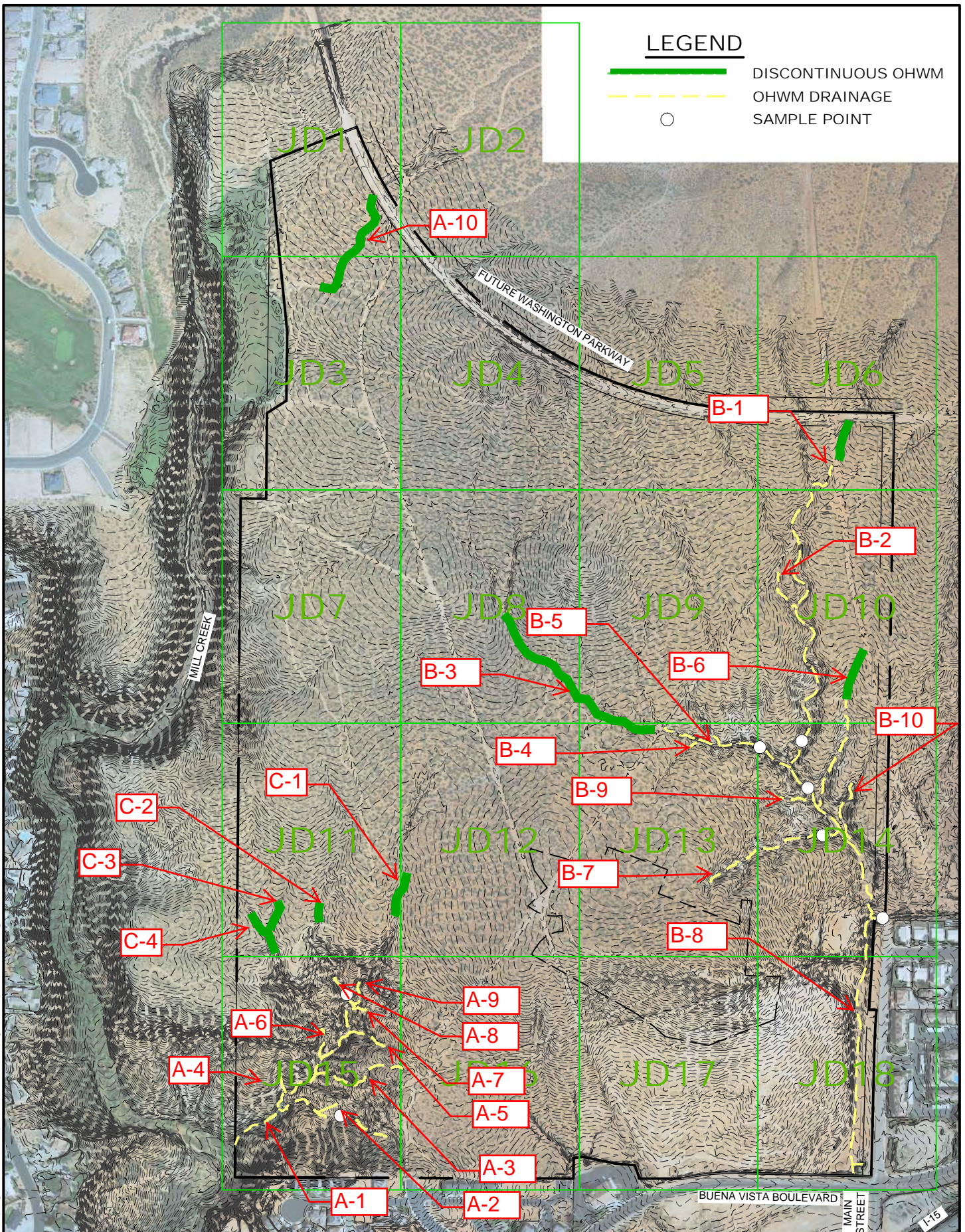
BRILLO DE SOL

JURISDICTIONAL DETERMINATION

FIGURE LEGEND:	DRAWN	DESIGNED	SCALE:
	SM	SAD	1" = 2000'
	FIGURE NO.		DATE:
	VM1		09/04/2014
			DRAWING NO.
			1

LEGEND

-  DISCONTINUOUS OHWM
-  OHWM DRAINAGE
-  SAMPLE POINT




H:\2013\CG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 12/23/2014 8:34 AM

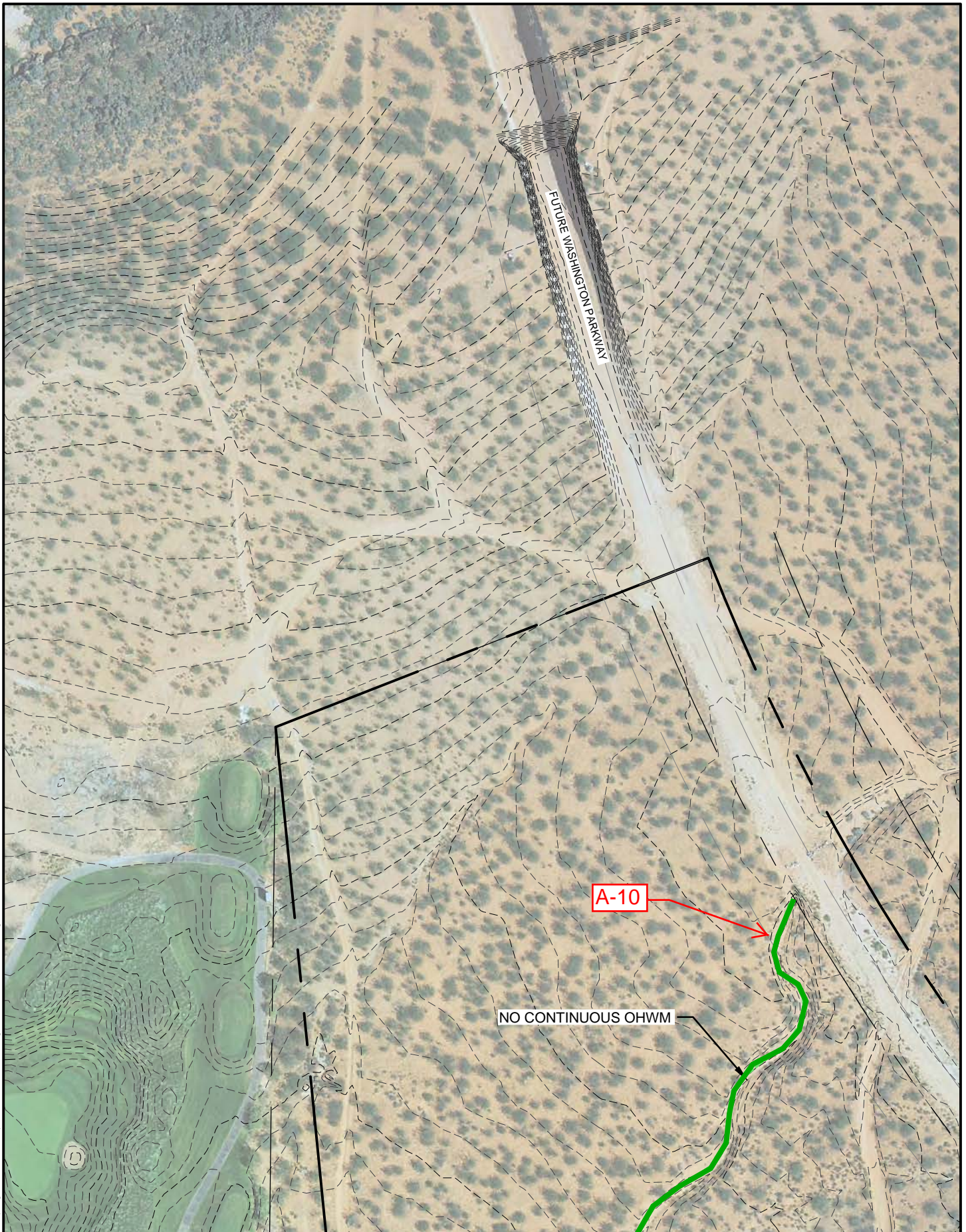
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

	FIGURE LEGEND:	DRAWN	DESIGNED	SCALE:
		SM	SAD	1" = 50'
	FIGURE NO.		DATE:	
JD0		09/04/2014		
			DRAWING NO.	
			2	

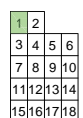
HI20131SG-492-1309 Green Springs Residential Project Data Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:46 AM

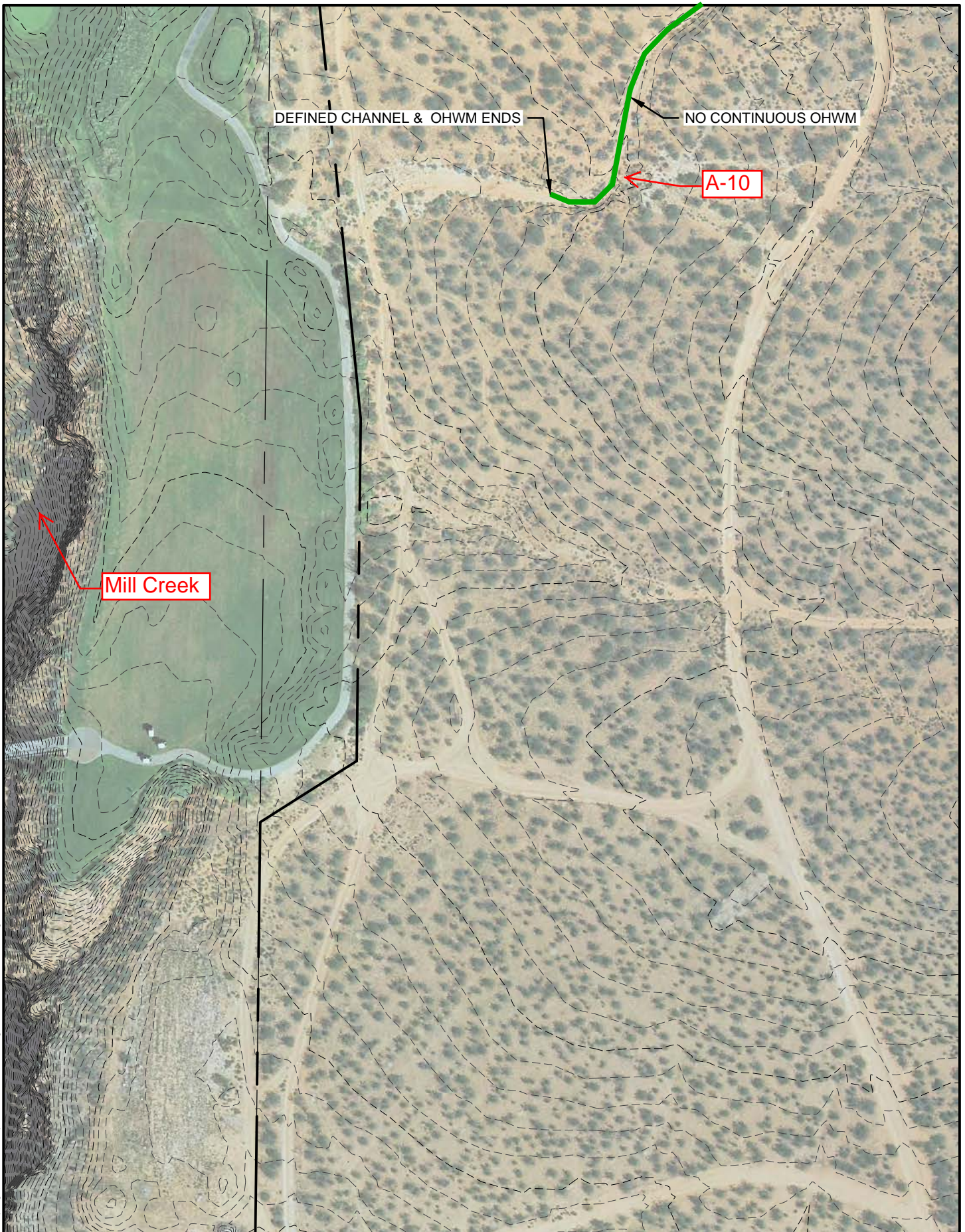


HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: 	DRAWN	DESIGNED	SCALE:
	SM	SAD	1" = 100'
	FIGURE NO.		DATE:
	JD1		09/04/2014
			DRAWING NO.
			3



H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:46 AM

HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
3	4																				
5	6																				
7	8																				
9	10																				
11	12																				
13	14																				
15	16																				
17	18																				
	FIGURE NO. JD3		DATE: 09/04/2014																		
			DRAWING NO. 5																		

HI20131SG-492-1309 Green Springs Residential Project Data Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:46 AM



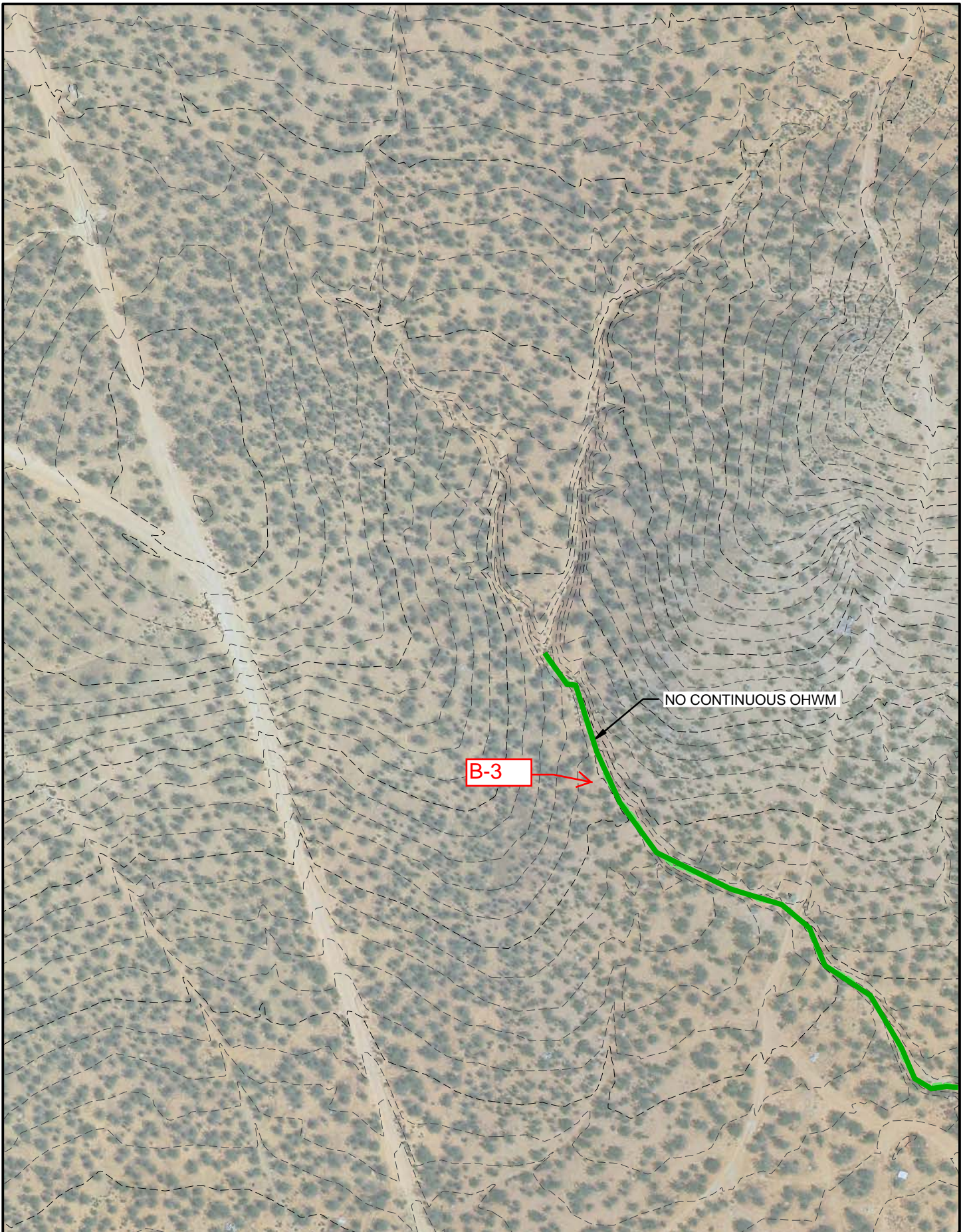
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
3	4																				
5	6																				
7	8																				
9	10																				
11	12																				
13	14																				
15	16																				
17	18																				
	FIGURE NO. JD6		DATE: 09/04/2014 DRAWING NO. 8																		

H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:46 AM



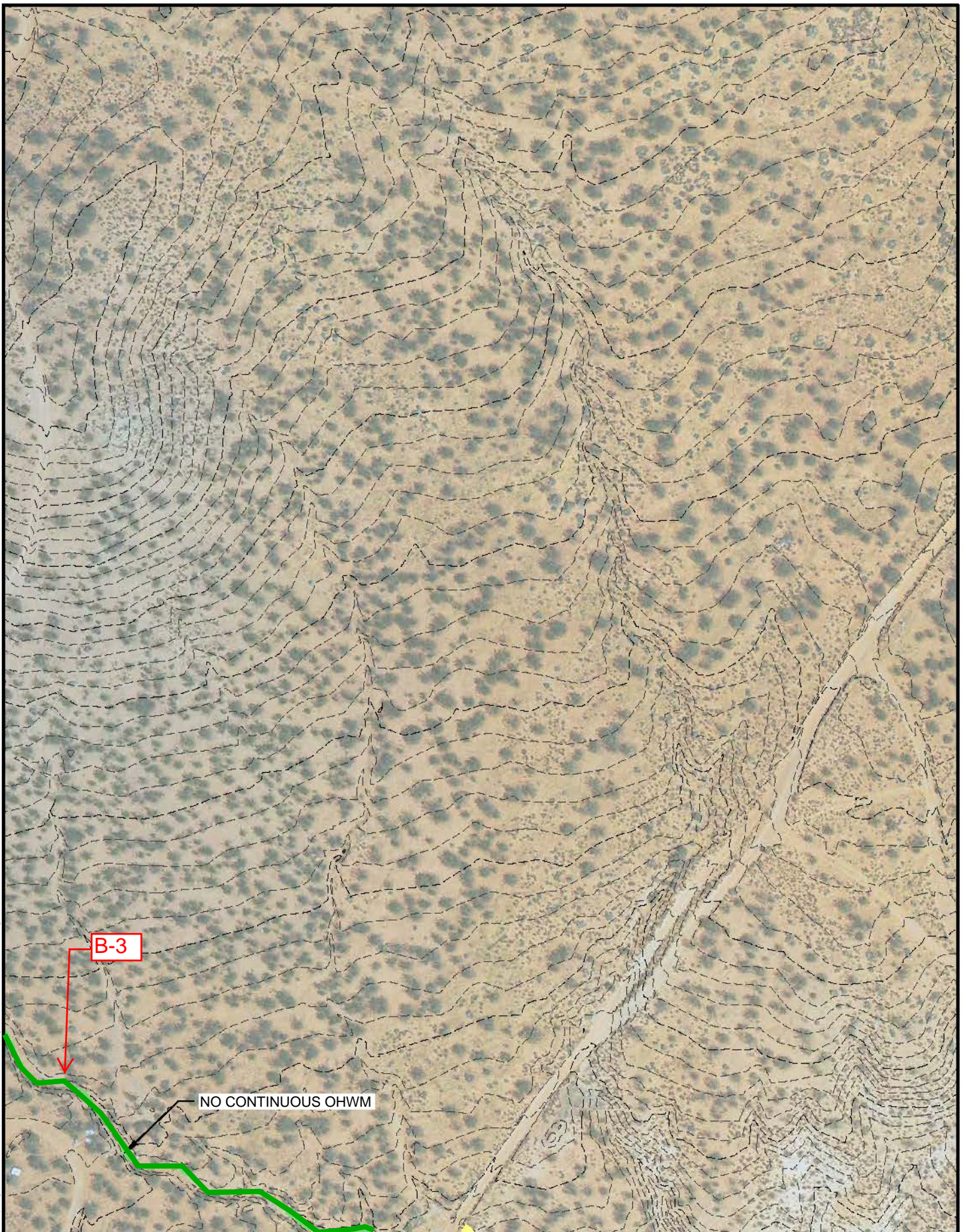
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
3	4																				
5	6																				
7	8																				
9	10																				
11	12																				
13	14																				
15	16																				
17	18																				
	FIGURE NO. JD8		DATE: 09/04/2014																		
			DRAWING NO. 10																		

H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibit REV 6.dwg Shannon McLendon 10/30/2014 8:46 AM



B-3

NO CONTINUOUS OHWM

HORROCKS

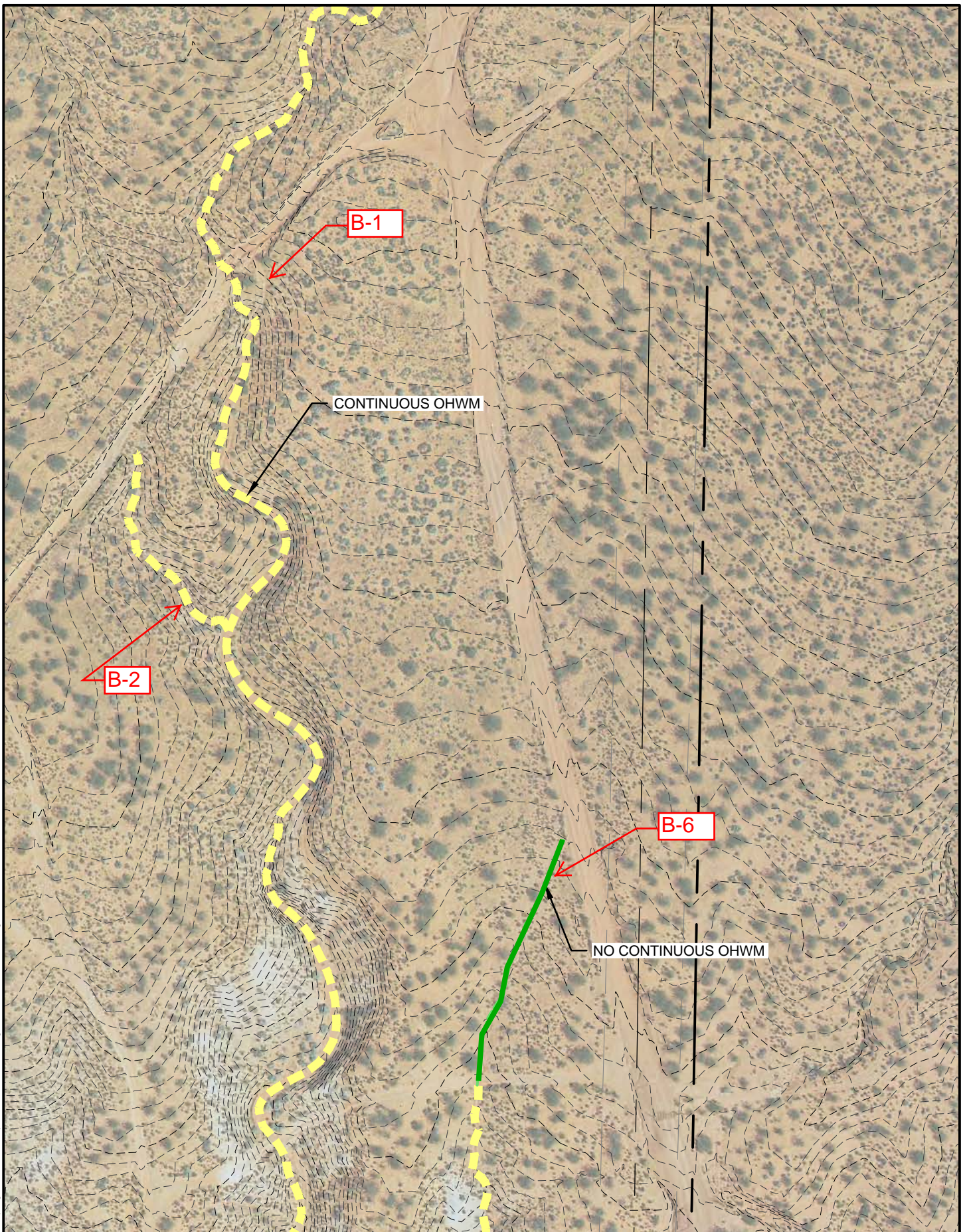
ENGINEERS
 555 South Bluff Street, Suite 101
 St. George, UT 84790, (435) 986-7888

BRILLO DE SOL

JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
	3	4																			
	5	6																			
7	8																				
9	10																				
11	12																				
13	14																				
15	16																				
17	18																				
FIGURE NO. JD9		DATE: 09/04/2014																			
		DRAWING NO. 11																			

HI20131SG-492-1309 Green Springs Residential Project Data Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLondon 10/30/2014 8:46 AM



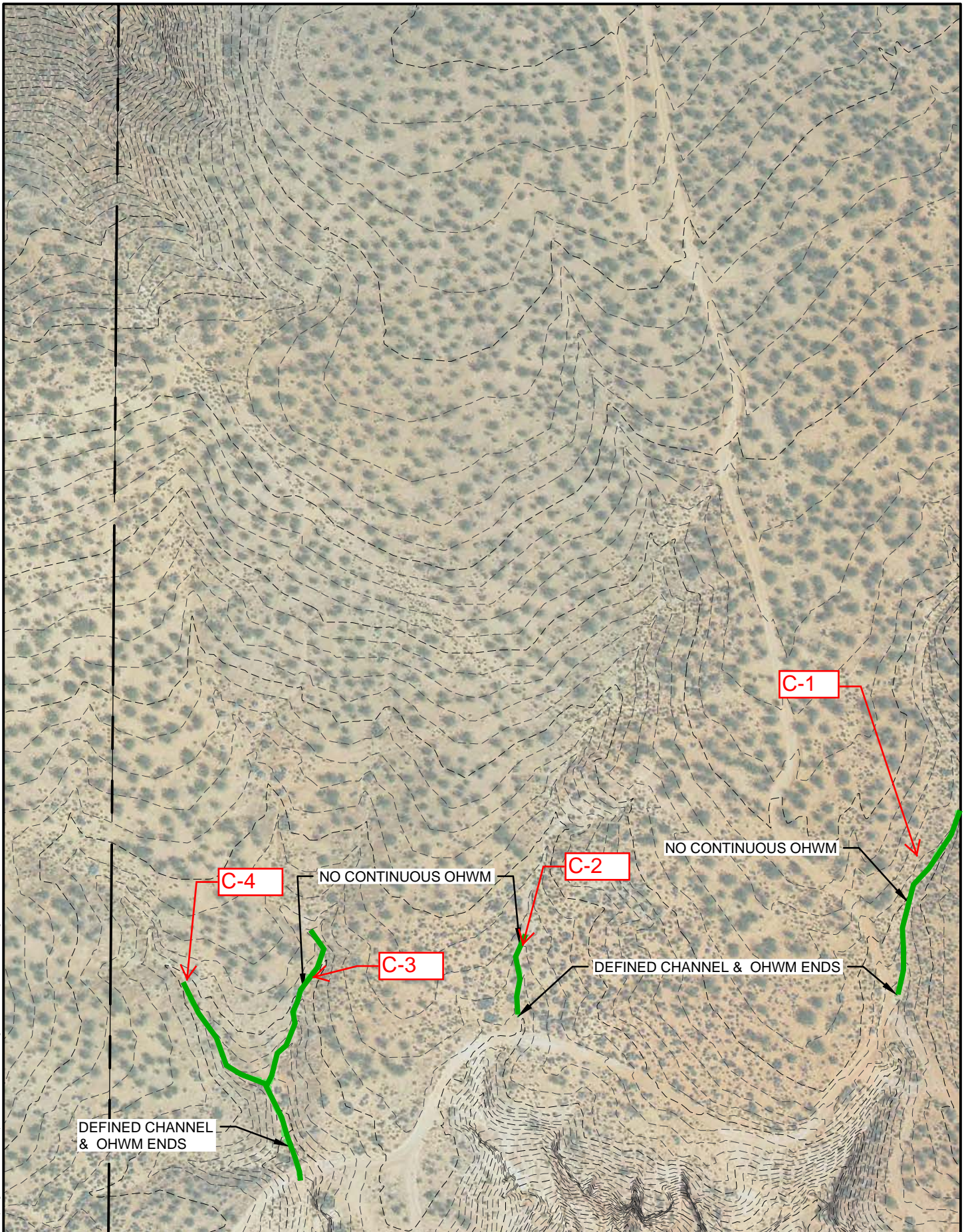
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
3	4	5	6																		
7	8	9	10																		
11	12	13	14																		
15	16	17	18																		
	FIGURE NO. JD10		DATE: 09/04/2014 DRAWING NO. 12																		

HI20131SG-492-1309 Green Springs ResidentialProject>Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



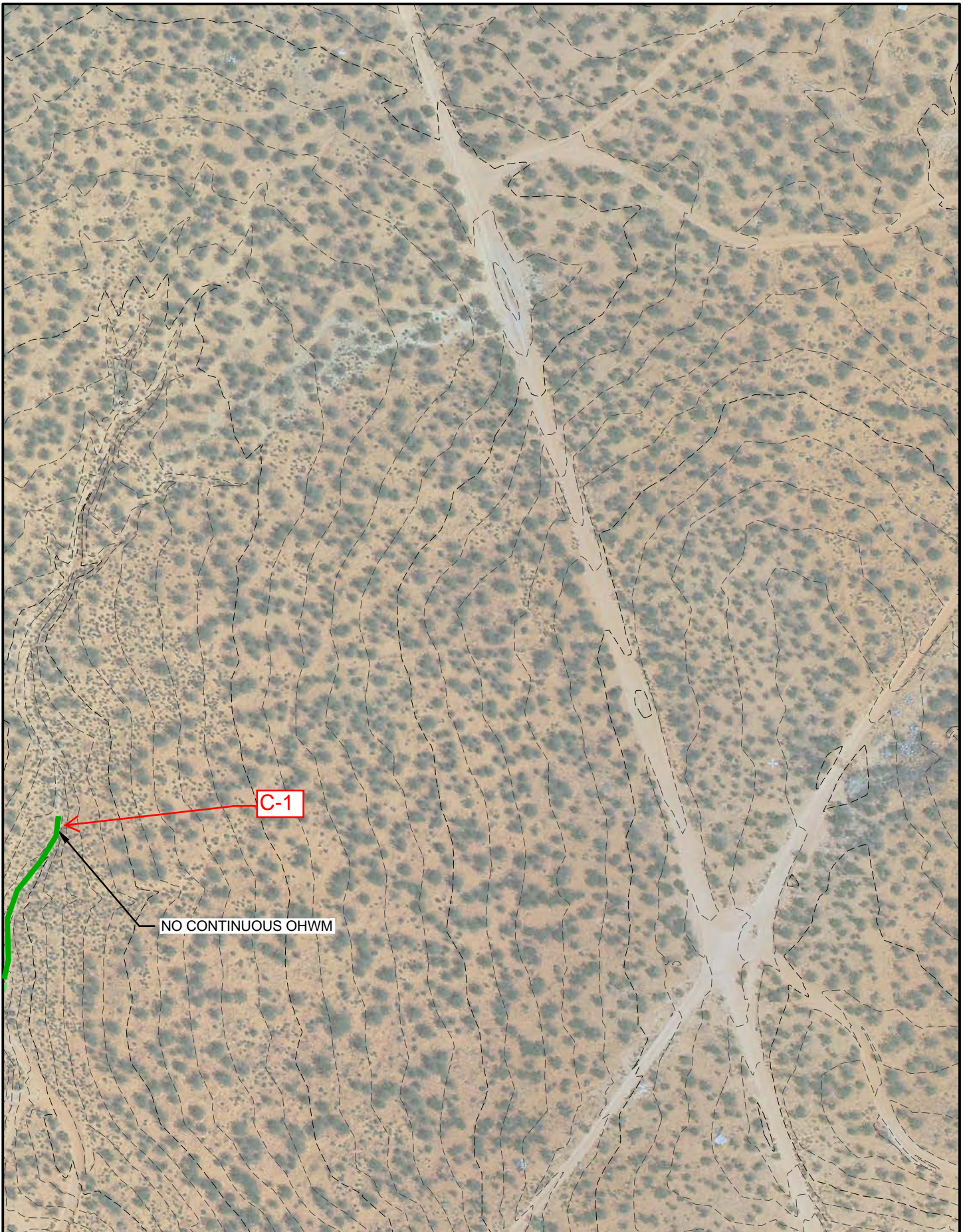
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
3	4																				
5	6																				
7	8																				
9	10																				
11	12																				
13	14																				
15	16																				
17	18																				
	FIGURE NO. JD11		DATE: 09/04/2014 DRAWING NO. 13																		

H:\2013\CG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibit REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



C-1

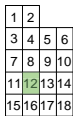
NO CONTINUOUS OHWM

HORROCKS

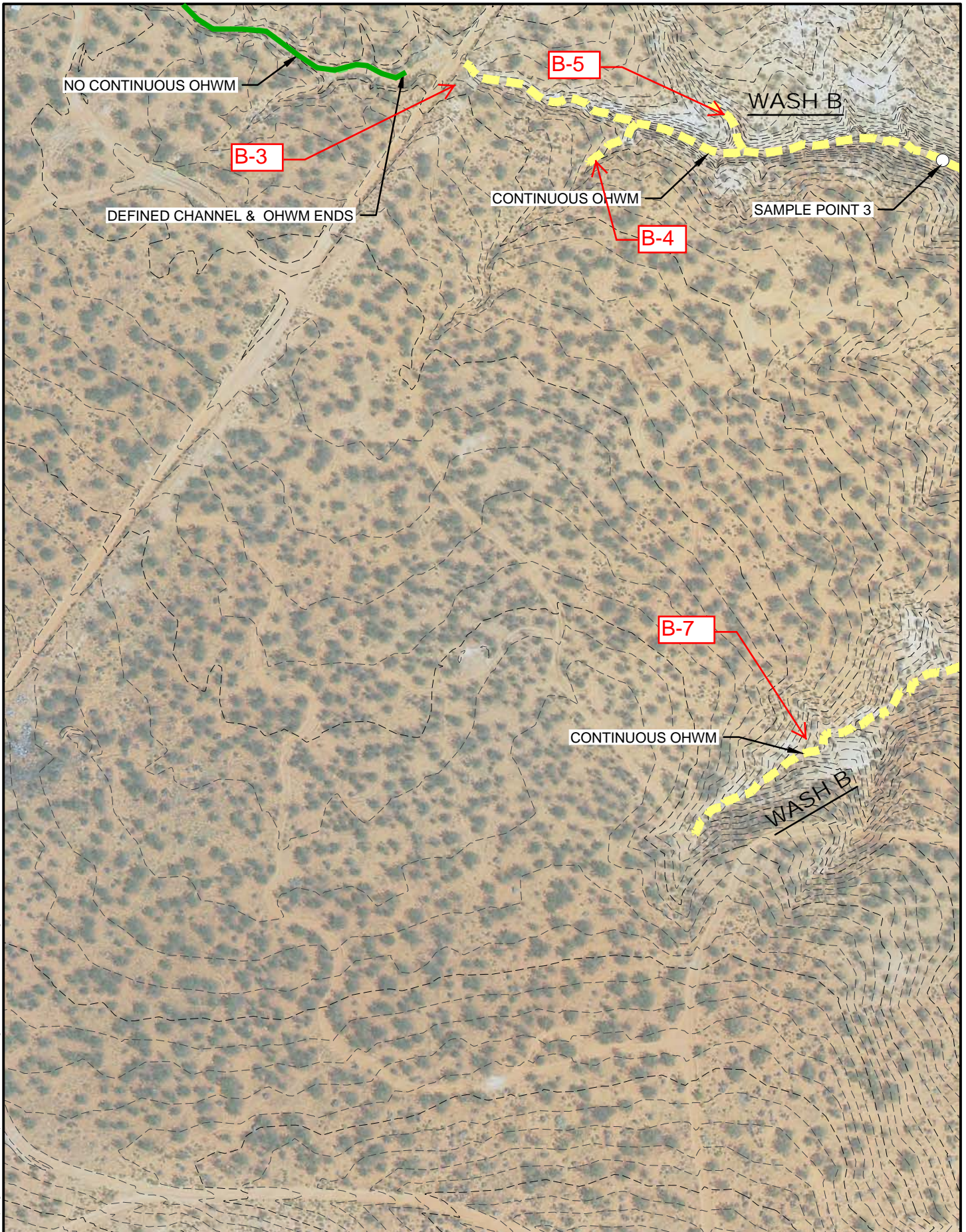
ENGINEERS
 555 South Bluff Street, Suite 101
 St. George, UT 84790, (435) 986-7888

BRILLO DE SOL

JURISDICTIONAL DETERMINATION

FIGURE LEGEND: 	DRAWN	DESIGNED	SCALE:
	SM	SAD	1" = 100'
	FIGURE NO.		DATE:
	JD12		09/04/2014
			DRAWING NO.
			14

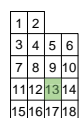
H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



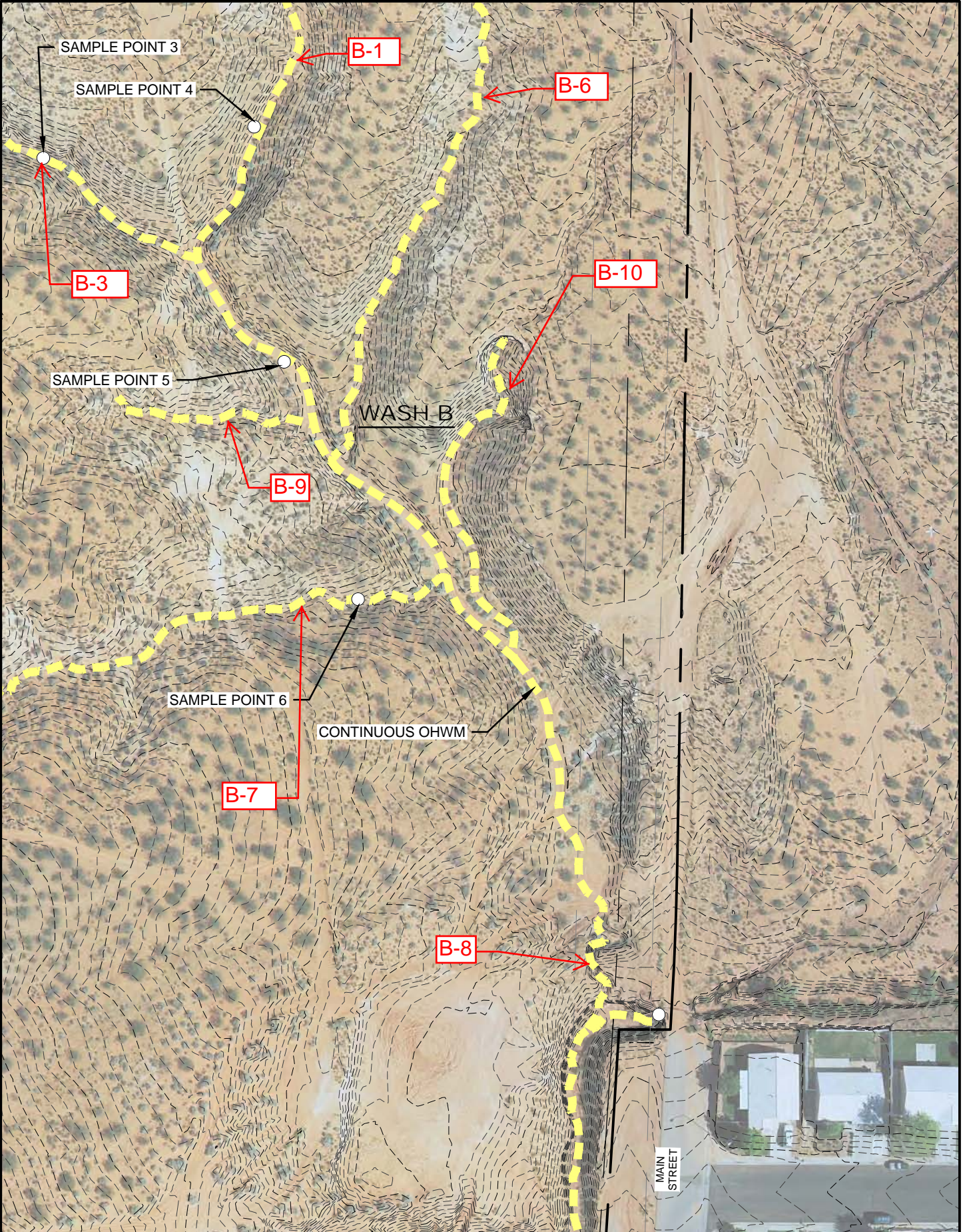
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: 	DRAWN	DESIGNED	SCALE:
	SM	SAD	1" = 100'
	FIGURE NO.		DATE:
	JD13		09/04/2014
			DRAWING NO.
			15

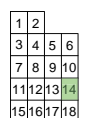
H:\2013\CG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



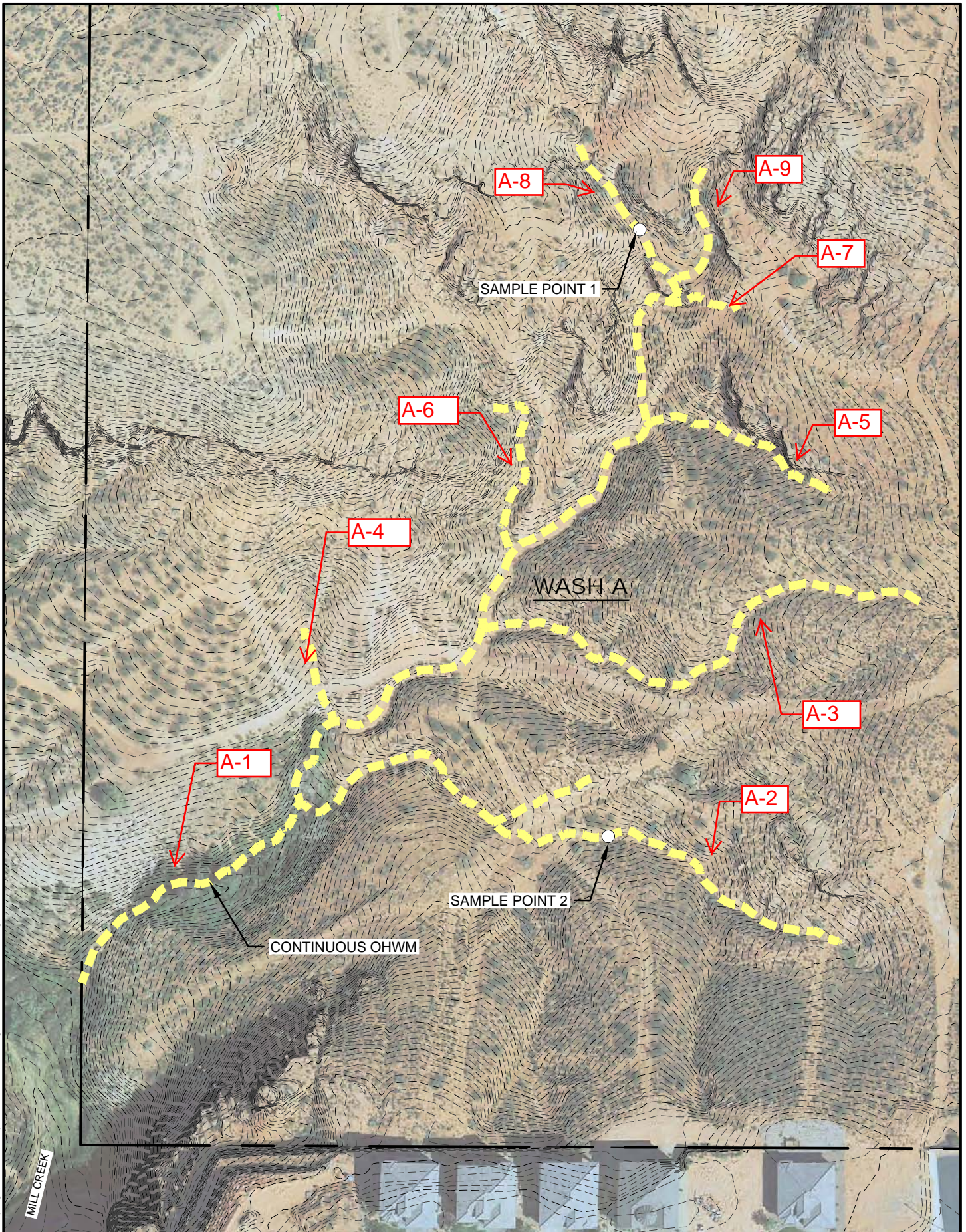
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: 	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	FIGURE NO. JD14		DATE: 09/04/2014
			DRAWING NO. 16

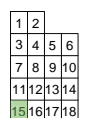
H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



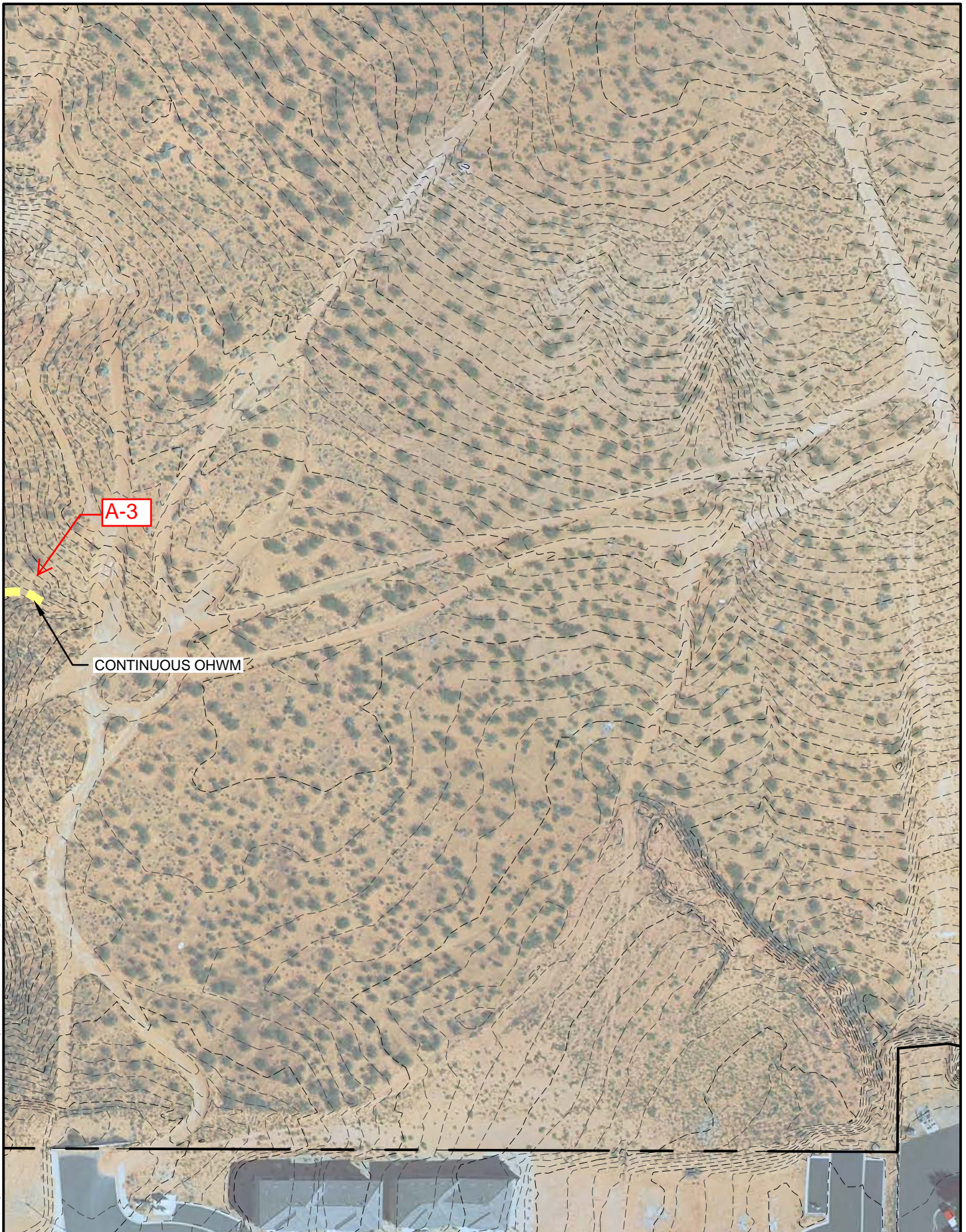
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: 	DRAWN	DESIGNED	SCALE:
	SM	SAD	1" = 100'
	FIGURE NO.		DATE:
	JD15		09/04/2014
			DRAWING NO.
			17

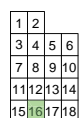
H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



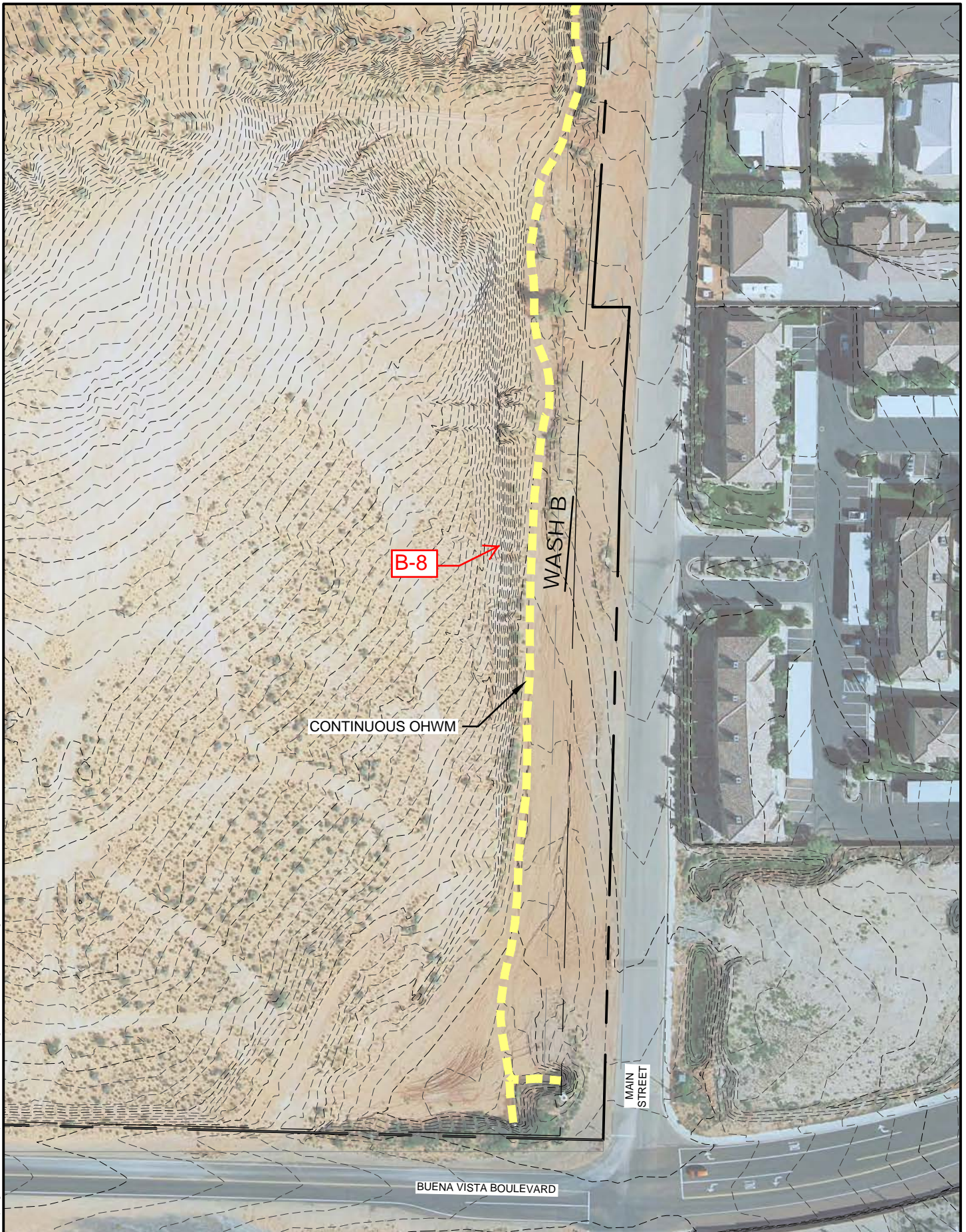
HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: 	DRAWN	DESIGNED	SCALE:
	SM	SAD	1" = 100'
	FIGURE NO.		DATE:
	JD16		09/04/2014
		DRAWING NO.	18

H:\2013\SG-492-1309 Green Springs Residential\Project Data\Sheet_Files\Figures\JD Exhibits REV 6.dwg Shannon McLendon 10/30/2014 8:47 AM



HORROCKS

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

BRILLO DE SOL
 JURISDICTIONAL DETERMINATION

FIGURE LEGEND: <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN SM	DESIGNED SAD	SCALE: 1" = 100'
	1	2																			
3	4																				
5	6																				
7	8																				
9	10																				
11	12																				
13	14																				
15	16																				
17	18																				
	FIGURE NO. JD18		DATE: 09/04/2014																		
			DRAWING NO. 20																		