Lake Powell Pipeline Project
FERC Additional Information Request Schedule B – Item 12

Exhibit E
Geology and Soils

12. In sections 5.3.1.1.9 and 5.3.1.2.2.7 of exhibit E, you have revised the description of the South Alternative to state that soil and rock not used for construction would be spread as spoil material along the right-of-way (ROW) outside the cut area. The Proposed Action indicates an approximate 5-inch-thick layer of spoil material would be spread in a manner to blend with the original topography and drainage. By making this assumption, spoil haul distances would be limited, and no off-project spoil placement areas would be needed. As we note in comment 11, the quantity of material to be deposited would depend on how much rock can be used as crushed aggregate. Because information on rock quality is not available for us to reliably estimate the quantity spoil materials, please provide a range of spoil volumes to be generated and the location of spoil disposal sites if all material cannot be placed in the ROW. Please assume the same two scenarios of the quantity of usable rock materials—50 percent and 25 percent—as noted in comment 11.

UBWR Response:

Tables 2-1, 2-2 and 2-3 show the volume of spoil material generated during construction along the three LPP project alternative alignments for each of the three assumptions of the percentage of blasted rock that would be suitable for use as pipe bedding: 75 percent, 50 percent, and 25 percent, respectively. Figures 2-1 and 2-2 show the locations of potential borrow and spoil pits along the LPP project Water Conveyance and Hydro Systems, respectively.

Table 2-1
Volume of Spoil Material Generated during Construction
(Assuming 75% of blasted rock is suitable for use as pipe bedding)

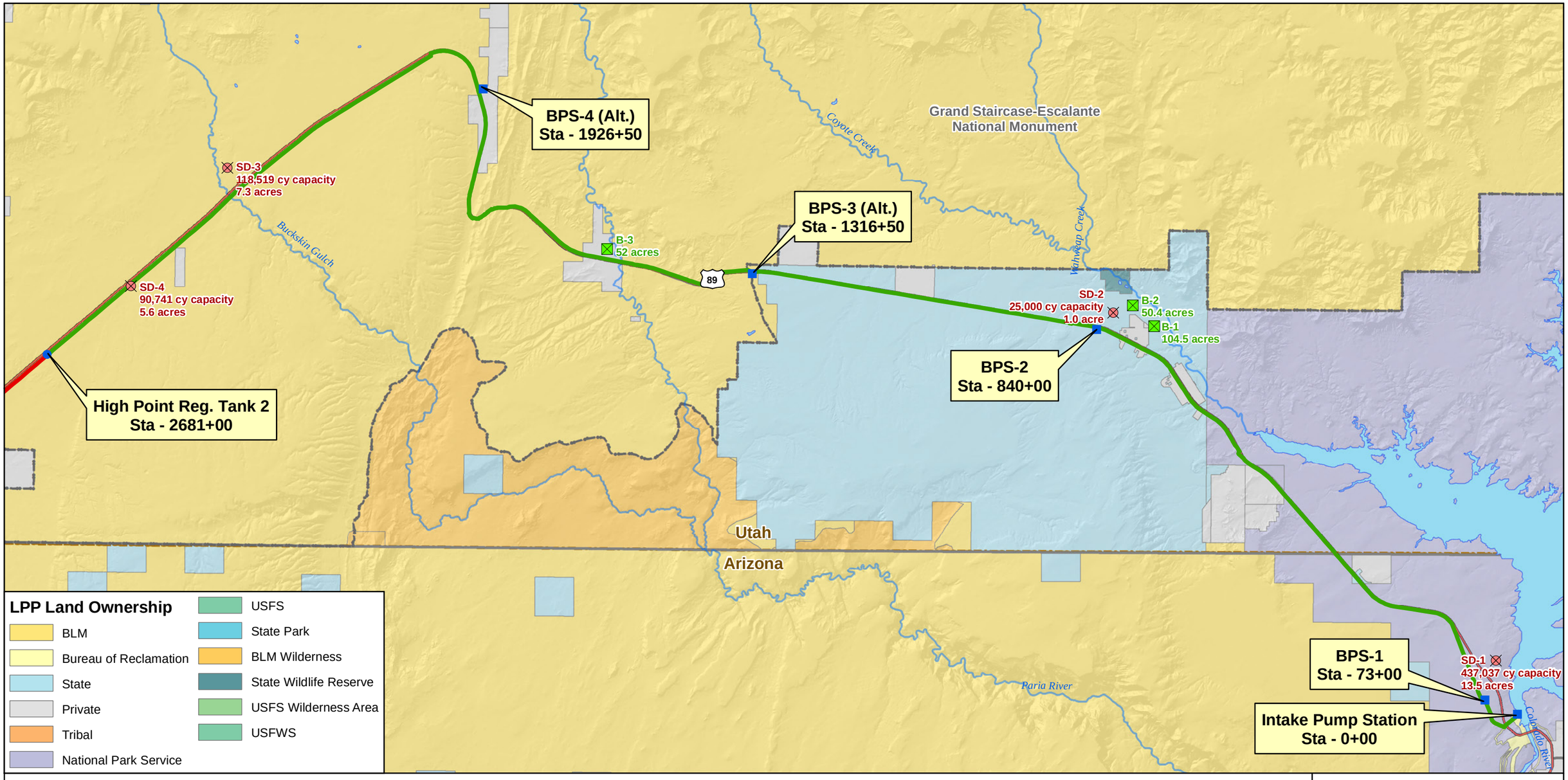
Alignment	Spoil Volume (cy)
Proposed Action	1,897,844
Existing Highway Alternative	2,636,979
Southeast Corner Alternative	1,867,271

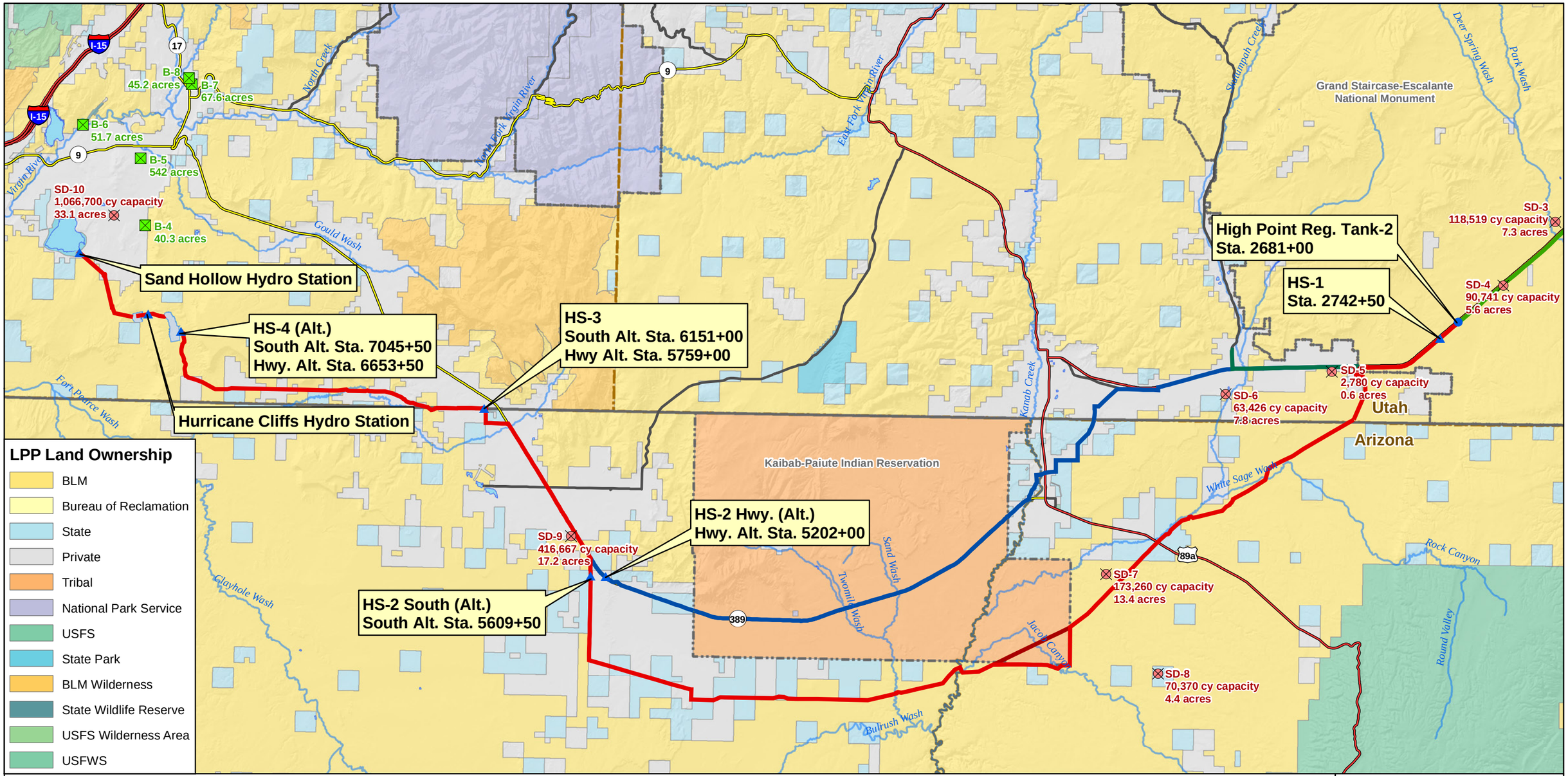
Table 2-2
Volume of Spoil Material Generated during Construction
(Assuming 50% of blasted rock is suitable for use as pipe bedding)

Alignment	Spoil Volume (cy)
Proposed Action	2,549,014
Existing Highway Alternative	2,995,145
Southeast Corner Alternative	2,538,685

Table 2-3
Volume of Spoil Material Generated during Construction
(Assuming 25% of blasted rock is suitable for use as pipe bedding)

Alignment	Spoil Volume (cy)
Proposed Action	3,264,359
Existing Highway Alternative	3,353,312
Southeast Corner Alternative	3,233,324


BPS-4 (Alt.)
Sta - 1926+50
SD-3
118,519 cy capacity
7.3 acres
Buckskin Gulch
SD-4
90,741 cy capacity
5.6 acres
High Point Reg. Tank 2
Sta - 2681+00
B-3
52 acres
89
BPS-3 (Alt.)
Sta - 1316+50
Coyote Creek
Grand Staircase-Escalante
National Monument
Wahweap Creek
SD-2
25,000 cy capacity
1.0 acre
B-2
50.4 acres
B-1
104.5 acres
BPS-2
Sta - 840+00
Utah
Arizona
Paria River
BPS-1
Sta - 73+00
SD-1
437,037 cy capacity
13.5 acres
Intake Pump Station
Sta - 0+00
Colorado River
LPP Land Ownership
BLM
Bureau of Reclamation
State
Private
Tribal
National Park Service
USFS
State Park
BLM Wilderness
State Wildlife Reserve
USFS Wilderness Area
USFWS
SD-# Spoil Disposal Site
B-# Borrow Source
Project Pump Station
Project Regulating Tank
Project Hydro Station
Water Conveyance System
Hydro System - Proposed Action
KCWCD System
Hydro System, Existing Highway Alternative
Hydro System, Southeast Corner Alternative
Interstate
US Highway
ST Highway
Hwy
Major Road
Lakes & Reservoirs
Major Rivers & Streams
National Park/Monument
GSENM-Boundary
State Boundaries
FERC Project Number:
12966-001
BLM Serial Numbers:
AZA-34941
UTU-85472
N
0 0.5 1 2 3 4
Miles
Lake Powell Pipeline Project
Spatial Reference: UTM Zone 12N, NAD-83
UDWRe
Figure 2-1
MWH
Lake Powell Pipeline
Borrow and Spoil Locations
Water Conveyance System



LPP Land Ownership

- BLM
- Bureau of Reclamation
- State
- Private
- Tribal
- National Park Service
- USFS
- State Park
- BLM Wilderness
- State Wildlife Reserve
- USFS Wilderness Area
- USFWS

- SD-# Spoil Disposal Site
- B-# Borrow Source
- Project Pump Station
- Project Regulating Tank
- Project Hydro Station

- Water Conveyance System
- Hydro System - Proposed Action
- KCWCD System
- Hydro System, Existing Highway Alternative
- Hydro System, Southeast Corner Alternative

- Interstate
- US Highway
- ST Highway
- Hwy
- Major Road

- National Park/Monument
- GSENM Boundary
- Tribal Lands
- State Boundaries
- County Boundaries

- Hurricane Cliffs Forebay/Afterbay
- Lakes & Reservoirs
- Major Rivers & Streams

FERC Project Number:
12966-001
BLM Serial Numbers:
AZA-34941
UTU-85472

N

0 1.25 2.5 5 7.5 10 Miles

Lake Powell Pipeline Project

Spatial Reference: UTM Zone 12N, NAD-83

UDWRe **Figure 2-2** MWH

Lake Powell Pipeline
Borrow and Spoil Locations
Hydro System