2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASI	EREQ. NO.	5. PROJECT NO. /If a	ipplicable)
6. ISSUED BY		7. ADMINISTERED BY (If oth	er than Irom 6)	1 2221	
CODE		- ADMINICIENCE DI 12 DIII	er man sem oy	CODE	
	1				
B. NAME AND ADDRESS OF CONTRACTOR (No., street, co	ounty, State and ZIP Code)		(✓) 9A. AMENDN	ENT OF SOLICITATION	NO.
			9B. DATED (SEE ITEM 11)	
			10A MODIFI	CATION OF CONTRACT	ORDER NO
			Tare Media	3.1113.13.13.13.111.13.1	. CALLETTIC.
			10B. DATED	(SEE ITEM 13)	
CODE	FACILITY CODE		7,000		
	M ONLY APPLIES TO				and a
The above numbered solicitation is amended as set f	orth in Item 14. The hour and	date specified for receipt of C	offers is exte	nded. s not exte	ended.
Offers must acknowledge receipt of this amendment prior to	the hour and date specified in	the solicitation or as amende	ed, by one of the follow	wing methods:	
에 있는 사람들은 경영 선생님은 이 전투를 가입니다. 그렇게 보고 있는 것이 없었다면 보다 있다면 보고 있다면 보다 있다면 보다 있다면 모든 것이다. 프로그램 보다	copies of the amendme				
 c) By separate letter or telegram which includes a reference PLACE DESIGNATED FOR THE RECEIPT OF OFFERS 					
mendment you desire to change an offer already submitte	ed, such change may be made				
and this amendment, and is received prior to the opening he	THE PROPERTY COLUMN				
2. ACCOUNTING AND APPROPRIATION DATA (If require	<i>(d)</i>				
	PPLIES ONLY TO MOD			RS,	
	THE CONTRACT/ORD				
A. THIS CHANGE ORDER IS ISSUED PURSUANT NO. IN ITEM 10A.	TO: (Specify authority) THE CH	ANGES SET FORTH IN ITEM	1 14 ARE MADE IN T	HE CONTRACT ORDER	
B. THE ABOVE NUMBERED CONTRACT/ORDER IS SET FORTH IN ITEM 14, PURSUANT TO THE AU		E ADMINISTRATIVE CHAN	GES (such as changes i	n paying office, appropriat	ion date, etc.)
C. THIS SUPPLEMENTAL AGREEMENT IS ENTER	ED INTO PURSUANT TO AUT	HORITY OF:			
D. OTHER (Specify type of modification and authority)					
E MADODTANT:					
E. IMPORTANT: is not, is	required to sign this docum	ent and return	copies	to the issuing effice.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Org	ganized by UCF section headings,	including solicitation/contract	ubject matter where fed	sible)	
Evenot no provided baroin all target and an alternative to	no many postponent and to the co-sta	or IOA on hands free street	ad madeline madeline	ad and in full faces	ffort
	ocument referenced in Item 9A				effect.
Except as provided herein, all terms and conditions of the di 15A. NAME AND TITLE OF SIGNER (Type or print)	ocument referenced in Item 9A	or 10A, as heretofore chang 16A. NAME AND TITLE OF			ffect.
		16A. NAME AND TITLE OF	CONTRACTING OF	FICER (Type or print)	
15A. NAME AND TITLE OF SIGNER (Type or print)	ocument referenced in Item 9A	16A. NAME AND TITLE OF	CONTRACTING OF	FICER (Type or print)	iffect. DATE SIGNED

TABLE OF CONTENTS

Notice to Bidders	A-i
Solicitation, Offer, and Award	A-1
Basis for Award and Bid Schedule	A- 4
Solicitation Provisions	B-1
Contract Clauses	
Davis Bacon Wage Determination	D-1

SPECIAL CONTRACT REQUIREMENTS (SCRs)

The following Special Contract Requirements amend and supplement the Standard Specification for Construction of Roads and Bridges on Federal Highway Projects

Division 100	E-3
Division 150	E-32
Division 200	
Division 300	
Division 400	
Division 500	
Division 600	
Division 700	

APPENDICES

Appendix A	
Appendix B	
1.1	Signed NOI
11	SWPPP
rr	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The Contractor is fully responsible to verify that all data is correct when an offer is submitted. Failure to properly update your data may cause the offer to be rejected.

Request for Technical Information – Questions relative to the plans and SCRs for this solicitation will only be accepted in writing (see Block 9 on Page A-3).

TECHNICAL QUESTIONS REGARDING THIS SOLICITATION WILL NOT BE ACCEPTED AFTER 4 P.M. ON JANUARY 3, 2013

Questions can be submitted to <u>CFLContracts@dot.gov</u>. Questions and answers will be posted at http://www.cflhd.gov/contracting/construction/AdvertisedProjects.cfm

Modifications to Bids - Bids may be modified or withdrawn by facsimile or telegraphic notice, if such notice is received **prior to the time specified for receipt of bids**. The Government will not be responsible for <u>ANY</u> failure attributable to the transmission or receipt of telegraphic or facsimile data. See FAR Provision 52.214-5, Submission of Bids.

FAX Number to submit modifications to bids for this project is (720) 963-3360

II. Post Award Information.

Subcontracting - **Subcontracting** - FAR Clause 52.219-8, *Utilization of Small Business Concerns* states that Prime Contractors afford small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns the maximum practicable opportunity to participate in performing contracts let by any Federal agency

Insurance requirements - See Subsection 107.05 of the FP-03.

EEBACS - Contractors shall use the Government's web-based system, *Engineer's Estimating, Bidding, Award, and Construction System (EEBACS)*, to prepare all "*Inspector's Daily Record of Construction Operations*" (*Contractors Daily Reports*) and measurement notes (pay notes).

The Contractor shall be required to attend a training session on the use of EEBACS. The training session will require up to 4 hours. No more than 3 Contractor staff may attend the training unless approved by the CO. The Contractor shall be responsible for training additional staff.

The Contractor shall be required to submit a user account form to gain access to the EEBACS system. See Subsection 108.01.

A user guide, "*EEBACS for Construction Contractors*", is available. An electronic version can be found at http://flh.fhwa.dot.gov/resources/pse/estimate/guide.htm

Section 107. - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.01 Laws to be Observed. Add the following:

Submit and follow a Hazardous Spill Plan when an SPCC plan is not required. Develop a plan describing what actions will be taken in case of a spill and incorporate preventative measures to be implemented (such as the placement of refueling facilities, storage and handling of hazardous materials, etc).

Submission of the plan must be made at least 2 days before beginning on site work.

"Good Housekeeping" Practices and Requirements.

Locate machinery servicing and refueling areas away from streambeds and washes to reduce the possibility and minimize the impacts of accidental spills or discharges.

Where the Contractor's working area encroaches on a running or intermittent stream, construct and maintain adequate barriers to prevent the discharge of any contaminants into the stream.

Immediately clear ephemeral drainages, intermittent and perennial streams, lakes and reservoirs of all work items, debris or other obstructions inadvertently placed thereby or resulting from construction operations.

Section 401 and 404 of the Clean Water Act.

Comply with the terms and conditions of the 404 permit and with the terms and conditions, if any, specified in the 401 certification. Comply with the terms and conditions of any permits that are issued for the performance of work within the jurisdictional waters of the U.S.

National Pollutant Discharge Elimination System (NPDES) in Arizona

Comply with the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit (CGP) AZG2008-001 for erosion and sediment control due to storm water runoff. A copy of the permit is located at:

http://www.azdeg.gov/environ/water/permits/download/2008_cgp.pdf

(a) General. Designate a qualified Erosion Control Supervisor according to Subsection 157.03.

Obtain a separate NPDES permit associated with industrial activity for any mobile asphalt and concrete plants that provide material for the project. Provide a copy of the permit and acknowledgement letter to the CO for their records.

(b) Preparation of the Storm Water Pollution Prevention Plan (SWPPP). The Government has prepared a preliminary SWPPP. Update the preliminary SWPPP for the project or develop a new SWPPP and provide to the CO for review. When the SWPPP is accepted by the CO and signed by both the CO and the Contractor, it will be the document in force on the project. Do not

perform any ground disturbing activities including removals, clearing and grubbing or earthwork until the SWPPP has been accepted by the CO. Implement the SWPPP as required throughout the construction period.

Modify the erosion control details and layout sheets included in the plans, as necessary, to accommodate project site conditions and proposed construction operations and include them in the SWPPP.

(c) Notice of Intent (NOI). The Government will file an NOI. Obtain AZPDES permit coverage by filing a separate NOI. Provide a copy of the NOI and confirmation letter to the CO. Do not perform any ground disturbing activities including clearing and grubbing or earthwork until a confirmation of coverage letter is received from the ADEQ and the SWPPP has been approved and implemented.

The NOI form may be downloaded from the following website:

http://www.azdeq.gov/environ/water/permits/download/Construction_NOI_Inst-9-10.pdf

The NOI may also be submitted electronically via the Smart NOI website:

http://az.gov/app/noi/(S(wwwpwz45uut3g455nqgj2b45))/Default.aspx

Post all project authorization numbers near the entrance to the site and on the bulletin board.

(d) Inspections and Revisions to the SWPPP. Perform inspections as required in the CGP. Document inspections and retain records in the SWPPP. Update the SWPPP and ensure that all procedures, practices, and inspections are current.

Place the SWPPP and all updates in a three ring binder so that completed inspection forms and other records may be inserted. Make the SWPPP available for public inspection and for use by the CO.

Revisions to the SWPPP may be necessary during construction to make improvements or to respond to unforeseen conditions noted during construction or site inspections. For that purpose, specify in the SWPPP the mechanism whereby revisions may be proposed by the Contractor or the CO and incorporated into the plan, including review and approval of minor changes. Jointly approve and sign each revision to the SWPPP. Implement approved changes according to the CGP.

(e) Notice of Termination (NOT). File a NOT when the conditions listed in the CGP have been met.

At the completion of the project, provide the CO with the complete SWPPP, including inspection forms, logs, and all other required documentation added during the project.

National Pollutant Discharge Elimination System (NPDES) in Arizona

Comply with the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit (CGP) AZG2008-001 for erosion and sediment control due to storm water runoff. A copy of the permit is located in the Appendix and at:

http://www.azdeq.gov/environ/water/permits/download/2008_cgp.pdf.

This permit is scheduled to expire on 02/28/2013. Amend the SWPPP and site plan when the new permit goes into effect to meet new permit conditions.

(a) General. Designate a qualified Erosion Control Supervisor according to Subsection 157.03.

Obtain a separate NPDES permit associated with industrial activity for any mobile asphalt and concrete plants that provide material for the project. Provide a copy of the permit and acknowledgement letter to the CO for their records.

(b) Preparation of the Storm Water Pollution Prevention Plan (SWPPP). The Government has prepared a preliminary SWPPP. Update the preliminary SWPPP for the project or develop a new SWPPP and provide to the CO for review. When the SWPPP is accepted by the CO and signed by both the CO and the Contractor, it will be the document in force on the project. Implement the SWPPP as required throughout the construction period.

Modify the erosion control details and layout sheets included in the plans, as necessary, to accommodate project site conditions and proposed construction operations and include them in the SWPPP.

(c) Notice of Intent (NOI). File a NOI as a primary operator. Provide a copy of the NOI and confirmation letter to the CO. The Government will also file a NOI and provide that information to the Contractor for inclusion in the SWPPP. Do not perform any ground disturbing activities including clearing, grubbing, or earthwork until an acknowledgement letter is received from the Arizona Department of Environmental Quality and the SWPPP has been approved and implemented.

The NOI form may be downloaded from the following website:

http://azdeq.gov/environ/water/permits/download/construction_noi.pdf

The NOI may also be submitted electronically via the Smart NOI website:

http://az.gov/app/noi/(S(wwwpwz45uut3g455nggj2b45))/Default.aspx

Post all project authorization numbers near the entrance to the site and on the bulletin board.

(d) Inspections and Revisions to the SWPPP. Perform inspections as required in the CGP. Document inspections and retain records in the SWPPP. Update the SWPPP and ensure that all procedures, practices, and inspections are current.

Place the SWPPP and all updates in a three-ring binder so that completed inspection forms and other records may be inserted. Make the SWPPP available for public inspection and for use by the CO.

Revisions to the SWPPP may be necessary during construction to make improvements or to respond to unforeseen conditions noted during construction or site inspections. For that purpose, specify in the SWPPP the mechanism whereby revisions may be proposed by the Contractor or the CO and incorporated into the plan, including review and approval of minor changes. Jointly approve and sign each revision to the SWPPP. Implement approved changes according to the CGP.

(e) Notice of Termination (NOT). File a NOT when the conditions listed in the CGP have been met or transfer the NOI to FHWA when project has reached final acceptance. The Government will file a NOT.

At the completion of the project, provide the CO with the complete SWPPP, including inspection forms, logs, and all other required documentation added during the project.

107.02 Protection and Restoration of Property and Landscape. Add the following:

Apply the following seed mixture and rate: Quickgaurd Sterile Triticale (Triticum aestivum x Secale cereale) (80 lbs. per acre) or a TBD annual grass.

625.08 Mulching. Delete the text and substitute the following:

Apply mulch immediately following seeding by the following method:

(b) Hydraulic Method.

Once seeding operations are complete, apply Bonded Fiber Matrix mulch (BFM, must be CO approved) to all disturbed areas at a rate of 3000 lbs./acre. Bonded Fiber Matrix mulch must be made of 100% biodegradable, virgin, weed free, wood fiber with a tackifier (either already included in the BFM or added to the BFM) that is not harmful to plants, natural, and non-toxic alactomannan (guar) based hydrocolloid treated with dispersant agents for easy field mixing.

Apply BFM from two different directions 180° from each other so that no gaps or shading affects exist between the fiber and the soil. Do not apply BFM immediately before, after or during rainfall such that the BFM will have opportunity to dry for up to 24 hours after installation.

A non-toxic, biodegradable tackifier such as Super Tack or its equivalent shall be used on this project at the manufacturer's recommended rate for slope and precipitation. The tackifier shall not be harmful to plants and shall be a natural, non-toxic galactomannan (guar) based hydrocolloid treated with dispersant agents for easy field mixing.

To ensure proper curing of the tackifier, it shall be applied when the daytime temperature is above 50 degrees F. and minimum temperatures do not fall below freezing. It should not be applied to saturated wet soil, during rain, high winds, or when the temperature is less than 50 degrees F. separate application using hydraulic type equipment.

Use an individual who is certified by the manufacturer or other acceptable certification training to install BFM. Furnish a mixture of BFM according to the manufacturer's recommendations and provide "free liquid" test if requested by the CO. Fax or email certification to COR CO one week before application of hydro-mulch.

Do not apply fertilizer to disturbed areas.

625.09 Protecting and Caring for Seeded Areas. Delete the text and substitute the following:

Protect and care for seeded areas including watering when needed until final acceptance. Repair all damage to seeded areas by reseeding and remulching. Apply supplemental applications of seed and mulch.

Section 626. — PLANTS, TREES, SHRUBS, VINES, AND GROUNDCOVERS

Description

626.01 Add the following:

APPENDIX C- SIGNED NOI



NOTICE OF INTENT (NOI)

for Construction Activity Discharges

to Waters of the United States under the AZPDES Stormwater Construction General Permit (AZG2008-001)

FOR COVERAGE, A COMPLETE AND ACCURATE NOI (INCLUDING REQUIRED FEE) MUST BE SUBMITTED TO: Arizona Department of Environmental Quality, Surface Water Section / Stormwater and General Permits Unit 1110 West Washington Street, 5415A-1, Phoenix, Arizona 85007

Gene	eral	Ol a revision to a project filed under the 2008 AZPDES Stormwater Construction Permit?YESV_NO		
	OP	ERATOR (Applicant) INFORMATION: Contact Name: Matt Ambroziak		
·		Phone Number: (720) 963-3619		
	 Phone Number: (1/20) 903-3019			
7				
7	> Operator's Mailing Address: 12300 W. Dakota Ave			
>	> City: Lakewood State: CO Zip Code: 80228			
>	A	Business Status: Federal: V State: Other Public: Private: Private:		
II. O	co	NSTRUCTION SITE INFORMATION:		
>	>	Project/Site Name: Lee's Ferry Road & Paria River Bridge		
)	>	County Parcel No. (at main entrance): Coconino, S34 T40 R7E Phone Number:		
)	> Type of Project (subdivision, commercial, road, pipeline, utility, ADOT project, etc.): Road - FHWA Project			
•		If a subdivision, has state or local subdivision approval been obtained?YESNO		
		If yes, provide the Subdivision Certificate of Approval Number:		
	>	Is the project part of a larger common plan of development?YESV_NO		

Name of Project: Lee's Ferry Road & Paria River Bridge

II.	cc	DNSTRUCTION SITE INFORMATION (continued)				
	>		or approvals? If so, list them and provide the permit/approval 20000525-DB, CWA Section 401 ADEQ LFT No.56437			
	Site physical location (Provide address. If no address, provide driving directions from nearest municipality): Marble Canyon, AZ, Glen Canyon National Recreation Area, Project Centroid: Latitude 36deg 50' 51.85"; Longitude:111deg37' 28.83" near Lee's Ferry, Coconino County, Arizona					
	×	City: Marble Canyon State: AZ Zip Code:	86036 County: Coconino			
	>	Estimated Project Start Date: 01/21/2013 Es	timated Project Completion Date: 12/01/2013 Month/Day/Year			
	>	Estimate of total acres (to nearest whole acre) to be distu	urbed by the entire construction activity: 49			
	➤ Estimate of total acres (to nearest whole acre, round up if < 1) to be disturbed by your operations: 28					
	➤ Select the non-stormwater discharges expected to be associated with your construction-related activities:					
		None	Foundation or footing drains – uncontaminated			
		Discharges from emergency fire-fighting activities	Potable water well flushing – ephemeral receiving waters only			
	<u></u>	Fire hydrant flushing – ephemeral receiving waters only Waters used to control dust – no reclaimed or other wastewaters	✓ Waters used for compacting soil – no reclaimed or other wastewaters			
		Potable waterline flushing – ephemeral receiving waters only	Water used for drilling and coring (e.g., for evaluation of foundation materials) uncontaminated			
•	**********	Routine external building wash down (no detergents)	Uncontaminated water from dewatering operations or foundations			
		Pavement wash waters – no spills or leaks of toxic or hazardous materials and no detergents	Other (specify)			
		Uncontaminated air conditioning or compressor condensate				
-		Uncontaminated groundwater				

Name of Project: Lee's Ferry Road & Paria River Bridge

III.	DI	SCHARGE LOCATION
	>	Provide the latitude and longitude of the construction site at the point nearest the receiving water (natural water course): Latitude: $\lfloor 3 \lfloor 6 \rfloor^{\circ} \lfloor 5 \rfloor \rfloor \lfloor 5 \rfloor \rfloor \lfloor 14 \rfloor \rfloor$ Longitude: $\lfloor 1 \rfloor \lfloor 1 \rfloor \rfloor \lfloor 5 \rfloor \rfloor \lfloor 5 \rfloor \rfloor \lfloor 78 \rfloor \rfloor$ (Degrees, minutes, seconds)
	>	Identify the closest receiving water to the construction site (e.g., dry washes, named and unnamed waterbodies, etc.): Cathedral Wash, No Name Wash and Paria River
	>	Is there a potential for any discharges from the site to enter a municipal separate storm sewer system (MS4), canal, or a privately owned conveyance?YESV_NO If yes, enter the name of the MS4, canal, or conveyance owner:
IV.		**ORMWATER POLLUTION PREVENTION PLAN (SWPPP) — A SWPPP must be developed in accordance with the rms of the general permit before completing and submitting this NOI.
	>	I confirm that a SWPPP meeting the requirements of the Stormwater Construction General Permit (No. AZG2008-001) has been developed and will be implemented prior to commencing construction activities at this site. The SWPPP will be located at the site during construction activities. If this is a late NOI, a SWPPP has been developed and implemented prior to submitting this NOI. NOTE: ADEQ retains the authority to take enforcement action(s) for any unpermitted discharge or other non-compliance that occurs between the time construction commenced and discharge authorization is issued.
	>	When construction activities are not actively underway, the SWPPP will be available at the following location: Lee's Ferry Construction Site, Lee's Ferry Road, Glen Canyon National Recreation Area
	>	Name of SWPPP Contact Person: Dan Onisko
	>	Telephone Number of SWPPP Contact Person: (303) 524-4391
,	>	This project may discharge within 1/4 mile of an Impaired or Outstanding Arizona Water:

Name of Project: Lee's Ferry Road & Paria River Bridge

-3-	
V.	FEES
	✓ I confirm that the correct fee payment is included with the NOI:
	Less than or equal to I acre: \$250.00 *
	✓ Greater than 1 acre, but less than or equal to 50 acres: \$350.00
	Greater than 50 acres: \$500.00
	Review of SWPPP by ADEQ, if required (see section IV above): add \$1,000.00
	Total fee payment included: \$\\\\350.00\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	No fee is required. The signer below represents an Arizona state agency (exempt from AZPDES fees).
	No fee is required. This is an amendment of an NOI previously filed under the 2008 Stormwater Construction General Permit, for which the fee was paid or not required.
	* (If the project will disturb less than one acre, Stormwater Construction General Permit coverage is required only if the project is part of a larger common plan of development or sale that will ultimately disturb one acre or more.)
VI.	CERTIFICATION BY AUTHORIZED SIGNATORY (see Part VIII.J.1 of the General Permit for requirements)
	"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in accordance with a system designed to ensure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, I believe the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, as the operator, I certify that I have reviewed and will comply with all the terms and conditions stipulated in the Stormwater Construction General Permit (AZG2008-001)."
	Printed Name: Matt Ambroziak Title: Project Manager
	> Signature: Matt Date: 12/17/12
	Business Name: US Department of Transportation Federal Highway Administration
	> Address: 12300 W. Dakota Ave
	> City: Lakewood State: CO Zip Code: 80228 Phone: (720) 963-3619

APPENDIX D-SWPPP

Stormwater Pollution Prevention Plan

for:

Lee's Ferry Access Road and Paria River Bridge AZ PRA GLCA 5(2) & 99(1) Glen Canyon National Recreation Area Coconino County, Arizona

Operator(s):

U.S. Department of Transportation Federal Highway Administration
Central Federal Lands Highway Division
12300 W. Dakota Ave
Lakewood, CO 80228
Matt Ambroziak, Project Manager
(720) 963-3619

SWPPP Contact(s):

Fax (720) 963-3596 Email: Matthew.Ambroziak@dot.gov

U.S. Department of Transportation Federal Highway Administration
Central Federal Lands Highway Division
12300 W. Dakota Ave
Lakewood, CO 80228
Matt Ambroziak, Project Manager
(720) 963-3619
Fax (720) 963-3596 Email: Matthew.Ambroziak@dot.gov

SWPPP Preparation Date:

November 2012

Estimated Project Dates:

Project Start Date: 01/21/2013 Project Completion Date: 12/01/2013

Contents

SECTI	ON 1: SITE EVALUATION, ASSESSMENT, AND PLANNING	1
1.1	Project/Site Information	1
1.2	Contact Information/ Responsible Parties	2
1.3	Nature and Sequence of Construction Activity	4
1.5	Construction Site Estimates	6
1.6	Receiving Waters	
1.7	Site Features and Sensitive Areas to be Protected	8
1.8	Potential Sources of Pollution	9
1.10	Historic Preservation	
	ON 2: EROSION AND SEDIMENT CONTROL BMPS	
2.1	Minimize Disturbed Area and Protect Natural Features and Soil	
2.3	Control Stormwater Flowing onto and through the Project	
2.4	Stabilize Soils	
2.5	Protect Slopes	
2.6	Protect Storm Drain Inlets	
2.9	Establish Stabilized Construction Entrances	
	ON 3: GOOD HOUSEKEEPING BMPS	
3.1	Material Handling and Waste Management	
3.3	Designate Washout Areas	
3.4	Establish Proper Equipment/Vehicle Fueling and Maintenance Practices	
3.5	Control Equipment/Vehicle Washing	
3.6	Spill Prevention and Control Plan	
3.7	Allowable Non-Stormwater Discharge Management	
	ON 5: In the section of the section	
5.1	ON 5: Inspection Inspections	
5.2	Delegation of Authority	
5.3	Corrective Action Log	
	ON 6: RECORDKEEPING AND TRAINING	
6.1	Recordkeeping	
	ading and Stabilization Activities form is provided in Appendix I	
6.2	Log of Changes to the SWPPP	
	Training	
	ON 7: FINAL STABILIZATION	
	ON 8: CERTIFICATION AND NOTIFICATION	
	P APPENDICES	
5,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
List of	Appendices	
	ndix A – General Location Map	
	ndix B – Site Maps	
	ndix C – Construction General Permit	
	ndix D – NOI and Acknowledgement Letter from EPA/State	
	ndix E – Corrective Action Log	
	ndix F – SWPPP Amendment Log	

Stormwater Pollution Prevention Plan (SWPPP) Lee's Ferry Road and Paria River Bridge November 2012

Appendix G – Inspection Checklist

Appendix H – Subcontractor Certifications/Agreements

Appendix I – Grading and Stabilization Activities Log

Appendix J – Training Log

Appendix K – Delegation of Authority

Appendix L – Monitoring Program for Impaired Waters

List of Tables and Figures

Table 1: Construction Site Pollutants

Figure 1: Wetlands in the Lee's Ferry Project Limits

Figure 2: Slope Protection (Revet Mattress)

Figure 3: Temporary Inlet Protection (CFL Standard Drawing)

Figure 4: Silt Fence Installation

Figure 5: Check Dam Installation

Figure 6: Gabion Wall Installation

Figure 7: Revet Mattress Installation

Figure 8: Paved Ditch and Curb and Gutter Installation

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

permit.)

Project/Site Name: AZ PRA GLCA 5(2) & 99(1) Lee	•	Road and	Paria Rive	r Bridge
Project Street/Location: Lee's Ferry Access Road (I	ŕ			0.500.5
City: Marble Canyon	State:	AZ	ZIP Code:	86036
County or Similar Subdivision: Coconino				
$Latitude/Longitude \ (Use \ \textbf{one} \ of \ three \ possible \ format$	s, and specify r	nethod)		
Latitude:	Longitude:			
1. 36 ° 50' 51.85" N (degrees, minutes, seconds)	1. 111 ° 37' 28 seconds)	i.83" W (d	egrees, mir	iutes,
Method for determining latitude/longitude:				
USGS topographic map (specify scale: Other (please specify):)	⊠ EPA	Web site	GPS
Is the project located in Indian country?	⊠ No			
If yes, name of Reservation, or if not part of a Reservation	ation, indicate '	'not applic	cable."	
Is this project considered a federal facility?	Yes] No		
Does your project/site discharge stormwater into a M (MS4)? Yes No	Iunicipal Separ	ate Storm	Sewer Sys	tem
Are there any surface waters that are located within a Yes No	50 feet of your	constructi	on disturba	nces?
AZDPES project or permit tracking number*:				
*(This is the unique identifying number assigned to your project coverage under the appropriate Arizona Pollutant Discharge El				

1.2 Contact Information/Responsible Parties

Operator(s):

U.S. Department of Transportation Federal Highway Administration

Central Federal Lands Highway Division

12300 W. Dakota Ave

Lakewood, CO 80228

Matt Ambroziak, Project Manager

(720) 963-3619

U.S. Department of Transportation Federal Highway Administration

Central Federal Lands Highway Division

Project Manager(s) or Site Supervisor(s):

Insert Company or Organization Name: CONTRACTOR TBD

Insert Name:

Insert Address:

Insert City, State, Zip Code:

Insert Telephone Number:

Insert Fax/Email:

Insert area of control (if more than one operator at site):

Repeat as necessary

SWPPP Contact(s):

U.S. Department of Transportation Federal Highway Administration

Central Federal Lands Highway Division

12300 W. Dakota Ave

Lakewood, CO 80228

Dan Onisko, Construction Engineer

(303) 524-4391

Area of control: Lees Ferry Access and Paria River Channel Improvements

Stormwater Pollution Prevention Plan (SWPPP) Lee's Ferry Road and Paria River Bridge November 2012

This SWPPP was Prepared by:

Tory Jackson HDR Engineering 303 East 17th Avenue, Suite 700 Denver, CO 80210 (303) 318-6273 Tory.Jackson@hdrinc.com

Darin Lockhart
HDR Engineering
303 East 17th Avenue, Suite 700
Denver, CO 80210
(303) 318-6328
Darin.Lockhart@hdrinc.com

Subcontractor(s):

TBD

Emergency 24-Hour Contact:

Insert Company or Organization Name: CONTRACTOR TBD

Insert Name:

Insert Telephone Number:

Stormwater Pollution Prevention Plan (SWPPP) Lee's Ferry Road and Paria River Bridge November 2012

1.3 Nature and Sequence of Construction Activity

The general scope of roadway improvements for this project includes recycling and replacing pavement surfaces on 5.74 miles of Lee's Ferry Access Road (Route 5) in the Glen Canyon National Recreation Area in Coconino County. Erosion is a concern along the roadside and will be addressed with paved ditches, curb, roadside ditch improvements and inlet protection. The No Name Wash crossing will replace the existing culverts with a larger box culvert and the road profile will be raised to reduce roadway overtopping during minor storm events. The project includes minor roadside grading, drainage structures, placement of pulverized base and asphalt pavement, minor signing, striping, and other safety-related features necessary to meet current design practice.

The Paria River will be stabilized in the vicinity of the Paria River Bridge adjacent to Lee's Ferry Road. The existing bridge abutment will be stabilized with a concrete lining. The east bank protection consists of installing a revet mattress and two channel spurs upstream of the bridge. Lonely Dell Access Road bank protection consists of installing a gabion retaining wall to stabilize the bank slope and restore the road section.

Depending on funding, construction may begin in December 2012 and will be completed by December 2013. Construction will be completed in the following sequence:

- 1. Establish temporary Best Management Practices (BMPs)
- 2. Removal of obstructions
- 3. Subexcavation and ditch excavation
- 4. Roadway obliteration
- 5. Installation of gabions and revet mattresses
- 6. Roadway pulverizing and paving
- 7. Culvert installation
- 8. Curb and paved ditch installation
- 9. Slope paving
- 10. Temporary seeding and hydro-mulching
- 11. Sign installation and roadway stripping
- 12. Remove temporary BMPs

What is the funct	tion of the construct	tion activity?	
Residential	Commercial	Industrial	Linear Utility
Other (please	specify):		
Estimated Projec	et Start Date: 01/21/	/2013	
Estimated Projec	t Completion Date:	12/1/2013	

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s): Most of Lees Ferry Road has soils that developed from the Eolian sands and/or weathered sandstone and shale. These soils are nutrient-poor and do not support an extensive vegetative community. The Paria River floodplain consists of more recent sandy alluvial soils. Sand bars in this area and in spot locations along the Colorado River support narrow areas of riparian vegetation.

The disturbance area includes five primary or dominant soil map units. These soil map units include:

- Somorent family-rock outcrop complex, 5 to 12 percent slopes
- Myton very gravelly sandy loam, 5 to 18 percent slopes
- Razito-Riverwash complex, 1 to 4 percent slopes
- Rock outcrop-Torriorthents complex, 20 to 65 percent slopes
- Pennell cobbly loam, 3 to 10 percent

Soil characteristics and the general project location of these soils can be found in the Environmental Assessment.

Slopes: Slopes within the basin average from 5% to 40% grade. The current slopes adjacent to the roadway experience a great deal of erosion. Construction will include paved ditches, special ditches, and side slopes that are graded during paving operations. These construction activities are designed to reduce the effects of erosion and provide stable slopes.

Drainage Patterns: Surface drainage adjacent to the existing road embankment is suitable with the exception of the area near Cathedral Rock (Sta 131+00 to 178+00) where the asphalt lining of the ditches has failed or cracked. Additional asphalt lined ditches will be added adjacent to the roadway.

Vegetation: Glen Canyon National Recreation Area is characterized by an arid desert climate and vegetation in the project area is limited. Plant communities are dominated by shrubland shadscale (Atriplex confertifolia). The nakedstem sunray (Enceliopsis nudicaulis) is found within the Moenkopi formation along Lees Ferry Road. The shrublands that occur on the Kaibab limestone are more diverse than on the Moenkopi soils and contain numerous forbs and annuals, such as Brady's pincushion cactus (Pediocactus bradyi) and an exotic grass species (Schismus arabicus). The dry wash communities contain mixed shrubs, forbs, and annual species, including the Marble Canyon spurge (*Euphorbia aaron rossii*). Within the narrow wetland communities along the Paria River, rush (*Juncus* sp.) is the dominant (and only) wetland species.

A number of nonnative plant species pose threats to Glen Canyon National Recreation Area's sensitive habitats, native plant communities, and landscape aesthetics including the Russian olive (*Elaeagnus angustifolia*), salt cedar or tamarisk (*Tamarix chinensis*), and Sahara mustard (*Brassica tournefortii*). Cultivated plants are also present within the national recreation area including, desert willow (*Chilopsis linearis*), which is present within the Lees Ferry Campground.

1.5 Construction Site Estimates

The following are estimates of the construction site.

Total project area:	48.5 acres
Construction site area to be disturbed:	27.3 acres
Percentage impervious area before construction:	42.8 %
Runoff coefficient before construction:	0.41
Percentage impervious area after construction:	42.3 %
Runoff coefficient after construction	0.41

Due to the large drainage area of the basin (greater than 3 square miles) and the relatively unchanged area of the paved road, the runoff coefficient will not change for this project.

1.6 Receiving Waters

Receiving Waters

The Paria River is a tributary to the Colorado River and a primary sediment source for the Colorado River through the Grand Canyon. Annual mean discharge of the Paria River at Lee's Ferry is approximately 24 cubic feet per second for the Lees Ferry gauge period of record from water years 1995 through 2010. During this time, mean monthly flows ranged from a low of 2.95 cubic feet per second in July 2002 to a high of 196.5 cubic feet per second in September 1997. The typical flow pattern is quite variable with low flows typically occurring during the summer months.

The Colorado River flows in a southwest direction from the Glen Canyon Dam towards the Gulf of California. The sediment load of the Colorado River drops out of suspension in the upper reaches of Lake Powell. At Lee's Ferry, the river is clear and the nutrient levels are low. The mean flow of the river is relatively constant due to the Glen Canyon Dam and ranges daily from 5,000 cubic feet per second to 20,000 cubic feet per second.

There are several intermittent washes through the Lees Ferry area, including No Name Wash and Cathedral wash. These washes are typically dry, but flow during rain events with high run-off. These washes typically include pools and other catchments that can hold water after the washes have stopped flowing. Groundwater near the surface at Lees Ferry is hydrologically linked with the Colorado and Paria Rivers.

Description of storm sewer systems:

There are no storm sewer systems within the construction limits.

Description of impaired waters or waters subject to TMDLs:

The Paria River was listed in 2010 by the ADEQ as one of Arizona's impaired and not attaining waters. In accordance with the AZPDES construction general permit, projects located in within one-quarter mile of impaired or unique waters are subject to undergo site specific monitoring program in order minimize impacts and ensure no adverse effects on water quality due to sediment, debris, and other pollutants.

See Appendix L: Monitoring Program for Impaired Waters for the Paria River monitoring plan.

The main causes of this impairment of the Paria River are a combination of suspended sediment and E. coli concentration. The high concentration of sediment is likely due to natural processes such as erosion in a desert environment. Approximately 29.4 miles of the Paria River are affected.

See Section 1.8: Potential Sources of Pollution for possible sources and ways to prevent further contamination.

1.7 Site Features and Sensitive Areas to be Protected

The natural vegetation and soil surrounding the project limits is to remain undisturbed by the contractor during construction.

There are several wetlands located along the Paria River. A wetland delineation and preliminary jurisdictional determination form (completed in April 2010 by SWCA Environmental Consultants) indicated that there are 0.102 acres of riverine wetlands within the project area. Each of these 7 wetlands is located within the boundaries of the ordinary high water mark and abuts the river's edge. These are labeled A-G on the sitemap below. The National Park Service categorizes all 7 wetlands as "areas with hydrophytes and hydric soils, such as those commonly known as marshes, swamps, and bogs." These wetlands provide some value for bank stabilization and animal and fish habitat.

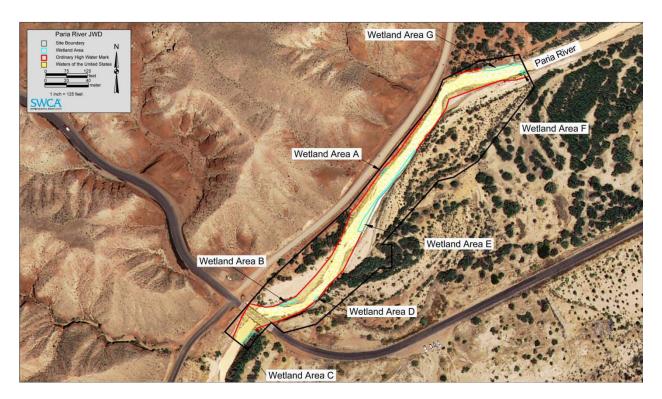


Figure 1: Wetlands in the Lee's Ferry Project Limits

On-site contractors will identify and clearly mark wetlands with fencing or flagging prior to construction work. Wetlands will be avoided unless disturbance is specified in the contract documents. Construction activities will be performed in a cautious manner to prevent wetland damage by equipment, erosion, and siltation. Protection measures will be applied during construction in areas where wetland disturbance cannot be avoided. The NPS proposes to salvage existing wetland vegetation that would be disturbed, hold them in a local greenhouse, and transplant after construction is completed.

1.8 Potential Sources of Pollution

The principal pollutant of concern in storm water runoff is sediment. Historically, the Paria River has been on Utah and Arizona's Impaired Water List due to the high concentration of suspended sediments. Other pollutants may be found in the storm water runoff, though they are usually in substantially smaller amounts. There are many construction areas that could become potential sources of both sediment and other pollutants. The table listed below takes these areas into consideration and lists the potential pollutants.

Table 1: Construction Site Pollutants

Construction Site Pollutants								
	Primary Pollutant		(Other	Poll	utant	S	
Areas of Consideration	Sediment	Nutrients	Heavy metals	pH (acids & bases)	Pesticides and herbicides	Oil, grease, fuels	Bacteria & viruses	Trash, debris, solids
Grading and excavating	✓							✓
Pulverizing and paving operations	✓							✓
Concrete washout and waste			✓	✓				✓
Demolition and debris disposal	✓							✓
Material delivery and storage	✓	✓	✓	✓	✓	✓		✓
Material use during construction		✓	✓	✓	✓	✓		✓
Solid waste								✓
Contaminated Spills		✓	✓	✓	✓	✓		
Equipment fueling, use, and storage						✓		
Sanitary waste		✓					✓	

Stormwater Pollution Prevention Plan (SWPPP) Lee's Ferry Road and Paria River Bridge November 2012

1.9 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?
⊠ Yes □ No
The Biological Assessment of the Lees Ferry Road Rehabilitation and Paria River Bridge
Stabilization was prepared by the National Park Service in 2012 and was submitted to the U.S
Fish and Wildlife Service for review. The six endangered and threatened species listed below
were identified by the U.S. Fish and Wildlife Service to be likely within the Lee's Ferry area
They include two plant species, one fish species, and three bird species. The Biological
Assessment describes the steps necessary to protect the endangered species in their habitat.

Endangered and threatened species include:

- Brady pincushion cactus (*Pediocactus bradyi*), federally listed as endangered, grows in the restricted habitat of Kaibab limestone chips overlying soil derived from Moenkopi shale and sandstone outcrops.
- Marble Canyon Spurge (*Euphorbia aaron-rossii*), an Arizona state species of concern, is a shrubby perennial herb with dense clusters of erect, wiry stems. Within the Lees Ferry area, the spurge occurs where small dry washes reach the cliffs along the Colorado River.
- Razorback sucker (*Xyrauchen texanus*), federally listed as endangered, is endemic to the Colorado River basin of the southwestern United States.
- California condor (*Gymnogyps californianus*), federally listed as endangered, are among the largest flying birds in the world and the most endangered.
- Southwestern willow flycatcher (*Empidonax traillii extimus*), federally listed as endangered, nests in dense riparian habitats along streams, lakesides, and other wetlands.
- Mexican spotted owl (*Strix occidentalis lucida*), federally listed as threatened, has not been sighted in the Lees Ferry area, although the U.S. Fish and Wildlife Service indicated that the species may be found in nearby canyon habitats.

Prior to initiating construction activities in the project area, the Park will conduct a survey for all endangered and threatened species. If any areas contain an endangered species, the Environmental Assessment discusses which measures shall be taken to avoid impact to the species.

Stormwater Pollution Prevention Plan (SWPPP) Lee's Ferry Road and Paria River Bridge November 2012

1.10 Historic Preservation

Are there any historic sites on or near the construction site?

· · · · , · · · · · · · · · · · · · · · ·
⊠ Yes □ No
Lees Ferry Historic District was listed on the National Register of Historic Places in 1976, while
Lonely Dell Ranch was listed in 1978. In 1997, these two separate historic districts were
combined into a singular district due to the interrelated nature of their existence. The current
boundary of the district includes all extant historic resources associated with the ferry and ranch
sites within lands owned and managed by the National Park Service and the Bureau of Land
Management.

A cultural landscape is defined by the National Park Service as a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. A Cultural Landscapes Inventory (CLI) was conducted at the Lees Ferry and Lonely Dell Ranch Historic District in 2010. A CLI identifies and documents a historic landscape's location, size, physical development, condition, landscape characteristics, and character-defining features. According to the Cultural Landscapes Inventory, "The Lees Ferry and Lonely Dell Ranch component landscape contains many character-defining features, such as spatial patterns, natural systems, buildings and structures, and small-scale elements that were significant characteristics during the period of significance from 1871 to 1974."

The project area is located within the Canyonlands subprovince of the Colorado Plateau, near the confluence of the Colorado and Paria Rivers. Bedrock in the area consists of Permian to Jurassic limestone, shale, siltstone, and sandstone and has been eroded over time to create a rugged landscape. Of the prehistoric archeological sites in or near the project area, approximately half are lithic scatters, many of which date to the Archaic period. Projectile point types discovered in the area date to roughly 4250-2550 B.C. Petroglyphs depicting animals such as sheep or antelope have been documented along the Colorado River, and are considered a significant demonstration of Archaic symbolic expression. Sites demonstrating Anasazi occupation in the area from approximately 1000 to 1150 A.D. are also found within both the Colorado and Paria River vicinities. This evidence suggests a seasonal occupation by the Anasazi, but does not indicate the presence of any groups inhabiting the area for long periods of time.

The Environmental Assessment of the Lees Ferry Road Rehabilitation and Paria River Bridge Stabilization was prepared by the National Park Service in March 2012. This document includes the likelihood of an impact on historic sites within the project area as well as action to be taken if historic resources or artifacts are found within the project limits.

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

Contractor will not disturb existing vegetation outside project limits and minimize impacts to existing vegetation and side slopes within construction limits. Temporary seeding with a sterile seed mix and hydro-mulching will be applied to disturbed areas. Additional revegetation will be performed by the National Park Service upon completion of construction. The existing topsoil is composed of sandy and rocky material and will not be removed and stockpiled during construction. The impacts of the roadway rehabilitation are mostly limited to the existing roadway bench where there is no conservable topsoil. Only certified weed free erosion control devices will be used.

Storm water flow will be controlled by constructing temporary berms and permanent revet mattresses and gabion basket check structures adjacent to the roadway. Erosion control will consist of implementing the use of many perimeter controls and sediment barriers including sediment logs, silt fences, sediment wattles, and check dams. During construction, temporary inlet protection will occur at all storm drain inlets. Wind erosion control will consist of application of water and/or application of city, state and federally approved chemical dust suppressants to all exposed surfaces that could cause a dust nuisance. All construction entrances will be stabilized (i.e. track out protection and wash down) through the duration of use.

Work within the Paria River will be conducted during low flow periods. The stream flow will be diverted around the work areas by earthen berms constructed of clean native fill. Diversions will be constructed in a manner that will provide continuous flow to downstream reaches. Upon completion of the work at the Paria River, the diversions will be removed.

2.2 Phase Construction Activity

Construction is scheduled to begin in January 2013 and will be completed in December 2013. Construction consists of removing, recycling, and repaving the existing Lee's Ferry Access Road and construction of several new culverts, ditches, curbs and gutters to improve drainage in the area.

Estimated construction sequence will be as follows:

- 1. Establish temporary BMPs
- 2. Removal of various items project wide including sings, sidewalks, and bollards
- 3. Subexcavation and ditch excavation
- 4. Roadway obliteration
- 5. Installation of gabions and revet mattresses
- 6. Roadway pulverizing and paving
- 7. Culvert installation
- 8. Curb and paved ditch installation

- 9. Slope paving
- 10. Temporary seeding and hydro-mulching
- 11. Sign installation and roadway stripping
- 12. Remove temporary BMPs

2.3 Control Stormwater Flowing onto and through the Project

Reinforced Concrete Box Culvert

BMP Description: A reinforced concrete box culvert will be installed at No Name Wash to reduce the impacts of flooding in the area.

Installation Schedule:	The culvert is scheduled to be installed in March 2013.
Maintenance and Inspection:	The culvert at No Name Wash will be inspected weekly and after storm events.
Responsible Staff:	Field Contractor

Temporary Berms

BMP Description: During the pulverizing and repaving of Lee's Ferry Access Road, temporary berms will be constructed adjacent to the roadway using the pulverized pavement material. These berms will direct runoff away from unprotected slopes. During any construction within the Paria River, stream flow will be diverted around work areas with temporary berms constructed of clean native fill.

Installation Schedule:	Berms adjacent to Lee's Ferry Road will be constructed at the same time that the roadway is pulverized. The material used to construct roadside berms will then be turned into roadbed material prior to paving. The Paria River berms will be constructed prior to any activity within the river using clean native fill. Diversions will be constructed in a manner that will provide continuous flow to downstream reaches. Upon completion of the work in that location, the diversions will be removed.
Maintenance and Inspection:	Inspect and maintain temporary berms after each storm event and weekly during construction.
Responsible Staff:	Field Contractor

2.4 Stabilize Soils

Dust Control

BMP Description: Wind erosion and dust emissions will be controlled through the application of water as necessary to prevent or alleviate any dust nuisance. The control of dust shall mean that no construction activity shall take place without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne so that it remains visible beyond the limits of construction. Reasonable measures include the periodic application of water and/or application of city, state and federally approved chemical dust suppressants. Dust from the site may be controlled by using a mobile pressure-type distributor truck to apply water to disturbed areas. The mobile unit will apply water at a rate sufficient to minimize dust as necessary and to prevent runoff and ponding. The use of chemical suppressants is subject to written approval by the Owner and the city. Federal, state, and local air quality regulations should be followed.

Permanent	∑ Temporary
Installation Schedule:	Dust control will be implemented as needed once construction starts and during windy conditions throughout the duration of the project. Water will be sprayed on all exposed surfaces including stockpiles as necessary to prevent or reduce any dust nuisance without making surfaces slippery and unsafe. Dust control will continue on an as needed basis for on-site dust control for construction activities.
Maintenance and Inspection:	The Contractor is responsible for maintaining a site that minimizes airborne particulate matter. The Owner's representative will determine the effectiveness of the dust control program and may request the Contractor to provide additional measures at no cost to the Owner. The Contractor will record and maintain dust control application records in accordance with city and state agency requirements, if applicable.
Responsible Staff:	Field Contractor

Stormwater Pollution Prevention Plan (SWPPP) Lee's Ferry Road and Paria River Bridge November 2012

Revegetation and Soil Stabilization

BMP Description: Revegetation and soil stabilization will be performed by the National Park Service and a contractor following the completion of construction activities. The existing vegetation is sparse and there are invasive plant species along the shoulders. Temporary seeding and hydro-mulching will be applied by the contractor to stabilize the cut and fill slopes and other disturbed areas (See Section 7-Fianl Stabilization).

∑ Permanent	☐ Temporary
Installation Schedule:	Disturbed areas must be stabilized within 14 calendar days of the most recent land disturbance in areas where construction activities have been temporarily suspended or have permanently ceased. Stabilization shall be initiated within 7 calendar days for areas within 50 feet of the Paria River (impaired water).
Maintenance and Inspection:	Disturbed areas will be inspected weekly during construction activities for failure and after storm events until a satisfactory cover of vegetation has been established. The operator shall maintain the following records as part of the SWPPP: • Dates when major grading activities occurred • Dates when construction activities temporarily or permanently cease on any portion of the site • Dates when stabilization measures are initiated and completed and reasons for delay (if applicable).
Responsible Staff:	Field Contractor

2.5 Protect Slopes

Slope Protection

BMP Description: Cathedral Wash embankment slope protection will be provided in the area adjacent to the wash. Paria River bank stabilization will include east bank protection with revet mattresses and channel spurs and Lonely Dell Access Road bank protection with a gabion wall. Revet mattresses will be installed in various locations to protect slopes permanently. Slopes will be protected as shown in the plans. Wattles will be installed on cut and fill slopes as shown on the plans.

Erosion control blankets and tackifiers will not be used on the project for slope protection. The proposed improvements will be limited to the existing bench where cut and fill slopes are required a sterile seed mix and hydro-mulching will be applied to stabilize the slopes. Erosion control blankets are harmful to the native reptiles in this area.

Installation Schedule:	Gabion walls, revet mattresses, and seeding and hydro-mulching will be utilized during construction and for permanent slope protection.
Maintenance and Inspection:	Gabion walls and revet mattresses should be cleared of all debris and sediment if the flow of water is being restricted. See section 4 for more details on these structures.
Responsible Staff:	Field Contractor

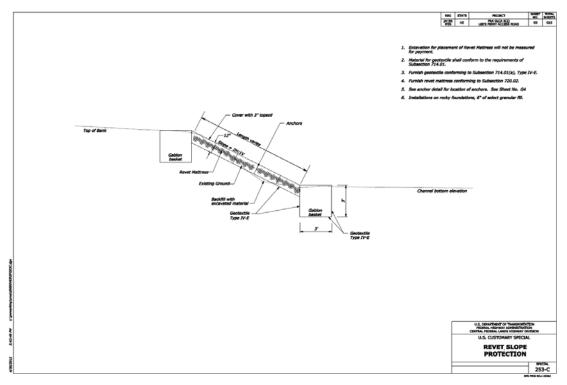


Figure 2: Slope Protection BMP (Revet Mattress)

2.6 Protect Storm Drain Inlets

BMP Description: Storm drain inlet protection consists of a sediment filter or temporary detention area around a storm drain drop inlet that prevents sediment from entering the storm drain system during construction activities and storm events. Temporary inlet protection will be installed in the locations shown on the plans or as needed to prevent erosion.

Installation Schedule:	Storm drain inlets will be protected before construction begins at the site and as needed to prevent erosion.
Maintenance and Inspection:	Temporary inlet protection will be inspected weekly and immediately after storm events. Inspect for damage, failure to filter sediment, accumulation of sediment that should be removed, and damage from temporary flooding that may have occurred during a storm event. Replace filter fabric if it becomes clogged. Remove sediment as necessary and after each rainfall event. Remove all inlet protection devices within 30 days after site is stabilized or when inlet protection is no longer needed. Regrade and stabilize disturbed areas as necessary.
Responsible Staff:	Field Contractor

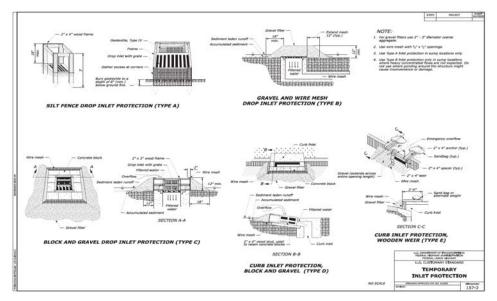


Figure 3: Temporary Inlet Protection BMP (CFL Standard Drawing)

2.7 Establish Perimeter Controls and Sediment Barriers

Sediment logs

BMP Description: Sediment logs are bound tight tubular rolls made of organic matter such as wood or compost. They intercept runoff, reduce flow velocities, and reduce sediment from runoff. Sediment logs will be installed in the locations shown on the plans or as needed.

Installation Schedule:	Sediment logs will be installed before construction begins at the
	site and as needed to prevent erosion.
Maintenance and Inspection:	Sediment logs will be inspected weekly and immediately after storm events to ensure that there are no split, torn, or unraveling logs or evidence of erosion due to log failure. Accumulated sediment will be removed from the log if it reaches one-third the height of the log.
Responsible Staff:	Field Contractor

Sediment Wattles

BMP Description: Sediment wattles are tight tubular rolls (filled with straw) placed on the face of slopes at regular intervals. They intercept runoff, reduce flow velocities, and promote infiltration. Sediment wattles will be installed in the locations shown on the plans or as needed to prevent erosion.

Installation Schedule:	Sediment wattles will be installed before construction begins at the site and as needed to prevent erosion.
Maintenance and Inspection:	Sediment wattles will be inspected weekly and immediately after storm events to ensure that there are no tears, split or unraveling rolls, or evidence of erosion due to wattle failure. If washout, breakage, or erosion occurs, the sediment wattle will be repaired. Accumulated sediment from behind the sediment wattle will be removed as necessary to prevent failure.
Responsible Staff:	Field Contractor

Silt Fences

BMP Description: Silt fences are a temporary sediment barrier consisting of a filter fabric that is entrenched into the soil and attached to posts and wire fence for support. Silt fences will be installed in the locations shown on the plans or as needed to prevent erosion and contain sediment.

scament.	
Installation Schedule:	Silt Fences will be installed before construction begins at the site and as needed to prevent erosion.
Maintenance and Inspection:	Silt fences will be inspected weekly and immediately after storm events to ensure it is intact, that there are no gaps where the fence meets the ground, or that any tears occur along the length of the fence. If gaps or tears are found during the inspection, the fabric will be repaired or replaced immediately. Accumulated sediment will be removed from the fence if it reaches one-third the height of the fence. If accumulated sediment is creating noticeable strain on the fabric that may cause the fence to fail during a sudden storm event, the sediment will be removed more frequently. Before the fence is removed from the project area, the sediment will be removed. The anticipated life span of the silt fence is 6 months and will likely need to be replaced after this period.
Responsible Staff:	Field Contractor

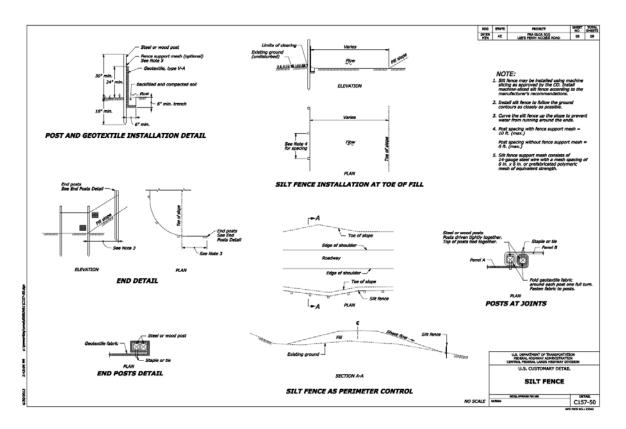


Figure 4: Silt Fence BMP Installation

Check Dams

BMP Description: Check dams are small temporary or permanent dams constructed in a swale or channel that reduce the velocity of concentrated water flows and channel erosion. Check dams will be installed in the locations shown on the plans or as needed to prevent erosion.

Installation Schedule:	Check dams will be installed before construction begins at the site.
Maintenance and Inspection:	Check dams will be inspected weekly and immediately after storm events. Accumulated sediment will be removed from the dam if it reaches one-third the dam height. Erosion caused by high flows around the edges of the dam should be corrected immediately.
Responsible Staff:	Field Contractor

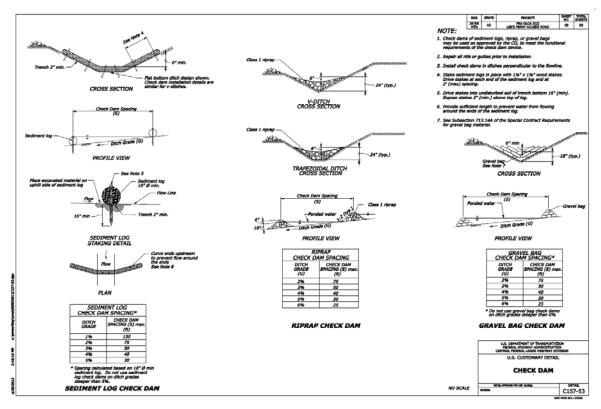


Figure 5: Check Dam BMP Installation

2.8 Retain Sediment On-Site

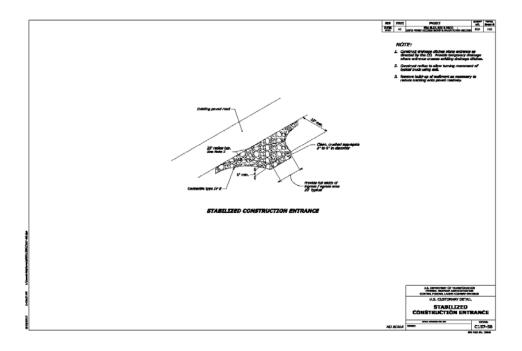
All sediment will be retained on site using methods described above.

2.9 Establish Stabilized Construction Entrances

Stabilized Construction Entrances

BMP Description: Stabilized construction entrances consisting of stone will be installed in the locations identified on the plans to prevent the off-site transport and track out of sediment by construction vehicles.

construction venicles.	
Installation Schedule:	The stabilized entrances/exits will be installed before construction begins on the site and will remain until all areas of the site have been stabilized.
Maintenance and Inspection:	The entrances will be inspected weekly and after storm events or heavy use. The entrances will be maintained in a condition that will prevent tracking or flowing of sediment onto existing roadways. This could require adding additional crushed stone to the entrances/exits. All sediment tracked, spilled, dropped, or washed onto existing roadways will be swept up immediately and hauled off-site for disposal. Broken road pavement as a result of construction activities on roadways immediately adjacent to the project site will be repaired immediately. The removed stone and sediment from the pad will be hauled off-site for disposal.
Responsible Staff:	Field Contractor



SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 Material Handling and Waste Management

Waste Materials

BMP Description: All waste materials will be collected and disposed of daily into trash dumpsters located in the materials storage area. Dumpsters will have a secure watertight lid, be placed away from storm water conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpster. No construction materials will be buried on-site. All personnel will be instructed, during tailgate training sessions, regarding the correct disposal of trash and construction debris. Notices that state these practices will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.

Installation Schedule:	Trash dumpsters will be installed once the materials storage area has been established.
Maintenance and Inspection:	The dumpsters will be inspected weekly and immediately after storm events and will be emptied at least weekly and taken offsite for disposal.
Responsible Staff:	Field Contractor

Hazardous Waste Materials

BMP Description: A comprehensive waste-management program will be implemented for the storage, handling, inventory, and spill cleanup of hazardous waste (e.g. diesel fuel used for onsite refueling of construction equipment). Hazardous waste will be stored in a designated hazardous-waste collection area with secondary containment. Employees will be trained in proper material use, storage and disposal of hazardous waste.

Installation Schedule:	Waste-management program will be implemented prior to construction.
Maintenance and Inspection:	Hazardous waste storage area will be inspected to ensure that hazardous waste containers are properly labeled and to verify no leaks are present.
Responsible Staff:	Field Contractor

Sanitary Waste

BMP Description: Temporary sanitary facilities (portable toilets) will be provided at the site throughout the construction phase. The toilets will be in the staging area, located away from concentrated flow paths and traffic flow and will have collection pans underneath as secondary containment where possible.

Installation Schedule:	The portable toilets will be brought to the site once the staging
	area has been established.
Maintenance and	All sanitary waste will be collected from the portable facilities as
Inspection:	needed, a minimum of once per week, by the assigned company.
	The portable toilets will be inspected weekly for evidence of
	leaking holding tanks. Toilets with leaking holding tanks will be
	removed from the site and replaced with new portable toilets.
Responsible Staff:	Field Contractor

Recycling

BMP Description: It is recommended wood pallets, cardboard boxes, and other recyclable construction scraps will be disposed of in a designated dumpster for recycling. The dumpster will have a secure watertight lid, be placed away from storm water conveyances and drains and meet all local and state solid-waste management regulations. Only solid recyclable construction scraps from the site will be deposited in the dumpster. All personnel will be instructed, during tailgate training sessions, regarding the correct procedure for disposal of recyclable construction scraps. Notices that state these procedures will be posted in the office trailer, and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.

Installation Schedule:	Designated recycling dumpsters will be installed once the
	combined staging area has been established.
Maintenance and Inspection:	The recycling dumpster will be inspected weekly and immediately after storm events. The recycling dumpster will be emptied weekly and taken to an approved recycling center by the assigned company. If recyclable construction wastes are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.
Responsible Staff:	Field Contractor

3.2 Establish Proper Building Material Staging Areas

Staging Areas

BMP Description: Construction equipment and maintenance materials will be stored at the combined staging area and materials storage areas. Maximize the use of previously disturbed areas to minimize ground disturbance. Gravel bag berms will be installed around the perimeter to designate the staging and materials storage area. A watertight shipping container will be used to store hand tools, small parts, and other construction materials. Nonhazardous building materials such as packaging material (e.g., wood, plastic, and glass), and construction scrap material (e.g., wood, steel, metal scraps, and pipe cuttings) will be stored in a separate covered storage facility adjacent to the shipping container. All bagged materials such as concrete, fertilizers, etc. must be covered and all liquid materials must be covered and elevated. Very large items, such as framing materials and stockpiled lumber, will be stored in the open in the materials storage area. Such materials will be elevated on wood blocks to minimize contact with runoff.

Installation Schedule:	The materials storage area will be installed after grading and before any construction activities begin. Return all staging and stockpiling areas to pre-construction conditions following construction.
Maintenance and Inspection:	The storage area will be inspected weekly and after storm events. The storage area will be kept clean, well organized, and equipped with ample cleanup supplies, as appropriate, for the materials being stored. Perimeter controls, containment structures, covers, and liners will be repaired or replaced, as needed, to maintain proper function.
Responsible Staff:	Field Contractor

3.3 Designate Washout Areas

BMP Description: A designated temporary, above-grade concrete washout area will be constructed wherever concrete construction activities are to occur. The temporary concrete washout area will be constructed with a recommended minimum length and minimum width of 10 feet, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. A prefabricated concrete washout unit may be used as directed by the CO. The washout area will be lined with plastic sheeting at least 10 mm thick and free of any holes or tears. Signs will be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility.

Concrete pours will not be conducted during or before an anticipated storm event. Concrete mixer trucks and chutes will be washed in the designated area or concrete wastes will be properly disposed of off-site. When the temporary washout area is no longer needed for the construction project, the hardened concrete and materials used to construct the area will be removed and disposed of according to the maintenance section below, and the area will be stabilized.

Installation Schedule:	The washout area will be constructed before concrete pours occur at the site. All concrete washout areas shall be at least 50-feet away from any sensitive areas such as wetlands, water bodies, and storm drains. Allow convenient access for concrete trucks, preferably near the area where the concrete is being poured.
Maintenance and Inspection:	The washout areas will be inspected daily during all construction activities that include concrete placement to ensure that all concrete washing is being discharged into the washout area, no leaks or tears are present, and to identify when concrete wastes need to be removed. The washout areas will be cleaned out once the area is filled to 75 percent of the holding capacity. Once the area's holding capacity has been reached, the concrete wastes will be allowed to harden; the concrete will be broken up, removed, and taken off-site for disposal. Replace plastic sheeting if tears occur during removal of concrete wastes from the washout area.
Responsible Staff:	Field Contractor

3.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

Vehicle/Equipment Fueling and Maintenance

BMP Description: Road vehicle (e.g., trucks, vans, etc.) fueling will be performed off-site. For grading, excavating, and other heavy construction equipment, if a designated on-site equipment refueling area is established, secondary containment will be used and area will be located away from drainage facilities and watercourses to prevent storm water run-on and runoff. A double-walled fueling tank will be used on-site refueling during grading operations. In cases where a designated refueling area is impractical and/or mobile refueling is necessary, a spill kit (i.e. fueling spill control blanket) will be provided. Staff will be trained in the proper usage of the spill kit. Contractor will follow comprehensive handling and management procedures to prevent hazardous liquids from migrating across the site and to avoid groundwater contamination. Containment measures (e.g., drip pans, drip cloths, or absorbent pads) will be used when replacing spent fluids. Contractor will train employees in proper equipment handling and refueling procedures.

Installation Schedule:	Refueling and maintenance procedures to be established prior to construction.
Maintenance and Inspection:	On-site equipment will be inspected daily for leaks, equipment damage, and other service problems. Areas where refueling and maintenance occurs will be inspected daily for signs of storm water pollutant exposure. Spent fluids will be collected and stored in appropriate labeled containers in the proper storage areas and fluids will be disposed of properly or recycled, if possible. Maintenance and inspections will be documented in Appendix E (Inspection Reports) and corrective action will be documented in Appendix F (Corrective Action Log) or Part 5.3 of the SWPPP
Responsible Staff:	Field Contractor

3.5 Control Equipment/Vehicle Washing

All equipment and vehicle washing will be performed off-site. All vehicles and equipment should be power-washed prior to entering the recreation area to ensure that they are free of mud or noxious weed seed-bearing material.

3.6 Spill Prevention and Control Plan

Spill Prevention and Control Procedures

BMP Description: Conform to the Special Contract Requirements, Section 107.10 Environmental Protection. A spill kit (i.e. fueling spill control blanket) will be provided for use during mobile refueling. Staff will be trained in the proper usage of the spill kit. Contractor will follow comprehensive handling and management procedures to prevent hazardous liquids from migrating across the site and to avoid groundwater contamination. Containment measures (e.g., drip pans, drip cloths, or absorbent pads) will be used when replacing spent fluids. Contractor will train employees in proper equipment handling and refueling procedures.

Installation Schedule:

Refueling and maintenance procedures to be established prior to construction.

Maintenance and Inspection:

Areas where refueling/maintenance occur will be inspected daily for signs of storm water pollutant exposure. Inspect equipment for leaks of oil, fuels, or hydraulic fluids before and during use. Maintenance and inspections will be documented in corrective action will be documented in Appendix E (Corrective Action Log) and Appendix G (Inspection Reports) of the SWPPP.

Responsible Staff:

Field Contractor

3.7 Allowable Non-Stormwater Discharge Management

Any changes in construction activities that produce other allowable non-stormwater discharges will be identified, the SWPPP will be amended, and the appropriate erosion and sediment controls will be implemented.

Water Used to Control Dust

BMP Description: Dust control will be implemented, as needed, once site grading has been initiated and during windy conditions while site grading is occurring. Dust control will continue on-site during construction activities, as needed.

Responsible Staff:	Field Contractor
--------------------	------------------

Uncontaminated Excavation Dewatering

BMP Description: Because construction for this site is being conducted during the dry season, dewatering activities are not expected to occur at the project site. If dewatering does occur, the SWPPP will be revised to address the need for appropriate BMPs.

Responsible Staff:	Field Contractor
--------------------	------------------

SECTION 4: SELECTING POST-CONSTRUCTION BMPs

Gabion Walls and Revet Mattresses

BMP Description: Gabion walls and revet mattresses are wire mesh structures filled with rock and typically in a rectangular or trapezoidal shape. They provide stream bank stability and erosion control. Gabion walls and revet mattresses will be installed in the locations shown on the plans.

Installation Schedule:	Gabions walls and revet mattresses will be installed throughout the project during different stages of construction.
Maintenance and Inspection:	Inspect regularly for settlement, scour, wire mesh damage, or corrosion. Periodically check installation for excessive growth of bushes, trees, weeds, or other vegetation. Remove vegetation as necessary to maintain flow capacity of channels and to prevent damage to rock.
Responsible Staff:	Field Contractor

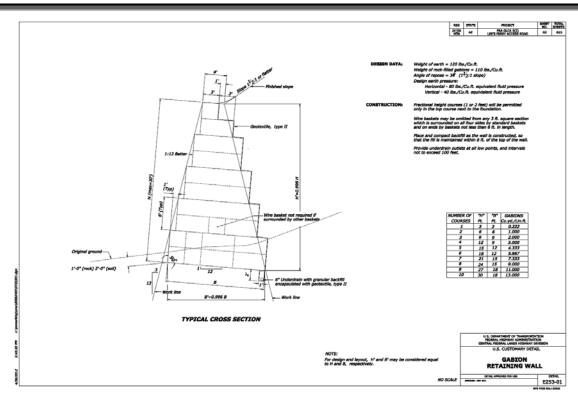


Figure 6: Gabion Wall BMP Installation

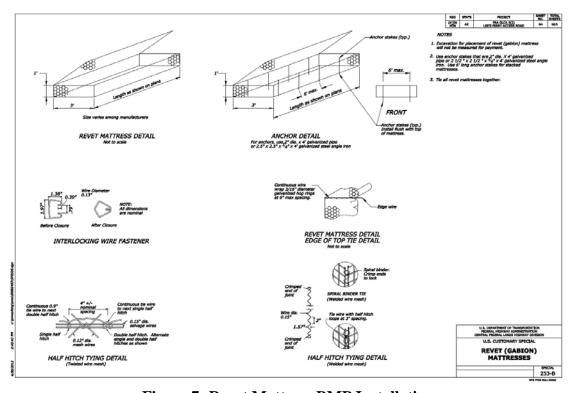


Figure 7: Revet Mattress BMP Installation

Paved Ditches, Special Ditches, and Curb and Gutter

BMP Description: Paved ditches and special ditches will be constructed adjacent to the roadway to control runoff. These will include concrete curb and gutter to further control the runoff. Ditches and curb will be installed in the locations shown on the plans.

Installation Schedule:	After the ditch is constructed, install temporary erosion controls upstream of the ditch until the project has been established to prevent sediment loading into the ditch.
Maintenance and Inspection:	Perform inspections regularly to ensure that water is draining properly after a storm. Static water may indicate that the ditch is settling or sediment is accumulating. Remove trash, sediment, and other debris from the ditch and gutter regularly.
Responsible Staff:	Field Contractor

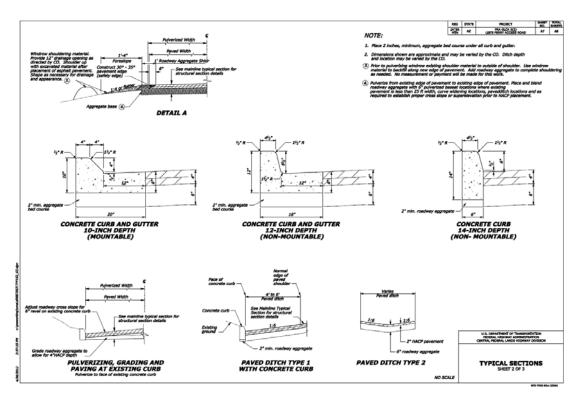


Figure 8: Paved Ditch and Curb and Gutter BMP Installation

SECTION 5: Inspection

5.1 Inspections

1. Inspection Personnel: All inspections shall be done by qualified personnel who are knowledgeable in the principles and practice of erosion control BMPs, and possess the skill and ability to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges. Inspector information shall be updated whenever a new inspector is brought in on the project.

The person(s) who will be responsible for conducting inspection and description of qualifications: Field Contractor

2. Inspection Schedule and Procedure

A visual inspection of the construction site will be made either once every 14 days and within 24-hours after a rain event equal to or greater than ½" or once every 7 days regardless of rain events. A report will be written, and a paper file will be kept as well as a PDF file. The operator shall retain records of all inspection reports as part of the SWPPP for a period of at least 3 years from the date the NOT is submitted to the ADEQ.

Reports will include:

- Date
- If rain fall occurred
- Grading activities
- Whether any maintenance was required
- Later reports will reflect when activities have ceased or when an area has been stabilized.

If the SWPPP inspector identifies the need for correct action, he/she will notify and submit a copy of the inspection report to the Operator. The Operator will be responsible for initiating corrective action within 24 hours of the report and completing maintenance as soon as possible or before the next storm event.

See *Appendix G* for Inspection Report Form.

Since Paria River is included on 2010 Arizona's Impaired Waters list, a site specific monitoring plan is required in accordance to the AZDPES General Permit. See *Appendix L* for *Monitoring Program for Impaired Waters*.

5.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s):

Insert Company or Organization Name:

Insert Name: SWPPP Contact

Insert Position: Insert Address:

Insert City, State, Zip Code: Insert Telephone Number:

Insert Fax/Email:

A copy of the signed delegation of authority form can be found in Appendix K.

5.3 Corrective Action Log

The Corrective Action Log is provided in Appendix E.

SECTION 6: RECORDKEEPING AND TRAINING

6.1 Recordkeeping

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

The Grading and Stabilization Activities form is provided in *Appendix I*.

6.2 Log of Changes to the SWPPP

Any changes in construction activities that produce other allowable non-stormwater discharges will be identified, the SWPPP will be amended, and the appropriate erosion and sediment controls will be implemented.

The SWPPP Amendment Log is provided in *Appendix F*.

6.3 Training

Basic training shall include:

- Spill prevention and cleanup measures, including the prohibition of dumping material into storm drains and waterways
- An understanding of the basic purpose of storm water BMPs, including what common BMPs are on-site, what they should look like, and how to avoid damaging them
- Potential penalties associated with storm water noncompliance

Staff directly responsible for implementing SWPPP should receive comprehensive training. This training shall include:

- The location and types of BMPs being implemented
- The installation requirements and water quality purpose for each BMP
- Maintenance procedures for each of the BMPs being implemented
- Spill prevention and cleanup measures
- Inspection and recordkeeping requirements

All inspections shall be done by qualified personnel. Qualification requirements include:

- Knowledgeable in principles and practice of erosion and sediment control BMPs
- Possess skills and abilities to assess conditions at site that could impact stormwater quality and effectiveness of BMPs being implemented
- Shall be able to examine each of the following during each inspection:
 - i. Good housekeeping BMPs
 - ii. All erosion and sediment control BMPs identified in the SWPPP to ensure they are in place and functioning as intended
 - iii. All of areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation

- iv. Locations where vehicles and equipment enter or exit the site for evidence of tracking sediment, debris, and other pollutants onto and of the site
- v. Site conditions for evidence of, or the potential for, pollutants entering the municipal separate storm sewer
- vi. Accessible discharge locations or discharge points to ascertain whether erosion and sediment control BMPs are effective in preventing significant impacts to receiving waters
- vii. Where discharge locations are inaccessible, nearby downstream locations to the extent that the inspections are practicable
- Ability to document all areas inspected, the presence and effectiveness of BMPs, and conditions found at the time of inspection

The Training Log is provided in *Appendix J*.

SECTION 7: FINAL STABILIZATION

Conform to the seeding and hydro-mulching requirements in the Special Contract Requirements, Section 625. – Turf Establishment

The Contractor will seed and hydro-mulch with a sterile seed mix all disturbed areas including new cut and fill slopes, obliterated pullouts, Bone Yard Borrow Site, and staging areas. The Notice of Termination (NOT) will be submitted to ADEQ within 30 days only after the 70% of the native background vegetative cover for the area is in place on all unpaved areas and areas not covered by permanent structures.

Disturbed areas must be stabilized within 14 calendar days of the most recent land disturbance in areas where construction activities have permanently ceased. Stabilization shall be initiated within 7 calendar days for areas within 50 feet of the Paria River (impaired water). The following exceptions apply:

- Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;
- When the site is using vegetative stabilization but is located in an arid area during dry or drought-like conditions, vegetative stabilization measures shall be initiated as soon as practicable, when growing conditions are best for planting and seeding;
- Where disturbed areas are awaiting vegetative stabilization for periods greater than 14-calendar days after the most recent disturbance, non-vegetative methods of stabilization shall be employed. These methods should be added and described in the SWPPP.

The operator shall maintain records concerning major grading activities and stabilization. These activities shall be recorded in the *Grading and Stabilization Activities Log* in *Appendix I*.

Broadcast seed (by hand or mechanically) all disturbed areas. Following seeding, incorporate seed into soil (some type of raking action) as directed by the CO. Lightly compact the seedbed immediately after seeding.

Apply the following seed mixture and rate: Quickguard Steriale Triticale (Tricticum aestivum x Secale cereal) (80 lbs. per acre) or a TBD annual grass.

Once seeding operations are complete, apply Bonded Fiber Matrix mulch (BFM, must be COR approved) to all disturbed areas at a rate of 2600 lbs./acre. Bonded Fiber Matrix mulch must be made of 100% biodegradable, virgin, weed free, wood fiber.

Apply BFM from two different directions 180° from each other so that no gaps or shading affects exist between the fiber and the soil. Do not apply BFM immediately before, after or during rainfall such that the BFM will have opportunity to dry for up to 24 hours after installation.

A non-toxic, biodegradable tackifier shall be used on this project at the manufacturer's recommended rate for slope and precipitation. The tackifier shall not be harmful to plants and shall be a natural, non-toxic galactomannan (guar) based hydrocolloid treated with dispersant agents for easy field mixing.

Use an individual who is certified by the manufacturer or other acceptable certification training to install BFM. Furnish a mixture of BFM according to the manufacturer's recommendations and provide "free liquid" test if requested by the CO. Fax or email certification to COR one week before application of hydro-mulch.

Do not apply fertilizer to disturbed areas.

After the Contractor has completed the turf establishment the National Park Service has generated a Vegetation Restoration Plan and will implement an internal revegetation and soil stabilization with a subcontractor once construction activities on Lees Ferry Road and Paria River Bridge are completed.

SECTION 8: CERTIFICATION AND NOTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	Title:
Signature:	Date:

SWPPP APPENDICES

Appendix A – General Location Map

Appendix B – Site Maps

Appendix C - Construction General Permit

Appendix D - NOI and Acknowledgement Letter from EPA/State

Appendix E - Corrective Action Log

Appendix F - SWPPP Amendment Log

Appendix G – Inspection Checklist

Appendix H – Subcontractor Certifications/Agreements

Appendix I - Grading and Stabilization Activities Log

Appendix J – Training Log

Appendix K – Delegation of Authority

Appendix L – Monitoring Program for Impaired Waters

Appendix A – General Location Map

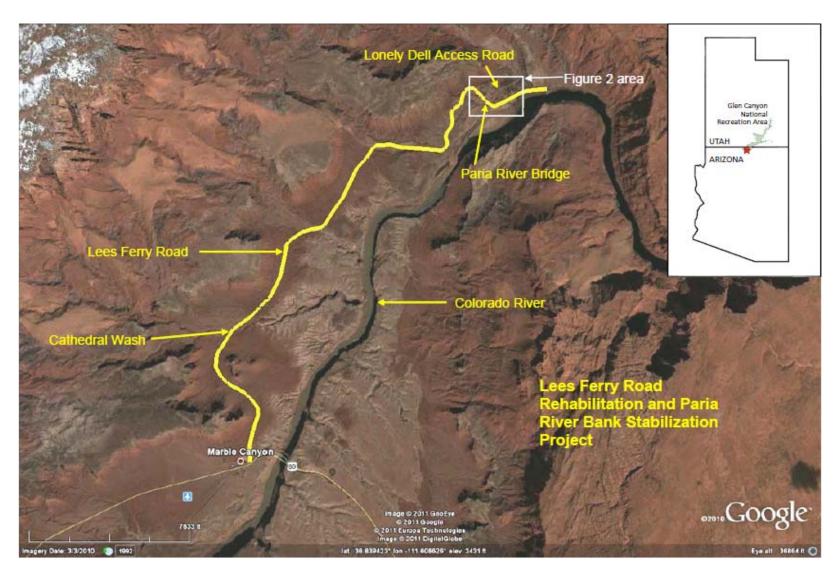
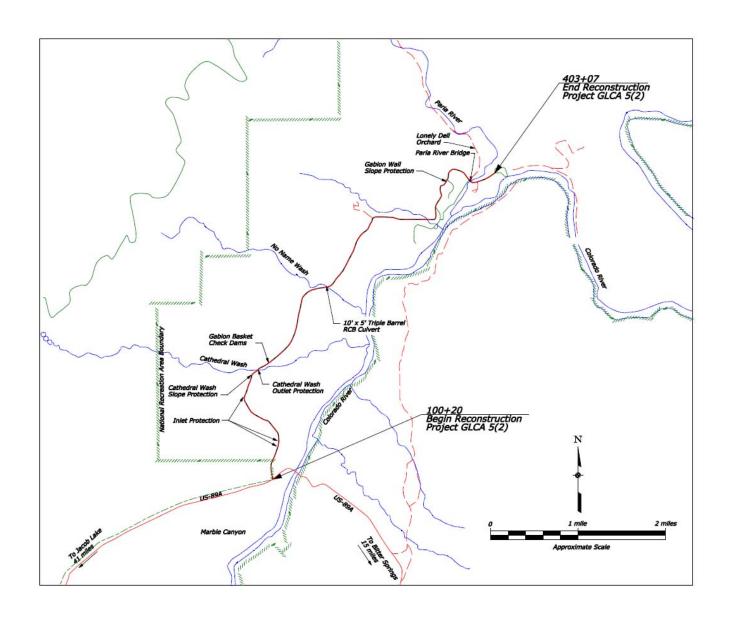


Figure A1- Lee's Ferry Access Road Site Map



Figure A2- Paria River Bank Stabilization Site Map

Appendix B – Site Maps



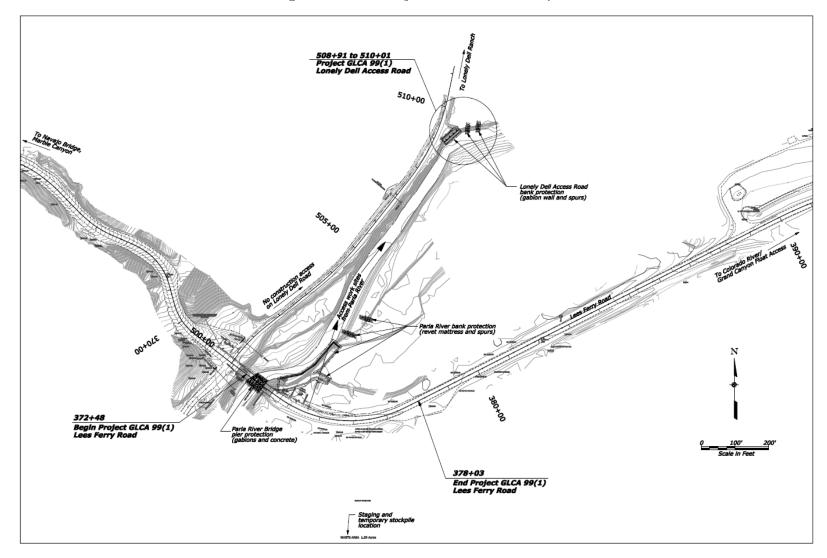


Figure B1-Lee's Ferry Access Road Site Map

Figure B2-Paria River Site Map

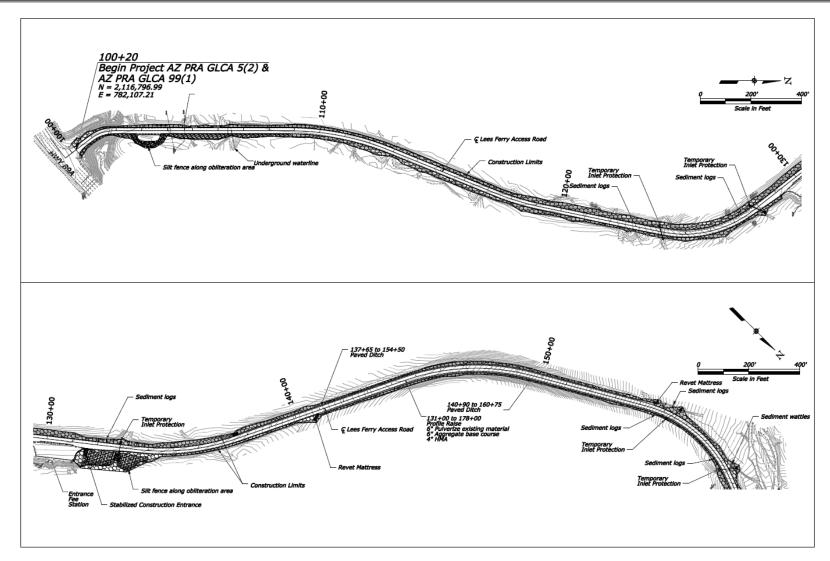


Figure B3- Erosion Control and BMPs Sta 100+20 to 160+00

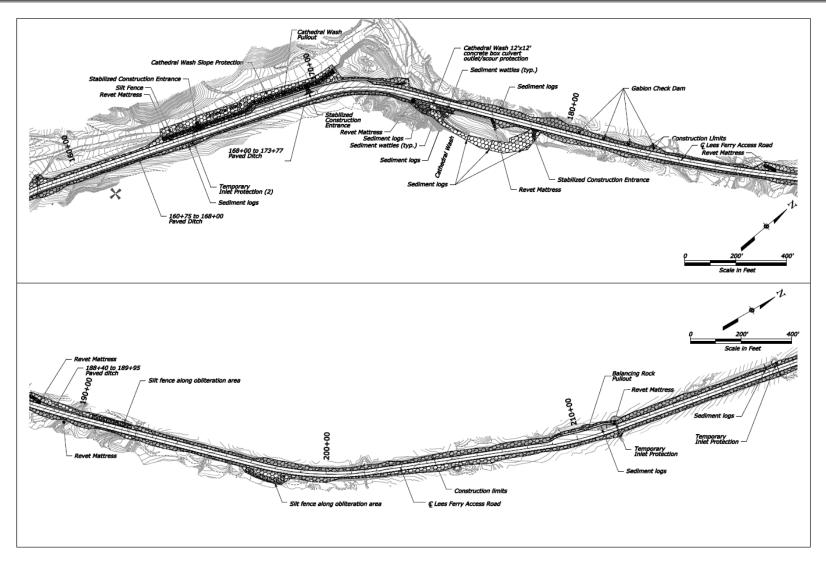


Figure B4- Erosion Control and BMPs Sta 160+00 to 220+00

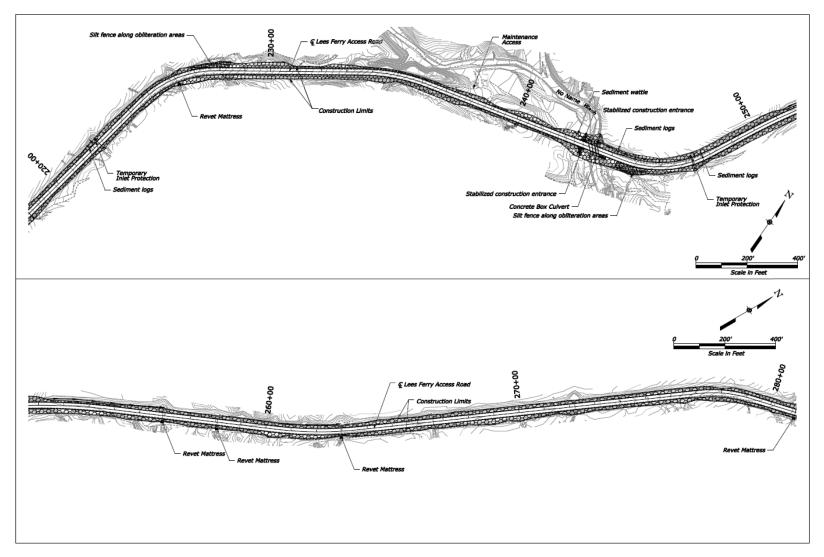


Figure B5- Erosion Control and BMPs Sta 220+00 to 280+00

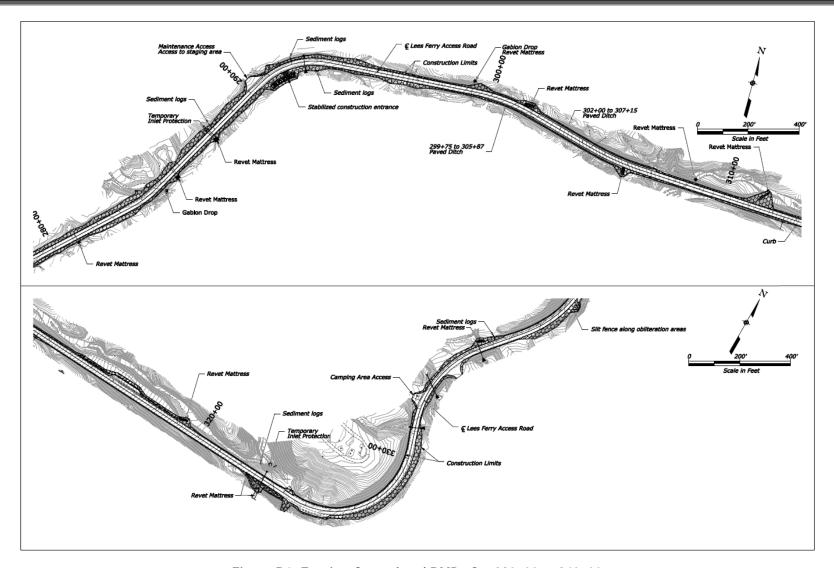


Figure B6- Erosion Control and BMPs Sta 280+00 to 340+00

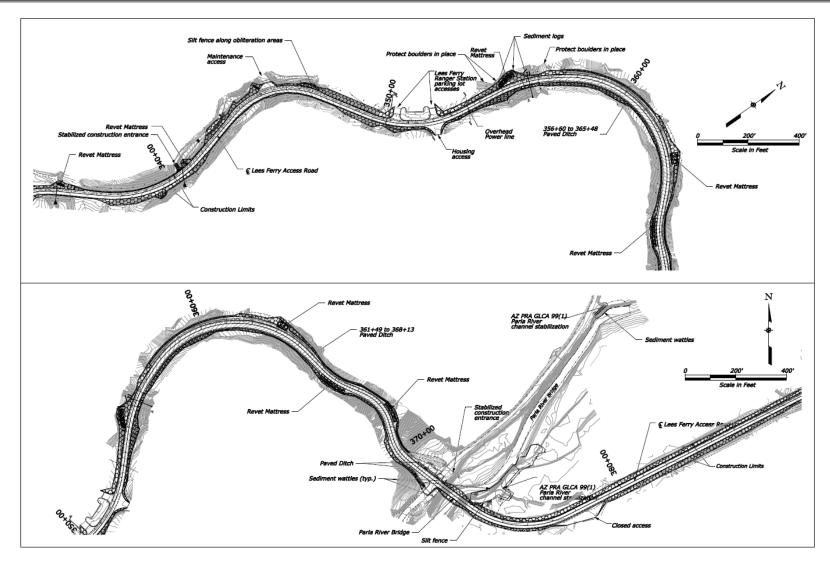


Figure B7- Erosion Control and BMPs Sta 340+00 to 390+00

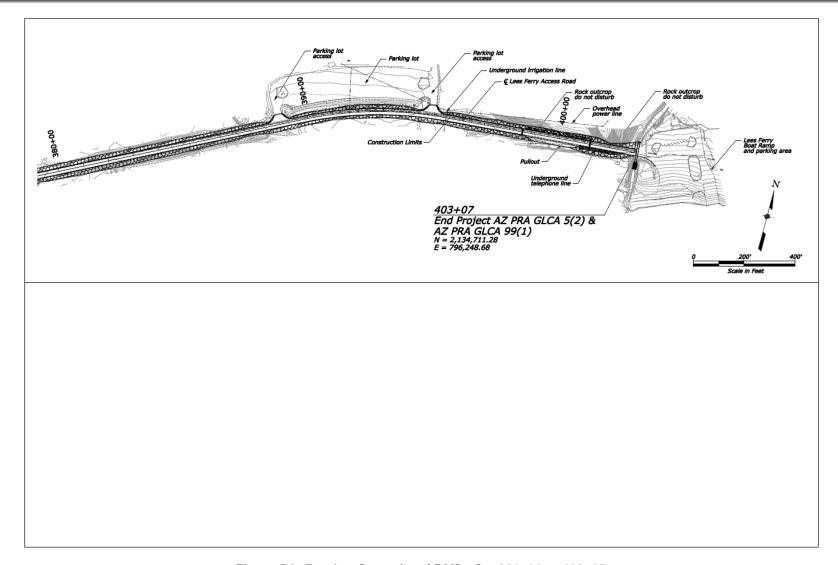


Figure B8- Erosion Control and BMPs Sta 380+00 to 403+07

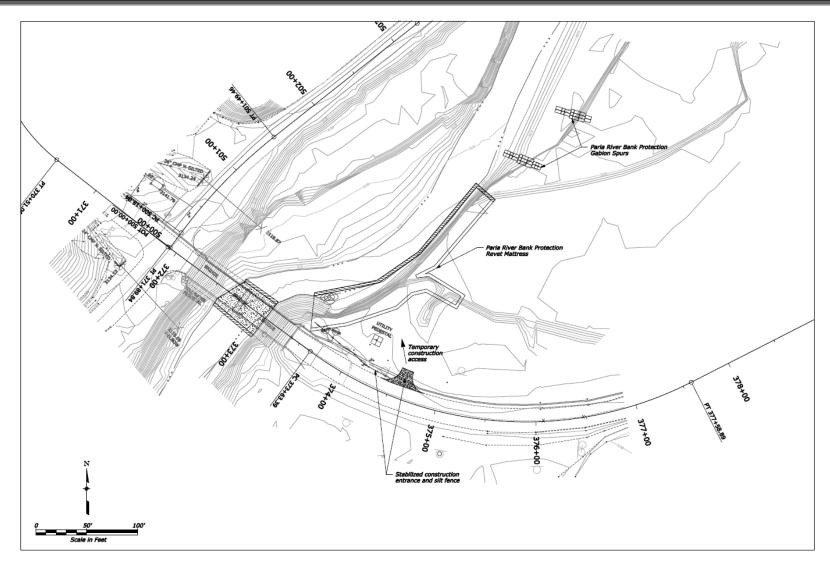


Figure B9- Erosion Control and BMPs at Paria River

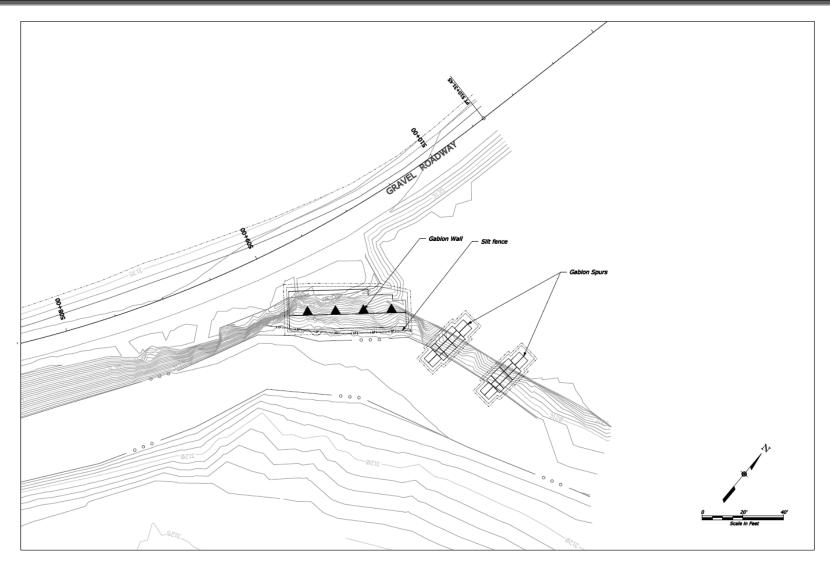


Figure B10- Erosion Control and BMPs at Lonely Dell

Appendix C – Construction General Permit

Appendix D – NOI and Acknowledgement Letter from State of Arizona



NOTICE OF INTENT (NOI)

for Construction Activity Discharges

to Waters of the United States under the AZPDES Stormwater Construction General Permit (AZG2008-001)

FOR COVERAGE, A COMPLETE AND ACCURATE NOI (INCLUDING REQUIRED FEE) MUST BE SUBMITTED TO:
Arizona Department of Environmental Quality, Surface Water Section / Stormwater and General Permits Unit
1110 West Washington Street, 5415A-1, Phoenix, Arizona 85007

	nera >	IOI a revision to a project filed under the 2008 AZPDES Stormwater Construction I Permit?YESVNO
I.	OP	ERATOR (Applicant) INFORMATION:
	>	Contact Name: Matt Ambroziak
	>	Phone Number: (720) 963-3619 Fax Number:
	` _	Operator's Business Name: US Department of Transportation Federal Highway Administration
	<u></u>	Operator's Mailing Address: 12300 W. Dakota Ave
		City: Lakewood State: CO Zip Code: 80228
		Business Status: Federal: V State: Other Public: Private:
		Business Status: Federal: ▼ State: Other Public: Private:
II.	CO	NSTRUCTION SITE INFORMATION:
	>	Project/Site Name: Lee's Ferry Road & Paria River Bridge
	>	County Parcel No. (at main entrance): Coconino, S34 T40 R7E Phone Number:
	>	Type of Project (subdivision, commercial, road, pipeline, utility, ADOT project, etc.): Road - FHWA Project
		If a subdivision, has state or local subdivision approval been obtained?YESNO
		If yes, provide the Subdivision Certificate of Approval Number:
	>	Is the project part of a larger common plan of development?YESNO

Name of Project: Lee's Ferry Road & Paria River Bridge

II.	СО	NSTRUCTION SITE INFORMATION (continued)								
	>	Does the project have/need other environmental permits or approvals? If so, list them and provide the permit/approvant number for each: 404 individual Application No. SPL-20000525-DB, CWA Section 401 ADEQ LFT No.56437								
	>	 Site physical location (Provide address. If no address, provide driving directions from nearest municipality): Marble Canyon, AZ, Glen Canyon National Recreation Area, Project Centroid: Latitude 36deg 50' 51.8 Longitude:111deg37' 28.83" near Lee's Ferry, Coconino County, Arizona 								
	>	City: Marble Canyon State: AZ Zip Code:	S6036 County: Coconino							
	>	Estimated Project Start Date: 01/21/2013 Estimated Project Start Date: Month/Day/Year	timated Project Completion Date: 12/01/2013 Month/Day/Year							
	>	Estimate of total acres (to nearest whole acre) to be distu	urbed by the entire construction activity: 49							
	>	Estimate of total acres (to nearest whole acre, round up i	f < 1) to be disturbed by your operations: 28							
	>	Select the non-stormwater discharges expected to be	e associated with your construction-related activities:							
		None	Foundation or footing drains – uncontaminated							
		Discharges from emergency fire-fighting activities	Potable water well flushing – ephemeral receiving waters only							
	/	Fire hydrant flushing – ephemeral receiving waters only	✓ Waters used for compacting soil – no reclaimed or							
•		Waters used to control dust – no reclaimed or other wastewaters	other wastewaters							
		Potable waterline flushing – ephemeral receiving waters only	Water used for drilling and coring (e.g., for evaluation of foundation materials) uncontaminated							
		Routine external building wash down (no detergents)	Uncontaminated water from dewatering operations or foundations							
		Pavement wash waters – no spills or leaks of toxic or hazardous materials and no detergents	Other (specify)							
		Uncontaminated air conditioning or compressor condensate								
		Uncontaminated groundwater								

Name of Project: Lee's Ferry Road & Paria River Bridge

III	DISC	'HAE	CF	I OC	ATION

> Provide the latitude and longitude of the construction site at the point nearest the receiving water (natural water course):

Latitude:
$$|3_16|^{\circ} |5_11|^{\prime} |5_11| \cdot |141|^{\prime\prime}$$
 Longitude: $|1_11_1|^{\circ} |3_15|^{\prime} |5_10| \cdot |78|^{\prime\prime}$ (Degrees, minutes, seconds)

- > Identify the closest receiving water to the construction site (e.g., dry washes, named and unnamed waterbodies, etc.): Cathedral Wash, No Name Wash and Paria River
- ➤ Is there a potential for any discharges from the site to enter a municipal separate storm sewer system (MS4), canal, or a privately owned conveyance? ____YES ______NO

If yes, enter the name of the MS4, canal, or conveyance owner:

- IV. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) A SWPPP must be developed in accordance with the terms of the general permit before completing and submitting this NOI.
 - I confirm that a SWPPP meeting the requirements of the Stormwater Construction General Permit (No. AZG2008-001) has been developed and will be implemented prior to commencing construction activities at this site. The SWPPP will be located at the site during construction activities. If this is a late NOI, a SWPPP has been developed and implemented prior to submitting this NOI. NOTE: ADEQ retains the authority to take enforcement action(s) for any unpermitted discharge or other non-compliance that occurs between the time construction commenced and discharge authorization is issued.
 - When construction activities are not actively underway, the SWPPP will be available at the following location: Lee's Ferry Construction Site, Lee's Ferry Road, Glen Canyon National Recreation Area
 - Name of SWPPP Contact Person: Dan Onisko
 - > Telephone Number of SWPPP Contact Person: (303) 524-4391
 - ➤ This project may discharge within 1/4 mile of an Impaired or Outstanding Arizona Water: _____ YES _____NO

✓ If yes, a copy of my SWPPP is included with this NOI for review by ADEQ.

Name of Project: Lee's Ferry Road & Paria River Bridge

V.	FEE	ES
	\checkmark	I confirm that the correct fee payment is included with the NOI:
		Less than or equal to I acre: \$250.00 *
		✓ Greater than 1 acre, but less than or equal to 50 acres: \$350.00
		Greater than 50 acres: \$500.00
		Review of SWPPP by ADEQ, if required (see section IV above): add \$1,000.00
		Total fee payment included: \$_350.00
		No fee is required. The signer below represents an Arizona state agency (exempt from AZPDES fees).
		No fee is required. This is an amendment of an NOI previously filed under the 2008 Stormwater Construction General Permit, for which the fee was paid or not required.
		(If the project will disturb less than one acre, Stormwater Construction General Permit coverage is required only if the project is part of a larger common plan of development or sale that will ultimately disturb one acre or more.)
VI.	CEI	RTIFICATION BY AUTHORIZED SIGNATORY (see Part VIII.J.1 of the General Permit for requirements)
	ac Ba the pe ce	certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in cordance with a system designed to ensure that qualified personnel gather and evaluate the information submitted. ased on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering information, I believe the information submitted is true, accurate, and complete. I am aware that there are significant inalties for submitting false information, including the possibility of fine and imprisonment. In addition, as the operator, I prify that I have reviewed and will comply with all the terms and conditions stipulated in the Stormwater Construction general Permit (AZG2008-001)."
	>	Printed Name: Matt Ambroziak Title: Project Manager
	>	Signature: Date:
	>	Business Name: US Department of Transportation Federal Highway Administration
	>	Address: 12300 W. Dakota Ave
	>	City: Lakewood State: CO Zip Code: 80228 Phone: (720) 963-3619

Appendix E –Corrective Action Log

Project Name: AZ PRA GLCA 5(2) & 99(1) Lee's Ferry Access Road and Paria River Bridge

SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix F – SWPPP Amendment Log

Project Name: AZ PRA GLCA 5(2) & 99(1) Lee's Ferry Access Road and Paria River Bridge

SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix G – Inspection Checklist

ADOT AZPDES Inspection Checklist

Proje	ect:		Date:	
()N	Monthy	Inspection	() Weekly Inspection () Rainfall Event Inspec	tion
Rain	fall:	i	nches Beginning of Last Storm Event	Duration
Insp	ected b	y:	Title	
Qual	ificatio	ns		(attach or reference SWPPP)
	No ()	Does not Apply	Are there any BMPs called for on the SWPPP installed improperly	that are either not installed or
()	()	()	Are there any operational storm sewer inlets the inflow?	nat are not protected from sediment
()	()	()	Do any structural practices require repair or cl function?	ean out to maintain adequate
()	()	()	Are there any on-site traffic routes, parking an supplies that are located outside of areas speci	
()	()	()	Are there any temporary soil stockpiles or con of the approved areas?	struction materials located outside
()	()	()	Do any seeded or landscaped areas require ma seeding, or mulching?	intenance, irrigation, fertilization,
()	()	()	Is there any evidence that sediment is leaving	the site?
()	()	()	Is there any evidence of erosion on cut or fill s	slopes or in roadside ditches?
()	()	()	Is there any evidence of sediment, debris, or n with site access roads?	and on public roads at intersections
()	()	()	Does the Storm Water Prevention Plan require	e revisions?
			any of the above, describe the location, and expl additional sheets if necessary).	ain necessary maintenance actions
supe evali syste my k subn	rvision aated tl m, or t nowle	in accordant ne information hose persons dge and belie	of law that this document and all attachments were with a system designed to assure that qualified in submitted. Based on my inquiry of the person directly responsible for gathering the information of true, accurate, and complete. I am aware that ation, including the possibility of fine and impris	d personnel properly gathered and or persons who manage the on, the information is, to the best of there are significant penalties for

Appendix H – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION STORMWATER POLLUTION PREVENTION PLAN

Project Number:
Project Title:
Operator(s):
As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.
Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:
I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.
This certification is hereby signed in reference to the above named project:
Company:
Address:
Telephone Number:
Type of construction service to be provided:
Signature:
Title:
Date:

Appendix I – Grading and Stabilization Activities Log

Project Name: AZ PRA GLCA 5(2) & 99(1) Lee's Ferry Access Road and Paria River Bridge

SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Appendix J – SWPPP Training Log

Stormwater Pollution Prevention Training Log

Projec	ct Name: AZ PRA GLCA 5(2) & 99(1) Lee's Ferry A	access Road and Paria River Bridge	
Projec	ct Location: Coconino Coun	ty, Ariz	zona		
Instru	ctor's Name(s):				
Instru	ctor's Title(s):				
Cours	e Location:	Date:			
Cours	e Length (hours):				
Storm	water Training Topic: (check	as app	propriate)		
□ E	Frosion Control BMPs		Emergency Pro	ocedures	
	Sediment Control BMPs		Good Houseke	eeping BMPs	
	Ion-Stormwater BMPs				
Specit	fic Training Objective:				_
Attend	dee Roster: <i>(attach additiona</i>	l pages	s as necessary)		_
No.	Name of Attendee			Company	
2					
2 3 4					
4					
5					
6 7					
8					
9					
10					

Appendix K – Delegation of Authority Form

Delegation of Authority

	(name), hereby designate the person or specifically described
with environm	to be a duly authorized representative for the purpose of overseeing compliance tental requirements, including the Construction General Permit, at the construction site. The designee is authorized to
sign any reports permit.	construction site. The designee is authorized to s, stormwater pollution prevention plans and all other documents required by the
	(name of person or position) (company) (address)
	(city, state, zip) (phone)
as set forth indesignee above	authorization, I confirm that I meet the requirements to make such a designation (Reference State Permit), and that the meets the definition of a "duly authorized representative" as set forth in (Reference State Permit).
direction or sup properly gather or persons who information, the and complete.	penalty of law that this document and all attachments were prepared under my pervision in accordance with a system designed to assure that qualified personnel and evaluated the information submitted. Based on my inquiry of the person of manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, I am aware that there are significant penalties for submitting false information, assibility of fine and imprisonment for knowing violations.
Name:	
Company: _	
Title:	
Signature: _	
Date:	

Appendix L - Monitoring Program for Impaired Waters

Applicability of Permit Requirements

In accordance with the AZPDES permit, projects located in within one-quarter mile of impaired or unique waters are subject to undergo site specific monitoring program in order minimize impacts and ensure no adverse effects on water quality due to sediment, debris, and other pollutants. Paria River is listed on ADEQ's 303 (d) Impaired Waters due to exceeded concentrations of both suspended sediments and E. coli. Monitoring sites will be located at points just upstream and downstream of the project limits, and monitoring activities will occur at a minimum of once a week. Additional observations are to be taken at both locations within one business day of each storm event delivering at least 0.5 inches of precipitation.

Monitoring Locations

In order to ensure the water quality of the Paria River is not being compromised, monitoring sites are to be located and maintained along the river. Two monitoring sites will be set up, one upstream of the project and the other downstream. The upstream sampling location should be established at a point along the bank that is upstream of all possible direct discharge points from the construction site. The downstream sampling location should be established at a point along the bank that is at least 500 feet downstream of all possible direct discharge points from the construction site. Samples should be taken as near as possible to the main current.

Safety

Personnel safety should be considered when selecting monitoring sites. At no time during storm conditions or when significant flows are present should sampling personnel enter a river or creek. Two-person sampling crews should be available for all fieldwork to be conducted under adverse weather conditions or whenever there are risks to personal safety. Sample collection is not required during dangerous weather conditions such as flooding and electrical storms, or during nighttime hours.

Information on any adverse conditions that prevented sampling shall be documented in SWPPP report.

Visual Monitoring (Inspections)

At a minimum, visual monitoring activities for projects near impaired or unique waters shall consist of weekly site inspections. In addition, the inspector shall visually observe stormwater discharges at all discharge locations within one business day after each 0.5 inch of precipitation from a rain event. Visual observations are only required during daylight hours (sunrise to sunset).

The inspector shall visually observe each drainage area for the presence of current (and indications of prior) discharges and their sources. The inspector shall document the presence or

evidence of any discharge, pollutant characteristics (floating and suspended material - clarity and solids, sheen, color, turbidity, odor, foam etc.), and source.

Documentation is required during visual monitoring. Documentation shall include photographs of site conditions including sediment loads, erosion and waste control BMPs and any discharges.

Water Quality Sampling and Analysis

Analytical monitoring shall be performed anytime sediment is known or suspected to discharge from the construction site. Monitoring shall continue until final stabilization for the project site is established and a Notice of Termination (NOT) is filed.

Discharge sampling will be conducted at locations observed above.

Analytical Monitoring Parameters:

- 1) The contractor will monitor for turbidity. Turbidity values from the upstream monitoring site will be compared to those from the downstream site. If there is a 25% or more increase at the downstream monitoring location, the contractor shall evaluate and replace, maintain, or install additional BMPs as necessary to reduce sediment transport.
- 2) The primary area of impairment for the Paria River is high concentration of suspended sediments. Although E. coli is another cause of impairment for the Paria River, there is no reasonable expectation that the construction activities of this project will be an additional source of this pollutant. Therefore analytical monitoring for E. coli should not be necessary.

Sample Collection, Preservation, Tracking, Handling and Analyses Procedures:

- 1) Manual grab sampling techniques will be used to collect samples for suspended solid concentration and turbidity. Samples are collected by direct submersion of each individual sample bottle into the flow stream. Electronic turbidity meters may be used to measure turbidity.
- 2) Samples shall be taken during the first two hours of discharge from a rain event during daylight hours regardless of time of year, status of the construction site, or day of the week. A minimum of 72 hours of dry weather shall occur between rain events to distinguish separate rain events. No more than four discharge events need to be sampled per month.
- 3) A series of five samples shall be collected at the upstream and downstream sampling locations to ensure a representative set of samples. Samples should be taken pre-cleaned sample containers provided by the laboratory.
- 4) Label each sample container using waterproof ink with the following information:
 - Sampler's name(s)
 - Sample identification
 - Date and time of sample collection
 - Sample location (discharge location)
 - Project name or number
 - Requested analyses
 - Preservation (as appropriate)

- 5) Transportation and shipment of samples for laboratory analyses will occur in a manner that minimizes destruction of the sample or otherwise compromises sample integrity. Samples will be provided to the analytical laboratory in a timeframe not exceeding analytical method hold times.
- 6) Contractor is responsible for designating and training personnel to collect, maintain, and ship samples.
- 7) Samples shall be tracked using chain-of-custody forms. The COC form shall include the sampler's name(s), phone number, date and time of sample collection, sample identification, requested analyses, and project name or number.
- 8) All monitoring instruments and shall be calibrated and maintained in accordance with manufacturers' recommendations. All laboratory analyses shall be conducted according to test procedures specified in the Code of Federal Regulations Title 40 Part 136, unless other test procedures have been specified in the general permit.
- 9) All samples collected for monitoring shall be analyzed by a laboratory that is licensed by the Arizona Department of Health Service (ADHS) Office of Laboratory Licensure and Certification. This requirement does not apply to parameters that require analysis at the time of sample collection as long as the testing methods used are approved by ADHS or ADEQ. The contractor may conduct field analysis of turbidity if the operator has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to properly perform the field analysis.
- 10) The operator shall submit monitoring records twice a year. Monitoring records for the period between June 1 and October 31 shall be submitted to ADEQ by November 30th of each year or at the time of final stabilization and NOT submittal, whichever is sooner. Monitoring records for the period between November 1 and May 31 shall be submitted to ADEQ by June 30th of each year or at the time of final stabilization and NOT submittal, whichever is sooner. Monitoring results must be reported on a Discharge Monitoring Report form and submitted to:

Arizona Department of Environmental Quality Surface Water Section Stormwater and General Permits Unit /NOI (5415A-1) 1110 W. Washington Street Pheonix, AZ 85007

- 11) The operator shall retain records of all stormwater monitoring information and reports as part of the SWPPP for a period of at least 3 years from the date the NOT is submitted to the ADEQ. These records shall include:
 - The date, exact place and time of sampling measurements
 - The name and title of qualified person performing the visual and analytical monitoring and any related measurements
 - The date the analyses were performed
 - The analytical techniques or methods used
 - The results of such analyses
 - The response taken to reduce or prevent pollutants in discharge

REG	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
INTER MTN	AZ	FTNP/PLH/NPS GLCA 5(2) & 99(1) LEE'S FERRY ACCESS ROAD & PARIA RIVER BRIDGE	B18	B21

	SIGNING SUMMARY																	
							ITE	M NUMBER			20301-2400	63301-0000	63301-1000	63306-1700	63309-0900	63315-0000	63316-1000	
	SCHEDULE	PROJECT SIGN NO.	APPROXIMATE STATION	LT/RT	MUTCD Reference	PAN SI (in x	ZE	DESCRIPTION	Background Color	Text Color	REMOVAL OF SIGN	SIGN SYSTEM	SIGN SYSTEM, GOVERNMENT FURNISHED SIGN	POST, WOOD, 4-INCH X 4- INCH	DELINEATOR, TYPE FLEXIBLE	RUMBLE STRIP	REMOVE AND RESET SIGN	REMARKS
											EACH	EACH	EACH	EACH	EACH	SQYD	EACH	
	A, B, & C		AT CULVERTS		N/A			DELINEATORS (FLEXIBLE) (TRIPLE YELLOW)							143			See Drainage Summary for Locations - At culvert inlets and outlets and drainage structures
	A, B, & C	1	100+00	LT	R1-1	3	0	STOP	Red	White	1	1						
	A, B, & C		100+00		LT			DELINEATORS (FLEXIBLE) (SINGLE WHITE)							12			
	A, B, & C	2	101+12	LT	W3-1	30 x	30	STOP SIGN AHEAD	Yellow	Black, Red	1	1						Remove from 101+12, LT and replace at 103+00, LT
	A, B, & C	3	107+35	RT		24 x	30	SPEED LIMIT 45	White	Black	1	1						33 . 33, 2.
	A, B, & C	4	109+43	RT	SPECIAL			REMOVAL OR DISTURBANCE OF NATURAL OBJECTS IS PROHIBITED	Brown	White							1	
	A, B, & C	5	111+70	RT	SPECIAL			ALL VEHICLES STAY ON ROADWAY	Brown	White							1	
	A, B, & C	6	122+85	RT				U.S. FEE AREA, ALL VEHICLES MUST, PAY FEES AHEAD (2 WOOD POSTS)	Brown	White				2			1	
	A, B, & C	7	131+85	RT	SPECIAL SPECIAL			CAMP IN DESIGNATED AREAS ONLY (2 WOOD POSTS)	Brown	White				2			1	
1	A, B, & C	8	140+00	RT	B2-1	2 4 >	€ 30	SPEED LIMIT 40	White	Black		4		_			-	
								HILL BLOCKS VIEW										
1	A, B, & C	8	178+00	LT			_	40 M.P.H	Yellow	Black		1						
	A, B, & C	9	140+00	LT	R2-2	24 x	30	SPEED LIMIT 45	White	Black		1						
	A, B, & C	10	150+00	RT	R2-1	24 >	30	SPEED LIMIT 45	White	Black							1	Remove from 150+00,RT and Reset at 178+00, RT
	A, B, & C	11	170+60	LT	SPECIAL			INFORMATIONAL PLAQUE (2 WOOD POSTS)			1		1					Install Government furnished interpretive
	A, B, & C	12	172+92	LT	SPECIAL			CATHEDRAL WASH INFO									1	
	A, B, & C	13	174+00	RT	SPECIAL			GRAPHIC SIGN, HIKING TRAIL SILHOUTTE	Brown	White							1	Remove from 174+00, RT and reset as directed by the NPS
	A, B, & C	14	174+46	RT	SPECIAL			ALL AREAS BELOW RIM ADMINISTERED BY GCNP, FIREARMS GROUND FIRES AND PETS ARE PROHIBITED	Brown	White							1	Remove from 174+46, RT and reset as directed by the NPS
Δ	A, B, & C	15	178+00	RT	R2-1			SPEED LIMIT 45	White	Black								Remove from 150+00,RT and Reset at 178+00, RT
<u> </u>	A, B, & C	16	178+00	LŦ			_	SPEED LIMIT 40 HILL BLOCKS VIEW	White	Black		1						
1	А, В, & С А, В, & С	16	178+00 209+91	LT LT	W13-1		x 18	### BLOCKS VIEW 40 M.P.H INFORMATIONAL PLAQUE (2 WOOD POSTS)	Yellow	Black		1		2			1	Plague at Balance Rock
	A, B, & C	18	222+40	RT	SPECIAL	30 \		GRAPHIC SIGN, WINDING ROAD	Yellow	Black	1	1		2			1	Plaque at Balafice Rock
	A, B, & C	19	222+40	RT	W1-5R W13-1				White	Black	1	1						
	A, B, & C	20	252+40	LT				GRAPHIC SIGN, WINDING ROAD	Yellow	Black	1	1						
	A, B, & C	21	252+40	LT	W13-1		_		White	Black	1	1						
	· ·		L					CHEDULE A TOTALS			8	10	1	6	155	0	9	
	B & C	22	318+20	RT		24 \	_	SPEED LIMIT 25	White	Black	1	1	-		100			
	B&C	23	318+20	LT	142 1			SPEED LIMIT 45	White	Black	1	1		1				
	B & C	24	321+30	LT	SPECIAL	+	1	PLEASE BUCKLE UP	White	Black	1	1						
	B & C		325+00	RT	N/A			DELINEATORS (FLEXIBLE) (SINGLE WHITE)			-	-			20			
	B & C	25	328+95	RT	SPECIAL			RANGER STATION, CAMPGROUND	Brown	White							1	
	B & C	26	331+00	RT	SPECIAL			LAUNCH RAMP, PARIA BEACH	Brown	White							1	
	B & C	27	333+80	LT	SPECIAL			CAMPGROUND TURN RIGHT (3 POST)	Brown	White							1	
	B & C	28	334+13	LT	SPECIAL			89A, LAUNCH RAMP SYMBOL	Brown	White							1	
	B & C	29	334+44	RT	R1-1	3	0	STOP	Red	White	1	1						
	-	20	350 : 30	T 1=	I	1 2		STOP		VACI- in -	12	14	1	6	175	0	13	
	C C	30 31	350+29 351+10	LT LT	R1-1			SPEED LIMIT 25	Red White	W hite Black	1	1		+				
	С	32	351+10	RT			_	SPEED LIMIT 25 SPEED LIMIT 25	White	Black	1	1		+				
	С	33	351+87	LT	R2-1 R1-1			STOP	Red	White	1	1						
	C	34	352+25	RT	R1-1	_		STOP	Red	White	1	1		<u> </u>				
	C	35	371+36	RT	SPECIAL	ΤŤ		DIRECTIONS, LAUNCH RAMP, LONELY DELL RANCH, PARIA BEACH	Brown	White	-	-					1	
	•						SCI	HEDULE C SUBTOTALS			17	19	1	6	175	0	14	
											-/	19	<u> </u>		1/3	<u> </u>		



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION

SIGNING SUMMARY
SHEET 1 OF 2

REVISED 12/14/12

1 AMENDMENT 001 Replaced sign panels for project sign numbers 8 and 16, R2-2 SPEED LIMIT 40, with W7-6 HILL BLOCKS VIEW and W13-1 40 M.P.H.

