PUBLIC NOTICE

US Army Corps of Engineers®

APPLICATION FOR PERMIT

LOS ANGELES DISTRICT

Public Notice/Application No.: SPL-2011-572-KAT
Comment Period: March 15, 2012 through April 13, 2012

Applicant
Mr. Todd Emery
Arizona Department of Transportation
Tucson District Engineer
1221 S. 2nd Avenue (T100)
Tucson, Arizona 85713-1602

Contact
Mr. Charles Beck
Arizona Department of Transportation
Environmental Planning Group
1611 West Jackson MD EM02
Phoenix, Arizona 85007

Location

The proposed project is located within and adjacent to the Gila River within the Paisano Wash-Middle Gila River sub-watershed (HUC 1505010007) within the Middle Gila Watershed (HUC 15050100) of the Lower Colorado River Basin. The proposed project area is located along the existing SR 79 corridor between milepost (MP) 135.4 and MP 136.0, in the town of Florence, Pinal County, Arizona (UTM 464609.8 mE / 3657199.3 mN Zone 12N). The legal description of the survey area includes Section 25 of Township 4 South, Range 9 East (USGS 7.5' Quadrangle: *Florence, Ariz.* [1981]).

Activity

To discharge dredged and/or fill material into 0.51 acres of the Gila River for the construction of a new concrete scour apron and installation of shotcrete slope paving.

For more information, see page 4 of this notice and attached drawings.

Interested parties are hereby notified that an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). Interested parties are invited to provide their views on the proposed work, which will become a part of the record and will be considered in the decision. This permit application will be issued or denied under Section 404 of the Clean Water Act (33 U.S.C. 1344).

Comments can be e-mailed to: kathleen.a.tucker@usace.army.mil or mailed to:

U. S. Army Corps of Engineers
ATTENTION: Regulatory Division (SPL-2011-572-KAT)
3636 North Central Avenue, Suite 900
Phoenix, Arizona 85012-1939

For additional information please call Kathleen A. Tucker at (602) 230-6956 or send an e-mail to kathleen.a.tucker@usace.army.mil. This public notice is issued by the Arizona Regulatory Branch of the Los Angeles District of the US Army Corps of Engineers.

Evaluation Factors

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal will discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR 230) as required by Section 404 (b) (1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Preliminary Review of Selected Factors

EIS Determination- A preliminary determination has been made that an environmental impact statement is not required for the proposed work.

Water Quality- The applicant has applied for a water quality certification, under Section 401 of the Clean Water Act, from the Arizona Department of Environmental Quality. Section 401 of the Clean Water Act requires that any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers.

Cultural Resources- The proposed project area has been previously surveyed for cultural resources. The results of the survey have been coordinated with the State Historic Preservation office who has concurred that the proposed project has no adverse effect on sites eligible for listing in the National Register of Historic Places (NHRP).

Endangered Species- Preliminary determinations indicate that the proposed activity would not affect federally-listed endangered or threatened species, or their critical habitat. Therefore, formal consultation under Section 7 of the Endangered Species Act does not appear to be required at this time.

Public Hearing- Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

Proposed Activity for Which a Permit is Required

Basic Project Purpose-The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent. The basic project purpose for the proposed project is transportation and therefore, not water dependent.

Overall Project Purpose- The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose is to provide scour countermeasures along the SR 79 Gila River Bridge in order to protect the existing bridge piers and abutments from scour, to minimize future maintenance costs, and to repair existing scour damages. In addition, access under the bridge will be improved for future inspection and maintenance purposes.

Additional Project Information

Baseline Information- The SR 79 bridge over the Gila River (Structure No. 501) was originally constructed in 1957. The 30-span steel girder bridge consists of a two-lane highway with a width of 35 feet and a length of approximately 1507 feet. The existing piers are supported on steel H-piles ranging from 35 to 40 feet deep; the abutments are supported on approximately 50-feet-deep steel H-piles. In addition, pier and abutment remnants are located under to footprint of the current bridge, near the middle of the bridge spans. ADOT has identified this bridge as vulnerable to scour because storm flows have eroded the channel beneath the bridge. The erosion has exposed the bridge footings, which could reduce the structure's integrity and serviceable life. In addition, a remnant abutment from an older bridge impedes inspections and repairs of the existing Abutment No. 1 (south abutment). Bridge scour data from the ADOT Structure Inventory and Appraisal sheet indicated that the bridge's scour critical rating is 3, which signifies scour vulnerability. Recent ADOT Bridge Inspection Reports noted the following issues:

- An old concrete bridge abutment is located in front of Abutment No. 1, covering most of Span No. 1. An existing soil berm is located in front of the old abutment remnant and covers Span No. 1 and a large portion of Span No. 2. The remaining old abutment and its embankment almost touch the bottom of the deck in Span Nos. 1 and 2. There is virtually little or no clearance below the superstructure. Girders are not accessible for inspection.
- Local scour occurs at Pier Nos. 21 through 28, and their pier footings (pile caps) are exposed. The scour ranged in depth up to 4 feet.
- A 4-foot scour hole is located at old pier footing just north of Pier No. 24.

The proposed project area is within ADOT right-of-way along SR 79, as well as a temporary construction easement on the west side of SR 79, through a combination of private lands and State Trust lands that are administered by the Arizona State Land Department. The project limits consist primarily of the channel and floodplain of the Gila River underneath the existing SR 79 Gila River Bridge, and also incorporate an existing access road located on the west side of the bridge. The area to the north of the Gila River is mostly undeveloped, while significant agricultural development, a State Prison complex, and residential and commercial development associated with the town of Florence are located on the south side of the river. The North Side Canal parallels the Gila River on its northern bank, and the River Bottom Saloon is present on the east side of SR 79 just north of the project limits.

The Gila River has perennial flows upstream of the Ashurst-Hayden Diversion Dam, which is located approximately 8.5 miles upstream (i.e., to the east) of the project area. However, the dam diverts nearly

all of the river's surface water into the Florence-Casa Grande Canal for agricultural use. The river is an ephemeral, sand- and cobble-bottomed drainage within the project limits. This stretch of the Gila River is susceptible to periodic scouring flows during brief but intense summer thunderstorms, although surface water is fleeting because of the high rate of water infiltration through the sand and cobble substrate. When surface water is present following storm events, the river flows from east to west through the project area. Within the project limits, the river's main flow channel (within the ordinary high water mark) is sparsely vegetated and ranges from 320 to 400 feet wide. The north bank of the Gila River rises steeply into upland desertscrub, while there is a more gradual slope and several broad floodplain terraces extending to the south of the main river channel.

Vegetation & Habitat.

The project area is located in central Arizona at elevations from 1,470 feet to 1,490 feet above mean sea level and occurs within the Lower Colorado River Valley subdivision of the Sonoran Desertscrub Biotic Community (Turner and Brown 1994). This biotic community is characterized by high temperatures, generally low precipitation, and an assemblage of vegetation and wildlife species that is specifically adapted to these conditions. Burrobrush (*Hymenoclea monogyra*) is the dominant species in the channel and immediately adjacent floodplain of the Gila River, while velvet mesquite (*Prosopis velutina*) and desert broom (*Baccharis sarothroides*) are common along the river's northern bank. Salt cedar (*Tamarix* sp.), Athel tamarisk (*Tamarix aphylla*), tree tobacco (*Nicotiana glauca*), mule-fat (*Baccharis salicifolia*), and Mexican paloverde (*Parkinsonia aculeata*) are occasional species in the project area. Goldenbush (*Isocoma* sp.) is dominant on the silty floodplain to the south of the main river channel, and many weedy species such as Mediterranean grasses (*Schismus* spp.), Russian thistle (*Salsola tragus*), buffelgrass (*Pennisetum ciliare*), Sahara mustard (*Brassica tournefortii*), and red brome (*Bromus rubens*) are also present. The agricultural areas on the south side of the river appear to be the source of many of the weed species that are present in the project area. Roadside vegetation in the project area consists primarily of grasses (e.g., purple three-awn [*Aristida purpurea*] and Bermuda grass [*Cynodon dactylon*]) and weeds such as Russian thistle and Maltese star-thistle (*Centaurea melitensis*). Soil associations in the vicinity of the project area are of the Torrifluvent Association (HA1), which are deep, stratified, coarse to fine-textured, nearly level to gently sloping soils on floodplains and lower alluvial fans (Hendricks 1985). Field surveys of the Gila River within the project area have characterized the substrate as sandy with small to large rocks and cobbles.

Wildlife. Wildlife observed in the project area consisted of several bird species including house finches (*Carpodacus mexicanus*), mourning doves (*Zenaida macroura*), and Abert's towhees (*Pipilo aberti*). The remains of several old cliff swallow nests were present on the underside of the bridge; however, no cliff swallows or active cliff swallow nests were observed during the site visit in May 2011. No bats were present underneath the bridge at the time of the site visit, and there was no evident sign from use of the bridge by roosting bats (e.g., guano, urine staining).

Overall Proposed Project Description- ADOT proposes to provide scour countermeasures to the bridge piers at the northern and southern ends of the bridge, stabilize the embankments, and remove abutment remnants and excess soil to provide adequate clearance beneath the bridge. The proposed improvements to the SR 79 Gila River Bridge will require dredge and fill within the Gila River. Construction activities within designated "waters of the United States" (Waters) will include:

- Remove portions of the old pier remnants located between Pier Nos. 21 and 28 to allow for construction of the new scour apron

- Construct a 385-foot-long and 60-foot-wide concrete scour apron that will extend 16.5 feet south of Pier No. 21 center line to 15 feet north of the Pier No. 28 center line. The concrete scour apron will be 6 inches thick, with 6-foot-deep concrete cut-off walls at the upstream end and south end of the apron and a 4-foot-deep concrete cut-off wall at the downstream end of the apron in order to protect Pier Nos. 21 through 28 from scour.
- Construct concrete walls around the H piles of the existing Pier Nos. 21 through 28. The vertical wall height will be 4feet 9 inches at Pier Nos. 21, 24 and 27, and 4 feet 6 inches at Pier Nos. 22, 23, 25, 26, and 28.
- Install a 60-foot-wide and 4-inch deep shotcrete slope paving with 6-foot by 6-foot welded wire fabric over the existing gabion mattress to protect Pier No 29 and Abutment No. 2 (north abutment). The shotcrete will extend from 15 feet north of the Pier No. 28 center line to 15.7 feet north of the Pier No. 29 center line.
- Backfill excavated material over the new concrete floor at the northern end of the bridge

Project activities located outside of Waters include:

- Remove the portion of the soil berm that covers Spans Nos. 1 and 2 to allow for construction of the new scour apron and to provide adequate clearance between the fill and the bridge
- Remove a portion of the old abutment located between Abutment No. 1 and Pier No. 1 to allow for construction of a scour apron at the southern end of the bridge
- Construct a 74.5-foot-long sloped concrete scour apron in Span No. 1 that will extend from Abutment No. 1 to 20 feet north of Pier No. 1. The concrete scour apron will have 6-foot-deep concrete cut-off walls at the east and north sides and a 4-foot-deep concrete cut-off wall at the west side in order to protect Pier No. 1 and Abutment No. 1 from scour. The concrete scour apron will consist of three portions:
  - 6-foot-long and 12.5-foot-wide horizontal concrete scour apron that will extend from the Abutment No. 1 center line to 6 feet south of the Abutment No. 1 center line
  - 42-foot-long and 50-foot-wide sloped concrete scour apron with a slope of 2:1 that will extend from the center line of Abutment No. 1 to 37.5 feet north of the Abutment No. 1 center line
  - 26.5-foot-long and 50-foot-wide horizontal concrete scour apron that will extend 6.5 feet south of the Pier No. 1 center line to 20 feet north of the Pier No. 1 center line
- Backfill excavated material over the new concrete floor at the southern end of the bridge
- Reseed disturbed upland portions of the project area with a native seed mix.

Proposed Mitigation – The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance and Minimization Information – Complete avoidance of impacts to Waters was determined to not be possible in achieving the project purpose; therefore, impacts to Waters were minimized to the maximum extent practicable.

Permanent impacts have been minimized by reducing the size of the concrete scour aprons to the

greatest extent practicable while still adequately protecting the piers and abutments from scour and erosion. Permanent impacts within the Gila River will include only the minimum area and fill material required for the modifications. All areas of the channel bottom not permanently altered will be recontoured to pre-construction grade conditions as close as possible following the completion of construction activities, wherever practicable. In addition, construction site access for the project will be available from the existing roadways, eliminating the need for construction of temporary access roads.

Activities associated with project activities will require the general site clearing of desert scrubland vegetation within Waters and immediately adjacent uplands within the project corridor. Desert scrubland vegetation such as burrobrush, velvet mesquite, desert broom, and other varieties of shrubs and grasses may be removed throughout the project area. However, vegetation within the river is sparse, and removal will be only the minimum amount necessary to provide an adequate work zone and construction access. Undeveloped portions of the project area, not within waters, that are disturbed during construction will be reseeded with a native seed mix and allowed to naturally revegetate following project completion. Therefore, the proposed project is not expected to have significant impact on the vegetative cover occurring in the area and impacts to wildlife and/or their habitat during and after construction of the proposed project will be minor.

Compensation- The proposed action will result in 0.51 acre of permanent impacts to the Gila River. ADOT will provide compensatory mitigation through in-lieu fees. The Corps will include the payment of in-lieu fees as a special condition of the permit.

Proposed Special Conditions

To be developed.

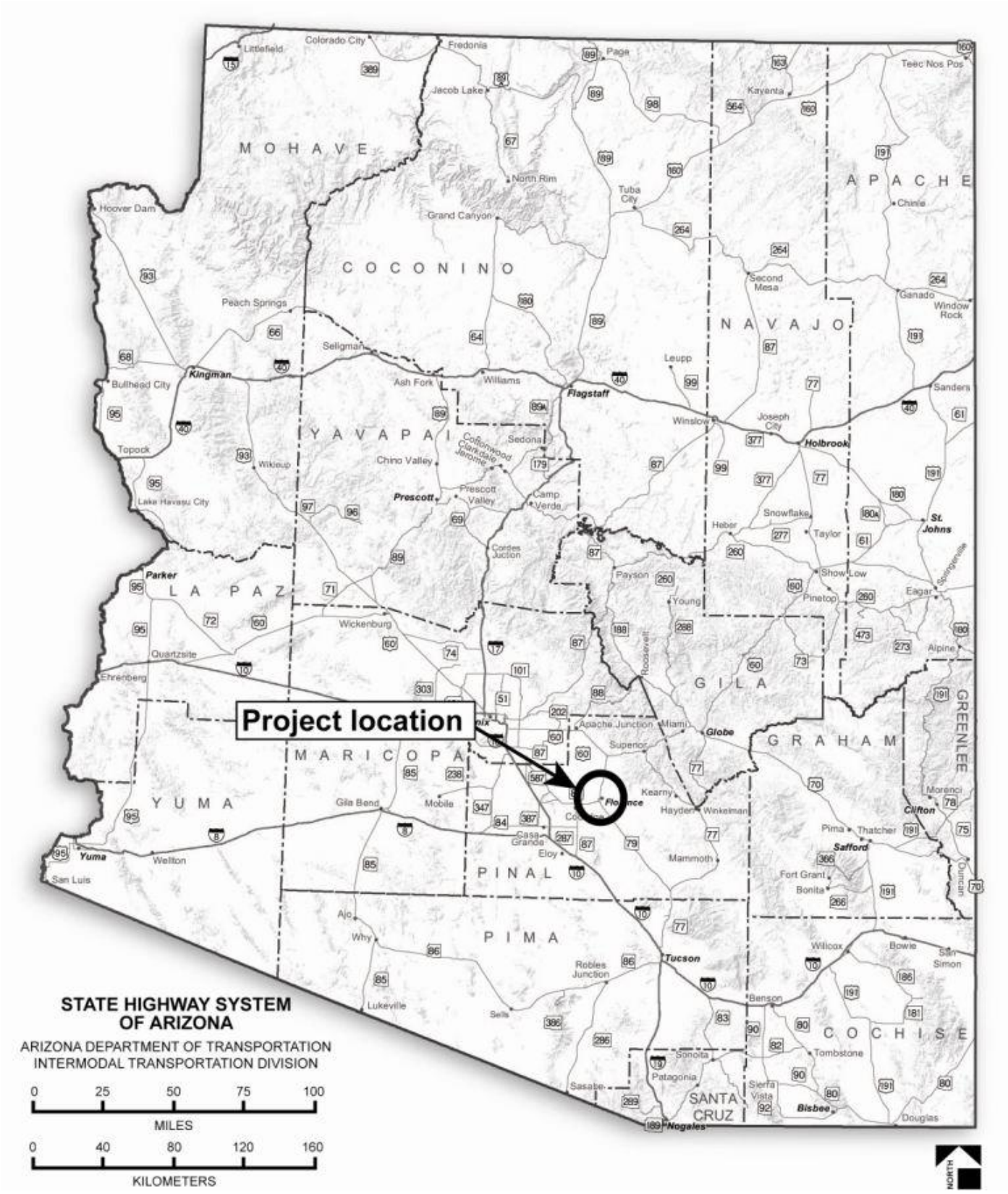
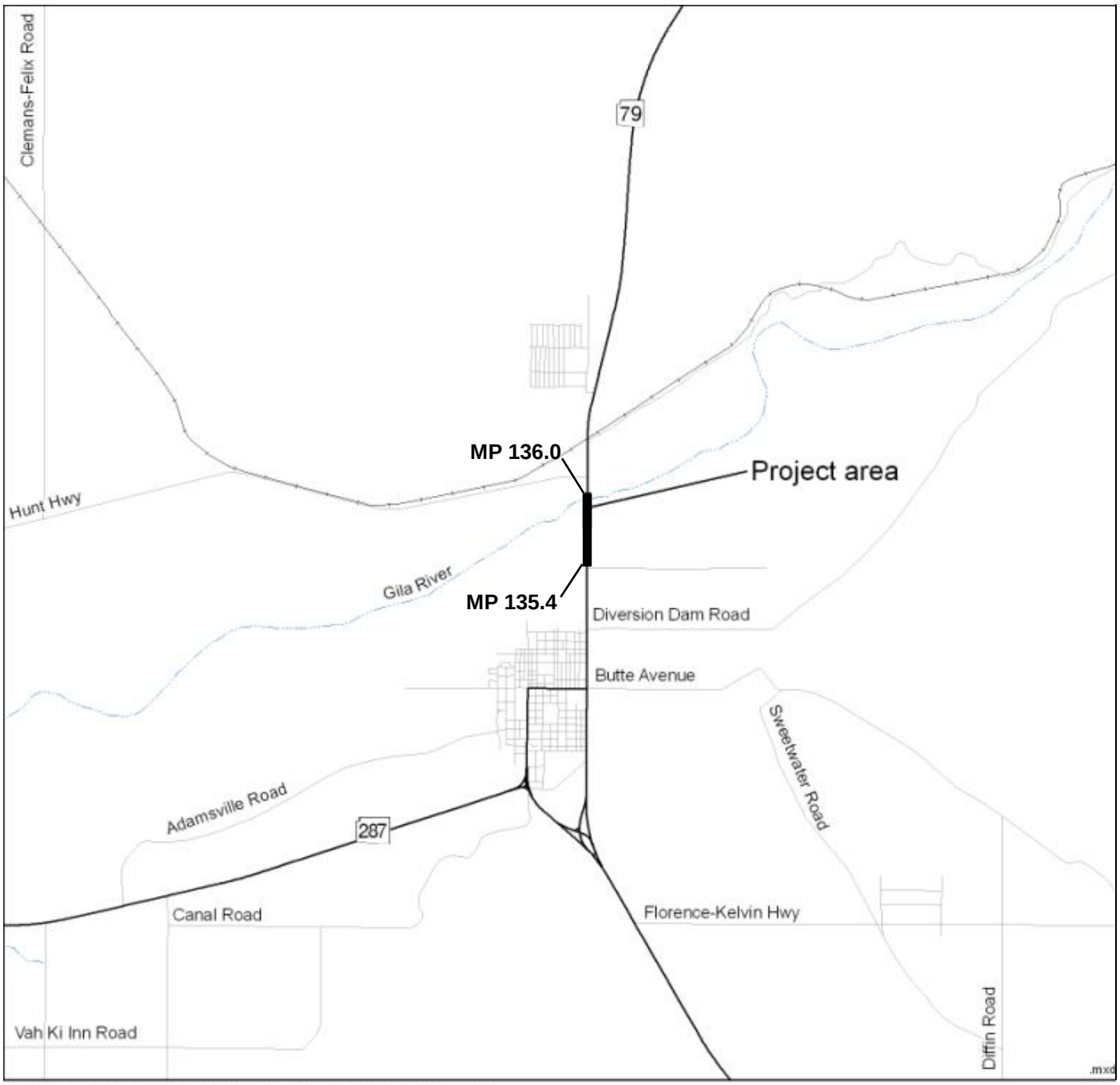


Figure 1. State Location Map



Source: Arizona Transportation Information Systems Coverage (2006)

Key

Project area

Mile

0 1

NORTH

Figure 2. Project Vicinity Map

Project area

Pier 29 Pier 28 Pier 27 Pier 26 Pier 25 Pier 24 Pier 23 Pier 22 Pier 21

79

Abutment #2

Access road

Abandoned piers
to be removed

Stock-pile
area

Staging area

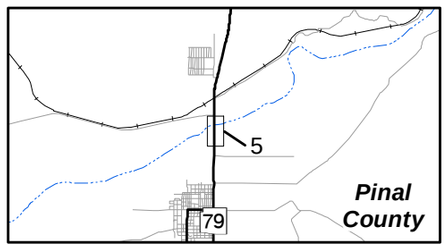
1

-111.37985°, 33.05440°

Aerial Date: ca. 2010

Key

- # — Wash number
- Flow direction
- Existing pier
- Abandoned pier to be removed
- Access road
- Proposed concrete scour apron
- Proposed shotcrete slope
- Staging/stock-pile area
- Waters of the U.S. (Waters)
- Temporary disturbance to Waters
- Permanent impacts of Waters



Section 404 Individual Permit
SR79 Gila River Bridge
079 PN 135 H7891 01C

Source: USGS 7.5' Quadrangle
Florence Ariz. (1981)
Township 4S, Range 9E,
Section 25
UTM 1983 Zone 12N
464,609mE, 3,657,199mN
Federal Project No. 079-A(206)A

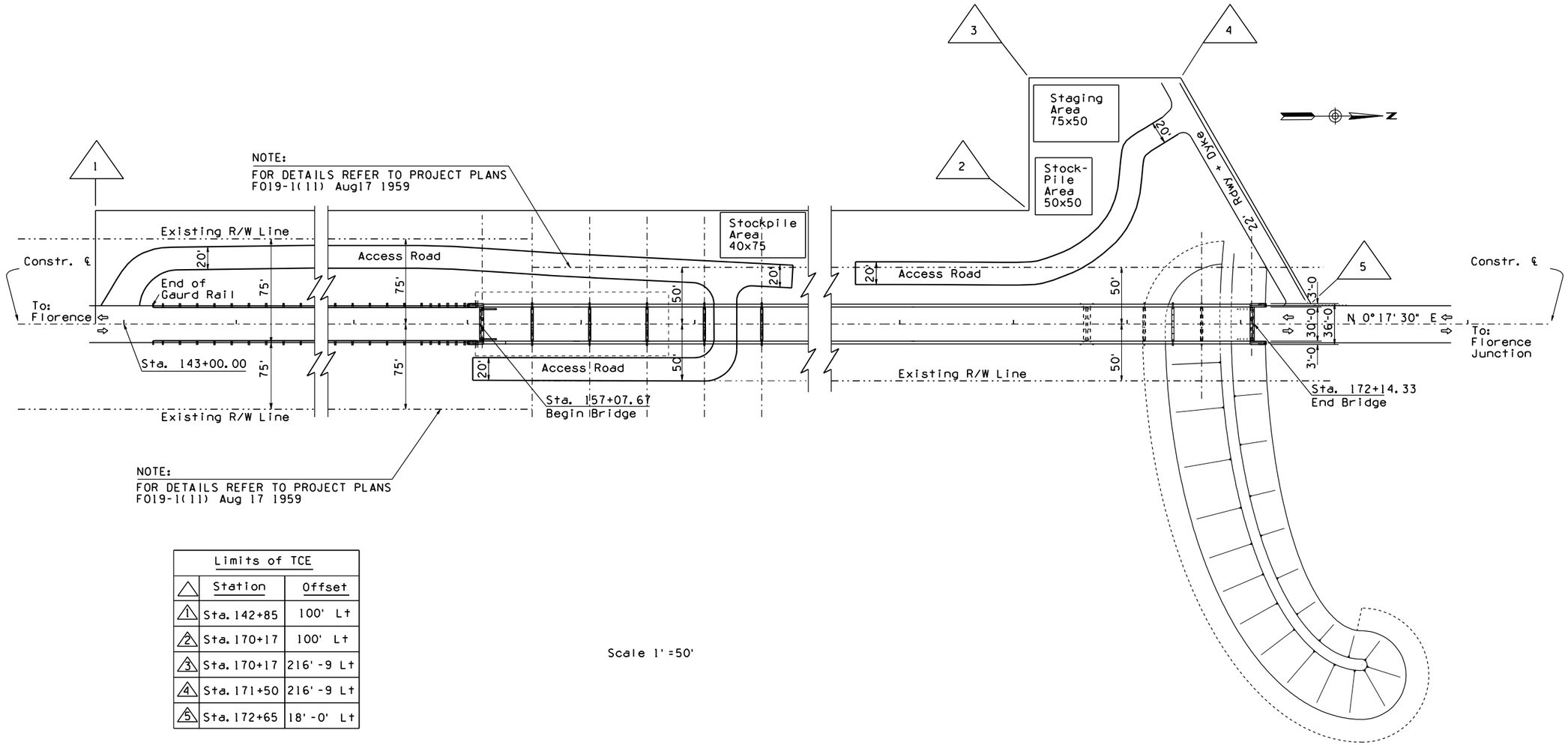
Feet
0 100
1" = 100'

January 2012

Figure 5

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 134			

NO.	DESCRIPTION OF REVISIONS	MADE BY	DATE
NO.1			
NO.2			



Limits of TCE		
△	Station	Offset
△1	Sta. 142+85	100' Lt
△2	Sta. 170+17	100' Lt
△3	Sta. 170+17	216'-9 Lt
△4	Sta. 171+50	216'-9 Lt
△5	Sta. 172+65	18'-0' Lt

Scale 1"=50'

BRIDGE HYDRAULICS SECTION		DATE
DESIGN	W. Grimsley	3-11
DESIGN CK'D	I.P.I.	3-11
DRAWN	W. Grimsley	3-11
DWG CK'D	I.P.I.	3-11
APPROVED-PROJ. ENGINEER	I.P.I.	3-11
APPROVED-DESIGN LEADER	I.P.I.	3-11

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

NOT FOR CONSTRUCTION

ACCESS PLANS

SR 79	135.54	501	LOCATION
ROUTE	MILEPOST	STRUCTURE NO.	GILA RIVER BRIDGE

TRACS NO. H 7891 01C | 079-A(206)A | ___ OF ___

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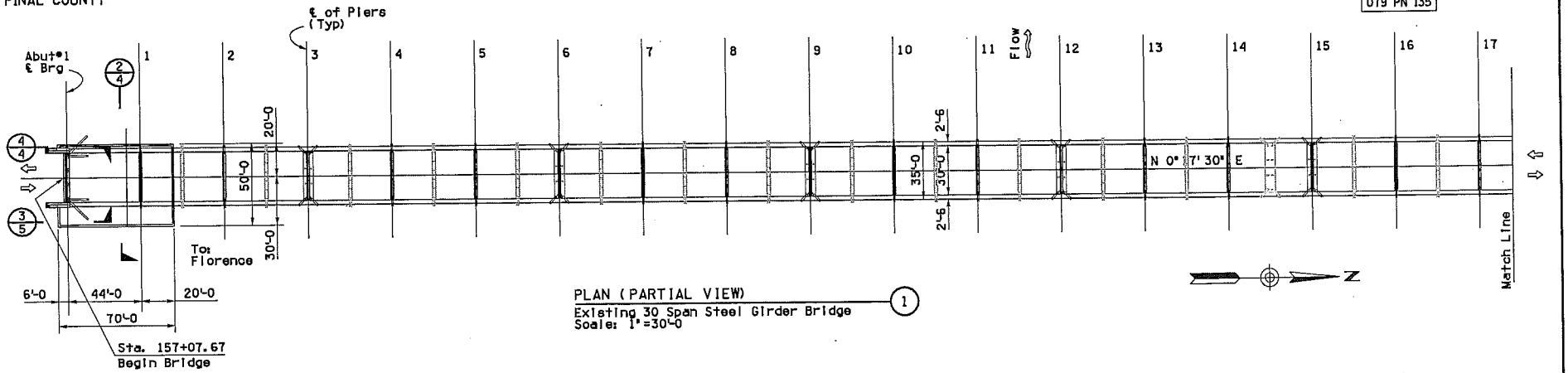
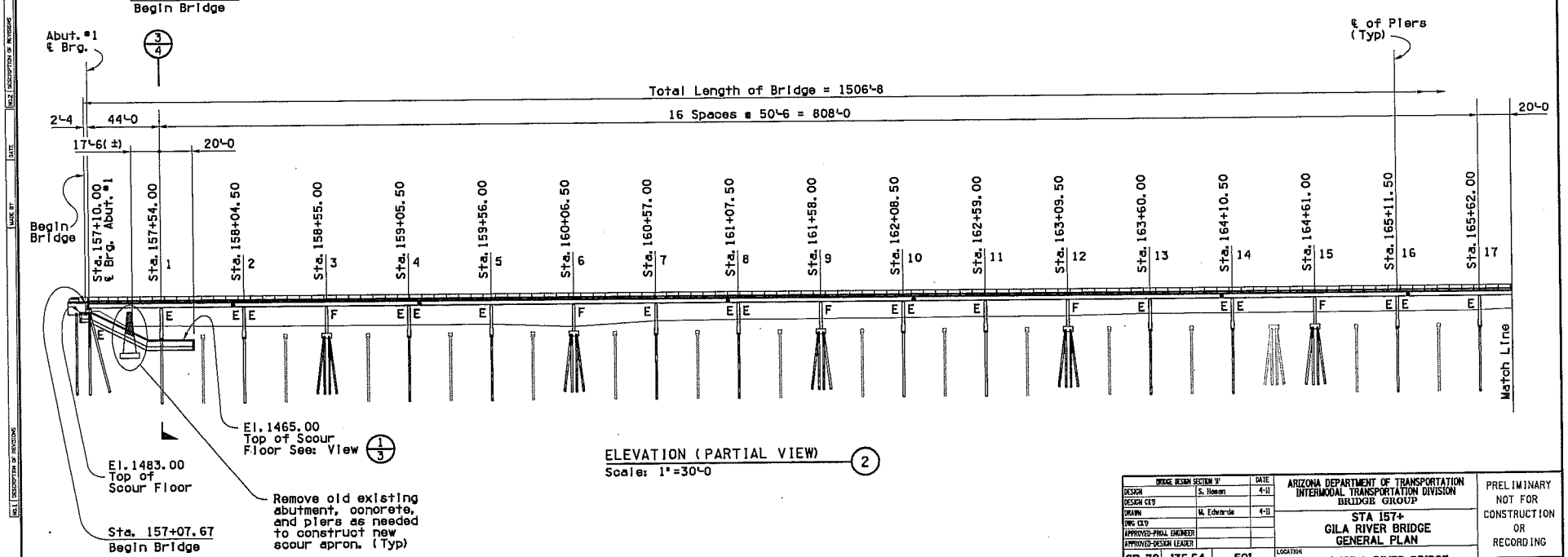
PICACHO-FLORENCE JUNCTION HWY (SR 79)
GILA RIVER
PINAL COUNTY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 135			



PLAN (PARTIAL VIEW) — 1
Existing 30 Span Steel Girder Bridge
Scale: 1"=30'-0



ELEVATION (PARTIAL VIEW) — 2
Scale: 1"=30'-0

BRIDGE DESIGN SECTION 'P'		DATE
DESIGN	S. Hosen	4-11
DESIGN CK'D		
DRAWN	M. Edwards	4-11
DWG CK'D		
APPROVED-FINAL ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
GENERAL PLAN

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	MILEPOST	STRUCTURE NO.	LOCATION
SR 79	135.54	501	SR-79/GILA RIVER BRIDGE

DWG. S-1.1 OF XX

TRACS NO. H 7891 01C — 079-A(206)A — ___ OF ___

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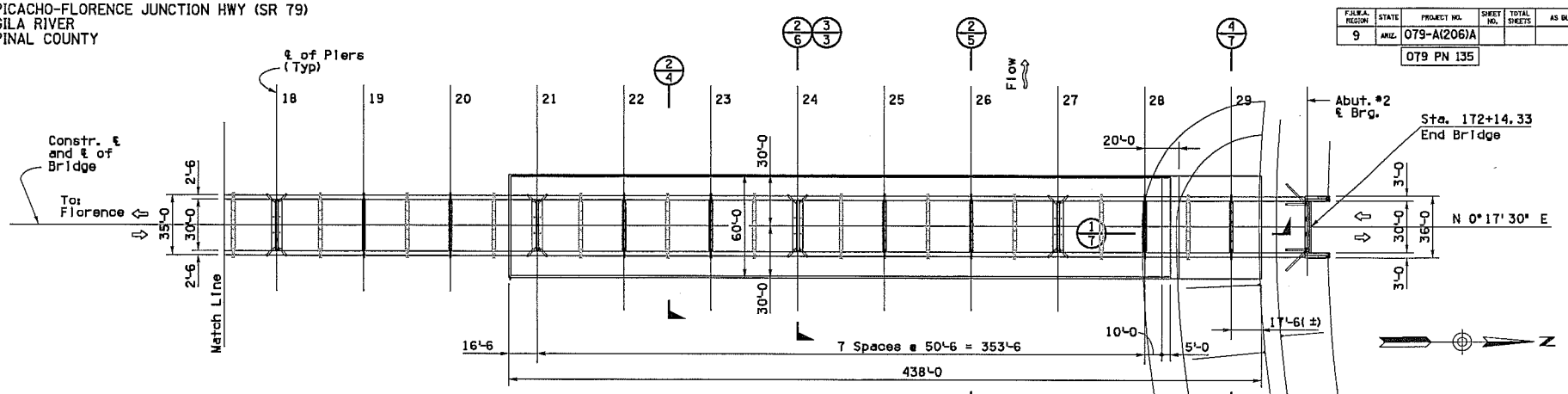
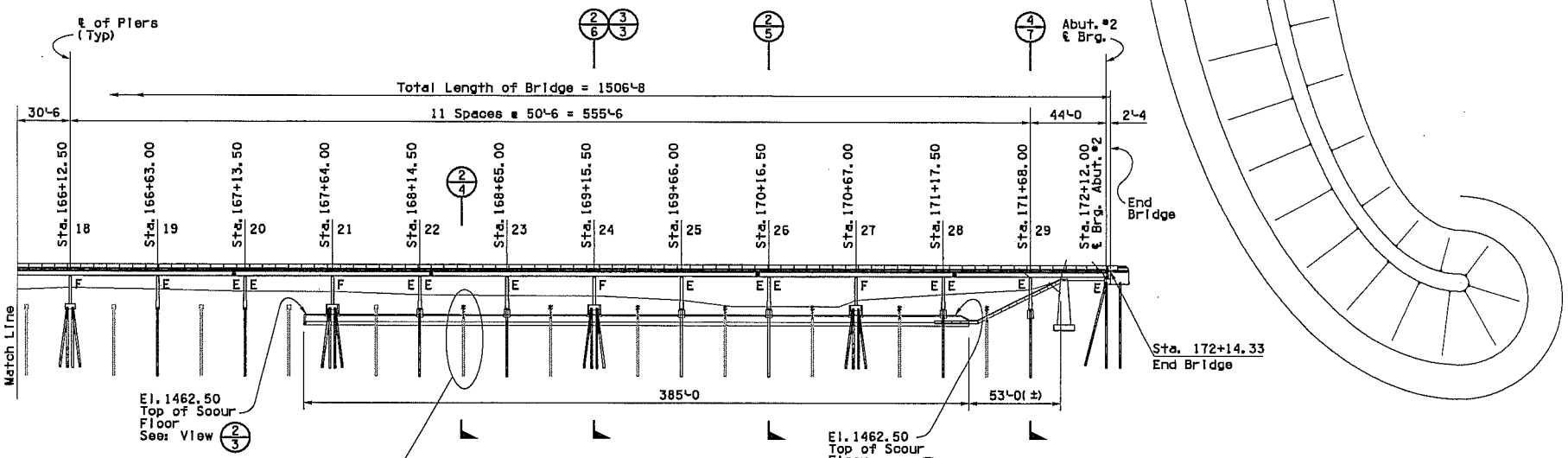
PICACHO-FLORENCE JUNCTION HWY (SR 79)
GILA RIVER
PINAL COUNTY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 135			



PLAN (PARTIAL VIEW) — 1
Existing 30 Span Steel Girder Bridge
Scale: 1"=30'-0



ELEVATION (PARTIAL VIEW) — 2
Scale: 1"=30'-0

BRIDGE DESIGN SECTION 'A'		DATE
DESIGN	S. Hasan	4-11
DESIGN CKD		
DRAWN	M. Edwards	4-11
DWG CKD		
APPROVED-PROJ. ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
GENERAL PLAN

ROUTE	MILEPOST	STRUCTURE NO.	LOCATION
SR 79	135.54	501	SR-79/GILA RIVER BRIDGE

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

DWG. S-12 OF XX

TRACS NO. H 7891 01C — 079-A(206)A — ___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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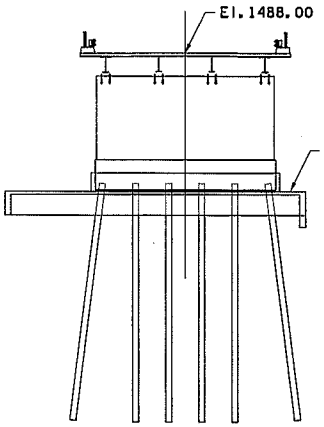
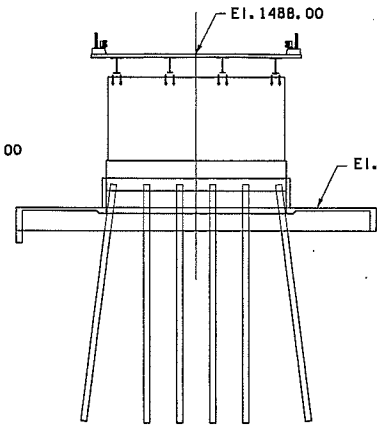
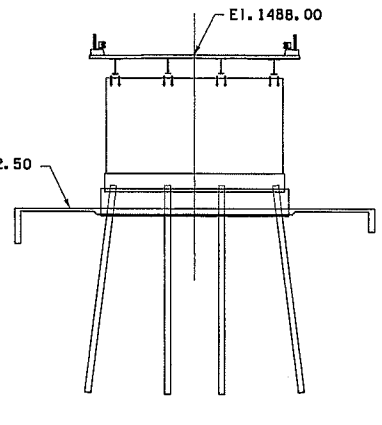
		079 PN 135			



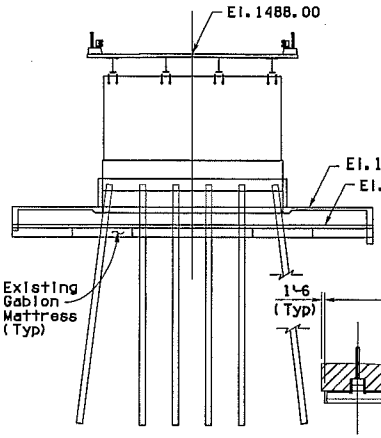
VIEW (1)
(Looking back)
Scale: 1"=10'-0



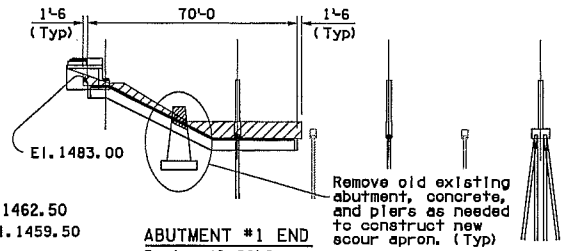
VIEW (2)
(Looking ahead)
Scale: 1"=10'-0



SECTION (3)
Scale: 1"=10'-0



VIEW (4)
(Looking back)
Scale: 1"=10'-0



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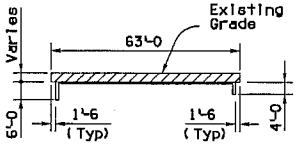
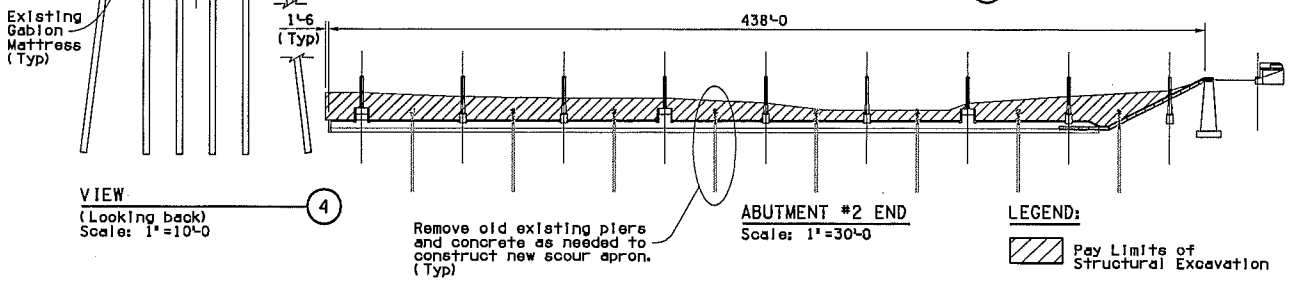


TYPICAL SECTION
Scale: 1"=20'-0

STRUCTURAL EXCAVATION (5)



ABUTMENT #2 END
Scale: 1"=30'-0

LEGEND:
Pay Limits of Structural Excavation

GENERAL NOTES:

Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Edition of 2008.

Design Specifications - AASHTO LRFD Bridge Design Specifications 4th Edition.

All Concrete shall be Class "S" (f'c = 3000 psi).

Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60.

All bends and hooks shall meet the requirements of AASHTO Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

All reinforcing steel shall have 2 inch clear cover unless noted otherwise.

Dimensions shall not be scaled from drawings.

All dimensions are based on As-built plans, and shall be verified prior to the fabrication of any materials.

All stations, elevations and dimensions shown are based on "As-built" plans and do not necessarily correspond to structure conditions now existing. Stations elevations and dimensions in field may vay from those shown and shall be adjusted as required and directed by the Engineer. ADOT NAVD 88 Survey Elevations -1.9' = As-Built NGVD 29 Elevations.

NOTE:

All excavated material shall be placed back over the new Apron Floor and the channel shall be graded to the original flow line as directed by the Engineer.

Cost of backfill tasks is incidental to pay item for structural excavation. See Drawing Sheet S-1.3 for Structural Excavation.

APPROXIMATE QUANTITIES

Item	Units	Total	As Built
Structural Excavation	C.Y.		
Structural Concrete Class "S" f'c=3000 psi	C.Y.		
Reinforcing Steel	Lbs.		
Removal of Structural Concrete	C.Y.		

The original bridge was built in 1957 by the Arizona Highway Department under Project No. F-019-1(1).

The Spur Dike was built in 1995 for Bank Protection under Project No. ER-055-1(17).

New Bridge Rail was added in 1995 under Project No. F-055-1-507.

Steel Repairs were made in 2000 under Project No. N 900-0-567.

New Bridge Rail was added in 2002 under Project No. F-055-1-507.

BRIDGE DESIGN SECTION 'A'		DATE
DESIGN	S. Hosen	8-09
DESIGN CKD		
DRAWN	M. Edwards	8-09
DNG CKD		
APPROVED-PROJ. ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
SCOUR PROTECTION DETAILS

SR 79	135.54	501
ROUTE	MILEPOST	STRUCTURE NO.

LOCATION: SR-79/GILA RIVER BRIDGE

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

DWG. S-1.3 OF xx

TRACS NO. H 7891 01C | 079-A(206)A | ___OF___

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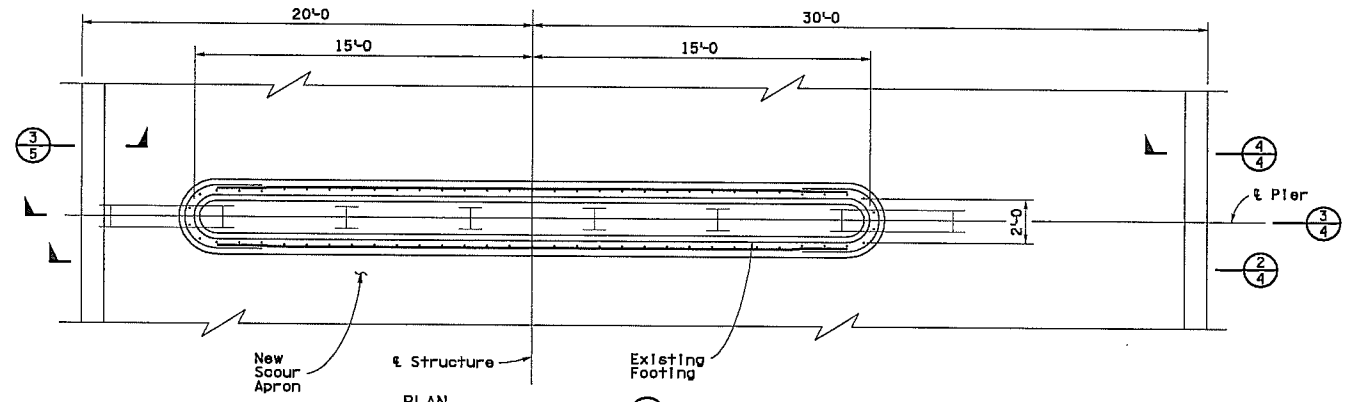
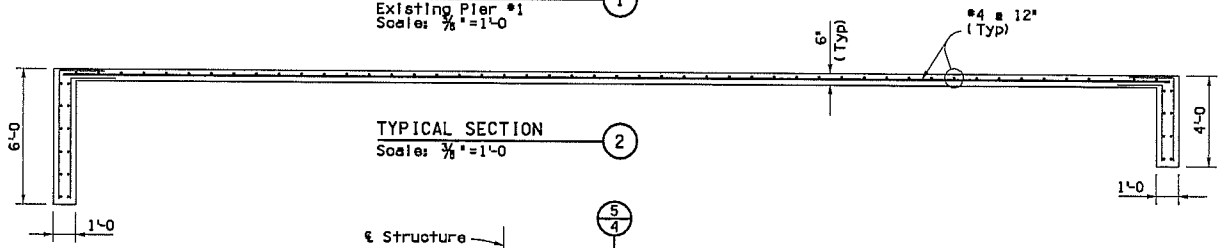
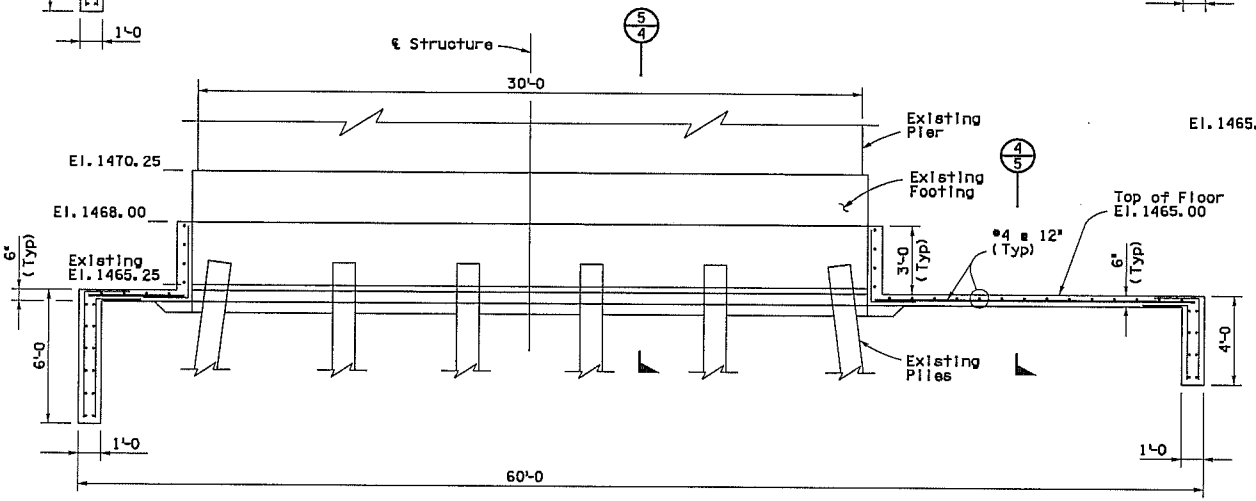
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 135			



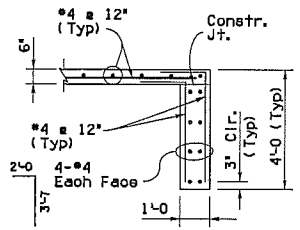
PLAN
Existing Pier #1
Scale: 3/8" = 1'-0 (1)



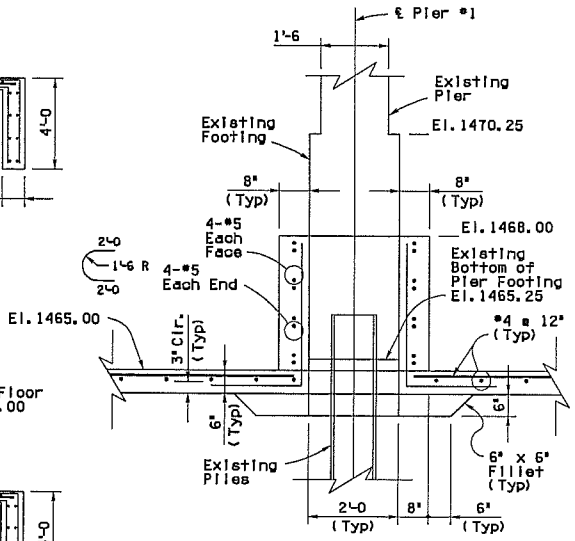
TYPICAL SECTION
Scale: 3/8" = 1'-0 (2)



SECTION AT PIER
Scale: 3/8" = 1'-0 (3)



SECTION CUT OFF WALL
Scale: 1/2" = 1'-0 (4)



SECTION AT PIER #1
Scale: 3/4" = 1'-0 (5)

BRIDGE DESIGN SECTION 'A'		DATE
DESIGN	S. Hansen	4-11
DESIGN CK'D		
DRAWN	M. Echeverria	4-11
DWG CK'D		
APPROVED-PROJ. ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
SCOUR PROTECTION DETAILS

LOCATION: SR-79/GILA RIVER BRIDGE

SR 79	135.54	501
ROUTE	MILEPOST	STRUCTURE NO.

TRACS NO. H 7891 01C | 079-A(206)A

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

DWG. S-L4 OF XX
___ OF ___

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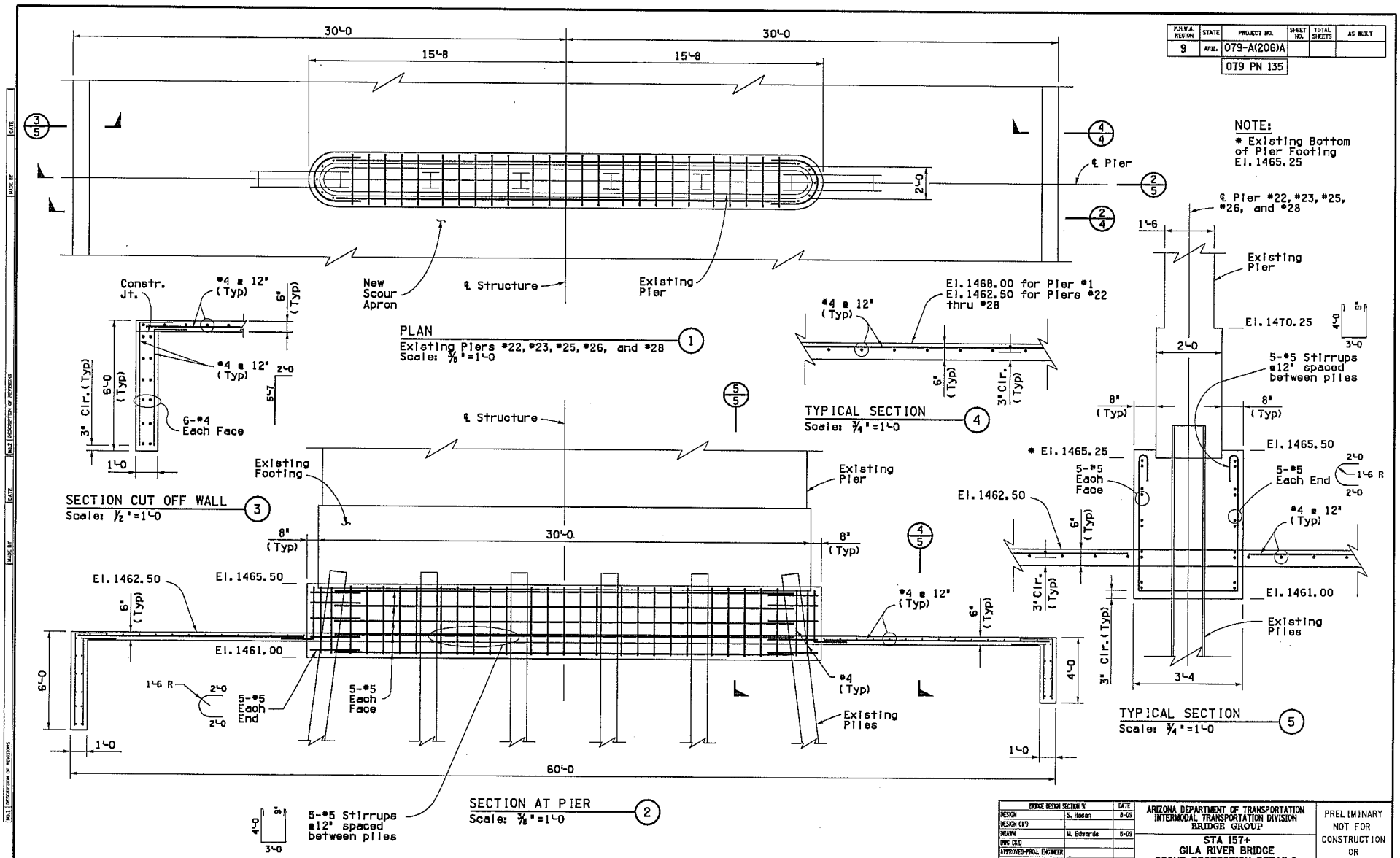

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 135			

BRIDGE DESIGN SECTION 'A'		DATE
DESIGN	S. Hasan	8-09
DESIGN CK'D		
DRAWN	M. Echeverria	8-09
DWG CK'D		
APPROVED-PROJ. ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
SCOUR PROTECTION DETAILS

SR 79	135.54	501
ROUTE	MILEPOST	STRUCTURE NO.

LOCATION: SR-79/GILA RIVER BRIDGE

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

DWG. S-L5 OF XX

TRACS NO. H 7891 01C | 079-A(206)A | ___ OF ___

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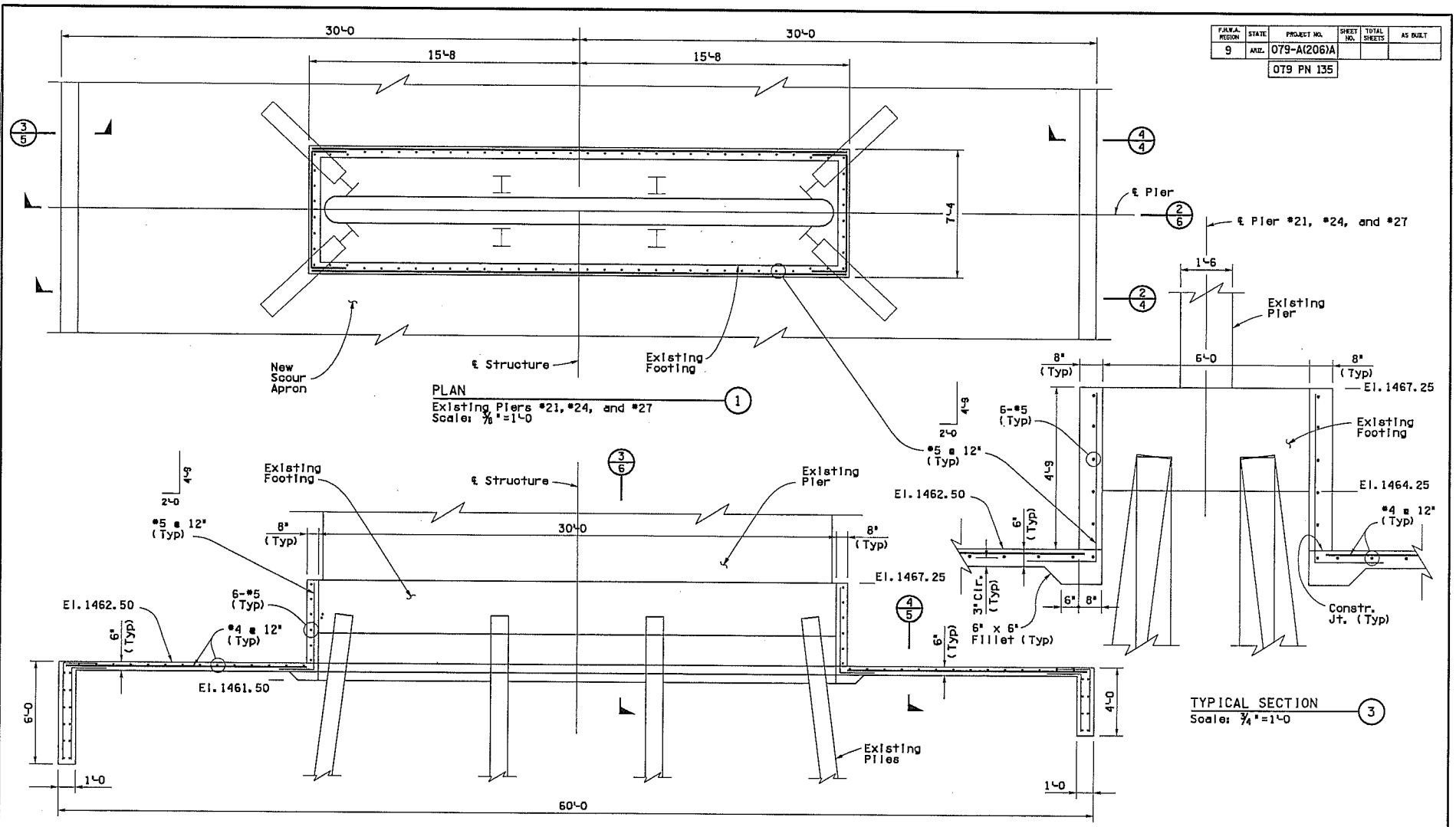

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 135			

BRIDGE DESIGN SECTION 'A'		DATE
DESIGN	S. Nasan	8-09
DESIGN CKD		
DRAWN	M. Echeverria	8-09
DWG CKD		
APPROVED-PROJ. ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
SCOUR PROTECTION DETAILS

SR 79	135.54	501
ROUTE	MILEPOST	STRUCTURE NO.

LOCATION: SR-79/GILA RIVER BRIDGE

TRACS NO. H 7891 01C | 079-A(206)A

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

DWG. S-16 OF XX

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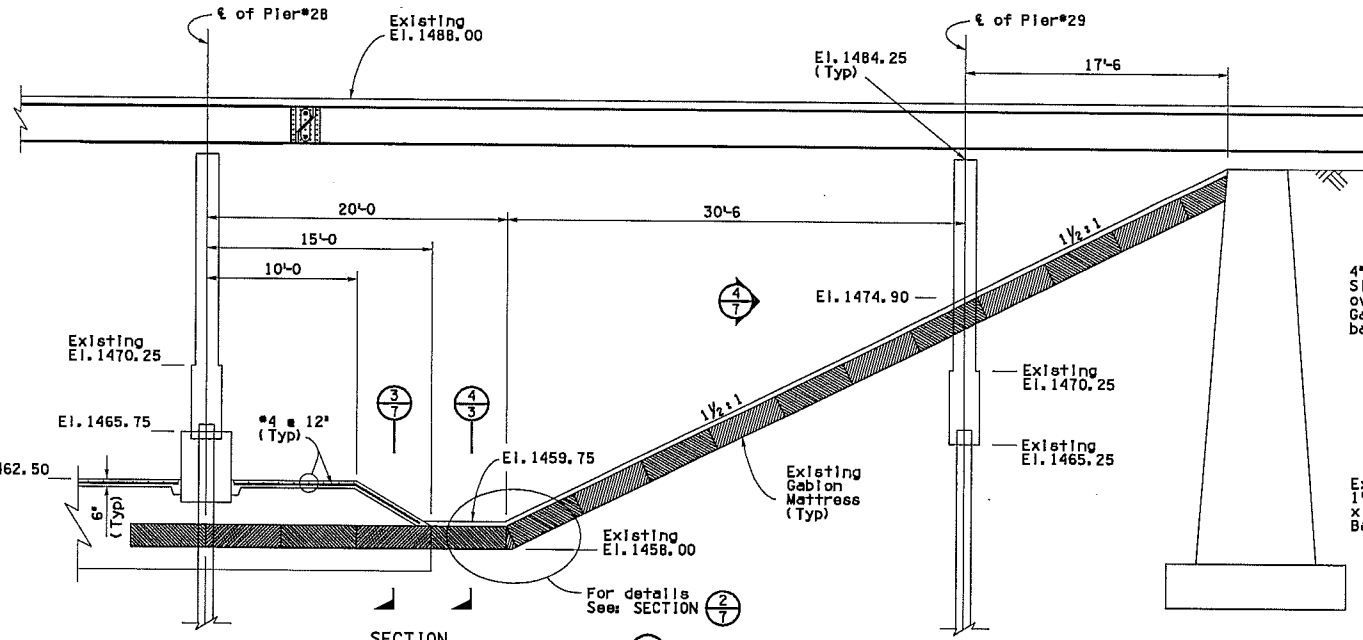
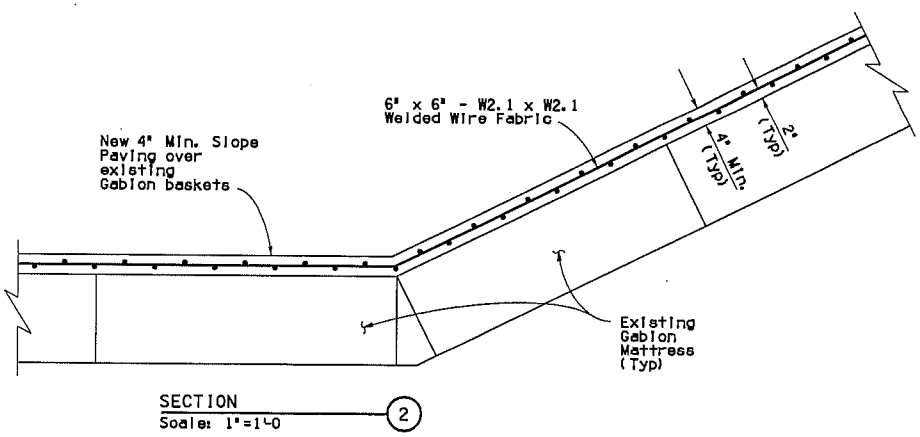
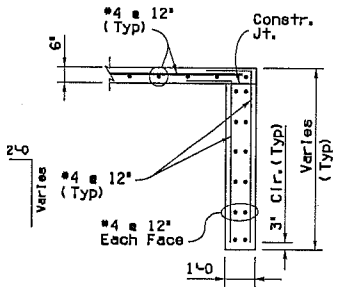


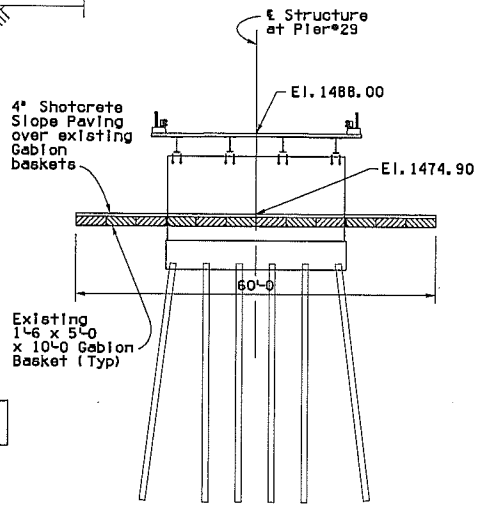
SECTION
Scale: ¼"=1'-0 (1)



SECTION
Scale: 1"=1'-0 (2)



SECTION CUT OFF WALL
Scale: ½"=1'-0 (3)



VIEW
(Looking ahead)
Scale: 1"=10'-0 (4)

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	079-A(206)A			
		079 PN 135			

BRIDGE DESIGN SECTION 'A'		DATE
DESIGN	S. Hosen	8-09
DESIGN CKD		
DRAWN	M. Edwards	8-09
DWG CKD		
APPROVED-PROJ. ENGINEER		
APPROVED-DESIGN LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP

STA 157+
GILA RIVER BRIDGE
SCOUR PROTECTION DETAILS

ROUTE	MILEPOST	STRUCTURE NO.	LOCATION
SR 79	135.54	501	SR-79/GILA RIVER BRIDGE

TRACS NO. H 7891 01C | 079-A(206)A

PRELIMINARY
NOT FOR
CONSTRUCTION
OR
RECORDING

DWG. S-L7 OF xx

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