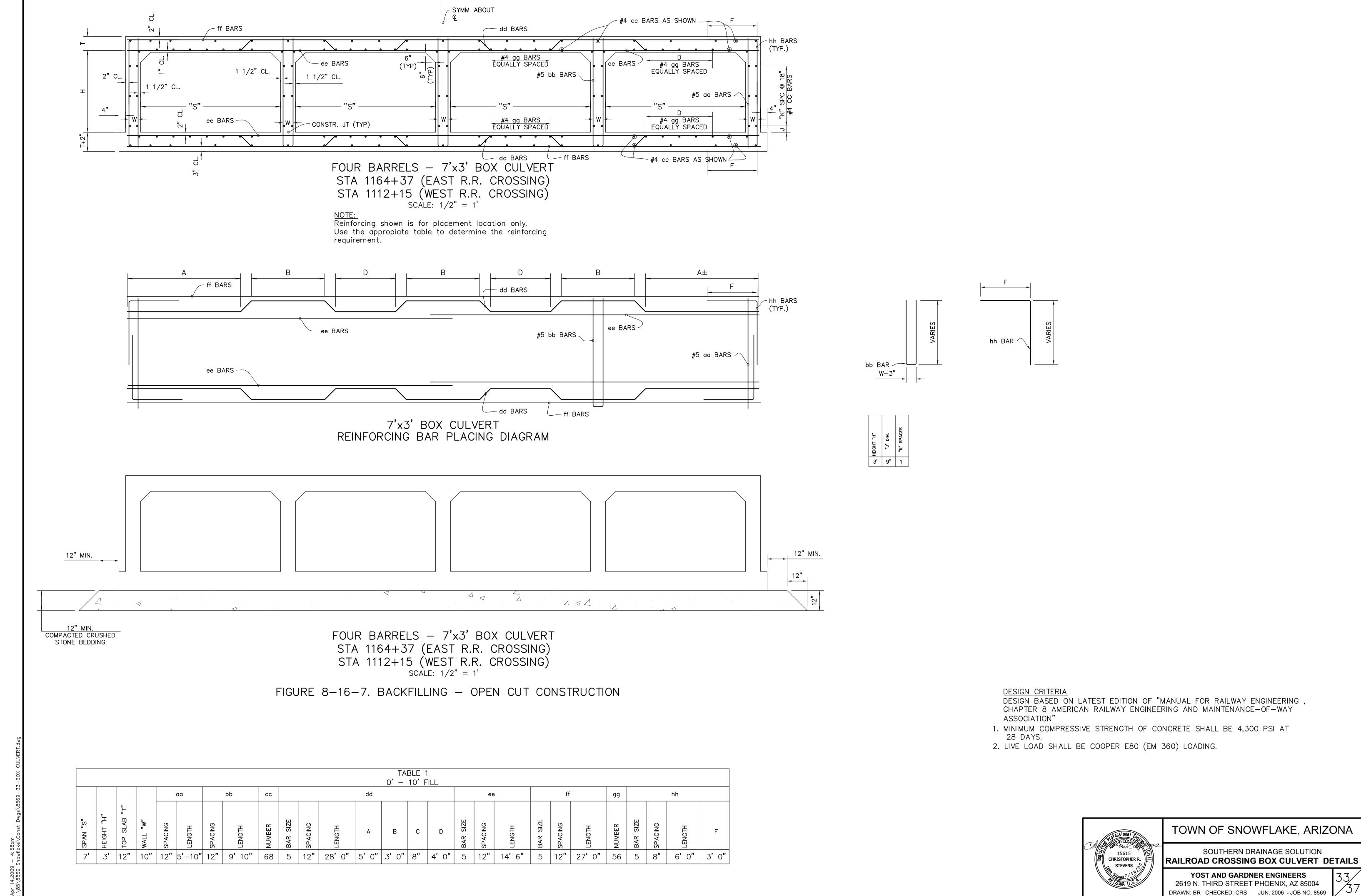


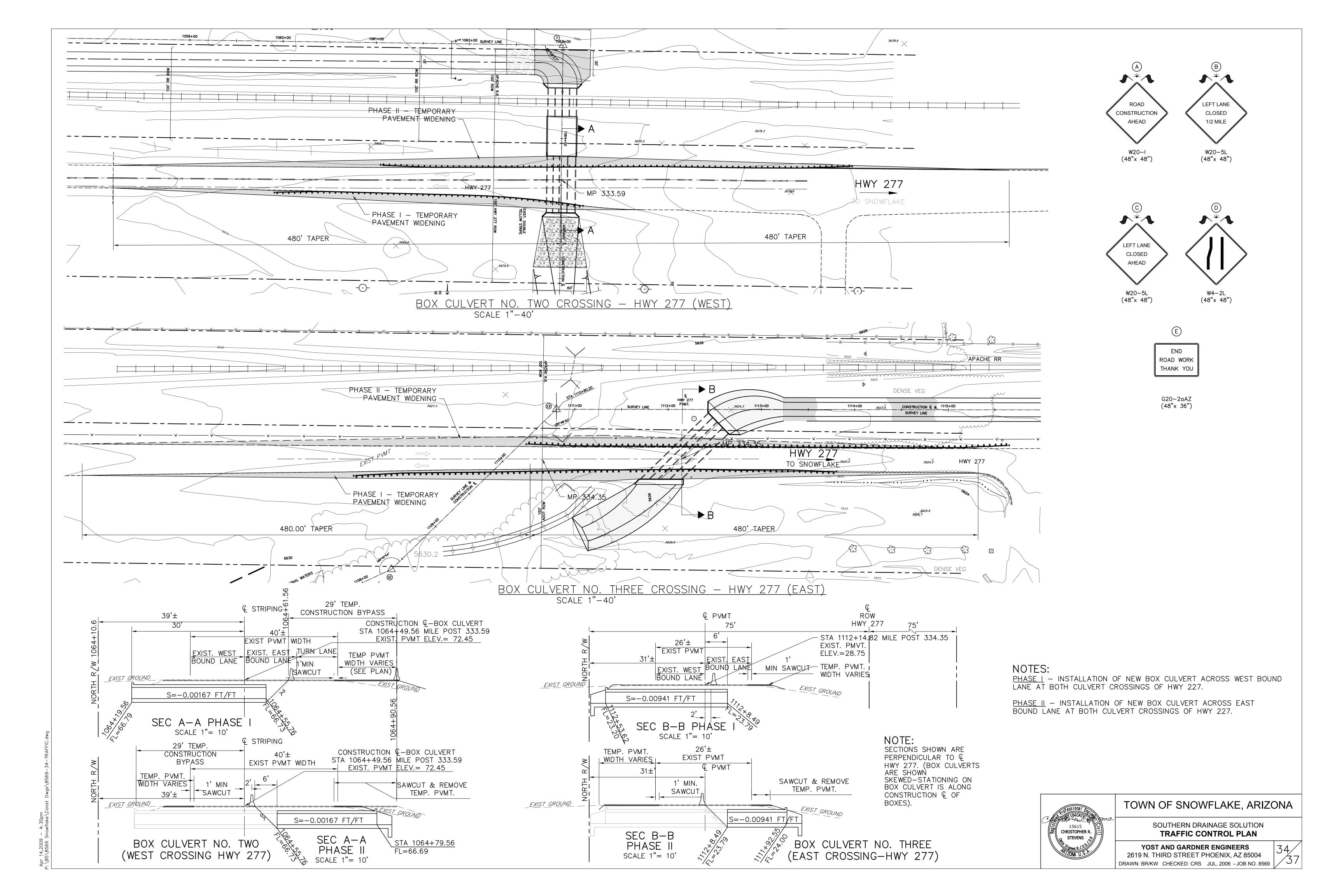
TOWN OF SNOWFLAKE, ARIZONA

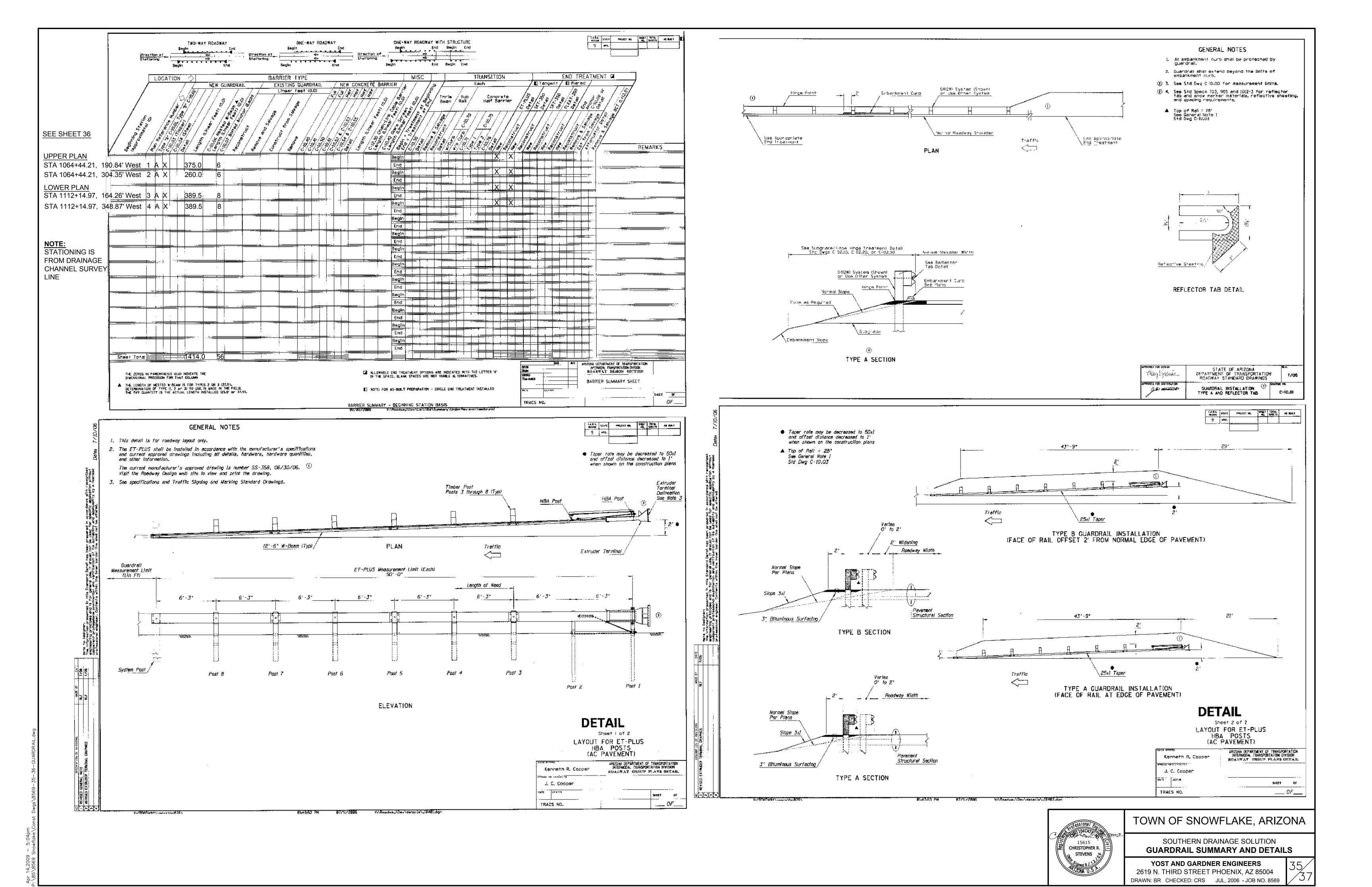
ADOT BOX CULVERT DETAILS

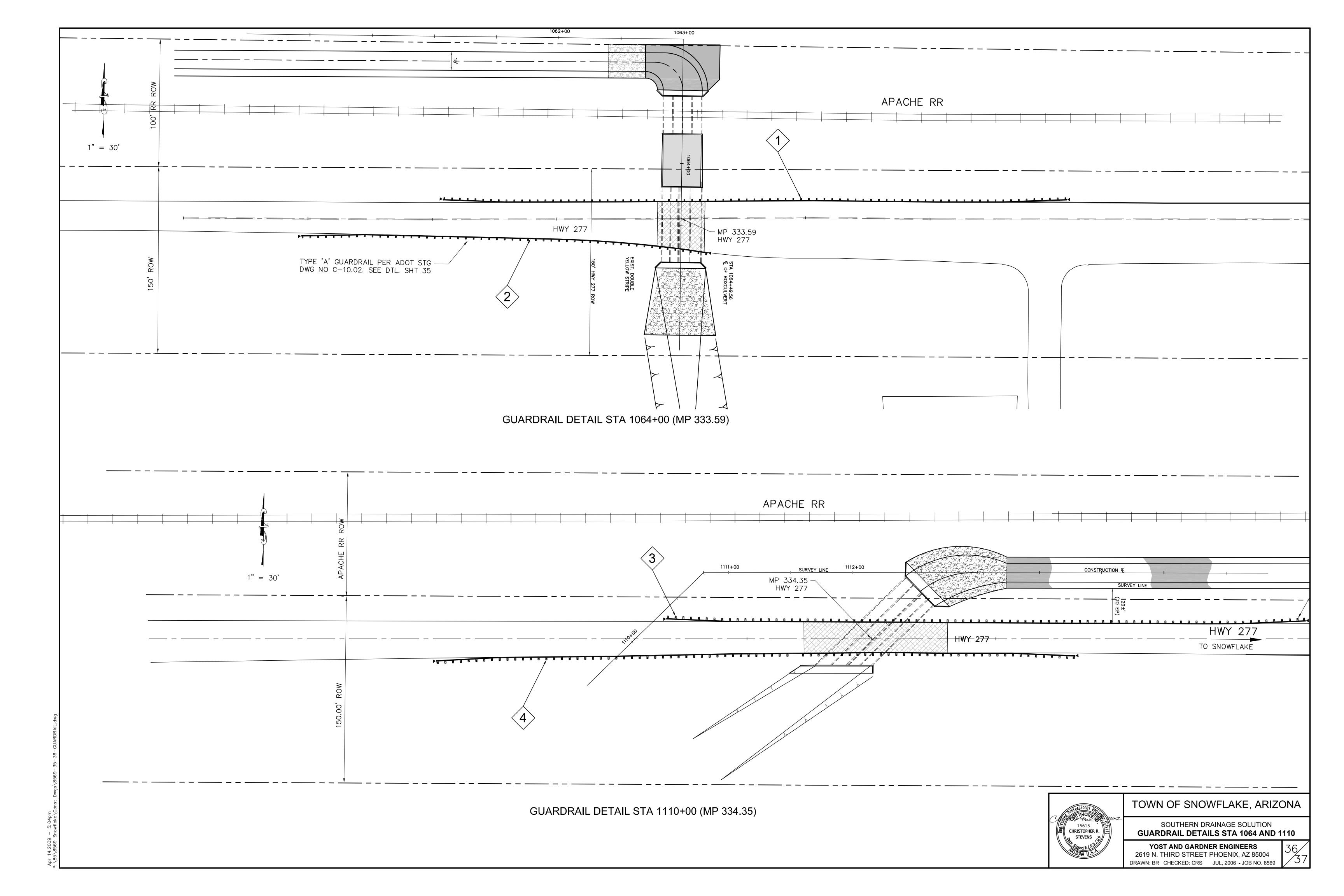
YOST AND GARDNER ENGINEERS
2619 N. THIRD STREET PHOENIX, AZ 85004
DRAWN: BR/KW CHECKED: CRS JUN, 2006 - JOB NO. 8569

4,2009 – 5:08pm









	wgs/8569-37-TABLES.dwg
14,2009 - 5:07pm	Snowflake\Const Dwas
Apr 14	3 \ 85 \ 85 \ 85 \ 85

	APPROXIMATE TRAFFIC CONTR	OL QUANT	TITIES -	TABLE 1	
ADOT ITEM NO.	ELEMENT OF WORK	UNIT	PHASE 1	PHASE 2	TOTAL
	ESTIMATED DURATION		30 DAYS*	30 DAYS*	60 DAYS
7015010	TEMPORARY CONCRETE BARRIER (INSTALLATION AND REMOVAL)	LF			
7015020	TEMPORARY IMPACT ATTENUATORS (INSTALLATION AND REMOVAL)	EACH			
7015042	TEMPORARY PAINTED MARKING (STRIPE)	EACH			
7015091	SPECIALTY SIGNS (WITH FLUORESCENT ORANGE SHEETING)	LF			
7016020	TEMPORARY CONCRETE BARRIER (IN USE)	EACH			
7016021	TEMPORARY IMPACT ATTENUATORS (IN USE)	LF			
7016032	PORTABLE SIGN STANDS (RIGID)	SQ FT			
7016033	PORTABLE SIGN STANDS (SPRING TYPE)	LF-DAY			
7016035	WARNING LIGHTS (TYPE A)	EACH-DAY			
7016037	WARNING LIGHTS (TYPE C)	EACH-DAY			
7016039	EMBEDDED SIGN POST	EACH-DAY			
7016050	TRUCK MOUNTED ATTENUATOR	EACH-DAY			
7016052	TEMPORARY SIGN (LESS THAN 10 SF)	EACH-DAY			
7016061	TEMPORARY SIGN (10 SF OR MORE)	EACH-DAY			
7016061	FLASHING ARROW PANEL	EACH-DAY			
7016067	CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED)	EACH-DAY			
(INFO ONLY)	LAW ENFORCEMENT (DPS OFFICERS)	HOURS	80	80	160

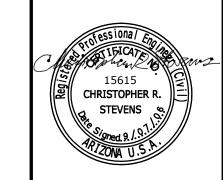
* DURATION MAY BE SHORTENED IF "PRECAST ALTERNATE" IS UTILIZED.

TRAFFIC CONTROL NOTES:

1. THE TRAFFIC CONTROL PLANS REPRESENT A SUGGESTED METHOD FOR TRAFFIC CONTROL DURING CONSTRUCTION. THE CONTRACTOR MAY PREPARE ANOTHER TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. ALL TRAFFIC CONTROL PLANS ARE SUBJECT TO APPROVAL OF A.D.O.T. BEFORE BEGINNING CONSTRUCTION. TRAFFIC CONTROL PLANS ARE TO BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PART VI. 2003 EDITION AND THE A.D.O.T. TRAFFIC CONTROL DESIGN GUIDELINES.

- 2. ADJUSTMENTS TO THE DETAILS OF THESE TRAFFIC CONTROL PLANS AND REQUIREMENTS MAY BE NECESSARY DUE TO CONSTRUCTION ACTIVITIES, AS DIRECTED BY A.D.O.T 3. ALL EXISTING SIGNS IN CONFLICT WITH THE CONSTRUCTION SIGNS SHALL BE REMOVED, RELOCATED OR COVERED IN PLACE, AS DIRECTED BY A.D.O.T. THE CONTRACTOR SHALL STORE AND
- REINSTALL ITEMS WHICH HAVE BEEN REMOVED OR RELOCATED IN A MANNER APPROVED BY A.D.O.T. 4. THE RETRO-REFLECTIVE SHEETING ON ALL CONSTRUCTION SIGNS SHALL MEET THE CRITERIA ESTABLISHED IN SECTION 1007 OF THE A.D.O.T. STANDARD SPECIFICATIONS 2000 EDITION.
- 5. ALL CONSTRUCTION SIGNS SHALL HAVE BLACK LETTERS ON AN ORANGE BACKGROUND, EXCEPT AS OTHERWISE NOTED.
- 6. FOR SIGNS INSTALLED ON EMBEDDED POSTS, SIGN MOUNTING HEIGHT IS A MINIMUM OF 7 FEET AS MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT. FOR
- SIGNS INSTALLED ON SPRING OR RIGID STANDS, SIGN MOUNTING HEIGHT IS A MINIMUM OF 1 FOOT ABOVE THE PAVEMENT. 7. FOR SIGNS INSTALLED ON EMBEDDED POSTS, THE NEAREST EDGE OR CORNER OF A SIGN SHOULD BE 12 FEET FROM THE NEAREST EDGE OF PAVEMENT.
- 8. EMBEDDED POSTS MAY BE USED IN PLACE OF SPRING OR RIGID SIGN STANDS, AS LONG AS THEY ARE NOT PLACED THROUGH NEW PAVEMENT.
- 9. TWO FLAGS SHALL BE MOUNTED ON TOP OF ALL CONSTRICTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN. TYPE "A" FLASHING WARNING LIGHTS SHALL BE REQUIRED ON ALL NIGHTTIME CONSTRUCTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN.
- 10. CONSTRUCTION SIGNS SHALL NOT BE DISPLAYED TO TRAFFIC MORE THAN 30 MINUTES PRIOR TO THE ACTUAL START OF CONSTRUCTION. THESE SIGNS MAY BE INSTALLED SOONER BUT THEY MUST BE COVERED OR TURNED AWAY FROM TRAFFIC. THE COST FOR COVERING OR TURNING THEM SHALL BE CONSIDERED PART OF THE SIGN INSTALLATION COST. NO FURTHER
- COMPENSATION WILL BE MADE. THESE SIGNS SHALL BE REMOVED WITHIN 24 HOURS AFTER COMPLETION OF THE CONSTRUCTION ACTIVITIES. 11. WHEN TRAFFIC CONTROL DEVICES ARE NOT IN USE, THEY SHALL BE MOVED AT LEAST 30 FEET FROM THE ROADWAY. ALL TRAFFIC CONTROL SIGNS NOT IN USE SHALL BE COVERED OR
- TURNED AWAY FROM TRAFFIC. 12. DRUMS, TYPE 2 BARRICADES AND VERTICAL PANELS SHALL BE PLACED 40 FEET ON CENTER IN TAPERS AND 80 FEET ON CENTER IN TANGENTS, EXCEPT AS OTHERWISE NOTED ON THE
- PLANS. 13. A TYPE "C" STEADY BURNING YELLOW LIGHT SHALL BE MOUNTED ON EVERY DRUM, BARRICADE, OR VERTICAL PANEL IN TAPER OR TANGENT AREAS FOR CHANNELIZATION DURING NIGHTTIME
- ACTIVITIES. 14. DURING NIGHTTIME ACTIVITIES, THE CONTRACTOR SHALL NOT UTILIZE CONES FOR CHANNELIZATION DEVICES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 15. THE CONTRACTOR SHALL UTILIZE A FLASHING ARROW PANEL IN THE SEQUENTIAL CHEVRON MODE FOR EACH CLOSURE OF A THROUGH LANE. THE CONTRACTOR SHALL NOT UTILIZE A
- FLASHING ARROW PANEL IN CONNECTION WITH ANY SHIFTING TAPER.
- 16. THE CONTRACTOR SHALL POSITION CHANGEABLE MESSAGE BOARDS IN ADVANCE OF EACH ROAD CLOSURE OR AS DIRECTED BY THE ENGINEER. 17. AN ADEQUATE NUMBER OF TYPE 3 BARRICADES SHALL BE PLACED ACROSS EACH ROADWAY TO BE CLOSED. A 60 INCH BY 36 INCH "ROAD CLOSED" SIGN SHALL BE ATTACHED TO ONE OF THE TYPE 3 BARRICADES CLOSING THE ROADWAY. A TYPE "A" FLASHING WARNING LIGHT SHALL BE MOUNTED ON EACH END OF EACH TYPE 3 BARRICADE DURING NIGHTTIME ACTIVITIES. 18. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE ENGINEER BY SWEEPING AND AIR-JET BLOWING, IMMEDIATELY PRIOR TO THE PLACEMENT OF ALL
- TEMPORARY PAVEMENT MARKINGS. THE ROADWAY SURFACE SHALL BE DRY. 19. SPEED LIMIT SIGNING IS SUBJECT TO REVIEW AND CHANGE BY A.D.O.T. AS DICTATED BY FIELD CONDITIONS.
- 20. SIGNING FOR DOUBLE FINES IN WORK ZONES, WHEN ALLOWED BY THE ENGINEER, SHALL GENERALLY CONFORM TO FIGURE SA-12 OF THE A.D.O.T. TRAFFIC CONTROL DESIGN GUIDELINES, 2003. SUCH SIGNING SHALL ONLY BE IN PLACE WHEN WORKERS ARE PRESENT IN ACCORDANCE WITH THE GUIDELINES FOR SIGNING FOR DOUBLE FINES IN WORK ZONES. THE COST FOR COVERING OR MOVING THE SIGNS BEFORE AND AFTER WORK PERIODS IS CONSIDERED INCIDENTAL TO THE CONTRACT.
- 21. ALL DRAWINGS ARE SCHEMATIC ONLY AND NOT TO SCALE. 22. EXISTING SIGNS NOT INDICATED ON THE PLAN SHEETS, THAT DO NOT NEED TO BE REMOVED OR RELOCATED, SHALL REMAIN. IF CONSTRUCTION ACTIVITIES REQUIRE THE REMOVAL OF SIGNS, THE SIGNS SHALL BE REINSTALLED AS NEAR AS POSSIBLE TO THE EXISTING LOCATION, AS DIRECTED BY A.D.O.T. THE REMOVAL/REINSTALLATION OF SIGNS FOR ANY CONSTRUCTION ACTIVITY
- SHALL BE INCLUDED IN THE COST OF THAT ACTIVITY. NO FURTHER COMPENSATION SHALL BE MADE. 23. THE CONTRACTOR SHALL PRESERVE ALL ROADWAY SIGNS, SIGN SUPPORTS, OBJECT MARKERS, AND MILEPOST MARKERS. THE CONTRACTOR SHALL REPLACE ANY SIGNS, SIGN SUPPORTS, AND MARKERS DAMAGED AS A RESULT OF THE CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.
- 24. THE APPROPRIATE LOCAL GOVERNMENT AGENCIES MUST BE NOTIFIED IN ADVANCE CONCERNING DETOUR ROUTES, PER THE SPECIAL PROVISIONS. ANY PERMITS REQUIRED BY THESE AGENCIES
- MUST BE OBTAINED PRIOR TO START OF WORK WITHIN THEIR JURISDICTIONS. 25. THE CONTRACTOR SHALL NOTIFY TRAFFIC OPERATIONS CENTER (602) 257-1563, 48 HOURS IN ADVANCE OF ANY FREEWAY LANE RESTRICTIONS OR CLOSURES.

	TABLE 3 - REINFORCED BOX CULVERT SUMMARY SHEET- CROSSING HWY 277 (BOX NO 2 - WEST CROSSING) AND (BOX NO 3 - EAST CROSSING)																										
	DESCRIPTION										END TREATMENT								LENGTH OF BARREL & BARREL EXTENSIONS		SAPPRO	APPROX. QUANTITIES					
										V	VINGS	APF	RONS	MISCE	ELLANE	OUS				LBS	EA	CUBIC YARDS					
STATION	PLAN S.		< /		BARREI	SPAN	<u>~</u> / +	SKEW (DEGREE)	B-0115	MISCELLANEOLIS	EXTENSI ARD	LOCATION	INLET WINGS	: / <u>/</u>	STANDARD OR DETAIL	APRON STANDARD	ETAIL	STANDARD OR DETAIL	. /)	DETAIL UISSIPATERS		BARRE LENGT LINEAR	H	RCING	PLACE DOWELS	STRUCTURE EXCAL	SYNUCTURE BACKFILL (L.C.M.S.)
4404:00	+					~			1	/ B	7		<i> ≤ </i>		1				/ ~ /	9	LEFT O	Г ¥.	RIGHT OF &	I I		/ S / C	REMARKS
1164+00	35	2	Х	4	6,8	3	60	0	X			LEFT		X	B-04.10	X B-06.1		DETAIL A	-		30			12,828	89		
(MP 333.59)												RIGHT	Х		B-04.30		_	DETAIL B					30	12,828	89		
1110+00	36	3	Χ	4	6,8	3	85	44° LT	X			LEFT		Χ	B-04.10	X B-06.1	0 X	DETAIL C			30			14,592	96		
(MP 335.45)												RIGHT	x		B-04.30		X	DETAIL D					52	25,293	149		



TOWN OF SNOWFLAKE, ARIZONA

SOUTHERN DRAINAGE SOLUTION TABLES AND MISCELLANEOUS DETAILS Appendix C: Agency Correspondence



September 23, 2008

Daisy Eldridge Regulatory Branch U.S. Army Corps of Engineers 3636 N. Central, Suite 760 Phoenix, Arizona 85012

Re:

Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Ms. Eldridge:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide Hazard Mitigation Grant Program (HMGP) funding to the Town of Snowflake, through the Arizona Division of Emergency Management, to implement a flood control project. The Town of Snowflake proposes to construct a combination of retention basins and channels in the western portion of the town along State Route 277 near the Industrial Park. A detailed description of the project and engineering drawings are enclosed.

The intent of this letter is to apprise your agency that this action appears to require a Department of the Army (DA) permit under Section 404 of the Clean Water Act of 1972 (CWA). FEMA will require, as a condition of the grant, that the Town of Snowflake fully complies with Section 404 of the CWA and is responsible for obtaining any necessary DA permits. FEMA understands that the Town of Snowflake has already been in consultation with you regarding the need for a DA permit.

Based on the January 12, 2000, agreement between FEMA Region IX and the South Pacific Division of the U.S. Army Corps of Engineers, FEMA is the lead agency for compliance with Section 7 of the Endangered Species Act because this project is proposed for funding under the HMGP. However, the project has already been reviewed and found to be in compliance with Section 7. In a letter to the Town of Snowflake dated November 25, 2005, the U.S. Fish and Wildlife Service (Service) determined that the project will not affect endangered or threatened species or critical habitat (enclosed). FEMA presumes that this 'no affect' determination remains valid as the project has not substantially changed and no new species or critical habitat in the area has been listed since the November 2005 determination. FEMA notified the Service of this determination by letter of September 23, 2008 (enclosed).

Ms. Daisy Eldridge September 23, 2008 Page 2

FEMA expects no return correspondence from your agency. However, should you have any questions or require additional information regarding the project, please feel free to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov.

Sincerely

Alessandro Amaglio Environmental Officer

Attachments



United States Department of the Interior

U.S. Fish and Wildlife Service Arizona Ecological Services Field Office

2321 West Royal Palm Road, Suite 103 Phoenix, Arizona 85021-4951 Telephone: (602) 242-0210 Fax: (602) 242-2513



In Reply Refer to: AESO/SE 22410-2006-TA-0080

November 25, 2005

Dr. Spencer A. Isom Town Manager Town of Snowflake 81 West 1st Street Snowflake, Arizona 85937

Dear Dr. Isom:

Thank you for your correspondence of November 14, 2005, received in our office the same day. This letter documents our recommendations regarding the public works project addressing flood control issues through the Town of Snowflake Industrial Park, in Navajo county, Arizona, in compliance with section 7 of the Endangered Species Act of 1973 (ESA) as amended (16 U.S.C. 1531 et seq.). Based on the information that you have provided, we believe that no endangered or threatened species or critical habitat will be affected by this project; nor is this project likely to jeopardize the continued existence of any proposed species or adversely modify any proposed critical habitat. No further review is required for this project at this time. Should project plans change or if additional information on the distribution of listed or proposed species becomes available, this determination may need to be reconsidered. We encourage you to coordinate review of this project with the Arizona Game and Fish Department.

We look forward to working with the Town of Snowflake on future projects. In particular, we have an interest in Silver Creek which has been historical habitat for the threatened Little Colorado spinedace (Lepidomeda vittata), a species listed as threatened under the ESA and other listed and sensitive aquatic species. We have surveyed portions of Silver Creek in 2003 and 2004, but have been unable to locate any spinedace since 1997. However, spinedace have a tendency to disappear from sampling sites from one year to the next and may not be found for several years. Additionally, the complex habitat within Silver Creek makes surveying very difficult. While recent surveys have not found Little Colorado spinedace in Silver Creek, we still believe that the stream may potentially be occupied. If you have any questions or concerns about this species or any other species, please do not hesitate to contact us.

Should you require further assistance or if you have any questions, please contact Jennifer Graves (x232) or Debra Bills (x239). Thank you for your continued efforts to conserve endangered species.

Sincerely,

Steven L. Spangle Field Supervisor

cc: Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ Shaula Hedwall, Fish and Wildlife Service, Flagstaff, AZ Robert Toy, CMI, Phoenix, AZ

W:\Jennifer Graves\Section 7\No Effect\Snowflake drainage channel.doc:cgg



September 23, 2008

Steve Spangle, Field Supervisor Arizona Ecological Services Field Office U.S. Fish and Wildlife Service 2321 W. Royal Palm Road, Suite 103 Phoenix, Arizona 85021

Re:

Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Mr. Spangle:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide Hazard Mitigation Grant Program funding to the Town of Snowflake, through the Arizona Division of Emergency Management, to implement a flood control project. The Town of Snowflake proposes to construct a combination of retention basins and channels in the western portion of the town along State Route 277 near the Industrial Park. A detailed description of the project and engineering drawings are enclosed.

The project has already been reviewed and found to be in compliance with Section 7 of the Endangered Species Act. In a letter to the Town of Snowflake dated November 25, 2005, your agency determined that the project will not affect endangered or threatened species or critical habitat (enclosed). FEMA presumes that this 'no affect' determination remains valid as the project has not substantially changed and no new species or critical habitat in the area has been listed since the November 2005 determination. FEMA expects no return correspondence from your agency. However, should you have any questions or require additional information regarding the project, please feel free to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov.

essandro Amaglio Environmental Officer



Mr. James Garrison State Historic Preservation Officer Arizona State Parks 1300 West Washington Street Phoenix, Arizona 85007 Attention: Ms. Jo Anne Medley

Re: Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Mr. Garrison:

The Town of Snowflake (Subgrantee) has applied, through the Arizona Division of Emergency Management (ADEM), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region IX for Federal financial assistance to construct and improve flood control structures within the Town of Snowflake limits. The Subgrantee's proposal involves constructing and improving a combination of retention basins and channels in the western portion of the town, along State Route 277 (SR 277). FEMA determined that the Undertaking could impact seven sites: a modern segment of the historical Apache Railway (AZ Q:13:18[ASM]), and six prehistoric archaeological sites (AZ P:8:87, 88, 89, 103, 111, and 112[ASM]). An additional prehistoric site, AZ P:8:90(ASM), is located outside the area of potential effect (APE).

FEMA initially consulted your office on this project, in compliance with Section 106 of the National Historic Preservation Act, by letter of October 9, 2008 (SHPO #2006-1122). Since then, Ms. Medley and our office have exchanged several letters, e-mails, and telephone conversations regarding the Undertaking and potential effects to historic properties. Most recently, in a letter dated September 24, 2009, your office concurred with FEMA's determination that the segment of the Apache Railway in the APE was a non-contributing element to the site's overall National Register of Historic Places (NRHP) eligibility; AZ P:8:87(ASM) was not eligible for listing on the NRHP; and AZ P:8:90(ASM) would be avoided by project activities. Additionally, your office concurred with the adequacy of the proposed testing plan to determine the NRHP-eligibility of sites AZ P:8:88, 89, 103, 111, and 112(ASM).

FEMA completed archaeological testing in November 2009; a report documenting the preliminary results is attached. The testing plan identified excavation of approximately 375 meters (1,230 feet) of systematic trenches across the five sites, with an additional 80 meters (263 feet) of supplemental trenching to be placed judgmentally, as warranted. A total of 54 trenches were excavated for a total of 487 meters (1,598 feet) of trenching. The overall

Mr. James Garrison January 13, 2010 Page 2

sample of 3.1 percent of the investigated site areas is about 0.7 percent more than planned. In summary, no archeological features or significant buried archaeological deposits were found. Based on the enclosed preliminary report, FEMA has determined that further study of sites AZ P:8:88, 89, and 111(ASM) and those parts of sites AZ P:8:103 and 112(ASM) within the APE is unlikely to yield evidence about the cultural affiliation and chronology of the sites. The analysis of the collected artifacts should produce some information about the nature of the activities that were conducted at the site, but because the collections lack chronological control, further study is unlikely to yield important information about toolstone procurement, lithic technology, or prehistoric subsistence or prehistoric mobility strategies within the context of the regional cultural history.

Copies of the <u>Preliminary Results of Archaeological Testing Snowflake Flood Control Project</u> (January 2010) are attached for your review, and have also been provided to the applicable Native American Tribes for their reviews. In accordance with the testing plan previously submitted to you office, FEMA will complete a testing report, documenting the goals, methods, and results of the testing, including the analysis of the artifacts collected from sites. Based on the results of the enclosed report, the previous historic property investigations completed, and ongoing communications with your office, FEMA has concluded that the Subgrantee's proposal would avoid one site, AZ P:8:90(ASM), and may impact six other sites—all of which FEMA has determined are not eligible for listing on the NRHP. Therefore, FEMA has determined that the project will result in "no historic properties affected".

In accordance with Stipulation VII.C. of the Section 106 Programmatic Agreement among FEMA, your office, ADEM, and the Advisory Council on Historic Preservation, executed for the Rodeo-Chediski Wildfire Disaster (FEMA-1442-DR-AZ), and extended to FEMA-1660-DR-AZ, FEMA requests your concurrence with this determination, and may authorize funding of the Undertaking unless you object within 14 days after receipt of this documentation. Should you have additional questions or comments, please do not hesitate to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov. Thank you for your continued assistance.

Sincerely,

Donna M. Meyer

Deputy Environmental and Historic

Preservation Officer

Attachments

cc: Robert Kimmell, ADEM

Brian Richards, Town of Snowflake



The Honorable Benjamin Nuvamsa, Chairman Hopi Tribe Honahnie Building 1 Main Street Kykotsmovi, Arizona 86039

Re:

Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Mr. Nuvamsa:

The Town of Snowflake (Subgrantee) has applied, through the Arizona Division of Emergency Management (ADEM), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region IX for Federal financial assistance to construct and improve flood control structures within the Town of Snowflake limits. The Subgrantee's proposal involves constructing and improving a combination of retention basins and channels in the western portion of the town, along State Route 277 (SR 277). FEMA determined that the Undertaking could adversely affect seven sites: a modern segment of the historical Apache Railway (AZ Q:13:18[ASM]), and six prehistoric archaeological sites (AZ P:8:87, 88, 89, 103, 111, and 112[ASM]). An additional prehistoric site, AZ P:8:90(ASM), is located outside the area of potential effect (APE).

FEMA initially consulted your office on this project by letter of September 23, 2008. You received two subsequent letters informing you of changes in the scope of work and APE and FEMA's determination that sites AZ Q:13:18(ASM) and AZ P:8:87(ASM) were ineligible for listing in the National Register of Historic Places (NRHP); and providing you with a copy of FEMA's August 2009 testing plan to determine the NRHP-eligibility of sites AZ P:8:88, 89, 103, 111, and 112(ASM).

FEMA completed archaeological testing in November 2009; a report documenting the preliminary results is attached. The testing plan identified excavation of approximately 375 meters (1,230 feet) of systematic trenches across the five sites, with an additional 80 meters (263 feet) of supplemental trenching to be placed judgmentally, as warranted. A total of 54 trenches were excavated, for a total of 487 meters (1,598 feet) of trenching. The overall sample of 3.1 percent of the investigated site areas is about 0.7 percent more than planned. In summary, no archeological features or significant buried archaeological deposits were found. Based on the enclosed preliminary report (*Preliminary Results of Archaeological Testing Snowflake Flood Control Project* [January 2010]), FEMA has determined that further study of sites AZ P:8:88, 89, and 111(ASM) and those parts of sites AZ P:8:103 and 112(ASM) within the APE is unlikely to yield evidence about the cultural affiliation and chronology of

Honorable Chairman Nuvamsa January 13, 2010 Page 2

the sites. The analysis of the collected artifacts should produce some information about the nature of the activities that were conducted at the site, but because the collections lack chronological control, further study is unlikely to yield important information about toolstone procurement, lithic technology, or prehistoric subsistence or prehistoric mobility strategies within the context of the regional cultural history. In accordance with the testing plan previously submitted to you office, FEMA will complete a testing report, documenting the goals, methods, and results of the testing, including the analysis of the artifacts collected from sites.

Based on the results of the enclosed report, the previous historic property investigations completed, and ongoing consultation, FEMA has concluded that the Subgrantee's proposal would avoid one site, AZ P:8:90(ASM), and may impact six other sites—all of which FEMA has determined are not eligible for listing on the NRHP. Therefore, FEMA has determined that the project will result in "no historic properties affected".

Please contact me with any comments at (510) 627-7027, fema-rix-1'ehp-documents@dhs.gov, or the letterhead address. Please provide any comments within 30 days of receipt of this letter. If you need additional time, please contact me; otherwise, if I do not hear back from you within 30 days, I will assume that you have no comment regarding the subgrantee's proposal and FEMA's Undertaking. Should you have additional questions or comments, please do not hesitate to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov. Thank you for your continued assistance.

Sincerely,

Donna M. Meyer

Deputy Environmental and Historic

M.Meg

Preservation Officer

Attachments

cc: Leigh Kuwanwisiwma, Hopi Cultural Preservation Office (with attachment)
Terry Morgart, Hopi Cultural Preservation Office
Robert Kimmell, ADEM
Brian Richards, Town of Snowflake



The Honorable Joe Shirley, Jr., President Navajo Nation Navajo Boulevard Window Rock, AZ 86515

Re:

Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Mr. Shirley:

The Town of Snowflake (Subgrantee) has applied, through the Arizona Division of Emergency Management (ADEM), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region IX for Federal financial assistance to construct and improve flood control structures within the Town of Snowflake limits. The Subgrantee's proposal involves constructing and improving a combination of retention basins and channels in the western portion of the town, along State Route 277 (SR 277). FEMA determined that the Undertaking could adversely affect seven sites: a modern segment of the historical Apache Railway (AZ Q:13:18[ASM]), and six prehistoric archaeological sites (AZ P:8:87, 88, 89, 103, 111, and 112[ASM]). An additional prehistoric site, AZ P:8:90(ASM), is located outside the area of potential effect (APE).

FEMA initially consulted your office on this project by letter of September 23, 2008. You received two subsequent letters informing you of changes in the scope of work and APE and FEMA's determination that sites AZ Q:13:18(ASM) and AZ P:8:87(ASM) were ineligible for listing in the National Register of Historic Places (NRHP); and providing you with a copy of FEMA's August 2009 testing plan to determine the NRHP-eligibility of sites AZ P:8:88, 89, 103, 111, and 112(ASM).

FEMA completed archaeological testing in November 2009; a report documenting the preliminary results is attached. The testing plan identified excavation of approximately 375 meters (1,230 feet) of systematic trenches across the five sites, with an additional 80 meters (263 feet) of supplemental trenching to be placed judgmentally, as warranted. A total of 54 trenches were excavated, for a total of 487 meters (1,598 feet) of trenching. The overall sample of 3.1 percent of the investigated site areas is about 0.7 percent more than planned. In summary, no archeological features or significant buried archaeological deposits were found. Based on the enclosed preliminary report (*Preliminary Results of Archaeological Testing Snowflake Flood Control Project* [January 2010]), FEMA has determined that further study of sites AZ P:8:88, 89, and 111(ASM) and those parts of sites AZ P:8:103 and 112(ASM) within the APE is unlikely to yield evidence about the cultural affiliation and chronology of the sites. The analysis of the collected artifacts should produce some information about the

Honorable Mr. Shirley January 13, 2010 Page 2

nature of the activities that were conducted at the site, but because the collections lack chronological control, further study is unlikely to yield important information about toolstone procurement, lithic technology, or prehistoric subsistence or prehistoric mobility strategies within the context of the regional cultural history. In accordance with the testing plan previously submitted to you office, FEMA will complete a testing report, documenting the goals, methods, and results of the testing, including the analysis of the artifacts collected from sites.

Based on the results of the enclosed report, the previous historic property investigations completed, and ongoing consultation, FEMA has concluded that the Subgrantee's proposal would avoid one site, AZ P:8:90(ASM), and may impact six other sites—all of which FEMA has determined are not eligible for listing on the NRHP. Therefore, FEMA has determined that the project will result in "no historic properties affected".

Please contact me with any comments at (510) 627-7027, fema-rix-1'ehp-documents@dhs.gov, or the letterhead address. Please provide any comments within 30 days of receipt of this letter. If you need additional time, please contact me; otherwise, if I do not hear back from you within 30 days, I will assume that you have no comment regarding the subgrantee's proposal and FEMA's Undertaking. Should you have additional questions or comments, please do not hesitate to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov. Thank you for your continued assistance.

Sincerely,

Donna M. Meyer

Deputy Environmental and Historic

Preservation Officer

Attachments



The Honorable Norman Cooeyate, Governor Pueblo of Zuni 1203 B, State Highway 53 Zuni, New Mexico 87327

Re: Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Mr. Cooeyate:

The Town of Snowflake (Subgrantee) has applied, through the Arizona Division of Emergency Management (ADEM), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region IX for Federal financial assistance to construct and improve flood control structures within the Town of Snowflake limits. The Subgrantee's proposal involves constructing and improving a combination of retention basins and channels in the western portion of the town, along State Route 277 (SR 277). FEMA determined that the Undertaking could adversely affect seven sites: a modern segment of the historical Apache Railway (AZ Q:13:18[ASM]), and six prehistoric archaeological sites (AZ P:8:87, 88, 89, 103, 111, and 112[ASM]). An additional prehistoric site, AZ P:8:90(ASM), is located outside the area of potential effect (APE).

FEMA initially consulted your office on this project by letter of September 23, 2008. You received two subsequent letters informing you of changes in the scope of work and APE and FEMA's determination that sites AZ Q:13:18(ASM) and AZ P:8:87(ASM) were ineligible for listing in the National Register of Historic Places (NRHP); and providing you with a copy of FEMA's August 2009 testing plan to determine the NRHP-eligibility of sites AZ P:8:88, 89, 103, 111, and 112(ASM).

FEMA completed archaeological testing in November 2009; a report documenting the preliminary results is attached. The testing plan identified excavation of approximately 375 meters (1,230 feet) of systematic trenches across the five sites, with an additional 80 meters (263 feet) of supplemental trenching to be placed judgmentally, as warranted. A total of 54 trenches were excavated, for a total of 487 meters (1,598 feet) of trenching. The overall sample of 3.1 percent of the investigated site areas is about 0.7 percent more than planned. In summary, no archeological features or significant buried archaeological deposits were found. Based on the enclosed preliminary report (*Preliminary Results of Archaeological Testing Snowflake Flood Control Project* [January 2010]), FEMA has determined that further study of sites AZ P:8:88, 89, and 111(ASM) and those parts of sites AZ P:8:103 and 112(ASM) within the APE is unlikely to yield evidence about the cultural affiliation and chronology of the sites. The analysis of the collected artifacts should produce some information about the

Honorable Mr. Cooeyate January 13, 2010 Page 2

nature of the activities that were conducted at the site, but because the collections lack chronological control, further study is unlikely to yield important information about toolstone procurement, lithic technology, or prehistoric subsistence or prehistoric mobility strategies within the context of the regional cultural history. In accordance with the testing plan previously submitted to you office, FEMA will complete a testing report, documenting the goals, methods, and results of the testing, including the analysis of the artifacts collected from sites.

Based on the results of the enclosed report, the previous historic property investigations completed, and ongoing consultation, FEMA has concluded that the Subgrantee's proposal would avoid one site, AZ P:8:90(ASM), and may impact six other sites—all of which FEMA has determined are not eligible for listing on the NRHP. Therefore, FEMA has determined that the project will result in "no historic properties affected".

Please contact me with any comments at (510) 627-7027, fema-rix-1'ehp-documents@dhs.gov, or the letterhead address. Please provide any comments within 30 days of receipt of this letter. If you need additional time, please contact me; otherwise, if I do not hear back from you within 30 days, I will assume that you have no comment regarding the subgrantee's proposal and FEMA's Undertaking. Should you have additional questions or comments, please do not hesitate to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov. Thank you for your continued assistance.

Sincerely,

Donna M. Meyer

Deputy Environmental and Historic

Preservation Officer

Attachments

cc: Kurt Dongoske, Zuni Historic Preservation Office (with attachments)

Herman G. Honanie



January 28, 2010

Donna M. Meyer, Deputy Environmental & Historic Preservation Officer Federal Emergency Management Agency 1111 Broadway, Suite 1200 Oakland, California 94607-4052

Dear Ms. Meyer,

Thank you for your correspondence dated January 13, 2010, with enclosed *Preliminary Results of Testing at Archaeological Sites AZ P:8:88, 89, 103, 111 and 112 (ASM), Snowflake, Navajo County, Arizona,* regarding the Federal Emergency Management Agency application from the Town of Snowflake to construct and improve flood control structures, FEMA -1660-DR-AZ, HMGP 1660-05-04. Because the Hopi Tribe claims ancestral and cultural affiliation to prehistoric cultural groups in Arizona we appreciate your continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office supports the identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties, and we consider the archaeological sites of our ancestors to be Traditional Cultural Properties. We previously reviewed the cultural resources survey report of the project area identified six prehistoric sites, and the testing plan for five sites that will be affected by project activities.

We have now reviewed the preliminary testing report and understand that no subsurface features or deposits were found. Therefore, we concur that this project is unlikely to further effect cultural resources significant to the Hopi Tribe. We look forward to receiving a copy of the testing report for review and comment.

However, we recommend that if any cultural features or deposits are encountered during project activities, that those activities must be discontinued in the immediate area of the remains, and the State Historic Preservation Office must be consulted to evaluate their nature and significance. If any Native American human remains or funerary objects are discovered they shall be immediately reported as required by law.

If you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural

Preservation Office. Thank you again for your consideration-

Leigh Kuwanwisiwma, Director Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office

5 HPO - 200 6 - 1122 (7(e185) DOE

U.S. Department of Homeland Security NHPA

1111 Broadway, Suite 1200

Oakland, CA 94607-4052



January 13, 2010

Mr. James Garrison State Historic Preservation Officer Arizona State Parks 1300 West Washington Street Phoenix, Arizona 85007 Attention: Ms. Jo Anne Medley

Re:

Flood Control Project

FEMA-1660-DR-AZ, HMGP 1660-05-04

Subgrantee: Town of Snowflake

Dear Mr. Garrison:

The Town of Snowflake (Subgrantee) has applied, through the Arizona Division of Emergency Management (ADEM), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region IX for Federal financial assistance to construct and improve flood control structures within the Town of Snowflake limits. The Subgrantee's proposal involves constructing and improving a combination of retention basins and channels in the western portion of the town, along State Route 277 (SR 277). FEMA determined that the Undertaking could impact seven sites: a modern segment of the historical Apache Railway (AZ Q:13:18[ASM]), and six prehistoric archaeological sites (AZ P:8:87, 88, 89, 103, 111, and 112[ASM]). An additional prehistoric site, AZ P:8:90(ASM), is located outside the area of potential effect (APE).

FEMA initially consulted your office on this project, in compliance with Section 106 of the National Historic Preservation Act, by letter of October 9, 2008 (SHPO #2006-1122). Since then, Ms. Medley and our office have exchanged several letters, e-mails, and telephone conversations regarding the Undertaking and potential effects to historic properties. Most recently, in a letter dated September 24, 2009, your office concurred with FEMA's determination that the segment of the Apache Railway in the APE was a non-contributing element to the site's overall National Register of Historic Places (NRHP) eligibility; AZ P:8:87(ASM) was not eligible for listing on the NRHP; and AZ P:8:90(ASM) would be avoided by project activities. Additionally, your office concurred with the adequacy of the proposed testing plan to determine the NRHP-eligibility of sites AZ P:8:88, 89, 103, 111, and 112(ASM).

FEMA completed archaeological testing in November 2009; a report documenting the preliminary results is attached. The testing plan identified excavation of approximately 375 meters (1,230 feet) of systematic trenches across the five sites, with an additional 80 meters (263 feet) of supplemental trenching to be placed judgmentally, as warranted. A total of 54 trenches were excavated for a total of 487 meters (1,598 feet) of trenching. The overall

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Mr. James Garrison January 13, 2010 Page 2

sample of 3.1 percent of the investigated site areas is about 0.7 percent more than planned. In summary, no archeological features or significant buried archaeological deposits were found. Based on the enclosed preliminary report, FEMA has determined that further study of sites AZ P:8:88, 89, and 111(ASM) and those parts of sites AZ P:8:103 and 112(ASM) within the APE is unlikely to yield evidence about the cultural affiliation and chronology of the sites. The analysis of the collected artifacts should produce some information about the nature of the activities that were conducted at the site, but because the collections lack chronological control, further study is unlikely to yield important information about toolstone procurement, lithic technology, or prehistoric subsistence or prehistoric mobility strategies within the context of the regional cultural history.

Copies of the <u>Preliminary Results of Archaeological Testing Snowflake Flood Control Project</u> (January 2010) are attached for your review, and have also been provided to the applicable Native American Tribes for their reviews. In accordance with the testing plan previously submitted to you office, FEMA will complete a testing report, documenting the goals, methods, and results of the testing, including the analysis of the artifacts collected from sites. Based on the results of the enclosed report, the previous historic property investigations completed, and ongoing communications with your office, FEMA has concluded that the Subgrantee's proposal would avoid one site, AZ P:8:90(ASM), and may impact six other sites—all of which FEMA has determined are not eligible for listing on the NRHP. Therefore, FEMA has determined that the project will result in "no historic properties affected".

In accordance with Stipulation VII.C. of the Section 106 Programmatic Agreement among FEMA, your office, ADEM, and the Advisory Council on Historic Preservation, executed for the Rodeo-Chediski Wildfire Disaster (FEMA-1442-DR-AZ), and extended to FEMA-1660-DR-AZ, FEMA requests your concurrence with this determination, and may authorize funding of the Undertaking unless you object within 14 days after receipt of this documentation. Should you have additional questions or comments, please do not hesitate to contact me at (510) 627-7027 or fema-rix-ehp-documents@dhs.gov. Thank you for your continued assistance.

Sincerely,

Donna M. Meyer

Deputy Environmental and Historic

Preservation Officer

Attachments

cc:

Robert Kimmell, ADEM

Concur Continuations of (in) eligibility and fending of eppech

Brian Richards, Town of Snowflake