



CITY OF FLAGSTAFF

- CONFIRMING CHANGE ORDER NO.
- CONSULTING CONTRACT CHANGE ORDER NO. 14
- CONSTRUCTION CONTRACT CHANGE ORDER NO. _____
- CONTRACT ALLOWANCE UPDATE NO. _____

PROJECT NO. 346800 **PROJECT NAME:** Rio de Flag Flood Control Utility Relocation
FILE NO. 03-04011 **PROJECT MANAGER:** Trevor Henry
TO: Shephard Wesnitzer, Inc.

You are hereby directed to make the herein described changes from the plans and/or specifications or perform the following described work not included in the plans and/or specifications of this contract. Description of work to be done:

Provide additional work tasks as described in the proposal dated October 15, 2020 to bring the Rio de Flag Flood Control design services contract to 100%, and to comply with Construction Plans prepared by the US Army Corps of Engineers (USACE) and their design consultant. The added tasks are supplemental to the design as outlined and requested by the USACE; supplemental survey services, additional side drain analysis, final design and coordination to produce 100% Construction Plans. There is a 180-day time extension requested with this change order to meet the USACE anticipated project award date.

Change Order originated by: CITY OF FLAGSTAFF CONTRACTOR CONSULTANT OTHER: _____

Project Manager	<u>11/05/2020</u> Date	Approval Recommended	 Bret C. Petersen <small>Digitally signed by Bret C. Petersen DN: cn=Bret C. Petersen, o=City of Flagstaff, ou=Capital Improvements, email=bcpetersen@flagstaff.gov, c=US Date: 2020.11.14 15:36:54 -0700</small>
Department Head	<u>11/05/2020</u> Date	Approval Recommended	Bret C. Petersen
Water Services	<u>11/05/2020</u> Date	Approval Recommended	 James L. Jones
Public Works	<u>11/05/2020</u> Date	Approval Recommended	Absent
Community Development	<u>11/05/2020</u> Date	Approval Recommended	Bret C. Petersen <small>Digitally signed by Bret C. Petersen DN: cn=Bret C. Petersen, o=City of Flagstaff, ou=Capital Improvements, email=bcpetersen@flagstaff.gov, c=US Date: 2020.11.16 15:32:07 -0700</small>
City Attorney	<u>11/05/2020</u> Date	Approval Recommended	
Purchasing (Chair)	<u>11/05/2020</u> Date	Approval Recommended	Patrick Brown <small>Digitally signed by Patrick Brown DN: cn=Patrick Brown, o=City of Flagstaff, ou=Purchasing Section, email=pbrown@flagstaff.gov, c=US Date: 2020.11.16 15:00:26 -0700</small>
City Manager	<u>11/05/2020</u> Date	Approval Recommended	

		END DATES		
ORIGINAL CONTRACT PERIOD	<u>275</u> Days	<u>(10/30/05)</u>	ORIGINAL CONTRACT	\$ 1,582,521.00
PRIOR TIME CHANGES	<u>5,935</u> Days	<u>(4/30/21)</u>	TOTAL PRIOR VALUE CHANGES	\$ 1,583,896.34
THIS TIME CHANGE	<u>180</u> Days	<u>(10/27/21)</u>	VALUE OF THIS CHANGE	\$ 374,135.00
NEW CONTRACT PERIOD	<u>6,390</u> Days	<u>(10/27/21)</u>	NEW CONTRACT	\$ 3,540,552.34

We, the undersigned consultant, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may otherwise be noted above and perform all services necessary for the work above specified and will accept as full payment therefore the prices and time extensions shown above.

FIRM NAME: Shephard Wesnitzer, Inc.
Accepted Date: 11/04/2020 **By:**

CITY OF FLAGSTAFF



CONFIRMING CHANGE ORDER NO. _____
 CONSULTING CONTRACT CHANGE ORDER NO. 14
 CONSTRUCTION CONTRACT CHANGE ORDER NO. _____
 CONTRACT ALLOWANCE UPDATE NO. _____

PROJECT NO. 346800 PROJECT NAME: Rio de Flag Flood Control Utility Relocation
 FILE NO. 03-04011 PROJECT MANAGER: Trevor Henry

JUSTIFICATION:

Shephard Wesnitzer Inc. (SWI) completed the design of the Final I utility and right of way relocation plans on February 24, 2010 as part of the City's LERRD (Land, Easements, Rights of Way, Relocation and Disposal) contribution. The USACE has hired TetraTech to complete the 100% flood control design, excluding the structural and landscaping components. The USACE has submitted the 90% plans in May 2020 and has projected a final design completion of December 2020. The USACE has received federal funding as part of their FY 20/21 work program to complete the Rio de Flag Flood Control Project. In order to comply with the USACE's schedule of December 2020 for design completion, SWI will address any outstanding tasks and provide supplemental work to comply with the USACE final design and provide 100% construction plans.

TIME ANALYSIS:

A 180-calendar day contract time extension is proposed to meet the USACE completion of the design at 100% in December 2020 and provide support to USACE through the procurement process for a construction contract, targeting the start of construction by fall 2021. The USACE has provided a preliminary schedule to complete the final design, this contract time extension to SWI should be considered final to meet the final design and initial stages for a construction contract.

COST ANALYSIS:

Reference attached documentation from SWI dated October 15, 2020 for scope of services and fee proposal regarding the additional tasks for the Rio de Flag Flood Control Project.

Original Contract Amount: \$1,582,521.00
 Total Prior Value Changes: \$1,583,896.34
 Value of this Change Order: \$ 374,135.00
 New Contract Amount: \$3,540,552.34

This change order exceeds the authorized change order authority and will require City Council approval. The Stormwater Fee increase authorized in November 2018 and collection in July 2019, will provide funding. The Rio de Flag Hydrology account (206-08-385-3236-0-4421) will fund Change Order #14.

CITY OF FLAGSTAFF				PROJECT STATUS FORM	
PROJECT NAME: Rio de Flag Flood Control Utility Relocation			<input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction <input type="checkbox"/> Other		
PROJECT NO. 346800			FILE NO. 03-04011		
ACCT. NO.					
206-08-385-3236-0-4433		100%		\$3,166,417.34	
PROPOSED CONTRACT TOTAL <i>(Includes Original Contract Amount & All Change Orders)</i>				\$3,166,417.34	
COUNCIL APPROVAL:		January 18, 2005		ORIGINAL CONTRACT AMOUNT: \$1,582,521.00	
PROJECT BUDGET		\$2,870,940.00		FY: 12/13	
PROJECT BUDGET				FY:	
NOTICE TO PROCEED:		January 28, 2005		ORIGINAL CONTRACT PERIOD (calendar days): 275	
ORIGINAL/REVISED COMPLETION DATES:		October 30, 2005		ORIGINAL CONTRACT ALLOWANCE: \$75,000.00	
CONSULTANT: Shephard Wesnitzer, Inc.			LOCATION: Flagstaff, AZ		
CITY PROJECT MANAGER: Trevor Henry					
Change Orders	C.O. Amount/ Allowance Amt	C.O. Days	Council Date	REASON FOR CHANGE	
Revision Date	New Total	Original / New Total	New Comp. Date		
CO#1	\$14,404.00	0	N/A	Revise sewer crossings & cost estimate due to change in structures & flood elevations by USACE. Amount is to be taken from City Manager's Authority. \$136,346.00/\$150,750.00	
8/04/05	\$1,596,925.00	275	10/30/05		
Field Order #1	\$1,290.00	0	N/A	Prepare exhibits and convert files to Arcmap format. \$73,710.00/\$75,000.00	
8/22/05			10/30/05		
Field Order #2	N/A	60	N/A	Time extension due to City/USACE delays.	
10/26/05		335	12/29/05		
Field Order #3	2,800.00	60	N/A	Time extension due to City/USACE delays.	
2/09/06	0	395	2/27/06		
CO#2	\$11,998.00	261	N/A	Additional Title Reports, time extension due to City delay. Amount is to be taken from City Manager's Authority. \$124,348.00/\$150,750.00	
3/20/06	\$1,608,923.00	656	11/15/06		
Field Order #4	\$941.98	0	N/A	Prepare Brownfield Exhibits. \$69,968.02/\$75,000.00	
5/20/06	N/A	656	11/15/06		
Field Order #5	N/A	60	N/A	Time extension due to City/USACE delays.	
11/6/06		716	1/14/07		

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PROJECT NAME: Rio de Flag Flood Control Utility Relocation			<input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction <input type="checkbox"/> Other		
PROJECT NO. 346800			FILE NO. 03-04011		
ACCT. NO.					
206-08-385-3236-0-4433		100%		\$3,166,417.34	
PROPOSED CONTRACT TOTAL <i>(Includes Original Contract Amount & All Change Orders)</i>				\$3,166,417.34	
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PROJECT BUDGET		\$2,870,940.00		FY: 12/13	
PROJECT BUDGET				FY:	
NOTICE TO PROCEED:		January 28, 2005		ORIGINAL CONTRACT PERIOD (calendar days): 275	
ORIGINAL/REVISED COMPLETION DATES:		October 30, 2005		ORIGINAL CONTRACT ALLOWANCE: \$75,000.00	
CONSULTANT: Shephard Wesnitzer, Inc.			LOCATION: Flagstaff, AZ		
CITY PROJECT MANAGER: Trevor Henry					
Change Orders	C.O. Amount/ Allowance Amt	C.O. Days	Council Date	REASON FOR CHANGE	
Revision Date	New Total	Original / New Total	New Comp. Date		
Field Order #6	N/A	60	N/A	Time extension due to City/USACE delays.	
1/08/07		776	3/15/07		
CO#3	\$12,015	730	N/A	Additional design to determine estimate of right of way needed and utility relocations cost for the Corps Limited Re-evaluation Report. Amount is to be taken from City Manager's Authority. \$112,333.00/\$150,750.00	
2/1/07	\$1,620,938	1506	3/14/09		
Field Order #7	N/A	60	N/A	Time delays due to City and USACE.	
3/09/09		1566	5/13/09		
CO#4	\$1,038,036.34	270	5/05/09	Deliver Phase II of the project per the attached scope and fee.	
4/16/09	\$2,658,974.34	1836	2/07/10		
Field Order #8	\$3,600.00	0	N/A	Provide additional sewer flow measurement.	
9/14/09	2,662,574.34	1836	2/07/10		
CO#5	\$24,343.00	38	N/A	Accelerate design of lower 850 I.f. of utility plans to meet shovel ready designation. Amount is to be taken from City Manager's Authority. \$87,990.00/\$150,750.00	
10/15/09	\$2,683,317.34	1874	3/17/10		

CITY OF FLAGSTAFF **PROJECT STATUS FORM**

PROJECT NAME: Rio de Flag Flood Control Utility Relocation	<input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction <input type="checkbox"/> Other
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PROJECT NO. 346800	FILE NO. 03-04011
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ACCT. NO.		
206-08-385-3236-0-4433	100%	\$3,166,417.34

PROPOSED CONTRACT TOTAL <i>(Includes Original Contract Amount & All Change Orders)</i>	\$3,166,417.34
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COUNCIL APPROVAL: January 18, 2005	ORIGINAL CONTRACT AMOUNT: \$1,582,521.00
PROJECT BUDGET \$2,870,940.00	FY: 12/13
PROJECT BUDGET	FY:
NOTICE TO PROCEED: January 28, 2005	ORIGINAL CONTRACT PERIOD (calendar days): 275
ORIGINAL/REVISED COMPLETION DATES: October 30, 2005	ORIGINAL CONTRACT ALLOWANCE: \$75,000.00
CONSULTANT: Shephard Wesnitzer, Inc.	LOCATION: Flagstaff, AZ

CITY PROJECT MANAGER: Trevor Henry

Change Orders	C.O. Amount/ Allowance Amt	C.O. Days	Council Date	REASON FOR CHANGE
Revision Date	New Total	Original / New Total	New Comp. Date	
Change Order #6	\$0	180	N/A	Time extension due to City/USACE delays as a result of the January 2010 VE study.
3/4/10	\$2,683,317.34	2054	9/13/10	
Change Order #7	\$0	365	N/A	Time extension due to City/USACE delays as a result of the 2010 VE study and revisions to the 90% plans.
9/9/10	\$2,683,317.34	2419	9/13/11	
Change Order #8	\$0	365	N/A	Time extension due to City/USACE delays as a result of the 2010 VE study and revisions to the 90% plans.
9/8/11	\$2,683,317.34	2784	9/13/12	
Change Order #9	\$0	365	N/A	Time extension due to City/USACE delays as a result of the 2010 VE study and revisions to the 90% plans.
9/13/12	\$2,683,317.34	3149	9/13/13	
Change Order #10	\$0	972	N/A	Time extension due to City/USACE delays.
5/21/15	\$2,683,317.34	4,121	5/12/2016	
Change Order #11	\$0	491	N/A	Time extension due to City/USACE delays.
9/15/16	\$2,683,317.34	4,612	9/15/2017	

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PROJECT NO. 346800		FILE NO. 03-04011		
ACCT. NO.				
206-08-385-3236-0-4433		100%		\$3,166,417.34
PROPOSED CONTRACT TOTAL <i>(Includes Original Contract Amount & All Change Orders)</i>				\$3,166,417.34
COUNCIL APPROVAL: January 18, 2005		ORIGINAL CONTRACT AMOUNT: \$1,582,521.00		
PROJECT BUDGET \$2,870,940.00		FY: 19		
PROJECT BUDGET		FY:		
NOTICE TO PROCEED: January 28, 2005		ORIGINAL CONTRACT PERIOD (calendar days): 275		
ORIGINAL/REVISED COMPLETION DATES: April 30, 2020		ORIGINAL CONTRACT ALLOWANCE: \$75,000.00		
CONSULTANT: Shephard Wesnitzer, Inc.		LOCATION: Flagstaff, AZ		
CITY PROJECT MANAGER: Trevor Henry				
Change Orders	C.O. Amount/ Allowance Amt	C.O. Days	Council Date	REASON FOR CHANGE
Revision Date	New Total	Original / New Total	New Comp. Date	
Change Order #12	\$0	958	N/A	Time extension to bring current the existing contract and meet the new USACE final design completion date of 04/30/2020
3/7/19	\$2,683,317.34	5,845	4/30/20	
Change Order #13	\$483,100.00	365	3/17/2020	Additional work to bring outstanding tasks to comply with the USACE final design and meet the project schedule for construction delivery, Spring 2021
2/13/2020	\$3,166,417.34	6,210	4/30/21	
Change Order #14	\$374,135.00	180	11/17/2020	Added tasks are supplemental to the design as outlined and requested by the USACE; supplemental survey services, additional side drain analysis, final design and coordination to produce 100% Construction Plans
11/05/2020	\$3,540,552.34	6390	10/27/21	

COMMENTS: The allocations shown above are inclusive of all Change Orders shown.

Purchase Order Number:	14-000120	Line Number:	1	Amount	\$698,015.35
Purchase Order Number:	14-000120	Line Number:	2	Amount	\$7,244.66
Purchase Order Number:	14-000120	Line Number:	3	Amount	\$483,100.00



Shephard Wesnitzer, Inc.

Engineering an environment of excellence

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Flagstaff, AZ 86001

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928.774.8923

www.swiaz.com

Engineering an environment of excellence.

Ms. Christine Cameron
City of Flagstaff
211 W. Aspen Avenue
Flagstaff, AZ 86001 ("Client")

October 15, 2020
Job # 04473

RE: Rio De Flag
Additional Services Change Order #14

Dear Ms. Cameron:

SWI has been asked to provide supplemental survey services, additional side drain analysis, and final design and coordination to produce 100% Construction Plans. Please provide a change order for the additional services listed below.

1.0 SCOPE OF SERVICES, ADDITIONAL

We propose to provide the following:

Item No.	Description	Fee
1.	Schedule B Review: Perform a review of the Schedule B items that are stated in the provided title reports for each of the affected parcels within the project limits. Prepare exhibits to support the review and document the existing encumbrances. This item will be divided into two phases. Phase 1 will include the Lower Reach and Clay Wash Avenue and consist of 46 parcels. Phase 2 will include the Upper Reach and consist of 30 parcels. This item will also include up to five (5) meetings with City staff and USACE to coordinate deliverables.	\$37,500
2.	Supplemental Aerial Exhibits: Prepare exhibits of the proposed easements with aerial imagery for the City of Flagstaff legal department to supplement the submitted legal descriptions. These exhibits will be presented to the property owner to help illustrate the improvements associated with the project and how their property is affected. There are 46 parcels for Phase 1 and 30 parcels for Phase 2. One exhibit will be provided per parcel.	\$10,600
3.	BNSF Utility Accommodation Policy: Prepare exhibits to support the UAP forms that will be submitted to BNSF. This item also includes any coordination between City staff and BNSF through the permitting process. There are 14 BNSF parcels. An exhibit will be provided per parcel.	\$7,800
4.	USACE Segment Maps: Prepare segments maps to be submitted to USACE and to accompany the legal description package. Segment maps will be created for both Phase 1 and Phase 2. This item will also include up to two (2) meetings with USACE to coordinate deliverables.	\$19,700

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|-----|---|-----------------|
| 5. | TCE Legal Descriptions:
Prepare legal descriptions for temporary construction easements (36 legals Phase 1, 40 legals Phase 2). Includes legal descriptions for all private/BNSF parcels, 12 City-owned parcels and all areas within the City of Flagstaff and ADOT right-of-way. | \$45,600 |
| 6. | Phase 2 Supplemental Survey:
Verify and field check old survey data to complete the final design and construction plans for Phase 2. | \$11,000 |
| 7. | Phasing Permitting:
The original contract included budget for ADEQ and ADOT permitting. The project is now broken up into two phases and will require separate submittals for each phase.

This item also includes submittal of construction plans and applications to ADEQ for an informal courtesy review. There will be two (2) pre-application meeting with ADEQ Drinking Water Department and up to four (4) additional coordination meetings with ADEQ through the courtesy review process. | \$9,000 |
| 8. | Fiber Optic Plans:
Prepare fiber optic plans to be included in the Utility Relocation Plans for Phase 1 and Phase 2. | \$12,300 |
| 9. | McCracken Hyatt Coordination:
This item includes meetings & coordination with City staff, USACE, and Tetra Tech for the sewer design and sequencing located at Malpais hotel and up to McCracken Street. | \$3,200 |
| 10. | Floodwall Visualization Services:
SWI will produce a surface in Civil3D for the floodwall areas based on contours provided by Tetra Tech. This surface is intended to be utilized in the renderings that will be prepared by Norris. SWI will set stakes of the floodwall location and cut/fill elevations along Navajo Drive for the neighborhood site walk. This item also includes up to three (3) meetings & coordination with City staff, Norris, and Beta PR and attendance at the neighborhood site walk.

Norris Design will prepare informational videos and 3D visualizations to aide in communicating the proposed improvements to City Council and the residents of Flagstaff.

Task 1 - Visualizations Services
A. Coordinate with SWI for engineering base information and design detail. (Autodesk Format/Civil3D preferred)
B. Utilize concept landscape plans provided by the city.
C. Review view locations for perspectives with the city.
D. Utilize drone video and photography provided by the city.
E. Develop 3D Visualizations. <ul style="list-style-type: none"> • Using the provided engineering and landscape information we will create a 3D model at 4 key locations depicting the proposed improvements. These renderings will be a mixture of before/after photo composites, 3D animation and 3D perspectives. We will work with the city to approve the final views/angles for these exhibits. • Maximum of (6) perspectives renderings are included in this work scope. F. Develop Informational Project Videos. <ul style="list-style-type: none"> • Overall Project Video to be 3-4 minutes in length and show the historic Rio de Flag flow and the new proposed improvements/alignment. • Video will focus on 4 key areas defined by the city. These areas will be | \$40,000 |

communicated through a variety of media (animated aerial vicinity map, existing drone video and photography, motion graphics/information, proposed photo composites, 3D animation and 3D perspectives)

- Upon approval of the overall video we will make 4 videos of approximately 30-45 seconds in duration so that citizens will have the option to watch specific portions of the improvements, dividing into the segments provided by the city.

Deliverables include:

- A. Progress graphics showing intended look and style of the full Visualization Task by 9/15/2020
 - a. These will include a mixture of video and renderings. We will focus on segments 1 and 2, provided by the city.
- B. Final 3D Visualizations
 - a. Approved renderings provided in jpeg and pdf format for the city's unrestricted use.
 - b. Maximum of (6) perspective renderings
- C. Informational Project Videos
 - a. (1) 3-4 minute video showcasing the full Rio de Flag Improvement Project.
 - b. (4) 30-45 second videos focusing on the individual segments of the project.
- D. Final videos and Visualizations completed by October 2, 2020.

Task 2 – Virtual Meeting Room

Norris Design will create a virtual meeting room for the Rio de Flag Flood Control Project. This meeting room will be populated with project information provided by the city and consultant teams. Content created in Task 1 of this Additional Services agreement will also be on display. This meeting room allows citizens to obtain project information and interact with project displays, provide feedback, etc.

Deliverables include:

- A. Virtual Meeting Room website
 - a. Content for displays provided by the City and beta|PR consultant team.
- B. City will provide a link to this meeting room from the project website.
- C. Updates to the original approved room to be billed as hourly updates based on changes requested.

11.	Route 66 Bridge Utility Relocations: Item includes construction phase services, meetings with ADOT/COF/EMC, product submittal reviews, and site visits.	\$6,600
12.	Slab Thickness Updates: Update Phase 1 and Phase 2 Utility Relocation Plans based on updates to the box culvert top slab thickness provided by Tetra Tech. This item also includes meeting & coordination with City staff and Tetra Tech for the updated utility relocations based on slab thickness updates.	\$13,600
13.	Phased Construction Plans: Prepare two construction plans for Phase 1 and Phase 2. This item also includes two EOPC's, bid schedules, special provisions, drainage reports, water and sewer design reports. This item also includes preparation of a stormwater prevention plans (SWPP) and demolitions plans for the project that were excluded from the original contract.	\$92,600
14.	Miscellaneous Drainage: This item includes additional grading and drainage design and coordination performed by SWI that was beyond the scope of the original contract.	\$8,335

Performed several iterations of grading design for McCracken Place and its intersection with Blackbird Roost due to the higher-than-anticipated profile of the Corps CBC through this area. One of the expectations for surface replacement design was that the existing surface features would be replaced at approximately the same elevations as in existing conditions. Due to the high proposed profile of the CBC through McCracken, replacing the pavement and existing valley gutter down the roadway centerline was not possible. Grading designs were prepared with a normal crown, a one-way crown, and a raised profile with standard pavement and valley gutter sections. Each of these alternatives resulted in undesirable drainage conditions. In the end, through coordination with Tetra Tech, it was decided that the top slab of the CBC would act as the valley gutter, with a flow line formed into the slab. SWI grading plans included detailed horizontal and vertical grading information for the CBC top slab and adjoining pavement to accomplish this.

SWI provided coordination services with Tetra Tech and COF, including one (1) site visit, regarding four existing sanitary sewer manholes in the Lower Reach open channel section of the Rio de Flag. We provided design information to Tetra Tech and coordinated regarding the best approach for protecting the manholes in place as part of the Rio de Flag improvement project.

15. **Weekly Coordination Meetings:** **\$56,300**
This item includes up to 88 weekly coordination meetings with City staff and SWI.

ASWO#14 DESIGN TOTAL: \$374,135

Your signature below will serve as your acceptance of this Work Order, pursuant to the terms and conditions of the original contract. Feel free to call if you have any questions or concerns.

Sincerely,



Guillermo E. Cortes, P.E.
Vice President

Accepted: _____ Date: _____