9/16/2021

HNTB CORPORATION Attention: Eddie Church 101 E. Old Settlers Blvd, Suite 100 Round Rock, TX 78664

RE:

WILLIAMSON Co. - CR101

Job #: 2138

CO-04 (Pavement & Jonah)

Dear Mr. Church,

Please see attached sign Change Order #4 for the above referenced project.

Please review, sign and return an executed copy.

James Construction Group does not waive any original contract conditions to submit costs of claims associated or arising from delayed or changed work. This includes occasions when it becomes necessary to preform extra work at Williamson County's request. Upon execution of Williamson County's change order form, the contractor reserves its right to submit or claim any extra costs, overhead and delay time with associated cost arising from or pertaining to the change order.

Regards,

James Construction Group

Aléxander Krejchi Project Engineer

CC:

WILLIAMSON COUNTY, TEXAS CHANGE ORDER NUMBER: 4

1. CONTRACTOR: James Construction			_ Project	2138
Change Order Work Limits Sta. 23+35	to Sta.	200+00	Roadwa	ay: <u>CR 101</u>
3. Type of Change(on federal-aid non-exempt projects):	Mi	inor (Major/Mino	r) CSJ Number	;
4. Reasons: 3C, 3F (3 Max In ord	der of imp	ortance - Primary fil	rst)	
5. Describe the work being revised:				
C. County Convenience. Implementation of a Value Engli	neering f	Inding. This Chang	e Order removes	quantities for various
Jonah Water SUD water line items, due to an alignment shift a	at the sou	thern end of the pro	ject at the US 79	intersection. 3F. County
Convenience. Additional work desired by the County. This he contractor for pavement repairs in the roadway and to perf	change of	order adds a force a ing to prevent future	account item to the	e contract to compensate
6. Work to be performed in accordance with Items:	See att	ached		
7. New or revised plan sheet(s) are attached and numbe				
3. New Special Provisions/Specifications to the contract		1175	Yes 🕝	No
D. New Special Provisions to Item_N/A_NoN/A_, Spe		95		ed.
Each signatory hereby warrants that each has the author	ity to exe	ecute this Change	Order (CO).	
The contractor must sign the Change Order and, by doing so, agrees to waiv	/e	The following in	nformation mus	t be provided
any and all claims for additional compensation due to any and all other exper additional changes for time, overhead and profit, or loss of compensation as	nses,		_	
esult of this change	a Tim	ne Ext. #: N/A	Days add	led on this CO: 0
54 F	Δm	ount added by this	s change order:	(\$366,519.81)
THE CONTRACTOR Date 9/6/20		ount added by this	s change order.	(\$300,313.01)
Carrier Salar Sala		-	,	<u> </u>
By				
Typed/Printed Name Kick Leurs				
Typed/Printed Title Don's Iwo Kunk URA				
<u>21013 (100 1 100 </u>	·			
RECOMMENDED FOR EXECUTION:				
RECOMMENDED FOR EXECUTION.				
		County Con	nmissioner Preci	nct 1 Date
9/16/21	l 👝	APPROVED	n Ri	EQUEST APPROVAL
Project Manager Date				
		County Com	nmissioner Preci	nct 2 Date
N/A		APPROVED	□ R	EQUEST APPROVAL
Design Er jineer Date				
1 1 11/11	Valer	ie Covey		Sep 29, 202
/// / W*/			missioner Preci	nct 3 Date
9/17/2021	. 🗆	APPROVED	□ Ri	EQUEST APPROVAL
Program M: nager Date				
Pesign Engineer's Seal:				
		County Com	missioner Preci	nct 4 Date
		APPROVED	_D RI	EQUEST APPROVAL
	_		_	
	_	Co	ounty Judge	Date
		APPROVED	- -	

WILLIAMSON COUNTY, TEXAS

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Project # 2138

TABLE A: Force Account Work and Materials Placed into Stock

HOURLY RATE					
HOURLY RATE					
LABOR					

TABLE B: Contract Items:	ract Items:								
				ORIGINAL + PREV	ORIGINAL + PREVIOUSLY REVISED	ADD or (DEDUCT)	_	NEW	
ITEM	DESCRIPTION	TIND	UNIT PRICE	QUANTITY	ITEM COST	QUANTITY	QUANTITY	ITEM COST	OVERRUN/ UNDERRUN
999-WC01	FORCE ACCOUNT-ROADWAY REPAIRS AND GRADING ON NORTH END	ST	\$1.00	00.00	00'0\$	90,000.00	90,000.00	\$90,000.00	\$90,000.00
J103-01	16" C-905, DR-18 PVC PIPE; W/ TRACER WIRE; INSTALLED	4	\$101.21	00.769	\$70,543.37	-540.00	157.00	\$15,889.97	(\$54,653.40)
J103-01	12" C-900, DR-18 PVC PIPE; W/ TRACER WIRE; INSTALLED	H	\$81.30	51.00	\$4,146.30	-15.00	36.00	\$2,926.80	(\$1,219.50)
J103-01	6" C-900, DR-18 PVC PIPE; W/ TRACER WIRE; INSTALLED	4	\$186.48	5.00	\$932.40	-5.00	00'0	\$0.00	(\$932.40)
J103-01	4" C-900, DR-18 PVC PIPE; W/ TRACER WIRE; INSTALLED	H	\$35.73	2,420.00	\$86,466.60	-15.00	2,405.00	\$85,930.65	(\$535.95)
J103-01	24" STEEL ENC. PIPE, BORED WITH 16" C-905, DR-18 RJ CARRIER PIPE; INSTALLED	4	\$532.36	700.00	\$372,652.00	-575.00	125.00	\$66,545.00	(\$306,107.00)
J103-01	16" GATE VALVE, BOX, AND MARKER; INSTALLED	EA	\$6,797.76	15.00	\$101,966.40	-8.00	7.00	\$47,584.32	(\$54,382.08)
J103-01	6" GATE VALVE, BOX, AND MARKER; INSTALLED	EA	\$1,665.60	1.00	\$1,665.60	-1.00	00'0	\$0.00	(\$1,665.60)
J103-01	CONNECT NEW 16" TO EXISTING 16"; INSTALLED	EA	\$4,400.00	4.00	\$17,600.00	-1.00	3.00	\$13,200.00	(\$4,400.00)
J103-01	CONNECT NEW 12" TO EXISTING 12"; INSTALLED	EA	\$3,300.00	3.00	00'006'6\$	-3.00	00'0	\$0.00	(\$9,900.00)
J103-01	CONNECT EXISTING 4" TO NEW 4"; INSTALLED	EA	\$794.00	4.00	\$3,176.00	-1.00	3.00	\$2,382.00	(\$794.00)
J103-01	CAP EXISTING 12" WATERLINE; INSTALLED	EA	\$929.73	1.00	\$929.73	-1.00	00.0	\$0.00	(\$929.73)
J103-01	INSTALL NEW FIRE HYDRANTS ASSEMBLY; INSTALLED	EA	\$4,891.45	3.00	\$14,674.35	-2.00	1.00	\$4,891.45	(\$9,782.90)
J103-01	CAP AND GROUT FILL ABANDONED WATERLINES WITHIN TXDOT AND RAILROAD R.O.W.; COMPLETE PER MODIFIED SPECIAL SPEC. 7076	5	\$27.90	380.00	\$10,602.00	(380.00)	00.0	\$0.00	(\$10,602.00)
J103-01	TRENCH SAFETY	LF	\$1.07	3,423.00	\$3,662.61	-575.00	2,848.00	\$3,047.36	(\$615.25)
	TOTALS		,		\$698,917.36			\$332,397.55	(\$366,519.81)

CHANGE ORDER REASON(S) CODE CHART

Design Error or Omission	1A. Incorrect PS&E 1B. Other
Differing Site Conditions (unforeseeable)	2A. Dispute resolution (expense caused by conditions and/or resulting delay) 2B. Unavailable material 2C. New development (conditions changing after PS&E completed) 2D. Environmental remediation 2E. Miscellaneous difference in site conditions (unforeseeable)(Item 9) 2F. Site conditions altered by an act of nature 2G. Unadjusted utility (unforeseeable) 2H. Unacquired Right-of-Way (unforeseeable) 2I. Additional safety needs (unforeseeable) 2J. Other
3. County Convenience	3A. Dispute resolution (not resulting from error in plans or differing site conditions) 3B. Public relations improvement 3C. Implementation of a Value Engineering finding 3D. Achievement of an early project completion 3E. Reduction of future maintenance 3F. Additional work desired by the County 3G. Compliance requirements of new laws and/or policies 3H. Cost savings opportunity discovered during construction 3I. Implementation of improved technology or better process 3J. Price adjustment on finished work (price reduced in exchange for acceptance) 3K. Addition of stock account or material supplied by state provision 3L. Revising safety work/measures desired by the County 3M. Other
4. Third Party Accommodation	 4A. Failure of a third party to meet commitment 4B. Third party requested work 4C. Compliance requirements of new laws and/or policies (impacting third party) 4D. Other
5. Contractor Convenience	 5A. Contractor exercises option to change the traffic control plan 5B. Contractor requested change in the sequence and/or method of work 5C. Payment for Partnering workshop 5D. Additional safety work/measures desired by the contractor 5E. Other
6. Untimely ROW/Utilities	 6A. Right-of-Way not clear (third party responsibility for ROW) 6B. Right-of-Way not clear (County responsibility for ROW) 6C. Utilities not clear 6D. Other

Williamson County Road Bond Program CR 101 Improvements Williamson County Project No. 2138

Change Order No. 4

Reason for Change

This Change Order adds a force account item to the Contract to compensate the contractor for pavement repairs in the roadway and to perform grading to prevent future saturation. This Change Order also removes quantities for various Jonah Water SUD water line items, due to an alignment shift at the southern end of the project at the US 79 intersection.

Item 999-WC01 Force Account-Roadway Repairs and Grading on North End is being added to pay the contractor for pavement repairs and to perform grading.

Pavement repairs are necessary, due to recent rains that created an area of ponding water adjacent to the roadway. The standing water migrated into the roadway embankment and saturated the subgrade. This caused a failure in the new roadway at the north end of the project. The repair will consist of:

- Excavating approximately 5' below the current finished grade of the roadway to remove wet material. Actual depth of excavation will be determined based on moisture content of material encountered.
- Placing large rock in the bottom of the excavation to establish a good foundation.
- Place embankment material with low clay content or flexible base to level with original pavement section.
- To expedite construction, full-depth hot mix asphalt will be considered in lieu of flexible base.

In addition to the pavement repair, the contractor will regrade the area to prevent water from ponding next to the roadway again. Tracking the contractor's actual cost by force account is the best method to determine the cost of the work, because some elements of the work are unknown at this time.

The original Jonah Water relocation plans show relocations that were necessary to the proposed CR 101 alignment that was revised and moved further north. This change made the original Jonah Water relocation length of pipe and appurtenances shown on the attached sheets are no longer necessary.

Following is a summary of new items required for this change order.

ITEM	DESCRIPTION	QTY	UNIT
999-WC01	FORCE ACCOUNT-ROADWAY REPAIRS AND	1	LS
	GRADING ON NORTH END		

This Change Order results in a decrease of \$366,519.81 to the Contract amount, for an adjusted Contract total of \$13,034,774.74. The original Contract amount was \$13,092,842.00. As a result of this and all Change Orders to-date, \$58,067.26 has been deducted from the Contract, resulting in a .44% net decrease in the Contract cost. No additional days will be added to or deducted from the Contract as a result of this Change Order.

HNTB Corporation

Lowell D. Choate, P.E.

Clayton Weber

From: Erin Gonzales <EGonzales@bgeinc.com>

Sent: Thursday, July 29, 2021 5:45 PM

To: Clayton Weber

Cc: Elena Ramon; 62811_2138_CR101; Eddie R. Church; Kyle McCoy; Lowell Choate; Wes

Jasek; Linda Barlow; David Leavell; mmcdaniel@hvj.com

Subject: RE: 2138-CR 101 Geotechnical

Clayton,

Below is information provided by HVJ and include a concurrence with the approach proposed with some additional suggestions. Please let me know if you have any questions or comments.

Thanks!

Erin

A site visit to the subject project was conducted on 29Jul2021. Distresses were arcing cracks that have grown to approximately ½" in width over an approximate 60 ft length. The cracked area appeared to be depressed by about 4" at the edge of pavement. The depression was approximately centered on a section of roadway that was adjacent to an area that had held water and now that the water has dissipated or pumped out, the depression and cracking is appearing and potentially growing. Height of roadway front slope is about 10ft with some reveal of an approximate 5ft vertical face into the water reservoir.

Observations: Cracking in the unpaved shoulder, cracking in the roadway. Cracking was arc shaped intersecting the edge of pavement and extending to approximately 20 ft into the roadway paved surface over approximately 60ft.

Although there is no data to prove or disprove the position, I think this cracking is due to the subsidence of soil because of water being removed from the soil structure (drying and weeping). Adjacent sections of the same water retention area, soil slope height, and pavement structure have no observed signs of failure. Additionally, shallow cracking observed on the unpaved shoulder, also arc shaped, show no signs or locations where sluffing at the toe of slope has occurred nor is there a large vertical displacement on either side of a crack. It is possible the subgrade and thus the structure is "moving" which may look like a slope failure but could be a result of edge rotation caused by the subsidence of underlying material that has caused the surface and other pavement layers to crack.

Mitigation: It was suggested by others to dig out the pavement structure, which includes HMAC, flexible base, and lime treated subgrade, and reconstruct. I would agree with the approach but suggest the following:

- 1. Excavate beyond the current limits of cracking
- 2. Place a geosynthetic—high strength—there are grids and fabrics that can be used—physically attach pieces together instead of overlapping only
- 3. Place an aggregate layer—a 3x5 rock or other such sound and volume building material may be used, just not a fine grained material with no strength when saturated
- 4. Place an appropriate fabric or grid over the aggregate layer. If the concern is the loss of fines of materials placed on the 3x5 rock layer, one could "choke" off the large aggregate surface by intermixing smaller aggregate to make it less porous at the top of this layer or use a flex base instead.
- 5. Place the pavement structure on the geosynthetic or other material required to meet structural considerations.

What has been provided are suggestions for consideration and not a representation of structural adequacy. Even though I do not believe this distress is caused by a slope failure, a proper investigation of layers beneath the pavement is required to determine whether a slope failure has been the cause of cracking and subsidence.

Erin N. Sobotik Gonzales, PE, CFM

Central Texas Director of Transportation 7330 San Pedro, Suite 202 San Antonio, TX 78216 Direct: 512-879-0425

Cell: 361-798-6110



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From: Clayton Weber <cweber@HNTB.com> Sent: Thursday, July 29, 2021 10:22 AM To: Erin Gonzales <EGonzales@bgeinc.com>

Cc: Elena Ramon < ERamon@bgeinc.com>; 62811_2138_CR101 < 62811_2138_CR101@HNTB.com>; Eddie R. Church < erchurch@HNTB.com>; Kyle McCoy < klmccoy@HNTB.com>; Lowell Choate < lchoate@HNTB.com>; Wes Jasek

<WJasek@bgeinc.com>; Linda Barlow <LBarlow@hvj.com>; David Leavell <DLeavell@bgeinc.com>

Subject: RE: 2138-CR 101 Geotechnical

Any update on the status of the response from our meeting yesterday morning. We want to get the repair started as soon as possible.

Clayton K. Weber, Construction Manager HNTB
Tel (512) 539-9342
Email cweber@hntb.com

From: Erin Gonzales < EGonzales@bgeinc.com >

Sent: Tuesday, July 27, 2021 2:36 PM
To: Clayton Weber < cweber@HNTB.com>

Cc: Elena Ramon < ERamon@bgeinc.com >; 62811_2138_CR101 < 62811 2138 CR101@HNTB.com >; Eddie R. Church < erchurch@HNTB.com >; Kyle McCoy < klmccoy@HNTB.com >; Lowell Choate < lchoate@HNTB.com >; Wes Jasek

<<u>WJasek@bgeinc.com</u>>; Linda Barlow <<u>LBarlow@hvj.com</u>>; David Leavell <<u>DLeavell@bgeinc.com</u>>

Subject: RE: 2138-CR 101 Geotechnical

Clayton,

I spoke with Linda Barlow with HVJ and she is working with her staff to find a time they can get out to see the site. In the interim, do you have any photos of the failures to share with them?

Thanks!

Erin

Erin N. Sobotik Gonzales, PE, CFM

Central Texas Director of Transportation 7330 San Pedro, Suite 202 San Antonio, TX 78216

Direct: 512-879-0425 Cell: 361-798-6110



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From: Clayton Weber < cweber@HNTB.com Sent: Tuesday, July 27, 2021 12:08 PM
To: David Leavell < DLeavell@bgeinc.com

Cc: Erin Gonzales < EGonzales @bgeinc.com >; Elena Ramon < ERamon @bgeinc.com >; 62811_2138_CR101

<62811 2138 CR101@HNTB.com>; Eddie R. Church <erchurch@HNTB.com>; Kyle McCoy <klmccoy@HNTB.com>;

Lowell Choate < lchoate@HNTB.com>
Subject: Re: 2138-CR 101 Geotechnical

Is the geotechnical consultant for this project is available to review the roadway failure on the north end of the project.please let me know ASAP because this issue is time critical. Give me a call if you have any questions

Sent from my iPhone

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient and receive this communication, please delete this message and any attachments. Thank you.

Clayton Weber

From:

Clayton Weber

Sent:

Friday, July 30, 2021 2:36 PM

To:

'Alexander Kreichi'; Paul Hering

Cc:

Christen Eschberger; Lowell Choate; 62811_2138_CR101; Steven Shull; Kyle McCoy

Subject:

CR 101 Pavement repair on north end

We have reviewed the cracks in the new pavement located on the north end of the project. We request the following repair procedure:

- 1. We will paint out the limits of the repair which will correspond to the cracks that are visible in the pavement.
- 2. This area should be excavated out and moved or redistributed toward the pond to fill in the pond and shore up the slope of the roadway.
- 3. The depth of the excavation will be approx. 5' below the current finished grade of the roadway. At this depth the existing material will be evaluated to determine if additional excavation is required.
- 4. The existing geogrid should be cut out to allow the excavation of the material.
- 5. When the depth of excavation is completed, we want large rock, (12"-18") to be placed in the bottom of the excavation to thickness of approx. 2'. (could be more depending on depth of excavation and material encountered)
- 6. On top of the rock we want flex base or old base/asphalt spoils from the old roadway to be placed to the level of the lime treated subgrade.
- 7. Flex base will be placed in the pavement section in lieu of the lime treated subgrade.
- 8. Geogrid will be placed at the level to match the existing geogrid. The geogrid in the patch will be tied to the existing geogrid.
- 9. Place original pavement section in pavement repair area.
- 10. To expedite construction full depth hot mix will be considered in lieu of flex base.
- 11. Outside the limits of the original cut line and prior to completion of the hot mix section the existing pavement will be sawcut to provide a new good edge for the repair.
- 12. To prevent risk of further damage we request that the excavation and embankment be performed in a continuous operation.
- 13. A separate force account item will be added to the contract by a change order to compensate James Construction for this work. Additional time and impacts will be evaluated at the end of the project.
- 14. This resolution has been reviewed and agreed to by the Engineer of record and Geotech. No plan sheets will be made available for this repair.

Let me know of any questions.

Clayton K. Weber, Construction Manager
Tel (512-527-6718 Cell (512) 539-9342 Email cweber@hntb.com
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