Memorandum

DATE: July 1, 2015

TO: Board of Public Works

FROM: Mark Radtke, Director of Public Works MR

RE: Change Order No. 2 Gilbert Trail Contracts 2014-03 and 2014-04

Attached are both Change Orders No. 2 for Gilbert Trail contracts 2014-03 and 2014-04. The change orders represent revisions to both contracts mainly resulting from the discovery of deteriorated piling components on the existing train trestle near the east end of the project site. Because of those substandard pilings, an alternate trail route needed to be evaluated and selected in order to deliver an affordable project.

Project Description

The project involves the construction of a 10 foot wide concrete trail commencing from the north/west side of Ahnaip Street, around the existing small pond, continuing to the river front, and turning east along the river's edge to an existing train trestle. The trail then continues across the trestle and on to the eastern terminus at the property limits. A small shelter building, trail lighting, benches, rock outcrops and a fishing area are among other improvements included in this project.

Because of the different construction types, the project was split into two contracts, one for the concrete trail sections and one for the trestle construction. The low bidder for both contracts was Janke General Contractors. In order to keep the project cost within budget, a change order was issued for both contracts immediately after the bid awards. The change orders in total represented a deduct of $40,155.00 (see attached).

Change Orders No. 2 Description

The trestle portion of the project originally involved the replacement/reinforcement of four of the trestle's pile caps identified by the consultant as being unacceptable as part of the supporting structure. While proceeding with the replacement of the pile caps, the contractor became concerned with the condition of some of the underlying piles based on a visual inspection and their previous experience with these types of structures.

In a follow up with our consultant, it was determined visual evidence of the trestle's pile bents indicated further testing should be done to determine the adequacy of the trestle's entire exposed substructure. In the meantime, the contractor was directed to suspend work on the trestle portion of the project because the cost to rebuild pile bents and caps would be prohibitive and could result in a radical change to the scope of the project.

At their own cost, our design consultant hired an outside firm specializing in trestle engineering to do the field investigation and testing of the trestle's substructure components. That firm utilized both visual and penetrating investigation techniques to determine the condition of the pile bent components. The findings of that work were summarized in a bridge inspection report submitted to our consultant.

The report indicates 11 of the 20 pile bents would require some level of repair and an additional 6 would require complete frame out meaning only 3 of the existing pile bents would not require any work. To continue a design to carry the trail over the existing trestle would be extremely cost prohibitive given the extra cost to upgrade the deficient pile bents. With this knowledge in hand, the City and its consultant investigated other options to route the trail past the trestle area to its terminus at the east end of the project site.

Because the three acceptable existing pile bents are located adjacent to each other on the western half of the trestle, we decided to evaluate the possibility of utilizing the western portion of the trestle, carrying the trail over the Gilbert waterway outlet, to a point where we would transition the trail off the trestle to a point on land. From this location the trail would proceed on land until it connects to the original designed trail location at the east end of the trestle. This option results in a decreased project cost while utilizing the maximum available structurally acceptable portion of the trestle.

Attached are the proposed change orders for each of the contracts. Change Order No. 2 for Unit No. 2014-03, Gilbert Riverfront Trail, is a deduct of $9,205.73. Essentially, this change order includes the additional cost for the east and west approaches to the trestle area, some mobilization and contractor re-engineering charges, additional heavy rip rap required at the river's edge below the off trestle portion of the trail, and some additional excavation and stone base. The change order also reflects reduced costs for the originally designed abutments, sheet piling, and limestone outcrop stone, among other items.

Change Order No. 2 for Unit No. 2014-04, Gilbert Trestle Improvements, is a deduct of $41,383. This change order has additional costs for the demolition of the unused portion of the trestle, additional pile cap, and the cost of contractor purchased, but unused, rail posts. The major deducts include the modifications to the trestle sub-decking, reduced composite decking and reduce cable railing.

Attached is a drawing depicting the recommended new route of the trail relative to the proposed original route of the trail in the vicinity of the trestle. The angle of departure from the trestle with the new design was maintained at the same angle as the original to allow for a smooth transition on/off the trestle. There will be a need for the placement of

heavy rip rap along the river's edge adjacent to the base of the trail fill area east of the retained trestle section. The relocation of the trail to the south of the trestle can be accomplished within City owned property. The easternmost portion of the trail is not affected by the proposed relocation of the trail and its construction will still require additional land rights from the adjacent property owner. The property owner has indicated a willingness to cooperate with our needs in that area. The Department of Natural Resources was notified of the proposed changes and has approved them if we decide to pursue that option.

Recommendation

Based on the structurally deficient condition of portions of the trestle and its corresponding prohibitive repair costs and the cost efficient option to relocate a portion of the trail off trestle, I recommend the approval of Change Order No. 2 for Contract Unit 2014-03 as a deduct of $9,205.75 and Change Order No. 2 for Contract Unit No. 2014-04 as a deduct of $41,383.00.

Attachment

CHANGE ORDER

DATE: 7/2/2015 CHANGE ORDER NO: Two

CONTRACTOR: **Janke General Contractors**
CONTRACT NO: **Unit No. 2014-03**
PROJECT: **Gilbert Riverfront Trail**

You are directed to make the changes noted below in the subject contract unit number.

I. (See Attached)

The changes result in the following adjustments:

	CONTRACT-TOTAL	TIME
Prior to this Change Order	$442,883.50	_____ Days
Adjustments per this Change Order	($9,205.75)	_____ Days
Current Contract Status	$433,677.75	_____ Days

Directed/Authorized
City of Menasha Dept. of Public Works
By: _____

Date: _____

Accepted

By: _____

Date: _____

Gilbert Riverfront Trail

ADD	Change Order #1 (See Attached CO1)	+$35,155.00 (LS)
ADD	New Pile for West & East approaches and 1 pile set to extend east end of Trestle	+$28,800 (LS)
ADD	Wood for West & East approaches	+$20,880 (LS)
ADD	Pile Backer Boards	+$6,900 (LS)
ADD	Hardware	+$10,681.75 (LS)
ADD	Fill for ramping proposed Concrete Trail (150 CY @$30/yd)	+$4,500
ADD	Mobilization of Crane	+$6,500 (LS)
ADD	Contractors re-engineering of approaches & decking	+$6,500 (LS)
ADD	Base Aggregate Dense 1¼" (300 Ton @ $25/ton)	+$7,500
ADD	Heavy Riprap (400 Ton @ $57/ton)	+$22,800
ADD	Excavation below sub-grade (195 CY @ $15/CY)	+$2,925
DEDUCT	Concrete Trail 5" (14,525ft²-13,750ft² @ 4.70)	-$3,642.50
DEDUCT	Concrete Steps	-$2,600 (LS)
DEDUCT	Modular Block Wall (315ft² @ $33/ft²)	-$10,395
DEDUCT	Limestone Outcrop Stone (114.3 Ton @ $200/ton)	-$22,860
DEDUCT	West Abutment	-$27,500
DEDUCT	East Abutment	-$31,000
DEDUCT	Sheet Piling (1650ft² @$39/ft²)	-$64,350
	TOTAL =	-$9,205.75

Change Order

DATE: December 11, 2014 CHANGE ORDER NO: ONE (1)

CONTRACTOR: **Janke General Contractors**
CONTRACT NO: **Unit No. 2014-03**
PROJECT: **Gilbert Riverfront Trail**

You are directed to make the changes noted below in the subject contract unit number.

Deducted from Trail Bid

1. Remove west abutment

2. Allowance for used sheet pile- east abutment

3. 12"x25' wooden pile ramp replacing west abutment, includes decking and railings

4. Remove block retaining wall on west end, replace w/sloped fill

5. 20% less outcrop stone- at water access site

6. 20% less heavy rip rap at water access site

Total Deduct = $35,155.00

The changes result in the following adjustments:

	CONTRACT-TOTAL	TIME
Prior to this Change Order	$478,038.50	_____ Days
Adjustments per this Change Order	($35,155.00)	_____ Days
Current Contract Status	$442,883.50	_____ Days

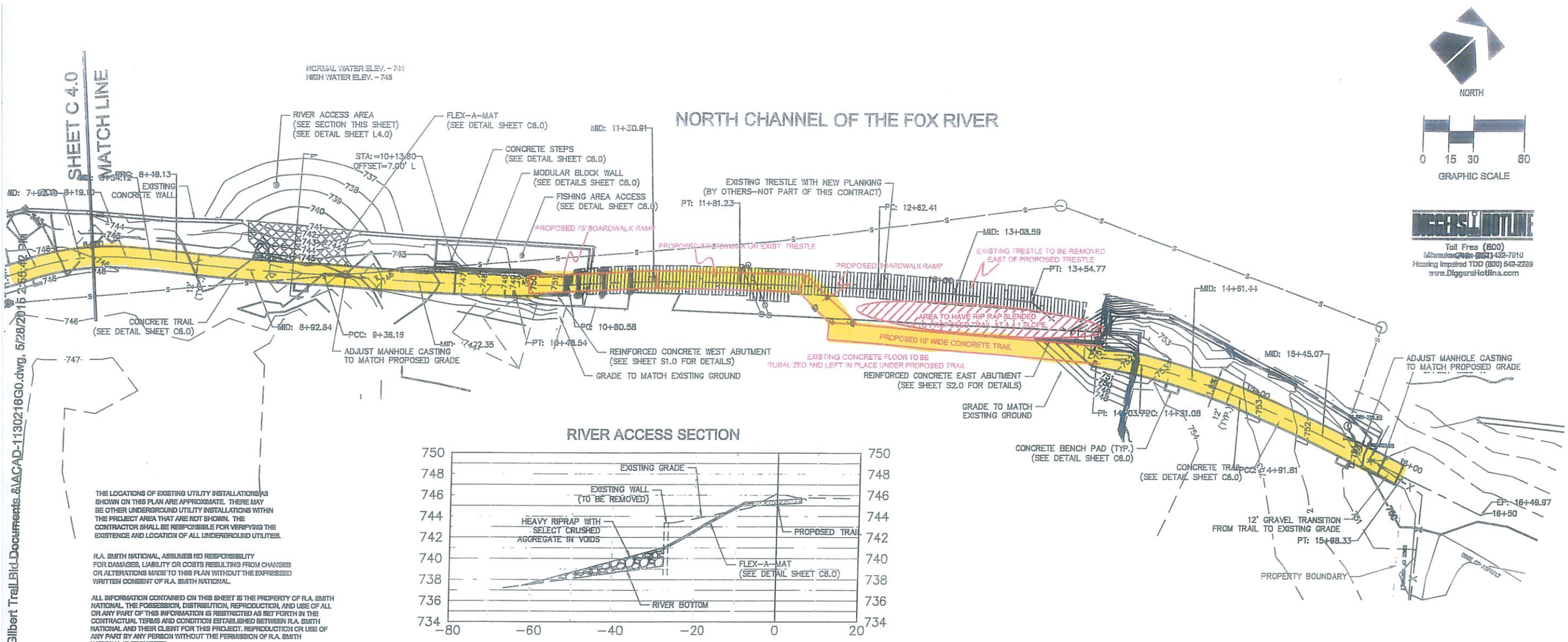
Directed/Authorized
City of Menasha Dept. of Public Works
By: _____

Date: _____

Accepted

By: _____

Date: _____



RIVER ACCESS SECTION

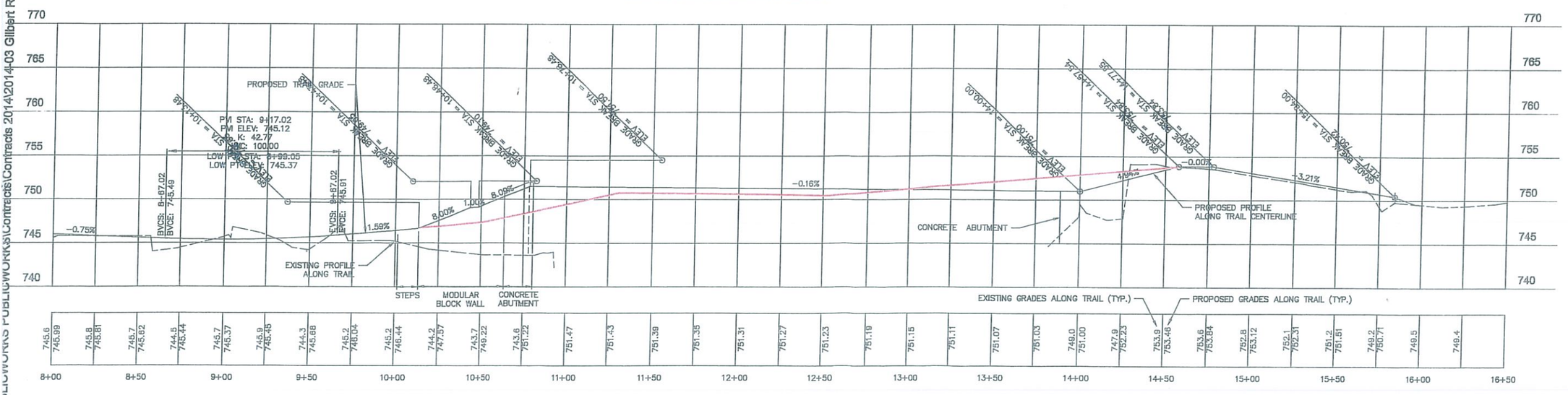
THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES.

R.A. SMITH NATIONAL, ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A. SMITH NATIONAL.

ALL INFORMATION CONTAINED ON THIS SHEET IS THE PROPERTY OF R.A. SMITH NATIONAL. THE POSSESSION, DISTRIBUTION, REPRODUCTION, AND USE OF ALL OR ANY PART OF THIS INFORMATION IS RESTRICTED AS SET FORTH IN THE CONTRACTUAL TERMS AND CONDITION ESTABLISHED BETWEEN R.A. SMITH NATIONAL AND THEIR CLIENT FOR THIS PROJECT. REPRODUCTION OR USE OF ANY PART BY ANY PERSON WITHOUT THE PERMISSION OF R.A. SMITH NATIONAL IS PROHIBITED.
©COPYRIGHT 2013
R.A. SMITH NATIONAL
16745 WEST BLUEMOUND ROAD, SUITE 200
BROOKFIELD, WI 53005

DIGGERS HOTLINE
Toll Free (800)
Milwaukee (414) 332-7910
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

TRAIL ALIGNMENT EAST



DATE	DESCRIPTION
---	---
---	---
---	---
---	---
---	---
---	---
---	---
---	---

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield, WI 53005-5938
262-781-1000 Fax 262-781-1460, www.rasmithnational.com
Appleton, WI Orange County, CA Pittsburgh, PA

GILBERT RIVERFRONT TRAIL
MENASHA, WI

GRADING & PAVING - EAST
PLAN & PROFILE

© COPYRIGHT 2014
R.A. Smith National, Inc.

DATE: 9/19/2014
SCALE: 1"=50'
JOB NO. 1130216
PROJECT MANAGER:
JEFF M. MAZANEC, P.E.
DESIGNED BY: GER
CHECKED BY: JMM

SHEET NUMBER
C5.0

S:\PUBLICWORKS PUBLICWORKS\Contracts\Contracts 2014\2014-03 Gilbert Riverfront Trail\Gilbert Trail\Bid Documents &\ACAD-1130216G0.dwg, 5/28/2015 2:55:42 PM