



# City of Grand Island

Tuesday, January 28, 2014

Council Session

## Item G-6

**#2014-13 - Approving Change Order No. 2 for North Interceptor  
Phase I; Project No. 2012-S-6**

Staff Contact: John Collins, P.E. - Public Works Director

# **Council Agenda Memo**

**From:** Marvin Strong PE, Wastewater Treatment Plant Engineer

**Meeting:** January 28, 2014

**Subject:** Approving Change Order No. 2 for North Interceptor Phase I; Project No. 2012-S-6

**Item #'s:** G-6

**Presenter(s):** John Collins PE, Public Works Director

## **Background**

Public Works Staff in conjunction with the design engineer, Black & Veatch of Kansas City, Missouri have jointly developed multi-year replacement planning stages for the City of Grand Island's large diameter gravity sanitary sewer interceptor network. The current planned interceptor, entitled the "North Interceptor" will replace aged gravity sanitary sewer, reduce or eliminate current sewer pumping station(s), provide additional capacity for existing, and new growth areas of Grand Island.

The Wastewater Division of the Public Works Department advertised for bids for North Interceptor Phase I (Project 2012-S-6) on March 26, 2013 and opened bids on April 23, 2013.

Resolution 2013-147 as approved by City Council on May 14, 2013 awarded Project 2012-S-6, North Interceptor Phase I to Merryman Excavation, Inc. of Woodstock, Illinois, in the amount of \$8,444,635.00.

On September 10, 2013, Resolution 2013-303, Change Order No. 1 supplied and installed thirty-four (34) Fiberglass Manhole(s) with Polyvinyl Chloride Pipe stubs. No additional claim for the contract amount or time was required.

## **Discussion**

The North Interceptor Phase I overall construction project progress level is at sixty (60%) percent complete. In December, 2013 the lower third of large diameter gravity interceptor sewer being installed was put into service.

In the one and a half (1-1/2) mile interceptor pipe route many complex construction strategies required development. The contractor, Merryman Excavation has mitigated many crossing conflicts installing the deep buried gravity sewer under existing shallower infrastructure. The contractor has requested consideration from owner, and engineer in

recapturing crossings cost that presented extra ordinary work, and supplies to complete the gravity interceptor installation.

Additionally, City Staff is requesting ingress/egress vault hatchway be incorporated on a junction box structure to facilitate maintenance, and inspection.

City Staff and the consulting engineer; Black & Veatch have reviewed, negotiated, and bring forward to the members of city council items outlined in Change Order No. 2.

Item CO2-1. Remove and Replace Concrete Encased Water Main

This change involves removing and replacing the existing concrete encased eight (8) inch water main near the intersection of Seedling Mile Road, and Voss Road. (Station 45+00; Sheet PP-8). In lieu of attempting to support the encased water main, it was removed and replaced to allow for the safe installation of the interceptor pipe.

Item CO2-2. Provide Vault Hatchway

A new interceptor sewer junction box for flow diversion was incorporated; either to channel sanitary sewer flow to an existing pumping station, or when completed divert flow to the newly constructed pumping station. (Station 10+00; Sheets PP-1, D-2)

The junction box was provided with four (4) equal sized concrete lid sections. This change involves removing and replacing the two (2) interior lid sections with one (1) larger lid section with a four (4) foot by four (4) foot cast aluminum hatchway to provide access.

Item CO2-3. Electrical Transmission Conduits

This change covers the negotiated cost to support a protective concrete slab.

The project required exposing two (2) substation medium-voltage buried electrical conduits on Museum Drive (Station 14+60; Sheet PP-2). Upon excavation the buried conduits were installed with a protective concrete cover slab. The concrete slab ended up shifting down during the interceptor installation and damaged the conduits. The total cost of the repair to the conduits (assessed by the Grand Island Utilities Department) was \$5,699.21. This change covers an estimated cost of \$1,000.00 had the concrete slab been additionally supported, and does not cover the total cost of the repairs, which remains the responsibility of the Contractor.

Item CO2-4. Remove and Replace Storm Sewer Pipe

This change covers removal, and replacement cost of a storm sewer pipe.

An existing fifteen (15) inch corrugated metal pipe storm sewer pipe at the intersection of 4<sup>th</sup> street and 7<sup>th</sup> street (Station 89+00; Sheet PP-17) was impacted by the interceptor routing. The pipe showed enough wear to warrant replacement, and will be interchanged with fifteen (15) inch reinforced concrete pipe, and flared end sections.

Item CO2-5. Extended Contract Times for Substantial and Final Completion

This change covers the time extension requested by the Contractor for substantial and final completion.

Merryman Excavation project team is committed to safety, and in minimizing impacts to schedule, costs, traffic, and the City's customer's services, and in doing such has impacted the project acceleration.

The contract extension will be put in place with the following:

1. Any failure occurring in the existing concrete interceptor after the original Substantial Completion date of January 13, 2014 and through to the Final Completion date of April 16, 2014 will be repaired by Merryman Excavation at their sole cost, without any reimbursement from the City of Grand Island. The existing concrete interceptor is defined as the section of sanitary sewer from new Manhole 27A (located in E. 7<sup>th</sup> Street, approximately three hundred fifty (350) feet west of Sky Park Road) downstream to the Wastewater Treatment Plant.
2. All of the new North Interceptor gravity sewer from the Wastewater Treatment Plant (Station 0+00) to approximately three hundred fifty (350) feet west of Sky Park Road (Station 92+47.91) will be installed and operational on or before March 12, 2014. In the event this intermediate milestone is not met, a penalty will be assessed to Merryman Excavation in the amount \$550.00 each day until such time that the pipe has been fully installed, tested, inspected, and operational as described herein.
3. All work will be substantially complete on or before April 9, 2014.
4. Final Completion and readiness for final payment will be on or before April 16, 2014.

### **Summary**

The Contract Price shall be modified as follows as a result of the changes described by this modification request. Additions to the Contract Price are indicated by a "+" in front of the amount, deductions by a "-".

<u>Effect on Contract Price</u>		Increase/Decrease In Contract Price (+/-)
<u>Item</u>	<u>Description</u>	
CO2-1	Remove and Replace Concrete Encased Water Main	+\$7,160.41
CO2-2	Provide Vault Hatchway	+\$11,704.47
CO2-3	Electrical Transmission Conduits	+\$1,000.00
CO2-4	Remove and Replace Storm Sewer Pipe	+\$7,168.29
CO2-5	Extended Contract Times for Substantial and Final Completion	+\$0.00

Effect on Contract Price

Item                      Description

Increase/Decrease In  
Contract Price  
(+/-)

NET CHANGE IN CONTRACT PRICE		+\$27,033.17
BID AMOUNT OF ORIGINAL CONTRACT		\$8,444,635.00
CHANGE ORDER NO. 1 ADJUSTMENTS		<u>+0.00</u>
CURRENT CONTRACT AMOUNT		\$8,444,635.00
CHANGE ORDER NO. 2		<u>+27,033.17</u>
ADJUSTED CONTRACT AMOUNT		\$8,471,668.17

Change Order No. 2 will extend the original construction completion date(s) of:

Substantial Completion: 210 calendar days, or January 13, 2014; and add: Eighty Six (86) calendar days, or April 9, 2014, and

Final Completion: 245 calendar days, or February 17, 2014; and add Fifty Eight (58) calendar days, or April 16, 2014.

**Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand.  
The Council may:

1. Move to approve
2. Refer the issue to a Committee.
3. Postpone the issue to future date.
4. Take no action on the issue.

**Recommendation**

City Administration recommends that the Council approve Change Order No. 2 with Merryman Excavation, Inc. of Woodstock, Illinois in the amount of \$27,033.17, for a revised contract of \$8,471,688.17 for North Interceptor Phase I; Project 2012-S-6.

**Sample Motion**

Move to approve the resolution.

**CITY OF GRAND ISLAND, NEBRASKA  
NORTH INTERCEPTOR – PHASE 1**

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**CITY PROJECT 2012-S-6  
BLACK & VEATCH PROJECT NO. 175144**

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**CHANGE ORDER NO. 2**

Change Order No. 2 covers the removal and replacement of an existing concrete encased waterline line at the intersection of Voss Road and Seedling Mile Road, the procurement and installation of a new partial lid for the Junction Box to provide access through a 4-foot by 4-foot hatch, the partial costs of the damages caused by a concrete slab that was discovered on top of existing electrical conduits near Station 14+60, the removal and replacement of an existing storm sewer at the intersection of 4<sup>th</sup> St. and 7<sup>th</sup> St., and the time extension requested by the Contractor for Substantial and Final Completion.

Item CO2-1. Remove and Replace Concrete Encased Waterline Near Station 45+00

Initiated by: Contractor

This change involves removing and replacing the existing concrete encased 8-inch waterline near Station 45+00 (Sheet PP-8). The waterline was shown on the contract documents, but it was not shown to be concrete encased. In lieu of attempting to support the encased waterline, it was removed and replaced to allow for the safe installation of the interceptor.

Item CO2-2. Provide New Lid for the Junction Box

Initiated by: Owner

The new Junction Box lid located at Station 10+00 (Sheets PP-1, D-2) came in four equal sized concrete sections. This change involves removing and replacing the two interior lid sections with one larger lid section with a 4-foot x 4-foot aluminum hatch cast in to provide access.

Item CO2-3. Repair Damaged Electrical Conduits Near Station 14+60

Initiated by: Contractor

Upon exposing the two 6-inch electrical conduits near Station 14+60 (Sheet PP-2), it was discovered that the conduits had a concrete slab covering them which was not shown on the contract documents. The concrete slab ended up shifting down during the interceptor installation and damaged the conduits. The total cost of the repair to the conduits (assessed by the Grand Island Utilities Department) was \$5,699.21. This change covers the estimated cost had the

1/17/2014

CO2-1

concrete slab been properly supported, and does not cover the total cost of the repairs, which remains the responsibility of the Contractor.

Item CO2-4. Remove and Replace Existing Storm Sewer at 4<sup>th</sup> Street and 7<sup>th</sup> Street

Initiated by: Contractor

This change involves removing and replacing the existing 15" CMP storm sewer pipe that was not shown on the drawings (near Station 89+00 on Sheet PP-17) and found to be in a poor, non-operable condition with a new 15" RCP storm sewer with flared end sections.

Item CO2-5. Extend Contract Times for Substantial and Final Completion

Initiated by: Contractor

This change involves extending the contract times for Substantial Completion to April 9, 2014 (originally January 13, 2014) and Final Completion to April 16, 2014 (originally February 17, 2014). The request for the contract extension is based on delays mainly caused by the dewatering and microtunneling subcontractor's inability to maintain their original schedules. As a condition of the contract extension, the following stipulations will be put in place:

1. Any failure occurring in the existing concrete North Interceptor after the original Substantial Completion date of January 13, 2014 and through to the Final Completion date of April 16, 2014 will be repaired by Merryman Excavation at their sole cost, without any reimbursement from the City of Grand Island. The existing concrete North Interceptor is defined as the section of sanitary sewer from new Manhole 27A (located in E.7<sup>th</sup> Street, approximately three hundred fifty (350) feet west of Sky Park Road) downstream to the wastewater treatment plant.
2. All of the new North Interceptor from the Wastewater Treatment Plant (Station 0+00) to approximately three hundred fifty (350) feet west of Sky Park Road (Station 92+47.91) will be installed and operational no later than March 12, 2014. In the event this intermediate milestone is not met, a penalty will be assessed to Merryman Excavation in the amount of \$550.00 each day until such time that the pipe has been fully installed, tested, inspected, and operational as described herein.
3. All work will be substantially complete on or before April 9, 2014.
4. Final Completion and readiness for final payment will be on or before April 16, 2014.

1/17/2014

CO2-2

**CITY OF GRAND ISLAND, NEBRASKA  
NORTH INTERCEPTOR – PHASE 1**

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**CITY PROJECT 2012-S-6  
BLACK & VEATCH PROJECT NO. 175144**

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**SUMMARY**

**CHANGE ORDER NO. 2**

The Contract Price shall be modified as follows as a result of the changes described by this modification request. Additions to the Contract Price are indicated by a "+" in front of the amount, deductions by a "-".

<u>Effect on Contract Price</u>		Increase/Decrease In Contract Price (+/-)
<u>Item</u>	<u>Description</u>	
CO2-1	Remove and Replace Concrete Encased Waterline Near Station 45+00	+7,160.41
CO2-2	Provide New Lid for the Junction Box	+11,704.47
CO2-3	Repair Damaged Electrical Conduits Near Station 14+60	+1,000.00
CO2-4	Remove and Replace Existing Storm Sewer at 4 <sup>th</sup> Street and 7 <sup>th</sup> Street	+7,168.29
CO2-5	Extend Contract Times for Substantial and Final Completion	+00.00
NET CHANGE IN CONTRACT PRICE		+27,033.17
BID AMOUNT OF ORIGINAL CONTRACT		\$8,444,635.00
PREVIOUS CHANGE ORDER ADJUSTMENTS		+ 0.00
CURRENT CONTRACT AMOUNT		\$8,444,635.00
CHANGE ORDER NO. 2		+27,033.17
ADJUSTED CONTRACT AMOUNT		\$8,471,668.17

1/17/2014

CO2-3



Effect on Contract Time

--	Substantial Completion for Original Contract	January 13, 2014
--	Final Completion for Original Contract	February 17, 2014
CO2-1	No additional time given for Contract	
CO2-2	No additional time given for Contract	
CO2-3	No additional time given for Contract	
CO2-4	No additional time given for Contract	
CO2-5	Contract Time Extension for Substantial Completion, Calendar Days (Date)	86 (April 9, 2014)
CO2-5	Contract Time Extension for Final Completion, Calendar Days (Date)	58 (April 16, 2014)

No additional claims shall be made for changes in Contract Time arising from these work items.

This change order includes all costs, direct, indirect, and consequential, and all changes in Contract Time arising from the work included in the items for Change Order No. 2. No additional claims shall be made for changes in Contract Price or Contract Time arising from these work items.

All other provisions of the contract remain unchanged.

Agreed to this \_\_\_\_\_ day of \_\_\_\_\_, 2014

Recommended:  
Black & Veatch Corporation

Approved:  
City of Grand Island

By: \_\_\_\_\_  
Engineering Manager

By: \_\_\_\_\_

Date: \_\_\_\_\_

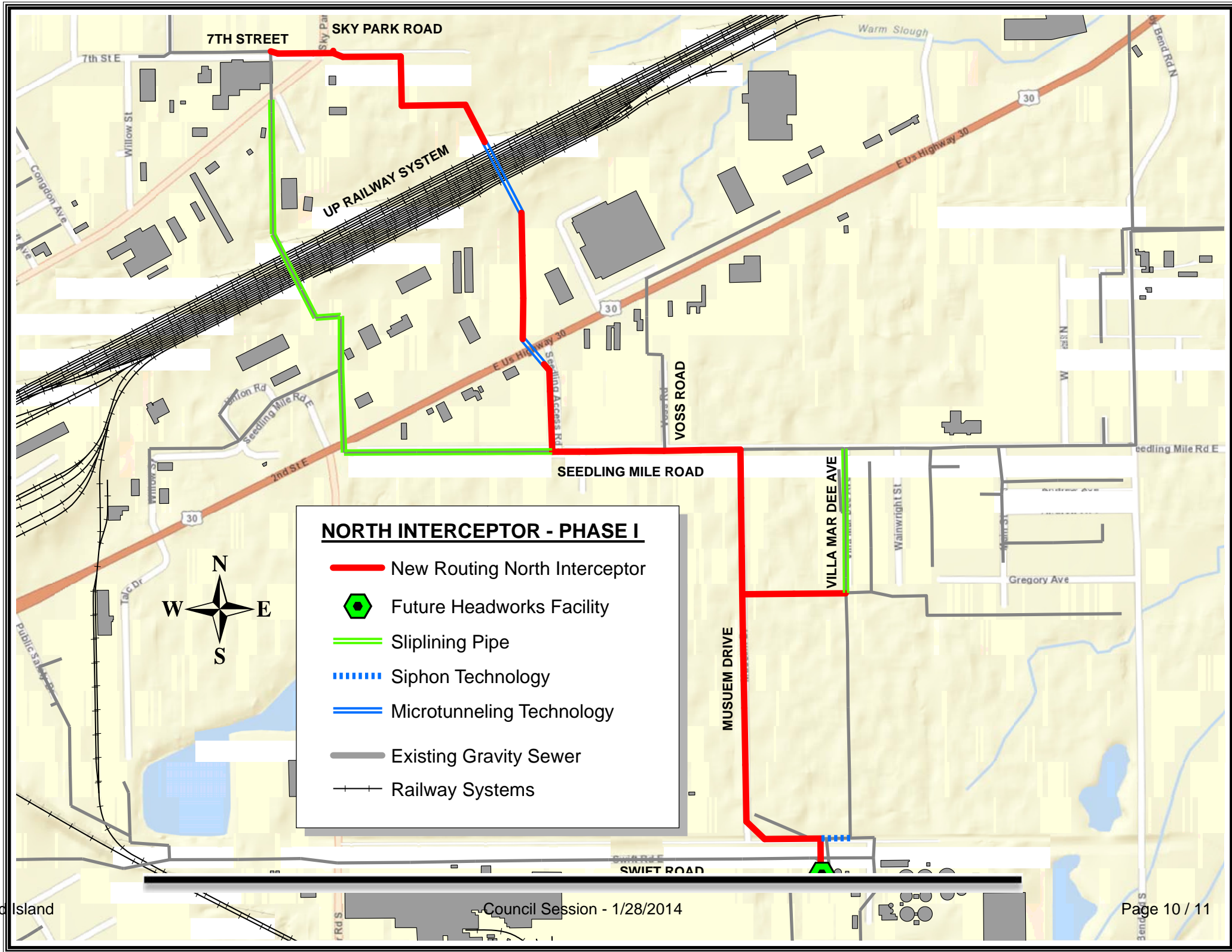
Date: \_\_\_\_\_

Approved:  
Merryman Excavation, Incorporated

By: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to Form _____ January 28, 2014    City Attorney
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### **NORTH INTERCEPTOR - PHASE I**

- New Routing North Interceptor
- ⬢ Future Headworks Facility
- Sliplining Pipe
- - - Siphon Technology
- Microtunneling Technology
- Existing Gravity Sewer
- + + + Railway Systems

RESOLUTION 2014-13

WHEREAS, On May 14, 2013, Resolution 2013-147, City Council awarded, Project 2012-S-6, North Interceptor Phase I to Merryman Excavation, Inc. of Woodstock, Illinois, in the amount of \$8,444,635; and

WHEREAS, On September 10, 2013, Resolution 2013-303, Change Order No. 1 supplied and installed thirty-four (34) Fiberglass Manhole(s) with Polyvinyl Chloride Pipe stubs. No additional claim for the contract amount or time; and

WHEREAS, Change Order No. 2 provides miscellaneous work changes in the amount of \$27,033.17; and

WHEREAS, Change Order No. 2 adds fifty-eight (58) calendar days, or March 12, 2014 for North Interceptor Gravity Sewer intermediate milestone; and

WHEREAS, Change Order No. 2 adds eighty-six (86) calendar days, or April 9, 2014 for the project Substantial Completion; and

WHEREAS, Change Order No. 2 adds fifty-eight (58) calendar days, or April 16, 2014 for the project Final Completion; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that authorization to proceed with scope described in Change Order No. 2 with Merryman Excavation, Inc. of Woodstock, Illinois in the amount of \$27,033.17, for a revised contract amount of \$8,471,688.17 is hereby approved; and

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such Change Order No. 2, North Interceptor Phase I, Project 2012-S-6 on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 28, 2014.

\_\_\_\_\_  
Jay Vavricek, Mayor

Attest:

\_\_\_\_\_  
RaNae Edwards, City Clerk

Approved as to Form	☐ _____
January 28, 2014	☐ City Attorney