

Project: 3873.1  
City of Minot,  
North Dakota  
**Change Order**  
No. 2

Date of Issuance: <u>October 24, 2015</u>		Effective Date: <u>October 24, 2015</u>
Project: 16Th Ave, 46th St, 14Th Ave Rebuild & 16th Ave Water line	Owner: City of Minot	Owner's Contract No.: 3873.1
Contract: 16Th Ave, 46th St, 14Th Ave Rebuild & 16th Ave Water line		Date of Contract: 9 April 2015
Contractor: Wagner Construction		Engineer's Project No. R14090.01

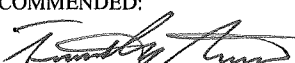


**The Contract Documents are modified as follows upon execution of this Change Order:**

Item #1: Revise storm drain from 48" Round Inlet #1 at Sta. 105+68.40 to outlet at the intersection of 16<sup>th</sup> Avenue SE and the Frontage Road. Revisions required to avoid existing utilities and to eliminate outlet into state highway right of way. Structures CB 2 and STMH 1 are to be eliminated. CB 1 is modified and new structure CBMH6 is added. Additional costs include: 72" CBMH6 at accepted unit cost of \$6,250.00 and 6 Ton (3 CY) of Rip Rap at contract unit cost of \$75.00/ Ton or \$450.00. The following items are eliminated or reduced as a result of the change: 18" RCP quantity is reduced by 127 LF at contract unit cost of \$85.00/LF or \$10,795.00, Catch Basin (CB 2) is eliminated at contract unit price of \$2,500/EA, 72" Storm Sewer Manhole (STMH 1) is eliminated at the contract unit price of \$6,000/EA. Net effect of this revision is a reduction of \$12,595.00 to the contract amount.

Item #2: Existing 18" CMP culverts to be removed at the intersection of 16<sup>th</sup> Avenue SE and the Frontage Road and replaced with 24" RCP and flared end sections. Due to realignment per change order item #1, the two culverts were reanalyzed and the city requested that these culverts be brought up to current design standards. Additional costs include: 86 LF of 24" RCP at contract unit cost of \$92.00/LF or \$7,912.00, 4 EA 24" flared end sections at accepted unit cost of \$1,500/EA or \$6,000.00, and removal of 88 LF of existing pipe at contract unit cost of \$3.00/LF or \$264.00. Net effect of this revision is an increase of \$14,176 to the contract amount.

Attachments: (List documents supporting change): See attached work orders and field orders.

<b>CHANGE IN CONTRACT PRICE:</b>	<b>CHANGE IN CONTRACT TIMES:</b>
Original Contract Price:	Original Contract Times: <input type="checkbox"/> Working days <input checked="" type="checkbox"/> Calendar date
	Substantial completion (days or date): <u>October 16, 2015</u>
\$2,103,067.00	Ready for final payment (days or date): <u>November 2, 2015</u>
[Increase] [ <del>Decrease</del> ] from previously approved Change Orders No. <u>0</u> to No. <u>1</u> :	[Increase] [ <del>Decrease</del> ] from previously approved Change Orders No. _____ to No. _____:
\$32,212.50	Substantial completion (days): <u>7 Calendar Days</u>
	Ready for final payment (days): <u>7 Calendar Days</u>
Contract Price prior to this Change Order:	Contract Times prior to this Change Order:
\$2,135,279.50	Substantial completion (days or date): <u>October 23, 2015</u>
	Ready for final payment (days or date): <u>November 2, 2015</u>
[Increase] of this Change Order:	[Increase] [ <del>Decrease</del> ] of this Change Order:
\$1,581.00	Substantial completion (days or date): <u>1 Calendar Day</u>
	Ready for final payment (days or date): <u>1 Calendar Day</u>
Contract Price incorporating this Change Order:	Contract Times with all approved Change Orders:
\$2,136,860.50	Substantial completion (days or date): <u>October 24, 2015</u>
	Ready for final payment (days or date): <u>November 10, 2015</u>

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: 	By: 	By: 
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date: <u>11/3/15</u>	Date: <u>11/5/15</u>	Date: <u>11/03/15</u>
Approved by Funding Agency (if applicable): _____	Date: _____	



CO # 2 : Items 1 & 2

# Work Change Directive/Work Order

Engineer/Owner  
Wagner Project Number/Name  
Date:  
Work Change Directive Number:

Ackerman-Estvold City of Minot  
16th Rebuild (Minot#3873.1)  
July 1, 2015  
Wagner CO#5

Description of Added/ Modified Work:

Quote per Ackerman-Estvold, FO#9

Wagner Construction is also requesting a contract extension of 7 days due to delays caused by discharge review.

149 LF of 18" RCP will be removed from the contract. (-\$12,665.00)

Submitted By		Work Requested By:			
Matt Guerton/Mike Brewinski		Ackerman-Estvold			
Description Labor:	# Men	Qty.	Units	Rate	Total Hours
Description Equipment:	Unit#	Qty.	Units	Unit Price	Total
* Contractor's proposed unit prices for non-contract items.					
Remainder items either not used or paid at contract unit prices.					
Description Materials:		Qty.	Units	Unit Price	Total
72" CBMH 6 (Non Bid Item) * (Item #1)		1.0	EA	\$6,250.00	\$6,250.00
STMH 1 (Cost & Disposal) - Never Built, No Charge		1.0	EA	\$0.00	\$0.00
CB 1 - Never Built, Minor Changes, Revised Shops, 07-01-15, No Charge		1.0	EA	\$0.00	\$0.00
Previously built CB 2 (Cost & Disposal)		1.0	EA	\$1,400.00	\$1,400.00
Remove Existing 18" Culvert(s)		88.0	LF	\$10.00	\$880.00
Install 24" RCP Culvert		86.0	LF	\$92.00	\$7,912.00
Install 24" RC FES * (Item #2)		4.0	EA	\$1,500.00	\$6,000.00
Riprap		7.0	CY	\$150.00	\$1,050.00
Existing 4" Forcemain Adjustment		1.0	LS	\$9,350.00	\$9,350.00
Misc/Dumpfees/Survey/Q/C Testing/		Qty.	Units	Unit Price	Total
Total:					\$32,842.00

Wagner Rep. [Signature] Date: 07/01/15 Owner Rep: \_\_\_\_\_ Date: \_\_\_\_\_

Field Order

No. 9

Date of Issuance: 2015-06-30

Effective Date: 2015-06-30

Project	Owner	Owner's Contract No
16 <sup>th</sup> Ave, 46th St, & 14 <sup>th</sup> Ave SE Rebuild	City of Minot	3873.1
Contract	2015-05-15	
CDGB Disaster Recovery Project		
Contractor	Engineer's Project No	
Wagner Construction	R14090.01	

Attention:

You are hereby directed to promptly execute this Field Order issued in accordance with General Conditions, for minor changes in the scope of the Project without changes in Contract Price or Contract Times. If you consider that a change in Contract Price or Contract Times is required, please notify the Engineer immediately and before proceeding with this Work.

Reference:

(Specification Section(s))


Revised sheets C6 & C22

(Drawing(s) / Detail(s))

Description:

- 1) The proposed 18" RCP storm drain from the flared end section to STMH #2 has been rerouted (see sheet C22). Structure CB 1 shall be revised per revised sheet C22 and submitted for approval. New structure CBMH 6 on revised sheet C22 shall also be submitted for approval. STMH 2 shall be used as constructed. Structures CB 2 and STMH 1 will not be needed. Previous quantity of 18" RCP from the flared end section to STMH 2, including runs to CB 1 & CB 2, was 431 LF. Revised quantity is 282 LF.
- 2) The two existing 18" culverts and end sections at 16th Ave SE and the frontage road are to be removed and replaced with 24" RCP CL III storm drain and concrete flared end sections. Install additional rip rap as shown on revised sheet C22. Additional quantities include 88 LF of culvert removal, 86 LF of 24" RCP, 4 EA 24" concrete end sections, and 3 CY of rip rap. Submit unit price for the flared end sections.
- 3) The storm drain is expected to intercept and existing 4" sanitary sewer force main. The 4" sanitary sewer force main will need to be lowered below the proposed storm drain. Submit lump sum price to lower the force main.

Engineer:

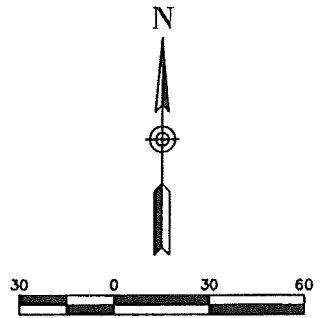
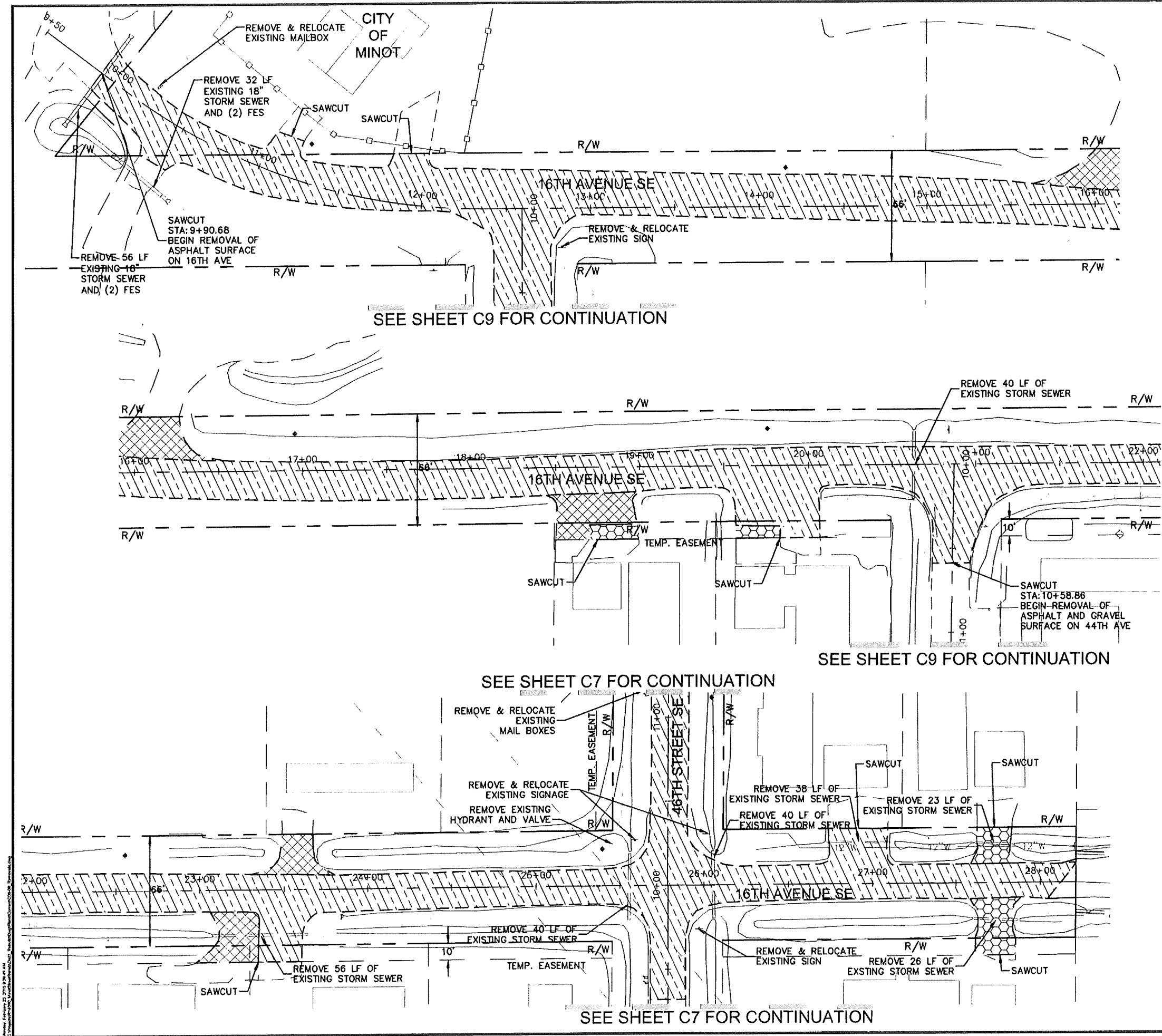


Receipt Acknowledged by (Contractor):

Date:

Copy to: Owner, File, Contractor, Engineer, Surveyor

City Project representative



**Graphic Scale:**

Attention is Drawn to the Fact That Drawing Scales  
May be Altered During Reproduction Processes.  
Scales Shown Hereon are Based on a Full Scale  
Sheet Size of 11" x 17".

Scale, 1" = 60'  
VERTICAL DATUM IS NGVD 1929

- Legend:**
- EXISTING STORM TO BE REMOVED
  - [Hatched Box] EXISTING ASPHALT TO BE REMOVED
  - [Hatched Box] EXISTING CONCRETE TO BE REMOVED
  - [Hatched Box] EXISTING GRAVEL TO BE REMOVED
  - - - RIGHT OF WAY
  - - - TEMPORARY EASEMENT

This document was originally  
issued and sealed by  
Timothy Arens  
Registration Number  
PE-7698  
on 06/30/15 and the original  
document is stored at the  
office of Ackerman-Estvold

NO. REVISIONS	BY	DATE	APPR.
	1.	EDS	6/30/15
REMOVED STORM PIPES & FES ON 16TH			

**ACKERMAN  
ESTVOLD**

1907 17th Street Southeast - Minot, ND 58701  
701.837.8737 - www.ackerman-estvold.com

Minot, ND | Williston, ND

SCALE (H): 1" = 60'	SCALE (V): 1" = N/A
DRAWN BY: EDS	DESIGNED BY: EDS
CHECKED BY: TJA	DATE: 02/23/2015

City of Minot, North Dakota  
16th Ave, 46th St and 14th Ave SE Rebuild  
CDBG-Disaster Recovery Project  
16th Avenue SE Existing Conditions & Removals

PROJECT NO. R14090
DRAWING NAME Removal Plans
C6 OF C59



### Field Order

No. 13

Date of Issuance: 2015-08-03 Effective Date: 2015-08-03

Project	Owner	Owner's Contract No.
16 <sup>th</sup> Ave, 46th St, & 14 <sup>th</sup> Ave SE Rebuild	City of Minot	3873.1
Contract		2015-05-15
CDGB Disaster Recovery Project		
Contractor:		Engineer's Project No.
Wagner Construction		R14090.01

**Attention:**

You are hereby directed to promptly execute this Field Order issued in accordance with General Conditions, for minor changes in the scope of the Project without changes in Contract Price or Contract Times. If you consider that a change in Contract Price or Contract Times is required, please notify the Engineer immediately and before proceeding with this Work.

Reference	Revised sheets C'22 & C'23
(Specification Section(s))	(Drawing(s) / Detail(s))

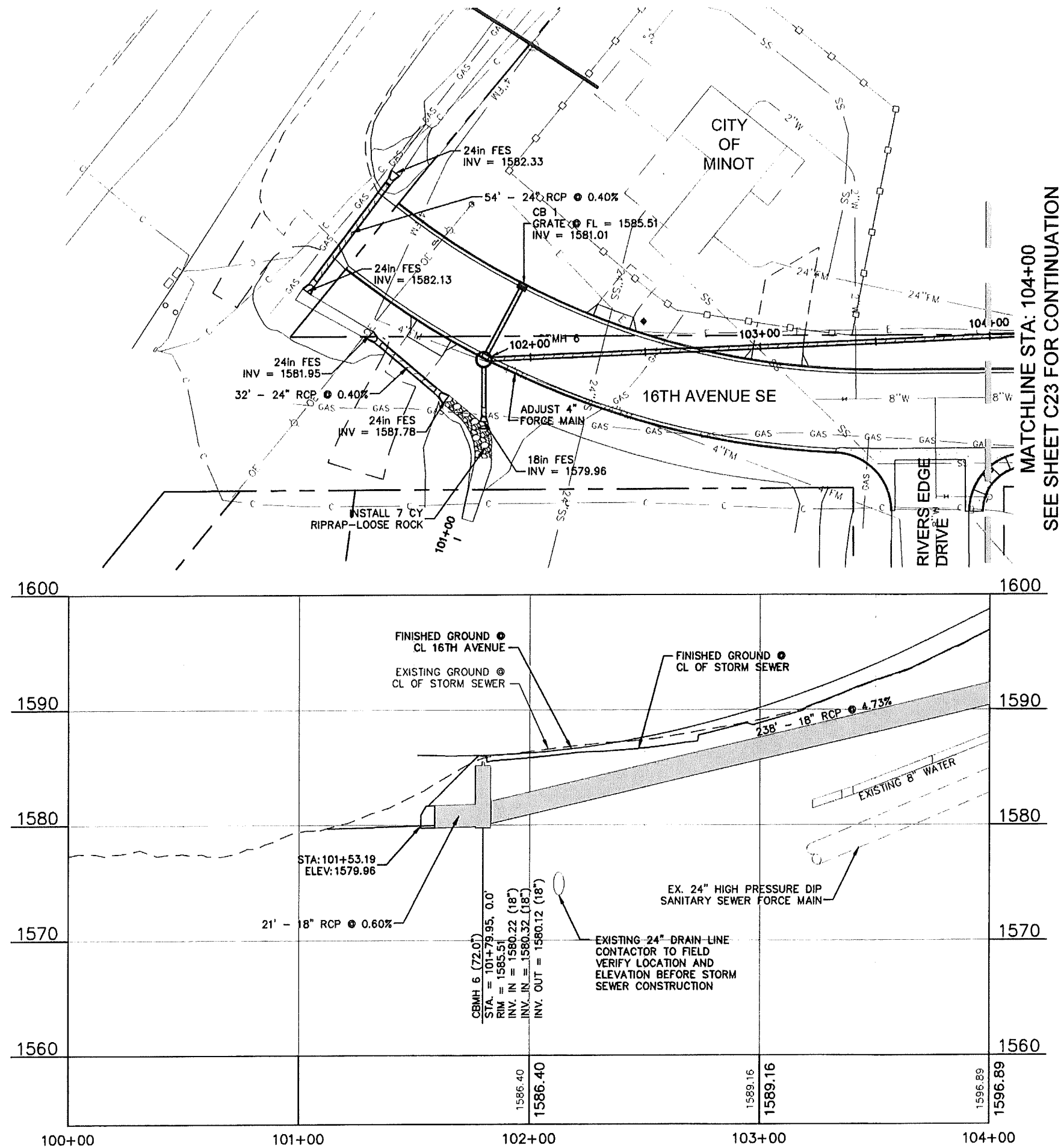
Description:

Structure STMH 2 to be relocated north 7' and the invert raised 4' to avoid and clear 24" sanitary sewer force main and electric utility line (see sheet C23) Invert of CB 3 raised 4' also. For structures STMH 2 and CB 3, eliminate the 4' barrel section to accommodate change. Structures CB 1, CBMH 6, and the outlet pipe to be relocated as shown on Sheet C22. Structures to be used as constructed. Net effect of change is an extra 22 L.F. of 18" RCP. Refer to Field Order #9 for initial changes that reduced some of the original quantity of 18" RCP.

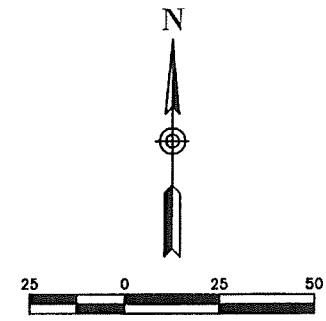
Engineer: 

Receipt Acknowledged by (Contractor):	Date:
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Copy to:   Owner,                      File,                      Contractor,                      Engineer,                      Surveyor  
                    City                      Project representative



MATCHLINE STA: 104+00  
SEE SHEET C23 FOR CONTINUATION



Attention is Drawn to the Fact That Drawing Scales May be Altered During Reproduction Processes. Scales Shown Hereon are Based on a Full Scale Sheet Size of 11" x 17".

Scale: 1" = 50'  
Vertical Datum is NGVD 1929

**Legend:**

- W ——— EXISTING WATER
- GAS ——— EXISTING GAS
- C ——— EXISTING COMMUNICATIONS
- 24" FM ——— EXISTING FORCE MAIN
- SS ——— EXISTING SANITARY SEWER
- — — — — EXISTING STORM
- △ ——— EXISTING HYDRANT
- M ——— EXISTING GATE VALVE
- ⊙ ——— EXISTING SANITARY MANHOLE
- ===== PROPOSED CURB
- ===== PROPOSED CONCRETE
- ===== PROPOSED ASPHALT
- — — — — RIGHT OF WAY
- - - - - TEMPORARY EASEMENT

This document was originally issued and sealed by  
Timothy Arens  
Registration Number  
PE-7698  
on 07/31/15 and the original document is stored at the office of Ackerman-Estvoid

NO. REVISIONS		BY	DATE	APPR.
1	STORM SEWER MODIFICATIONS	EDS	6/30/15	TA
2	STORM SEWER MODIFICATIONS	EDS	7/31/15	TA

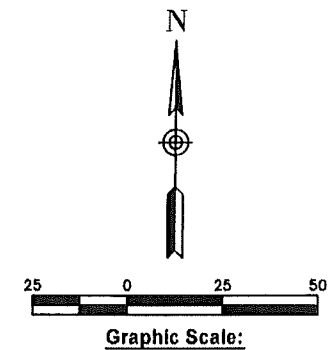
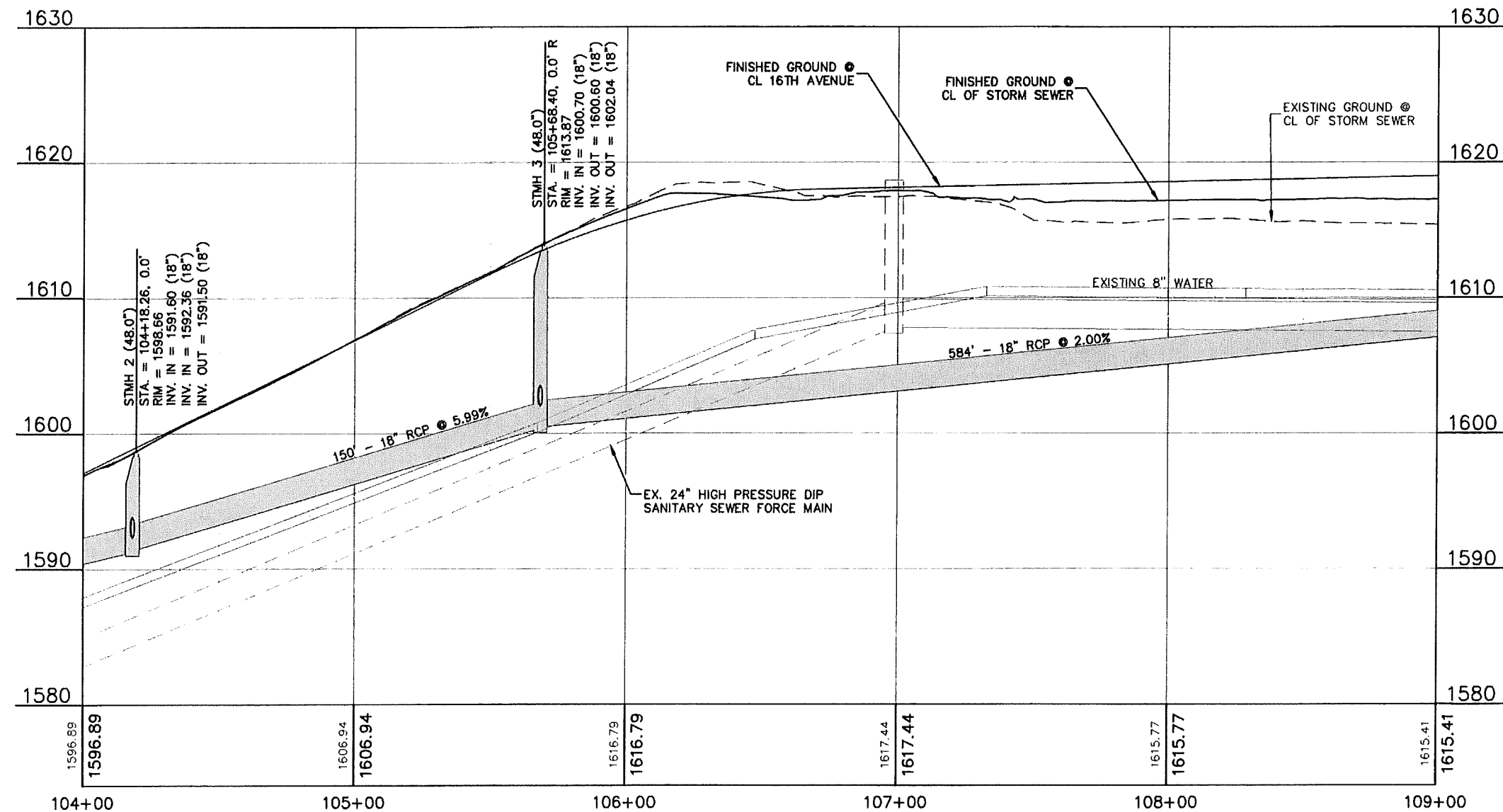
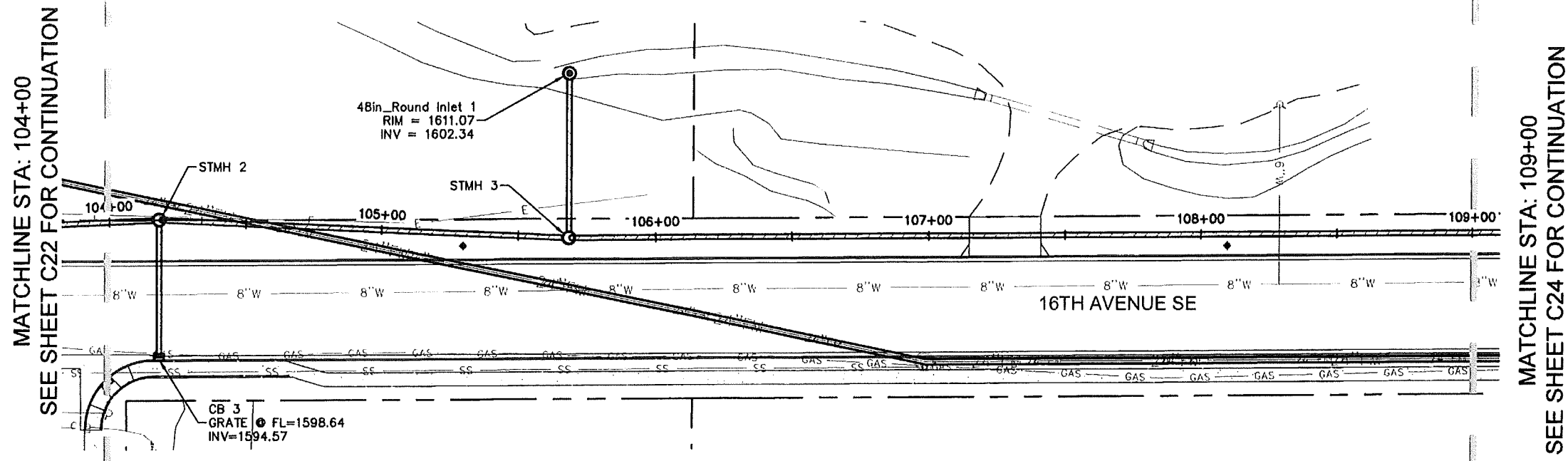
**ACKERMAN-ESTVOID**

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701.837.8737 • www.ackerman-estvoid.com

City of Minot, North Dakota  
16th Ave, 46th St and 14th Ave SE Rebuild  
CDBG-Disaster Recovery Project  
16th Ave SE Storm Sta: 100+00 - 104+00

SCALE (H): 1" = 50'	SCALE (V): 1" = 10'	DESIGNED BY: EDS	DATE: 02/23/2015
		CHECKED BY: TA	










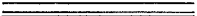




PROJECT NO. R14090
DRAWING NAME 16th Storm P&P
C22 of C59



Attention is Drawn to the Fact That Drawing Scales  
May be Altered During Reproduction Processes.  
Scales Shown Hereon are Based on a Full Scale  
Sheet Size of 11" x 17".

Scale. 1" = 50'  
Vertical Datum is NGVD 1929

**Legend:**

- |   |                           |
|---|---------------------------|
|                                  | EXISTING WATER            |
|                                  | EXISTING GAS              |
|                                  | EXISTING COMMUNICATIONS   |
|  | EXISTING FORCE MAIN       |
|                                  | EXISTING SANITARY SEWER   |
|                                  | EXISTING STORM            |
|                                  | EXISTING HYDRANT          |
|                                  | EXISTING GATE VALVE       |
|                                  | EXISTING SANITARY MANHOLE |
|                                  | PROPOSED CURB             |
|                                  | PROPOSED CONCRETE         |
|                                | PROPOSED ASPHALT          |
|                                | RIGHT OF WAY              |
|                                | TEMPORARY EASEMENT        |

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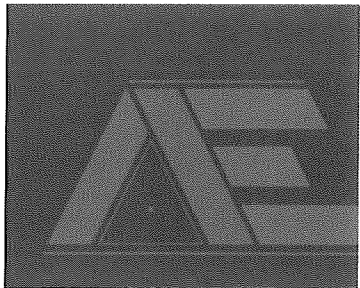
**ACKERMAN  
ESTVOLD**  
1907 17th Street Southeast • Minot, ND 58701  
701.837.8737 • [www.ackerman-estvold.com](http://www.ackerman-estvold.com)  
Minot, ND | Williston, ND

SCALE (H): 1" = 50'  
SCALE (V): 1" = 10'  
DRAWN BY: EDS  
DESIGNED BY: EDS  
CHECKED BY: TJA  
DATE: 02/23/2015

City of Minot, North Dakota  
16th Ave, 46th St and 14th Ave SE Rebuild  
CDBG-Disaster Recovery Project  
16th Ave SE Storm Sta: 104+00 - 109+00

PROJECT NO. R14000
DRAWING NAME 16th Storm P&P
C23 OF C59





1907 17th Street Southeast  
Minot, ND 58701  
701.837.8737  
www.ackerman-estvold.com

## MEMORANDUM

To: Ben Cofell, City of Minot

From: Ackerman-Estvold

Date: June 30, 2015

Re: Change Order #2 – Independent Cost Estimate & Justification for Change Order  
Project 3873.1 - 16th Ave, 46th St and 14th Ave SE Rebuild

This independent cost analysis is for the following items:

- 1) Revision to Storm Drain along 16<sup>th</sup> Ave SE. Revisions required to avoid existing utilities and to eliminate outlet into state highway right of way.
- 2) Replacement of Existing 18” CMP on 16<sup>th</sup> Ave SE. Due to realignment per item #1, the two culverts were reanalyzed and the city requested that these culverts be brought up to current design standards.

Item 1: The revision to the storm drain includes the following:

- Add 1 EA of 72” Catch Basin Manhole
- Add 6 Ton of Riprap at Contract Unit Price of \$75.00/Ton
- Eliminate 127 LF of 18” RCP at Contract Unit Price of \$85/LF
- Eliminate 1 EA of Catch Basin at Contract Unit Price of \$2,500/EA,
- Eliminate 1 EA of 72” Storm Sewer Manhole at Contract Unit Price of \$6,000/EA

The only non-contract item is the 72” Catch Basin Manhole. Anticipated unit cost should be similar to the 72” Storm Sewer Manhole that is in the contract at \$6,000/EA. The net result of this revision is estimated to be a decrease to the contract in the amount of \$12,845.

Item 2: This item includes removal of the two existing 18” CMP culverts and replacing with 24” RCP culverts and end sections. The additional pipe is 86 LF of 24” RCP to be overrun at the contract unit price of \$92/LF. The 88 LF of pipe to be removed will overrun quantity at the contract unit price of \$3/LF. Finally, the four 24” RCP end sections are estimated at a unit cost of \$1,500/EA since the contract unit price for a 18” RCP end section is \$1,250/EA and \$1,750/EA for a 30” RCP end section. The total estimated cost for this item is \$14,176.

Since the majority of the items are current contract items with unit prices, little variation can be expected in the total estimated cost for these revisions.



1907 17th Street Southeast  
Minot, ND 58701  
701.837.8737  
www.ackerman-estvold.com

October 24, 2015

Mr. Ben Cofell  
City of Minot  
1025 31st St. SE  
Minot, ND 58701

**RE: Change Order #2– Cost Justification for Storm Sewer Revisions  
Project 3873.1 - 16<sup>th</sup> Ave, 46<sup>th</sup> St and 14<sup>th</sup> Ave SE Rebuild**

This cost justification analysis includes the new items to complete the following revised or extra work:

1. Revise storm drain from 48” manhole at Sta. 105+68.40 to outlet at the intersection of 16<sup>th</sup> Avenue SE and the Frontage Road. Structures CB 2 and STMH 1 are to be eliminated. CB 1 is modified and new structure CBMH6 is added. Additional costs include: 72” CBMH6 at proposed unit cost of \$6,250.00 and 6 Ton (3 CY) of Rip Rap at contract unit cost of \$75.00/ Ton or \$450.00. The following items are eliminated or reduced as a result of the change: 18” RCP quantity is reduced by 127 LF at contract unit cost of \$85.00/LF or \$10,795.00, Catch Basin (CB 2) is eliminated at contract unit price of \$2,500/EA, 72” Storm Sewer Manhole (STMH 1) is eliminated at the contract unit price of \$6,000/EA. Net effect of this revision is a reduction of \$12,595.00 to the contract amount.

The proposed unit cost of \$6,250/EA for one 72” Catch Basin Manhole (CBMH6) is accepted based on the following: the contract price of \$6,000/EA for the 72” Storm Sewer Manhole if comparable to the submitted price of \$6,250/EA for the 72” Catch Basin Manhole and City Project #3913 bid in May 30, 2014, had a unit bid price of \$9,500/EA for 2 EA of 72” Dia. Catch Basin Manhole. The submitted price of \$6,250/EA is well below this comparable project.

2. Existing 18” CMP culverts are to be removed at the intersection of 16th Avenue SE and the Frontage Road and replaced with 24” RCP and flared end sections. Additional costs include: 86 LF of 24” RCP at contract unit cost of \$92.00/LF or \$7,912.00, 4 EA 24” flared end sections at proposed unit cost of \$1,500/EA or \$6,000.00, and culvert removal of 88 LF of existing pipe at contract unit cost of \$3.00/LF or \$264.00. Net effect of this revision is an increase of \$14,176 to the contract amount.

The proposed unit cost of \$1,500/EA for 4 EA of 24” End Section is accepted based on the following: City Project #3913 bid in May 30, 2014, had a unit bid price of \$1,800/EA for 3 EA of 24” End Sections and the submitted price of \$1,500/EA compares favorable. Also, the submitted price is between the contract unit prices of \$1,250/EA for 18” end sections and \$1,750/EA for 30” end sections.

Based on the comparable unit prices and the contractor's knowledge of the project, it is recommended that the additional work be authorized via change order to Wagner Construction as the most time and cost effective option.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy Arens". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Timothy Arens, PE  
Project Manager  
Ackerman-Estvold



CO # 2 : Items 1 & 2

# Work Change Directive/Work Order

Engineer/Owner  
Wagner Project Number/Name  
Date:  
Work Change Directive Number:

Ackerman-Estvold City of Minnetonka  
16th Rebuild (Minor) 3873 11  
July 1, 2015  
Wagner CO#5

Description of Added/ Modified Work:

Quote per Ackerman-Estvold, FO#9

Wagner Construction is also requesting a contract extension of 7 days due to delays caused by discharge review.

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Submitted By		Work Requested By:			
Matt Guerton/Mike Brewinski		Ackerman-Estvold			
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Description Equipment:	Unit#	Qty.	Units	Unit Price	Total
* Contractor's proposed unit prices for non-contract items.					
Remainder items either not used or paid at contract unit prices.					
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CB 1 - Never Built, Minor Changes, Revised Shops, 07-01-15, No Charge		1.0	EA	\$0.00	\$0.00
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Remove Existing 18" Culvert(s)		88.0	LF	\$10.00	\$880.00
Install 24" RCP Culvert		86.0	LF	\$92.00	\$7,912.00
Install 24" RC FES * (Item #2)		4.0	EA	\$1,500.00	\$6,000.00
Riprap		7.0	CY	\$150.00	\$1,050.00
Existing 4" Forcemain Adjustment		1.0	LS	\$9,350.00	\$9,350.00
Misc/Dumpfees/Survey/Q/C Testing/		Qty.	Units	Unit Price	Total
Total:					\$32,842.00

Wagner Rep. [Signature] Date: 07/01/15 Owner Rep: \_\_\_\_\_ Date: \_\_\_\_\_

Comparable  
Project

City Project #3913  
Bid May 30, 2014

City of Minot, North Dakota  
55th Crossing West Street & Utility Improvements

Item No.	Description	Quantity	Unit	Unit Price	Subtotal (Quantity x Unit Price)
27.	8"x6" DI Tee	1	EA	\$ 800.00	\$ 800.00
28.	8" DI Bend	1	EA	\$ 800.00	\$ 800.00
29.	8" Wet Tap with Valve & Tapping Sleeve	6	EA	\$ 5,500.00	\$ 33,000.00
30.	6" Wet Tap with Valve & Tapping Sleeve	5	EA	\$ 6,000.00	\$ 30,000.00
31.	8" DI Cap	6	EA	\$ 600.00	\$ 3,600.00
	<u>Sanitary Sewer</u>				
32.	8" PVC Sewer Main (SDR-35)	1,900	LF	\$ 75.00	\$ 142,500.00
33.	8" PVC Sewer Main (SDR-35), Remove & Replace	400	LF	\$ 200.00	\$ 80,000.00
34.	12" PVC Sewer Main (SDR-35)	1,760	LF	\$ 76.00	\$ 133,760.00
35.	4" PVC Sewer Service Complete - Sch. 40	110	EA	\$ 1,600.00	\$ 176,000.00
36.	48" Manhole, Eccentric Standard (Complete)	15	EA	\$ 9,000.00	\$ 135,000.00
37.	Connect to Ex. Manhole by External Drop	1	EA	\$ 5,000.00	\$ 5,000.00
38.	Ex. Manhole Adjustments	15	EA	\$ 750.00	\$ 11,250.00
39.	8" Plug	6	EA	\$ 225.00	\$ 1,350.00
40.	12" Plug	1	EA	\$ 250.00	\$ 250.00
41.	Sewer Televising	1	LS	\$ 1,500.00	\$ 1,500.00
	<u>Storm Sewer</u>				
42.	24" x 36" Catch Basin	28	EA	\$ 3,400.00	\$ 95,200.00
43.	48" Dia. Catch Basin Manhole	25	EA	\$ 600.00	\$ 15,000.00
44.	60" Dia. Catch Basin Manhole	21	EA	\$ 3,200.00	\$ 67,200.00
45.	72" Dia. Catch Basin Manhole	2	EA	\$ 9,500.00	\$ 19,000.00
46.	84" Dia. Catch Basin Manhole	1	EA	\$ 1,500.00	\$ 1,500.00
47.	48" Dia. Storm Sewer Manhole	5	EA	\$ 4,500.00	\$ 22,500.00
48.	60" Dia. Storm Sewer Manhole	10	EA	\$ 3,000.00	\$ 30,000.00
49.	72" Dia. Storm Sewer Manhole	4	EA	\$ 8,250.00	\$ 33,000.00
50.	15" RCP CL-III	1,050	LF	\$ 60.00	\$ 63,000.00
51.	18" RCP CL-III	5,550	LF	\$ 64.00	\$ 355,200.00
52.	24" RCP CL-III	1,650	LF	\$ 72.00	\$ 119,700.00
53.	30" RCP CL-III	2,650	LF	\$ 110.00	\$ 291,500.00
54.	18" CES	12	EA	\$ 1,166.67	\$ 14,000.00
55.	24" CES	3	EA	\$ 1,800.00	\$ 5,400.00
56.	30" CES	3	EA	\$ 2,666.67	\$ 8,000.00

Spec. No.	Item No.	Description	Quantity	Unit	Unit Price	Subtotal (Quantity x Unit Price)
	34.	72" Storm Sewer Manhole	2	EA	\$6,000.00	\$12,000.00
	35.	30" Round Inlet	2	EA	\$2,000.00	\$4,000.00
	36.	48" Round Inlet	10	EA	\$3,000.00	\$30,000.00
	37.	60" Round Inlet	3	EA	\$5,000.00	\$15,000.00
	38.	18" RCP Cl. III Storm Drain	1,732	LF	\$85.00	\$147,220.00
	39.	24" RCP Cl. III Storm Drain	1,026	LF	\$92.00	\$94,392.00
	40.	30" RCP Cl. III Storm Drain	1,016	LF	\$105.00	\$106,680.00
	41.	End Section - Conc. Reinf 18"	1	EA	\$1,250.00	\$1,250.00
	42.	End Section - Conc. Reinf 30"	1	EA	\$1,750.00	\$1,750.00
	43.	Polystyrene Insulation Board	704	BD FT	\$2.00	\$1,408.00
	44.	Rip Rap	28	TON	\$75.00	\$2,100.00
		<b>Sanitary Sewer Items</b>				
	45.	Adjust Manhole - Type 1	7	EA	\$650.00	\$4,550.00
	46.	Adjust Manhole - Type 2	3	EA	\$650.00	\$1,950.00
	47.	4" Sanitary Sewer Service, Complete w/ Cleanout	1	EA	\$2,500.00	\$2,500.00
		<b>Water Items</b>				
	48.	Connect to Existing Water Main	9	EA	\$3,500.00	\$31,500.00
	49.	6" PVC Water Main	36	LF	\$70.00	\$2,520.00
	50.	8" PVC Water Main	117	LF	\$70.00	\$8,190.00
	51.	12" PVC Water Main	2,033	LF	\$73.00	\$148,409.00
	52.	6" Gate Valve & Box	5	EA	\$1,300.00	\$6,500.00
	53.	8" Gate Valve & Box	1	EA	\$1,800.00	\$1,800.00
	54.	12" Gate Valve & Box	7	EA	\$3,500.00	\$24,500.00
	55.	8" DI Bend	1	EA	\$350.00	\$350.00
	56.	12" DI Bend	1	EA	\$650.00	\$650.00
	57.	8" DI Tee	2	EA	\$500.00	\$1,000.00
	58.	12"x6" DI Tee	4	EA	\$700.00	\$2,800.00
	59.	12"x8" DI Tee	1	EA	\$750.00	\$750.00
	60.	12" DI Tee	2	EA	\$850.00	\$1,700.00
	61.	12"x6" DI Reducer	2	EA	\$350.00	\$700.00
	62.	12"x8" DI Reducer	1	EA	\$400.00	\$400.00
	63.	1" Water Service, Complete w/ Curb Stop	5	EA	\$2,500.00	\$12,500.00
	64.	18" Steel Casing Pipe	200	LF	\$295.00	\$59,000.00
	65.	Remove Hydrant	3	EA	\$250.00	\$750.00
	66.	Remove Gate Valve and/or Box	5	EA	\$100.00	\$500.00
	67.	Remove DI Tee	1	EA	\$100.00	\$100.00
	68.	Remove DI Cross	1	EA	\$100.00	\$100.00
		<b>SUBTOTAL</b>				\$729,519.00