

REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

No. PW072704-07

Project Name & Number: West Chicago Street Reconstruction, 44th To Wedgewood Drive
ST02-1071

Project Description: New PCC intersection pavement, c&g, walk, signals, water mains, sewer mains, storm sewer in intersection, new ACC pavement to Wedgewood, water mains, sewer mains, storm sewer, irrigation & sodding.

Consultant: CETEC

Original Contract Amount: \$135,926.00 **Original Completion Date:** On hold

Amendment Number: Second amendment to do design revisions to improve traffic safety and flow by incorporating property acquisitions and realigning West Chicago

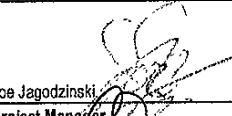
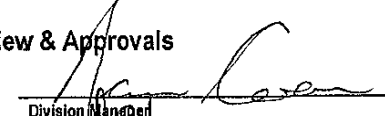

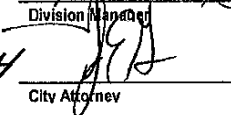
Amendment Description: Prepare final plans and specifications for revised intersection layout to improve overall traffic flow and safety. Includes property acquisition, allowing four legged intersection and second west bound lane. Also includes design of traffic signal lights, street lighting, water and sewer mains and services, storm sewer, and pedestrian crossings and sidewalks.

Current Contract Amount:	\$153,046.00	Current Completion Date:	on hold
Change Requested:	\$74,949.32		
New Contract Amount:	\$227,995.32	New Completion Date:	Fall 2004

Funding Source This Request:

Amount	Dept.	Line Item	Comments
\$31,000.00	8910	4223	street, intersection, curb and gutter, lighting, sidewalk design
\$22,000.00	8911	4223	drainage inlets and pipe design
\$11,000.00	933	4223	water mains and services design
\$10,949.52	833	4223	sewer mains and services design
\$74,949.52	Total		

Agreement Review & Approvals

 Joe Jagodzinski Project Manager	7/14/04 Date	 Division Manager	7/14/04 Date
 Theodore Voss Department Director	7-15-04 Date	 City Attorney	7-15-04 Date

ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.
 Finance Office - Retain one original
 Project Manager - Retain second original for delivery to Consultant
 cc: Public Works
 Engineering
 Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

Date	Initials	Approved	
7/22/04	W	(Y)	N
		Y	N

Appropriation
 Cash Flow



cetec@rushmore.com

February 12, 2004

City of Rapid City, Engineering Division
Attn: Joe Jagodzinski, P.E.
300 6th Street
Rapid City, SD 57701

Re: West Chicago Street Reconstruction
Project No. ST02-1071

Dear Joe:

Attached is our fee estimate for amending the referenced project contract to finish design of the West Chicago/44th Street intersection per Alternative #2 (copy of Figure 26 attached) from "Amendment #1 Additional Intersection Study Report" dated November 20, 2002. This alternative replaces the current five legged intersection with a four legged intersection at 44th Street/West Chicago Street/South Canyon Road and moves the West Chicago/South Canyon Road intersection to the west directly across from Stanley Court. As we discussed, the preliminary plan as shown on Alternative #2—Figure 26 along with a preliminary cost estimate are the only tasks that have been accomplished to date for this alternative. Therefore, additional preliminary design, as well as final design, is required for the street as well as water and sewer utilities. In addition to Alternative #2, Stanley Court street and water and sewer utility reconstruction is to be added to the project. Stanley Court street pavement is significantly broken and in need of replacement. Stanley Court water and sewer utilities will be evaluated to determine replacement needs.

As we discussed, we have proceeded with the survey on Stanley Court. However, we have not yet surveyed the underground utilities. We have not started the Stanley Court design since it will be dependent on the design of South Canyon Road.

With this proposed amendment the following items are excluded from the project at this time and a future amendment to the contract will be required to finish their design: 1. West Chicago roadway, major drainage and utilities from Seeaire Drive west to Wedgewood Drive. 2. 44th Street storm sewer outfall to the South Canyon Drainage at West Main Street. 3. Street lighting on West Chicago from 44th Street to Sturgis Road—as we discussed this will most likely be done as a separate project and the City will contract directly with the electrical engineer for design.



Joe Jagodzinski, P.E.

2.

February 12, 2004

We anticipate finishing final design on this segment of the project in approximately 3 ½ months after notice to proceed.

Please give me a call if you have questions. We can provide Amendment #2 to the contract at your request.

Thank you,

CETEC Engineering Services, Inc.

A handwritten signature in cursive script, appearing to read "Randy R. Sauter".

Randy R. Sauter, P.E.

attachments

AMENDMENT #2 FEE ESTIMATE

Project: West Chicago Street Reconstruction, 44th Street to Wedgewood City of Rapid City Project No. ST02-1071

Prepared By: CETEC Engineering Services, Inc.

Date: February 12, 2004

TASK NUMBER and PHASE DESCRIPTION	<i>Project Manager</i>	<i>Project Roadway Engineer</i>	<i>Project Utilities Engineer</i>		<i>Project Technician</i>	<i>Clerical</i>	<i>Survey Chief</i>	<i>Survey Assistant</i>	<i>Consultants</i>
	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>	<i>Fee</i>
Preliminary Design for Alternative 2 from Amendment #1 report dated Nov. 20, 2002 and Add Stanley Court									
Survey	2						32	20	
Roadway horiz. & vert. Alignments		8			8				
Roadway		40			32				
Major Intersection & traffic signals--Benshoof	2				4				See Final Design
Street lighting--West Plains Engineering	2				4				See Final Design
Local storm sewer		16			16				
Water & sewer study									
Gather w & s info			6		2	2			
S. Canyon sewer basin evaluation			8		8	2			
Sewer sizing & alignment evaluation			6		4				
Sewer video inspection & coordination			4		2				
W & s record research			4		4				
W & s vertical & horizontal alignments			4		4				
Water system hydraulic model			6		2				
Irrigation recommendations			4		2				
W & s summary report	2		8		4	8			
Water & sewer preliminary design									
W & s base plan prep			4		4				
W & s plan & profiles			16		16				
W & s detail drawings			6		6				
Utilities coordination		4	3						
Sequence of construction		4	4			2			
Assist City w/ easements, legal survey, plats	2						16		
Preliminary design submittal		4	4		4				
Preliminary opinion of probable const. Cost		6	4		4				
Meetings (2)		4	4						
Preliminary Design Hours	10	86	95	0	130	14	48	20	
Hourly Rates	85.00	85.00	85.00		50.00	30.00	60.00	35.00	
Preliminary Design Fee	\$850.00	\$7,310.00	\$8,075.00	\$0.00	\$6,500.00	\$420.00	\$2,880.00	\$700.00	\$0.00
Preliminary Design Fee Summation for Alternative 2 from Amendment #1 report dated Nov. 20, 2002 and Add Stanley Court									
									\$26,795.00

No. PM072704-07

AMENDMENT #2 FEE ESTIMATE

Project: West Chicago Street Reconstruction, 44th Street to Wedgewood City of Rapid City Project No. ST02-1071
 Prepared By: CETEC Engineering Services, Inc.
 Date: February 12, 2004

TASK NUMBER and PHASE DESCRIPTION	<i>Project Manager</i>	<i>Project Roadway Engineer</i>	<i>Project Utilities Engineer</i>		<i>Project Technician</i>	<i>Clerical</i>	<i>Survey Chief</i>	<i>Survey Assistant</i>	<i>Consultants</i>
Bidding Phase									
Benshoof & Associates									\$560.00
West Plains Engineering									\$281.12
Prebid conference		3	3		1	1			
Adenda preparation		8	4		6	7			
Consultation	4	8	6		1				
CETEC Eng Bidding Hours	4.00	19.00	13.00	0.00	8.00	8.00	0.00	0.00	
Hourly Rates	85.00	85.00	85.00		50.00	30.00	60.00	35.00	
Bidding Fee	\$340.00	\$1,615.00	\$1,105.00	\$0.00	\$400.00	\$240.00	\$0.00	\$0.00	\$841.12
Bidding Phase Fee Summation									\$4,541.12
Construction Phase									
Benshoof & Associates									\$2,980.00
West Plains Engineering									\$281.12
Preconstruction conference	4	4	4			4			
Shop drawing review		16	16			8			
Constr. consultation—Field Orders & Change Orders	8	16	16			8			
Construction observation	Not included in scope of services, but can be added as an amendment to the contract								
Construction staking	Not included in scope of services, but can be added as an amendment to the contract								
Review Contractor payments	Not included in scope of services, but can be added as an amendment to the contract								
As-constructed drawings and reports	Not included in scope of services, but can be added as an amendment to the contract								
Issue statement of substantial completion	Not included in scope of services, but can be added as an amendment to the contract								
Issue warranty letter to Contractor	Not included in scope of services, but can be added as an amendment to the contract								
Post construction project review	Not included in scope of services, but can be added as an amendment to the contract								
CETEC Construction Hours	12	36	36	0	0	20	0	0	
Hourly Rates	85.00	85.00	85.00		50.00	30.00	60.00	35.00	
Construction Fee	\$1,020.00	\$3,060.00	\$3,060.00	\$0.00	\$0.00	\$600.00	\$0.00	\$0.00	\$3,261.12
Construction Phase Fee Summation									\$11,001.12

AMENDMENT #2 FEE ESTIMATE

Project: West Chicago Street Reconstruction, 44th Street to Wedgewood City of Rapid City Project No. ST02-1071

Prepared By: CETEC Engineering Services, Inc.

Date: February 12, 2004

TASK NUMBER and PHASE DESCRIPTION	Project Manager	Project Roadway Engineer	Project Utilities Engineer		Project Technician	Clerical	Survey Chief	Survey Assistant	Consultants
Total to Finish This Segment including Bidding and Construction									\$95,373.90
Previous Billing									\$132,621.42
New Maximum Limiting Fee									\$227,995.32
Previous Maximum Limiting Fee									\$153,046.00
Total Increase in Maximum Limiting Fee--Amendment #2									\$74,949.32
Roadway, major drainage and utilities from Seeaire Drive west to Wedgewood excluded from this Final Design--Amendment to Contract Required to Finish Final Design									
44th Street Outfall to South Canyon Drainage at West Main St excluded from this Final Design--Amendment to Contract Required to Finish Final Design									
Street Lighting on West Chicago from 44th Street to Sturgis Road excluded from this Final Design--City will contract directly with Electrical Engineer for Final Design									

No. PW072704-07

**BENSHOOF & ASSOCIATES, INC.**

No. PW072704-07

TRANSPORTATION ENGINEERS AND PLANNERS

10417 EXCELSIOR BOULEVARD, SUITE TWO / HOPKINS, MN 55343 / (952) 238-1667 / FAX (952) 238-1671

FACSIMILE TRANSMITTALDate: **January 27, 2004**Job No. **01-58****PLEASE DELIVER THE FOLLOWING PAGE(S) TO:**Name: **Randy Sauter**Fax No.: **605 341-7864**

- **Proposed Work Scope and Cost Estimate to Complete Traffic Signal Design for West Chicago Street/44th Street Intersection**

Randy,

Please review the following draft proposal and contact me with any questions or comments. If the proposal is acceptable as is, please return one signed copy to me as our authorization to proceed.

This transmittal is being sent by: **Ed Terhaar**If you do not receive **4** pages, including this sheet, please call 952/238-1667.

**BENSHOOF & ASSOCIATES, INC.**

TRANSPORTATION ENGINEERS AND PLANNERS

10417 EXCELSIOR BOULEVARD, SUITE TWO / HOPKINS, MN 55343 / (952) 238-1667 / FAX (952) 238-1671

No. PW072704-07

January 27, 2004

Mr. Randy Sauter
CETEC Engineering Services, Inc.
1830 West Fulton Street
P.O. Box 9014
Rapid City, SD 57709

RE: Proposed Work Scope and Cost Estimate to Complete Traffic Signal Design for
West Chicago Street/44th Street Intersection

Dear Randy:

As a follow-up to our recent phone conversations, this letter is to present our proposed work scope to complete the traffic signal design for the West Chicago Street/44th Street intersection. This work will build upon the items we have already completed in this area over the past two years. Over the past few months, the City has taken steps to change the intersection layout to create a four legged intersection as opposed to the original five legged design. Our current work scope accounts for this change in the basic layout of the intersection.

As in our previous work, our role on this project will be to complete the traffic signal design to standards necessary for construction and to provide input to the roadway design and signing and striping plans.

SCOPE OF SERVICES

The services mentioned above will be accomplished through the following work tasks:

- 1) **Establish Project Framework.** As a first step, we will review our role on this project and establish the steps needed to complete our work in an effective and efficient manner.
- 2) **Input to Roadway Design.** After reviewing pertinent background information, we will provide input to the initial roadway design based on our traffic engineering background. We will work closely with you in order to answer questions related to traffic operations of the roadway and intersection.

Mr. Randy Sauter

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No. PW072704-07
January 27, 2004**3) Traffic Signal Plans and Specifications**

- a) Obtain and review base mapping needed for the project. The purpose of this task is to obtain and review the proposed base maps for the intersection. It is expected that CETEC Engineering Services, Inc. will provide the base mapping for the intersection with the appropriate layout and title block formats. This base mapping will be used to prepare the necessary traffic signal plan sheets.
- b) Prepare traffic signal plans and special provisions. This task is to prepare the complete plans and special provisions for the traffic signal. The following specific tasks will be performed:
 - b.1 Establish design parameters and background data, develop the traffic signal control plans and prepare preliminary signal layouts including placement of signal heads and detectors. This work will be coordinated and discussed with CETEC Engineering Services, Inc. and City staff
 - b.2 Complete the draft signal layout plans and other plan sheets.
 - b.3 Prepare complete special provisions for the signal system.
 - b.4 Submit the complete draft plans and special provisions for review by the City.
 - b.5 Revise the draft plans and special provisions as needed to prepare final plans and special provisions.
 - b.6 Submit final signal plans and special provisions to CETEC Engineering Services, Inc. for inclusion into the overall bid documents which will be submitted for final City approvals.
- c) Construction Inspection. We have included time and costs for one trip to the project site to provide general inspection.

4) **Develop Signing and Striping Plan.** We will develop a signing and striping plan for the West Chicago Street/44th Street intersection. This plan will take into account the special signing and striping needs for this intersection. We will provide this plan to CETEC staff for inclusion in the overall construction documents.

5) **Provide Assistance During Bidding and Construction.** We will answer questions related to the signal plans and specifications during the bidding and construction phases. We will also review signal system shop drawings as they are produced.

Mr. Randy Sauter

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January 27, 2004

COST ESTIMATE

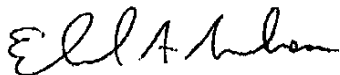
Labor costs for our work will be invoiced on an hourly basis using the following rates: Sr. Principal - \$130.00, Principal - \$95.00, Professional - \$65.00, and Technician - \$55.00. Direct expenses will be billed at cost. The total estimated cost to complete all of the work tasks listed above is \$12,250. Any extra items are requested will be billed on an hourly basis. In any event, we will not proceed on any extra work unless you specifically direct us to do so. We will coordinate closely with you and will focus tightly on the specific issues in order to complete our work effectively and at minimal cost. Invoices will be submitted on a monthly basis for work performed in the prior month. Payment terms are 30 days from date of invoice.

If these arrangements are acceptable, please sign below and return one copy to me. We are enthused about this project and look forward to working with you and other participants to complete the signal design.

Sincerely,

BENSHOOF & ASSOCIATES, INC.

CETEC ENGINEERING SERVICES, INC.



Edward F. Terhaar, P.E.

Name Date

MEMO

RECEIVED

JAN 22 2004

CETEC Engineering

DATE: January 20, 2004

TO: Randy Sauter
CETEC Engineering Services, Inc.
Rapid City, SD

FROM: Bob Thompson

RE: West Chicago/South Canyon
44th Street to West of Grays Drive
Rapid City, SD
WPE #R01058

Find attached our fee proposal for the electrical design period services to complete the project design as we discussed (Layout Alternative 2, Figure 26)

We anticipate providing street lighting and conduit provisions for the intersection signalization. We anticipate the signal layout and design will be done by your traffic consultant.

Please review and let me know if you have any questions or need any more information.

Thanks.

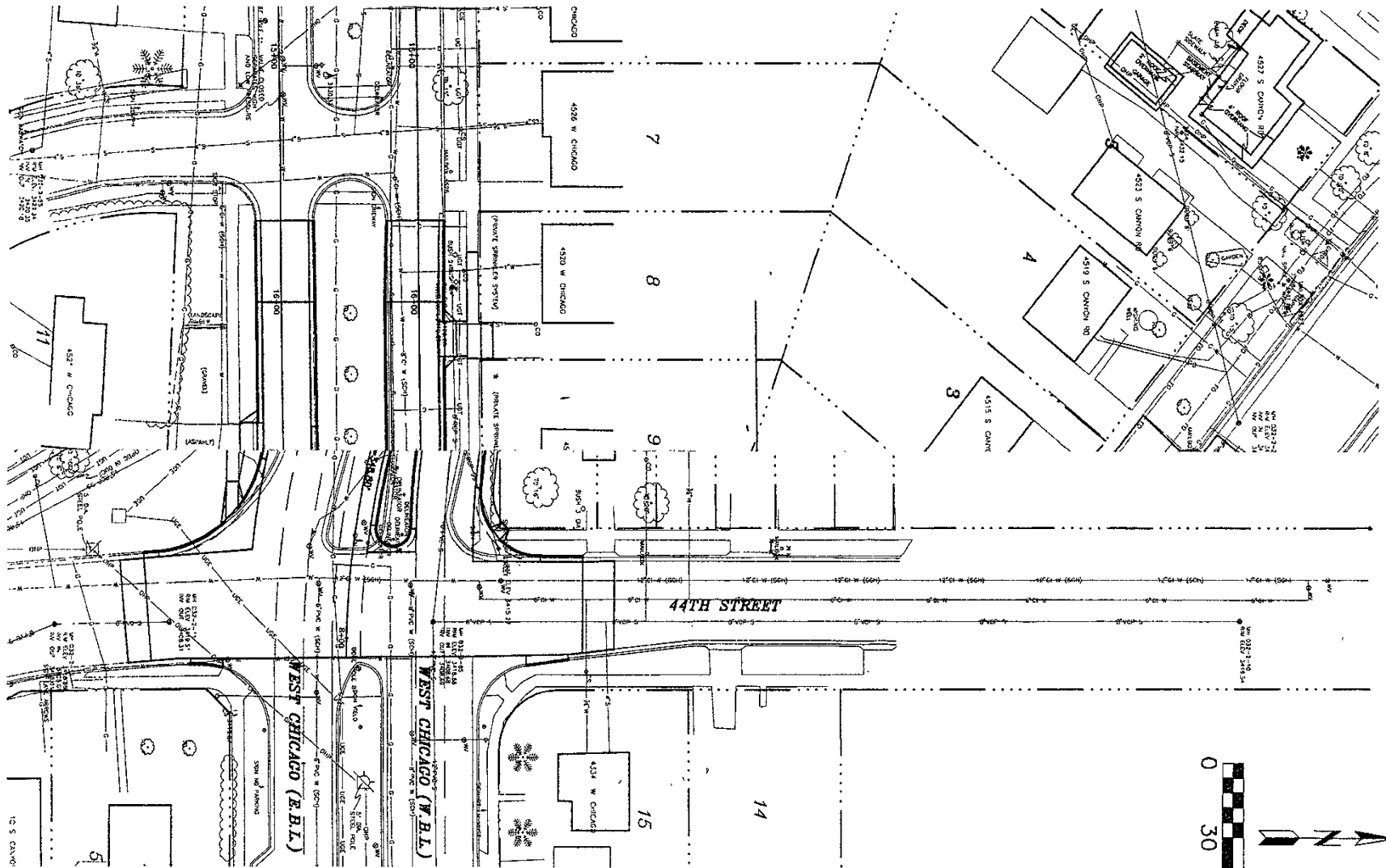
West Plains Engineering
Rapid City, SD

Electrical Fee Proposal

Street Lighting
for
West Chicago/South Canyon
(44th Street to West of Grays Drive)
Rapid City, SD

1/20/2004

	Principal Manhours	Senior Engineer Manhours	Project Engineer Manhours	Design Engineer Manhours	Drafting Manhours	Clerical Manhours
95% design submittal	4	0	32	0	20	4
Final Design completion	2	0	6	0	4	0
Bid Phase	0	0	0	4	0	1
Shop Drawing review	0	0	0	4	0	1
Total Manhours	6	0	38	8	24	6
Total Manhours -	82					
Direct Labor Rate/Manhour	\$51.78	\$40.28	\$32.60	\$23.01	\$17.26	\$15.34
Subtotal Direct Labor Cost	\$310.68	\$0.00	\$1,238.80	\$184.08	\$414.24	\$92.04
Direct Labor Overhead -	34%	\$105.63	\$0.00	\$421.19	\$62.59	\$140.84
General & Administrative Overhead -	104%	\$323.11	\$0.00	\$1,288.35	\$191.44	\$430.81
Subtotal	\$739.42	\$0.00	\$2,948.34	\$438.11	\$985.89	\$219.06
Profit -	10%	\$73.94	\$0.00	\$294.83	\$43.81	\$98.59
Additional Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Subtotal	\$813.36	\$0.00	\$3,243.18	\$481.92	\$1,084.48	\$240.96
Total Proposal Amount -	<u>\$5,863.90</u>					



SHEET:

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PROJECT:

WEST CHICAGO STREET/44th STREET/S. CANYON ROAD
 ADDITIONAL INTERSECTION STUDY
 CITY OF RAPID CITY PROJECT ST02-1071

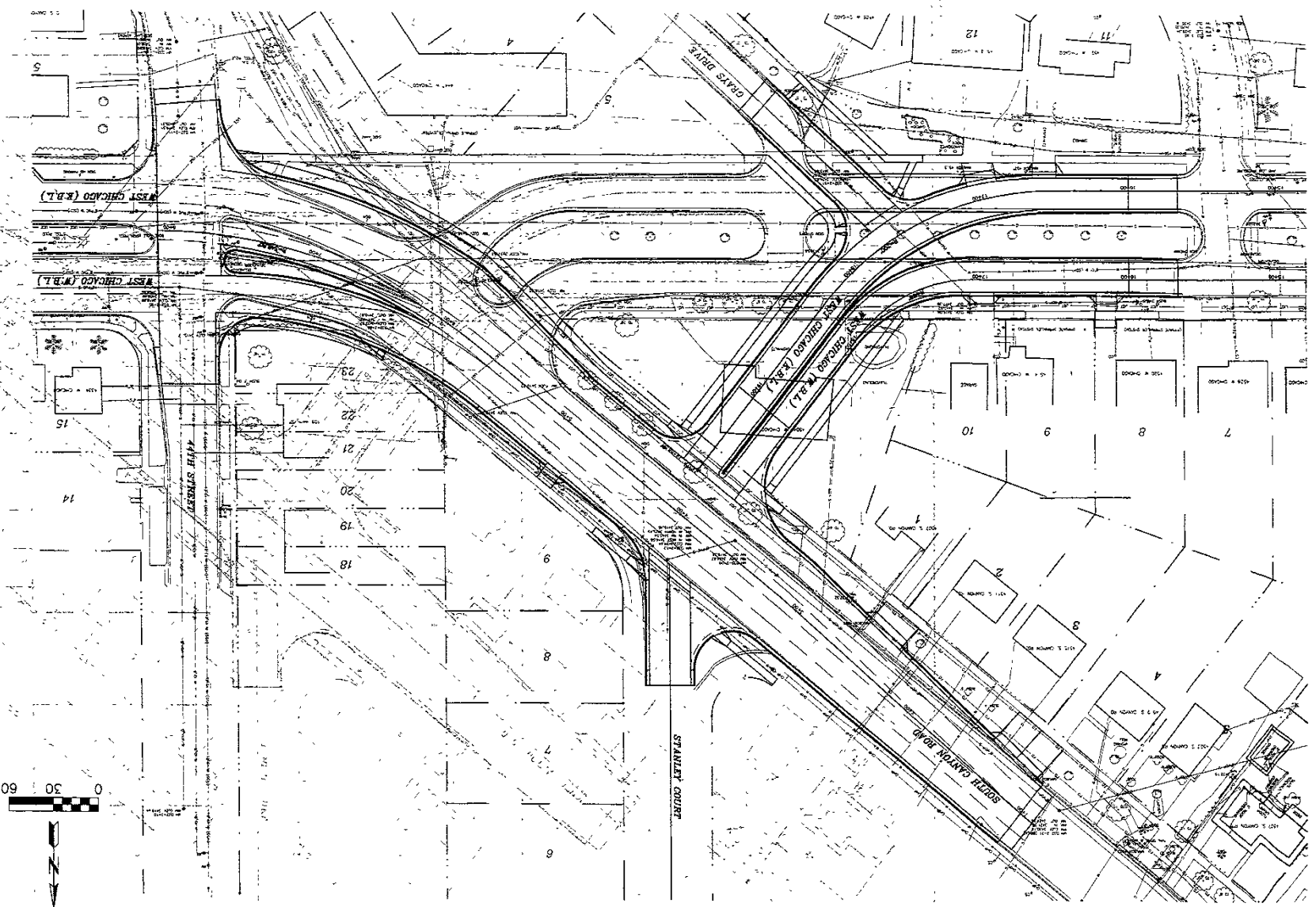
SHEET DESCRIPTION:

LAYOUT ALTERNATIVE 2
 FIGURE 26

DESIGNED RS -
 DETAILED RF
 CHECKED
 APPROVED
 DATE 11/20/02



1830 West Fulton Street
 Rapid City, SD 57702
 1021 Junction Avenue
 Sturgis, SD 57785
 Phone: (605) 341-7800
 cetec@rushmore.com



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PROJECT: WEST CHICAGO STREET/44th STREET/S. CANNON ROAD
ADDITIONAL INTERSECTION STUDY
CITY OF RAPID CITY PROJECT STUDY-1071

LAYOUT ALTERNATIVE 2
FIGURE 28

DESIGNED BY: RS
CHECKED BY: RS
DATE: 11/28/07



1830 West Fulton Street
Rapid City, SD 57702
Phone: 605 341-6000
cetece@earthlink.net