

Regular Plan Commission Meeting

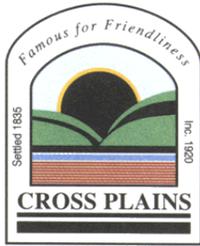
Meeting Notice and Agenda

Village of Cross Plains
2417 Brewery Road, PO Box 97
Cross Plains, WI 53528
(608) 798-3241

Monday, June 6, 2016
7:00 pm

- I. Call to Order, Pledge of Allegiance, and Roll Call
- II. Public Comment – This is an opportunity for anyone to address the Plan Commission on any issue NOT on the current agenda. *Please observe the time limit of 3 minutes.* While the Plan Commission encourages input from residents, it may not discuss or act on any issue that is not duly noticed on the agenda.
- III. General Business
 1. Discussion and action regarding minutes of regular meeting held May 2, 2016.
 2. Discussion regarding the Glacier’s Edge Square Redevelopment Master Plan from MSA Professional Services funded through the Dane County BUILD Grant Program.
 3. Discussion regarding a Development Concept from Sundance Development, LLC in order to annex and develop the property of and adjoining to 4923 Brewery Road (Weber Farm) as a residential subdivision.
- IV. Adjournment

This meeting notice constitutes an official meeting of the above referenced group and was posted in accordance with all applicable laws related Open Meetings Law. It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals. For additional information or to request this service, contact the Village Hall at (608) 798-3241 or matt@cross-plains.wi.us.



Village of Cross Plains
PO Box 97, 2417 Brewery Road
Cross Plains, WI 53528
Phone: (608) 798-3241
Fax: (608) 798-3817

Memorandum

To: Plan Commission
From: Matthew G. Schuenke, Village Administrator/Clerk
Date: June 3, 2016
Re: Plan Commission meeting – **June 3, 2016**

III. General Business

1. Discussion and action regarding minutes of regular meeting held May 2, 2016 – For approval.

2. Discussion regarding the Glacier's Edge Square Redevelopment Master Plan from MSA Professional Services funded through the Dane County BUILD Grant Program – MSA Staff will be present to review some initial concepts following the public information meeting held last month with the Streetscape Workgroup. The initial proposals for redevelopment of the site plus new aesthetic treatments are included in your packets for review.

3. Discussion regarding a Development Concept from Sundance Development, LLC in order to annex and develop the property of and adjoining to 4923 Brewery Road (Weber Farm) as a residential subdivision – Village Staff and the Developer have reviewed a number of concerns from the Plan Commission over the last several meetings regarding the proposed development on this site. Included within your packet is a revision to the former "Hybrid" Development that was included within the Development Proposal following the Plan Commission's discussion at the last meeting about the different types of development. Several changes are made by the Developer to make this project better align with the Plan Commission's vision. These changes are detailed on an email from the Developer providing narrative regarding the different revisions that were made to this latest concept.

Additionally, the Plan Commission requested the full secondary access be reviewed further to better determine its feasibility. The Village Engineer looked at two different routes and estimated cost for each route using two different styles of construction. The further pursuit of this access is not recommended by Staff without the presence of a development for this property that could properly site this improvement and would also be the primary beneficiary of. For this reason, property owners were not consulted as part of this analysis as Staff just looked at a very rough layout as well as estimated costs for reference.

If the Plan Commission is agreeable to this latest concept of the Hybrid Development, then it will be worked into the full Development Proposal last considered by the Plan Commission in March in order to take final action on the document at your meeting in July. This will move the Development Proposal onto the Village Board and continue the deliberations on the possible annexation of this property.

Regular Plan Commission Meeting

Regular Meeting Minutes

Village of Cross Plains
2417 Brewery Road, PO Box 97
Cross Plains, WI 53528
(608) 798-3241

Monday, May 2, 2016
7:00 pm

I. Call to Order, Pledge of Allegiance, and Roll Call

President Andreoni called the meeting was called to order at 7:00 pm.

Present: Commissioners Randy Case, Todd Duquette, Ron Hilmanowski, Mitch Hogan, Judy Ketelboeter, and President Pat Andreoni.

Not-Present: Commissioner Cliff Zander.

Also Present: Harold Weber, Kyo Ladopoulos, Tim Henneman, and Dan Laufenberg.

II. Public Comment – None.

III. General Business

1. Discussion and action regarding minutes of regular meeting held April 4, 2016 – A motion was made by Commissioner Ketelboeter, seconded by Commissioner Hilmanowski, and unanimously carried by the Plan Commission to approve the minutes of the regular meeting held on April 4, 2016.

2. Discussion regarding a Development Proposal from Sundance Development, LLC in order to annex and develop the property of and adjoining to 4923 Brewery Road (Weber Farm) as a residential subdivision – A presentation was provided by Sundance Development, LLC and Village Staff regarding the various proposals considered for development on this property. The Plan Commission provided the Developer and Staff direction regarding their concerns to be discussed further at the next meeting on June 6, 2016.

3. Discussion and action to make a recommendation to the Village Board regarding a proposed easement at 1107 Bourbon Road with T & M Business & Storage LLC allowing for the expansion of the Zander Park Trail – Following discussion, a motion was made by Commissioner Ketelboeter, seconded by Commissioner Hilmanowski, and unanimously carried by the Plan Commission to recommend approval to the Village Board regarding a proposed easement at 1107 Bourbon Road with T & M Business & Storage LLC allowing for the expansion of the Zander Park Trail subject to final discussions with the property owner.

4. Discussion and action to make a recommendation to the Village Board regarding a proposed easement at 1501 Bourbon Road with the Cross Plains-Berry Fire District allowing for the expansion of the Zander Park Trail – Following discussion, a motion was made by Commissioner Case, seconded by Commissioner Hilmanowski, and unanimously carried by the Plan Commission to recommend approval to the Village Board regarding a proposed easement at 1501 Bourbon Road with the Cross Plains-Berry Fire District allowing for the expansion of the Zander Park Trail.

IV. Adjournment

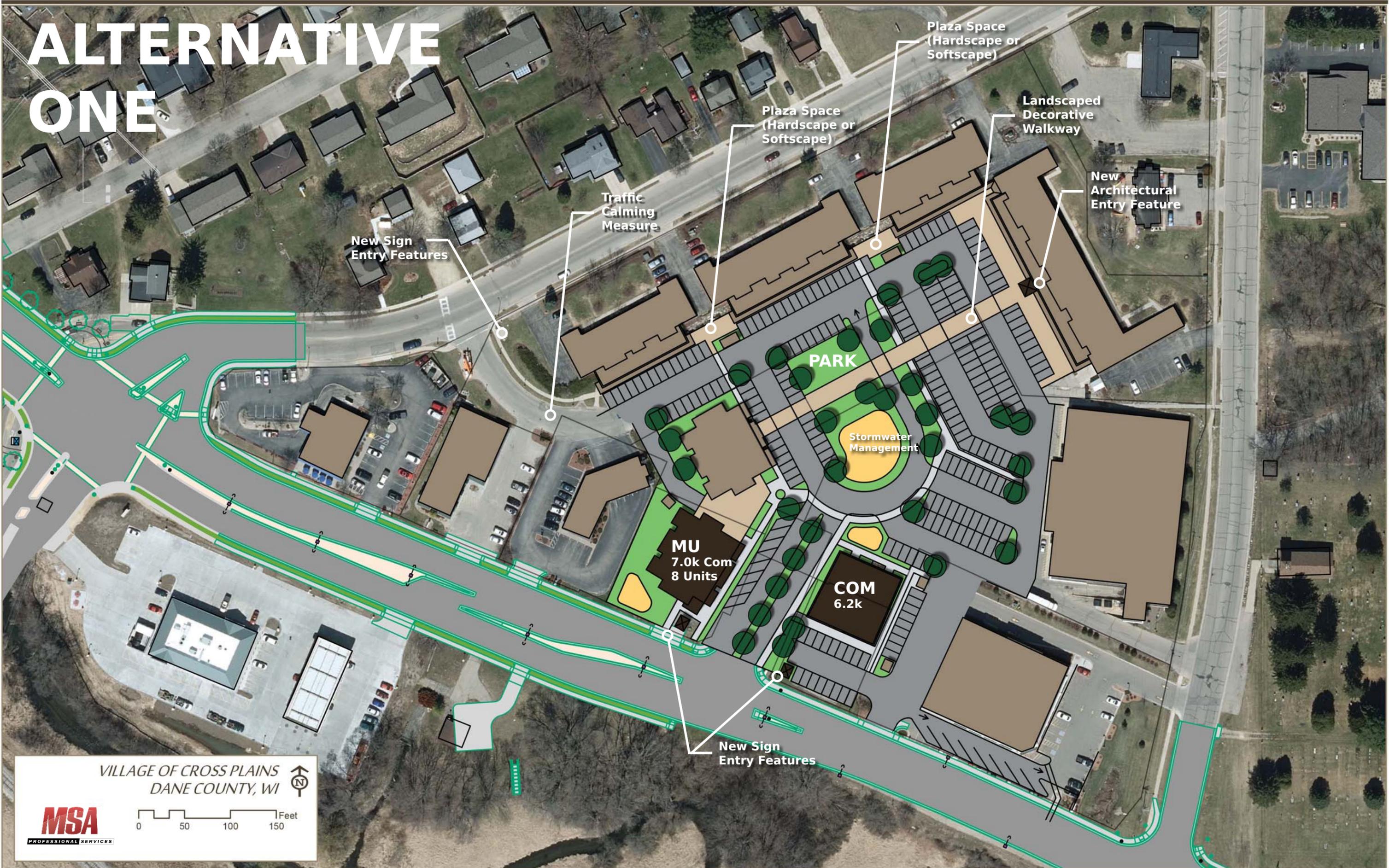
A motion was made by Commissioner Ketelboeter, seconded by Commissioner Hilmanowski, and unanimously carried by the Plan Commission to adjourn the meeting at 8:15 pm.

Pursuant to law, written notice of this meeting was given to the public and posted on the public bulletin boards in accordance with Open Meetings Law.

Respectfully submitted,

Matthew G. Schuenke
Village Administrator/Clerk-Treasurer

ALTERNATIVE ONE

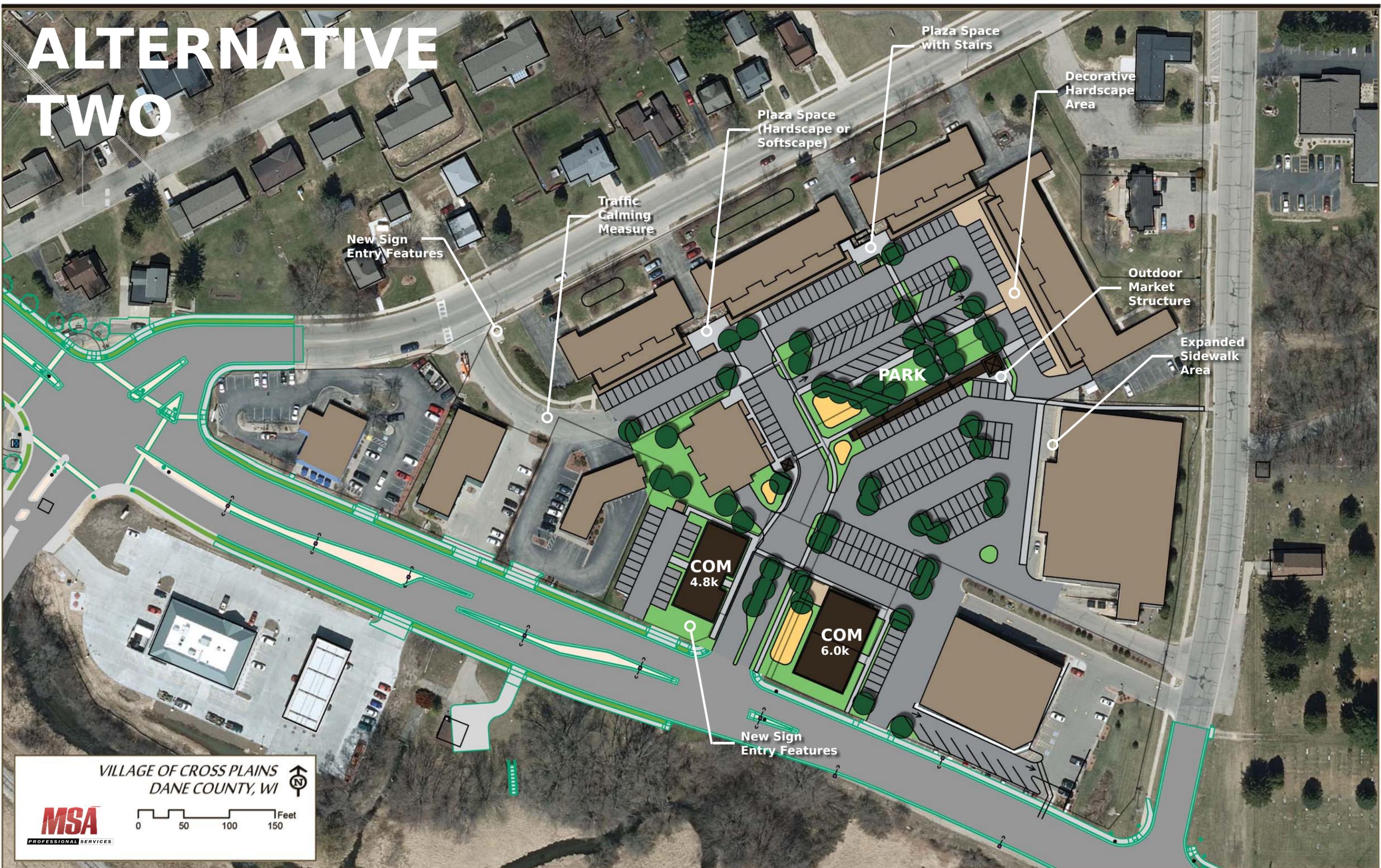


VILLAGE OF CROSS PLAINS
DANE COUNTY, WI

MSA
PROFESSIONAL SERVICES

0 50 100 150 Feet

ALTERNATIVE TWO



VILLAGE OF CROSS PLAINS
DANE COUNTY, WI

MSA
PROFESSIONAL SERVICES

0 50 100 150 Feet

Glacier's Edge Shopping Center Facade Improvements

Village of Cross Plains, Wisconsin



Facade Improvements Option 1



Facade Improvements Option 2

From: [Kyo Ladopoulos](#)
To: [Matt Schuenke](#)
Cc: ["Ron Klaas"](#)
Subject: updated hybrid-hybrid map & narrative
Date: Friday, June 03, 2016 10:59:20 AM
Attachments: [Sundance 12 concept development.pdf](#)

Good morning Matt,

Please find the map attached. Below is the revised description:

1. This map is based on Randy Case's suggestion at the end of the May Plan Commission meeting.
2. It still brings in the whole property for annexation alleviating the concern of uncontrolled Town development for the northern section.
3. It drastically reduces the total number of lots to 100. This is far below the (already low density) 145 of the hybrid proposal, and as close as we're going to get to the 74 in the Rural well-and-septic proposal without going well-and-septic.
4. It provides a combination of SR-3 lots, along with several larger SR-1 lots to the north.
5. All lots are served by private water--i.e. wells.
6. The SR-3 lots are arranged so they can be served by public sewer on gravity.
7. The large SR-1 lots are arranged such that they can be served either by:
 - a. Private sewer--i.e. septic
 - b. Gravity public sewer provided the houses are sited closer to the road and use individual private grinder pumps to get to their sewer to the lateral; that closeness is not exactly a desirable feature when you buy a large lot, so I wouldn't expect most buyers to want that option
8. The large park was moved north per staff's suggestion
 - a. A centrally located tot park has been added.
9. Trail/maintenance easements were added to Outlot 5 and for Hickory Hills access.
 - a. There will probably be additional stormwater detention in the northern conservancy, and access will be provided (if it can't be accomplished via the northern parkland).
10. The economics of such a low density plan are based on:
 - a. The road network shown.
 - b. Full annexation of Brewery Rd.
 - c. ...But improvement of Brewery Rd. only up to Outlot 1 (A Street). Future northern developments would pay for Brewery improvement beyond.
 - d. The vast majority of Sundance traffic is coming down A Street anyway (there are maybe 10 lots for whom B Street would be preferable anyway).
 - e. No matter where a "Secondary Access Road" is placed in an attempt to divert Sundance traffic away Brewery Rd, most residents of this subdivision will invariably come down Brewery Rd. to Main St.
 - f. ... Due to this factor and the substantially reduced number of lots, no Secondary Access Road is contemplated--other than the previously planned southern emergency access if that's still necessary.

Thank you,

Kyo Ladopoulos
All Star Group
mobile: 608-692-5234
office: 608-663-1445
fax: 608-663-1446
allstargroup.net

From: [Warren Myers](#)
To: [Matt Schuenke](#)
Cc: [Jerry](#); [Brian Berquist](#)
Subject: Preliminary Cost Estimates for Second Access Road to Proposed Sundance Subdivision
Date: Monday, May 16, 2016 10:34:11 AM
Attachments: [SECOND ACCESS STREET - FIELD ROAD ROUTE, Rural Section.pdf](#)
[SECOND ACCESS STREET - FIELD ROAD ROUTE, Urban Section.pdf](#)
[SECOND ACCESS STREET - SHORTEST PRACTICAL ROUTE, Rural Section.pdf](#)
[SECOND ACCESS STREET - SHORTEST PRACTICAL ROUTE, Urban Section.pdf](#)
[Map of Second Access Road Alternatives.pdf](#)

Hi Matt;

Attached are four preliminary street cost estimates for a second access road to the Sundance subdivision. I've estimated the costs by the two routes you requested, the shortest reasonable route and the field road route.

For each of the two possible routes I've estimated both an "urban section" (with curb & gutter per Village ordinances) and a "rural section" (without curb & gutter). For the "urban section" estimates I have included a very preliminary guess at the cost of constructing storm sewer. For the "rural section" estimates I have included only culverts where drainage must pass underneath the new street. Again, the sizing of the culverts is a guess. Both routes will require stormwater management because new traffic lanes are being created, the new impervious surfaces created will exceed 20,000 square feet and the disturbed area will exceed one acre. I am also attaching a map of the routes I used, which are slightly different from the routes on the map you gave me. The differences in the routes are due to slope limitations of the terrain. I've used a maximum allowable slope of 10% for the street slope. Village ordinances specify a maximum of 8% slope for such streets, but make provisions for slopes of up to 12% where the terrain is difficult. I think 10% is reasonable in this case. (If we limited the slope to 8%, the costs would go up considerably.) I have not included any costs for sanitary sewer or water main. I have not included any sidewalk or path costs. I have not included any land acquisition costs, even though those costs could be significant, because I have no way of assessing such costs.

The results are as follows:

Shortest reasonable route, urban section	\$1,805,559
Shortest reasonable route, rural section	\$1,286,268
Field road route, urban section	\$1,572,356
Field road route, rural section	\$ 864,884

The reason that the shortest reasonable route is so much more expensive is that there is a very steep slope from the end of Brewery Road to the east, and no room to do any type of "switchback". A tremendous amount of fill would be required to keep the slope down to the assumed 10% maximum. The field road route would also be much more useful for future developments. Therefore, the field road route appears to me to be the best alternative.

The estimates do not include any upgrade of Stone Valley Road, but an upgrade of that road is likely to be required as well.

If you have any questions or need any additional information, let me know.

Warren

Warren O. Myers, P.E. – Senior Project Manager

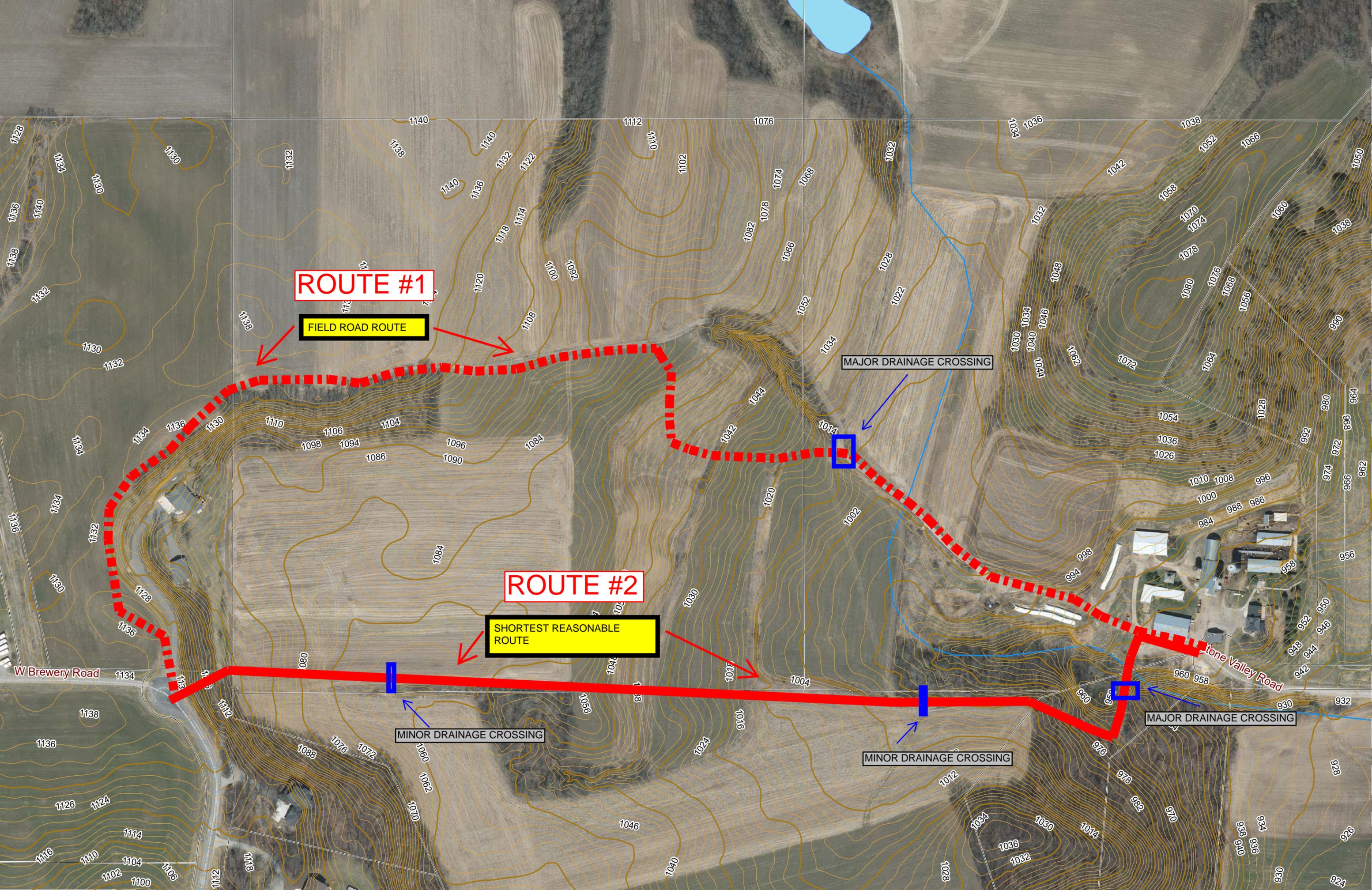
warren@tcengineers.net

Town & Country Engineering, Inc.

2912 Marketplace Drive, Suite 103

Madison, WI 53719

(608) 273-3350 Fax: (608) 273-3391



ROUTE #1

FIELD ROAD ROUTE

ROUTE #2

SHORTEST REASONABLE ROUTE

MAJOR DRAINAGE CROSSING

MAJOR DRAINAGE CROSSING

MINOR DRAINAGE CROSSING

MINOR DRAINAGE CROSSING

W Brewery Road

Stone Valley Road

**Route #1(a) - Field road route
designed to rural standards.**

STREET IMPROVEMENTS COST ESTIMATE

CLIENT NAME:
PROJECT NAME:

Village of Cross Plains
SUNDANCE DEVELOPMENT
Second Street Access - Field Road Route From the End of Brewery Road to Stone Valley Road Cul de Sac (Rural Section, No Sidewalks), 10% Maximum Slope, Not Including Land Acquisition Costs or Any Underground Utilities
5/10/2016

DATE OF ESTIMATE:

PHYSICAL ASSUMPTIONS:

Length of Street, Feet:	3630
Radii @ Intersections	20
Number of Radii	0
Number of Side Streets	0
Curb & Gutter Length, Feet:	0
Asphalt Width, Feet:	24
Shoulder Width, Feet:	4
Average Bad Subbase Undercut Depth, Inches:	3
Breaker Run Depth, Inches:	18
3/4" Crushed Aggregate Depth, Inches:	6
Asphalt Binder Course Thickness, Inches:	2
Asphalt Surface Course Thickness, Inches:	1.5
Width of Topsoiling, Each Side, Feet:	20
Sawcutting Length, Feet:	100
Base Course Safety Factor:	1.1
Asphalt Safety Factor:	1.1

COST ASSUMPTIONS:

Curb Cost, Per Lineal Foot:	\$13.00
Excavation/Fill to Subbase Cost, Per Cu. Yd.:	\$10.00
Bad Subbase Excavation Cost, Per Cu. Yd.:	\$12.00
Bad Subbase Replac. Br. Run Cost, Per Ton:	\$10.00
Breaker Run Cost, Per Ton:	\$10.00
3/4" Crushed Aggregate Cost, Per Ton:	\$10.00
Asphalt Binder Course Cost, Per Ton:	\$60.00
Asphalt Surface Course Cost, Per Ton:	\$62.00
Topsoil Restoration Cost, Per Sq. Yd.:	\$3.00
Seeding, Fertilizing & Mulching Cost, Per Sq. Yd.:	\$2.00
Sawcutting Cost, Per Lineal Foot:	\$4.00
Erosion Control Allowance, Lump Sum:	\$30,000.00
Traffic Control Allowance, Lump Sum:	\$1,000.00

CALCULATIONS:

Pavement Width, Feet:	24
Effective Depth of Crown, Inches:	1.92
Street Cr. Aggregate & Excavation Area, Sq. Ft.:	101640
Street Pavement Area, Square Feet:	87120
Street Pavement Area, Square Yards:	9680

COST ESTIMATE:

Description:	Units	Unit Price	Estimated Cost
Mobilization, Bonds & Insurances	1 l.s.	\$33,500.00 l.s.	\$33,500
Clearing & Grubbing	6 ac.	\$5,000.00 /ac.	\$30,000
Excavation to Subbase	9229 c.y.	\$10.00 /c.y.	\$92,290
Excavation of Bad Materials Below Subbase	941 c.y.	\$12.00 /c.y.	\$11,292
3" Breaker Run Replacement of Bad Subbase	1886 tons	\$10.00 /ton	\$18,860
3" Breaker Run Base Course	11320 tons	\$10.00 /ton	\$113,200
3/4" Crushed Aggregate Base Course	4981 tons	\$10.00 /ton	\$49,810
Sawcutting	100 l.f.	\$4.00 /l.f.	\$400
48" Dia. Concrete Culverts	198 l.f.	\$125.00 /l.f.	\$24,750
36" Dia. Concrete Culverts	132 l.f.	\$100.00 /l.f.	\$13,200
48" Concrete Endwalls	6 ea.	\$4,500.00 ea.	\$27,000
36" Concrete Endwalls	4 ea.	\$3,500.00 ea.	\$14,000
Stormwater Treatment Facilities Allowance	2 ea.	\$40,000.00 ea.	\$80,000
Concrete Curb & Gutter	0 l.f.	\$13.00 /l.f.	\$0
Asphalt Lower Course	1278 tons	\$60.00 /ton	\$76,680
Asphalt Surface Course	958 tons	\$62.00 /ton	\$59,396
Topsoil Restoration	5556 s.y.	\$3.00 /s.y.	\$16,668
Seeding, Fertilizing & Mulching	5556 s.y.	\$2.00 /s.y.	\$11,112
Erosion Control	1 l.s.	\$30,000.00 l.s.	\$30,000
Signing and Traffic Control	1 l.s.	\$1,000.00 l.s.	\$1,000

CONSTRUCTION SUBTOTAL

Engineering	@	13 %		\$703,158
Contingency	@	10 %		\$91,411

TOTAL **\$864,884**

Route #1(b) - Field road route designed to urban standards.

STREET IMPROVEMENTS COST ESTIMATE

CLIENT NAME:
PROJECT NAME:

Village of Cross Plains
SUNDANCE DEVELOPMENT
Second Street Access - Field Road Route From the End of Brewery Road to Stone Valley Road Cul de Sac (Urban Section, No Sidewalks), 10% Maximum Slope, Not Including Land Acquisition Costs or Any Underground Utilities Other than Storm Sewer
5/10/2016

DATE OF ESTIMATE:

PHYSICAL ASSUMPTIONS:

Length of Street, Feet:	3630
Radii @ Intersections	30
Number of Radii	0
Number of Side Streets	0
Curb & Gutter Length, Feet:	7260
Curb Face-to-Curb Face Width, Feet:	36
Width of Curb, Inches:	30
Average Bad Subbase Undercut Depth, Inches:	3
Breaker Run Depth, Inches:	18
3/4" Crushed Aggregate Depth, Inches:	6
Asphalt Binder Course Thickness, Inches:	2
Asphalt Surface Course Thickness, Inches:	1.5
Width of Topsoiling, Each Side, Feet:	15
Sawcutting Length, Feet:	100
Base Course Safety Factor:	1.1
Asphalt Safety Factor:	1.1

COST ASSUMPTIONS:

Curb Cost, Per Lineal Foot:	\$13.00
Excavation/Fill to Subbase Cost, Per Cu. Yd.:	\$10.00
Bad Subbase Excavation Cost, Per Cu. Yd.:	\$12.00
Bad Subbase Replac. Br. Run Cost, Per Ton:	\$10.00
Breaker Run Cost, Per Ton:	\$10.00
3/4" Crushed Aggregate Cost, Per Ton:	\$10.00
Asphalt Binder Course Cost, Per Ton:	\$60.00
Asphalt Surface Course Cost, Per Ton:	\$62.00
Topsoil Restoration Cost, Per Sq. Yd.:	\$3.00
Seeding, Fertilizing & Mulching Cost, Per Sq. Yd.:	\$2.00
Sawcutting Cost, Per Lineal Foot:	\$4.00
Erosion Control Allowance, Lump Sum:	\$30,000.00
Traffic Control Allowance, Lump Sum:	\$1,000.00

CALCULATIONS:

Pavement Width, Feet:	32
3/4 " Cr. Aggr. Depth Beneath Curb, Inches:	2
Effective Depth of Crown, Inches:	1.92
Street Cr. Aggregate & Excavation Area, Sq. Ft.:	141570
Street Pavement Area, Square Feet:	116160
Street Pavement Area, Square Yards:	12906.66667

COST ESTIMATE:

Description:	Units	Unit Price	Estimated Cost
Mobilization, Bonds & Insurances	1 l.s.	\$60,900.00	\$60,900
Clearing & Grubbing	4 ac.	\$5,000.00 /ac.	\$20,000
Excavation to Subbase	12855 c.y.	\$10.00 /c.y.	\$128,550
Excavation of Bad Materials Below Subbase	1311 c.y.	\$12.00 /c.y.	\$15,732
3" Breaker Run Replacement of Bad Subbase	2628 tons	\$10.00 /ton	\$26,280
3" Breaker Run Base Course	15767 tons	\$10.00 /ton	\$157,670
3/4" Crushed Aggregate Base Course	6007 tons	\$10.00 /ton	\$60,070
Sawcutting	100 l.f.	\$4.00 /l.f.	\$400
48" Dia. Concrete Culverts	198 l.f.	\$135.00 /l.f.	\$26,730
48" Concrete Culvert Endwalls	6 ea.	\$3,500.00 ea.	\$21,000
36" Concrete Culverts	132 l.f.	\$110.00 /l.f.	\$14,520
36" Concrete Culvert Endwalls	4 ea.	\$2,000.00 ea.	\$8,000
12" RCP Storm Sewer	360 l.f.	\$60.00 /l.f.	\$21,600
18" RCP Storm Sewer	100 l.f.	\$75.00 /l.f.	\$7,500
24" RCP Storm Sewer	1050 l.f.	\$90.00 /l.f.	\$94,500
36" RCP Storm Sewer	200 l.f.	\$110.00 /l.f.	\$22,000
Street Inlets	20 ea.	\$3,500.00 ea.	\$70,000
24" RCP Apron Endwalls	2 ea.	\$1,000.00 ea.	\$2,000
18" RCP Apron Endwalls	1 ea.	\$750.00 ea.	\$750
Stormwater Treatment Facilities Allowance	5 ea.	\$25,000.00 ea.	\$125,000
Concrete Curb & Gutter	7260 l.f.	\$13.00 /l.f.	\$94,380
Asphalt Lower Course	1704 tons	\$60.00 /ton	\$102,240
Asphalt Surface Course	1278 tons	\$62.00 /ton	\$79,236
Topsoil Restoration	17656 s.y.	\$3.00 /s.y.	\$52,968
Seeding, Fertilizing & Mulching	17656 s.y.	\$2.00 /s.y.	\$35,312
Erosion Control	1 l.s.	\$30,000.00 l.s.	\$30,000
Signing and Traffic Control	1 l.s.	\$1,000.00 l.s.	\$1,000

CONSTRUCTION SUBTOTAL

Engineering	@	13 %	\$166,184
Contingency	@	10 %	\$127,834

TOTAL

\$1,572,356

Route #2(a) - Direct road route
designed to rural standards.

STREET IMPROVEMENTS COST ESTIMATE

CLIENT NAME:
PROJECT NAME:

Village of Cross Plains
SUNDANCE DEVELOPMENT
Second Street Access - Shortest Reasonable Route From the End of Brewery Road to Stone Valley Road Cul de Sac (Rural Section, No Sidewalks), 10% Maximum Slope, Not Including Land Acquisition Costs or Any Underground Utilities
5/10/2016

DATE OF ESTIMATE:

PHYSICAL ASSUMPTIONS:

Length of Street, Feet:	2520
Radii @ Intersections	20
Number of Radii	0
Number of Side Streets	0
Curb & Gutter Length, Feet:	0
Asphalt Width, Feet:	24
Shoulder Width, Feet:	4
Average Bad Subbase Undercut Depth, Inches:	3
Breaker Run Depth, Inches:	18
3/4" Crushed Aggregate Depth, Inches:	6
Asphalt Binder Course Thickness, Inches:	2
Asphalt Surface Course Thickness, Inches:	1.5
Width of Topsoiling, Each Side, Feet:	20
Sawcutting Length, Feet:	100
Base Course Safety Factor:	1.1
Asphalt Safety Factor:	1.1

COST ASSUMPTIONS:

Curb Cost, Per Lineal Foot:	\$13.00
Excavation/Fill to Subbase Cost, Per Cu. Yd.:	\$10.00
Bad Subbase Excavation Cost, Per Cu. Yd.:	\$12.00
Bad Subbase Replac. Br. Run Cost, Per Ton:	\$10.00
Breaker Run Cost, Per Ton:	\$10.00
3/4" Crushed Aggregate Cost, Per Ton:	\$10.00
Asphalt Binder Course Cost, Per Ton:	\$60.00
Asphalt Surface Course Cost, Per Ton:	\$62.00
Topsoil Restoration Cost, Per Sq. Yd.:	\$3.00
Seeding, Fertilizing & Mulching Cost, Per Sq. Yd.:	\$2.00
Sawcutting Cost, Per Lineal Foot:	\$4.00
Erosion Control Allowance, Lump Sum:	\$25,000.00
Traffic Control Allowance, Lump Sum:	\$1,000.00

CALCULATIONS:

Pavement Width, Feet:	24
Effective Depth of Crown, Inches:	1.92
Street Cr. Aggregate & Excavation Area, Sq. Ft.:	70560
Street Pavement Area, Square Feet:	60480
Street Pavement Area, Square Yards:	6720

COST ESTIMATE:

Description:	Units	Unit Price	Estimated Cost
Mobilization, Bonds & Insurances	1 l.s.	\$49,800.00 l.s.	\$49,800
Clearing & Grubbing	4 ac.	\$5,000.00 /ac.	\$20,000
Excavation to Subbase	6407 c.y.	\$10.00 /c.y.	\$64,070
Fill to Limit Slope	45000 c.y.	\$10.00 /c.y.	\$450,000
Excavation of Bad Materials Below Subbase	653 c.y.	\$12.00 /c.y.	\$7,836
3" Breaker Run Replacement of Bad Subbase	1309 tons	\$10.00 /ton	\$13,090
3" Breaker Run Base Course	7859 tons	\$10.00 /ton	\$78,590
3/4" Crushed Aggregate Base Course	3458 tons	\$10.00 /ton	\$34,580
Sawcutting	100 l.f.	\$4.00 /l.f.	\$400
48" Dia. Concrete Culverts	198 l.f.	\$125.00 /l.f.	\$24,750
36" Dia. Concrete Culverts	264 l.f.	\$100.00 /l.f.	\$26,400
48" Concrete Endwalls	6 ea.	\$4,500.00 ea.	\$27,000
36" Concrete Endwalls	6 ea.	\$3,500.00 ea.	\$21,000
Stormwater Treatment Facilities Allowance	2 ea.	\$40,000.00 ea.	\$80,000
Concrete Curb & Gutter	0 l.f.	\$13.00 /l.f.	\$0
Asphalt Lower Course	887 tons	\$60.00 /ton	\$53,220
Asphalt Surface Course	665 tons	\$62.00 /ton	\$41,230
Topsoil Restoration	5556 s.y.	\$3.00 /s.y.	\$16,668
Seeding, Fertilizing & Mulching	5556 s.y.	\$2.00 /s.y.	\$11,112
Erosion Control	1 l.s.	\$25,000.00 l.s.	\$25,000
Signing and Traffic Control	1 l.s.	\$1,000.00 l.s.	\$1,000
CONSTRUCTION SUBTOTAL			\$1,045,746
Engineering	@	13%	\$135,947
Contingency	@	10%	\$104,575
TOTAL			\$1,286,268

STREET IMPROVEMENTS COST ESTIMATE

CLIENT NAME:
PROJECT NAME:

Village of Cross Plains
SUNDANCE DEVELOPMENT
Second Street Access - Shortest Reasonable Route From the End of Brewery Road to Stone Valley Road Cul de Sac (Urban Section, No Sidewalks), 10% Maximum Slope, Not Including Land Acquisition Costs or Any Underground Utilities Other Than Storm Sewer
5/10/2016

DATE OF ESTIMATE:

PHYSICAL ASSUMPTIONS:

Length of Street, Feet:	2520
Radii @ Intersections	30
Number of Radii	0
Number of Side Streets	0
Curb & Gutter Length, Feet:	5040
Curb Face-to-Curb Face Width, Feet:	36
Width of Curb, Inches:	30
Average Bad Subbase Undercut Depth, Inches:	3
Breaker Run Depth, Inches:	18
3/4" Crushed Aggregate Depth, Inches:	6
Asphalt Binder Course Thickness, Inches:	2
Asphalt Surface Course Thickness, Inches:	1.5
Width of Topsoiling, Each Side, Feet:	15
Sawcutting Length, Feet:	100
Base Course Safety Factor:	1.1
Asphalt Safety Factor:	1.1

COST ASSUMPTIONS:

Curb Cost, Per Lineal Foot:	\$13.00
Excavation/Fill to Subbase Cost, Per Cu. Yd.:	\$10.00
Bad Subbase Excavation Cost, Per Cu. Yd.:	\$12.00
Bad Subbase Replac. Br. Run Cost, Per Ton:	\$10.00
Breaker Run Cost, Per Ton:	\$10.00
3/4" Crushed Aggregate Cost, Per Ton:	\$10.00
Asphalt Binder Course Cost, Per Ton:	\$60.00
Asphalt Surface Course Cost, Per Ton:	\$62.00
Topsoil Restoration Cost, Per Sq. Yd.:	\$3.00
Seeding, Fertilizing & Mulching Cost, Per Sq. Yd.:	\$2.00
Sawcutting Cost, Per Lineal Foot:	\$4.00
Erosion Control Allowance, Lump Sum:	\$25,000.00
Traffic Control Allowance, Lump Sum:	\$1,000.00

CALCULATIONS:

Pavement Width, Feet:	32
3/4 " Cr. Aggr. Depth Beneath Curb, Inches:	2
Effective Depth of Crown, Inches:	1.92
Street Cr. Aggregate & Excavation Area, Sq. Ft.:	98280
Street Pavement Area, Square Feet:	80640
Street Pavement Area, Square Yards:	8960

COST ESTIMATE:

Description:	Units	Unit Price	Estimated Cost
Mobilization, Bonds & Insurances	1 l.s.	\$69,900.00 l.s.	\$69,900
Clearing & Grubbing	4 ac.	\$5,000.00 /ac.	\$20,000
Excavation to Subbase	8924 c.y.	\$10.00 /c.y.	\$89,240
Fill to Limit Slope	50000 c.y.	\$10.00 /c.y.	\$500,000
Excavation of Bad Materials Below Subbase	910 c.y.	\$12.00 /c.y.	\$10,920
3" Breaker Run Replacement of Bad Subbase	1824 tons	\$10.00 /ton	\$18,240
3" Breaker Run Base Course	10946 tons	\$10.00 /ton	\$109,460
3/4" Crushed Aggregate Base Course	4170 tons	\$10.00 /ton	\$41,700
Sawcutting	100 l.f.	\$4.00 /l.f.	\$400
48" Dia. Concrete Culverts	198 l.f.	\$135.00 /l.f.	\$26,730
48" Concrete Endwalls	6 ea.	\$3,500.00 ea.	\$21,000
36" Concrete Culverts	264 l.f.	\$110.00 /l.f.	\$29,040
36" Concrete Endwalls	9 ea.	\$2,000.00 ea.	\$18,000
12" RCP Storm Sewer	288 l.f.	\$60.00 /l.f.	\$17,280
18" RCP Storm Sewer	50 l.f.	\$75.00 /l.f.	\$3,750
24" RCP Storm Sewer	450 l.f.	\$90.00 /l.f.	\$40,500
36" RCP Storm Sewer	250 l.f.	\$110.00 /l.f.	\$27,500
Street Inlets	16 ea.	\$3,500.00 ea.	\$56,000
18" RCP Apron Endwalls	1 ea.	\$1,000.00 ea.	\$1,000
Stormwater Treatment Facilities Allowance	2 ea.	\$40,000.00 ea.	\$80,000
Concrete Curb & Gutter	5040 l.f.	\$13.00 /l.f.	\$65,520
Asphalt Lower Course	1183 tons	\$60.00 /ton	\$70,980
Asphalt Surface Course	887 tons	\$62.00 /ton	\$54,994
Topsoil Restoration	13956 s.y.	\$3.00 /s.y.	\$41,868
Seeding, Fertilizing & Mulching	13956 s.y.	\$2.00 /s.y.	\$27,912
Erosion Control	1 l.s.	\$25,000.00 l.s.	\$25,000
Signing and Traffic Control	1 l.s.	\$1,000.00 l.s.	\$1,000
CONSTRUCTION SUBTOTAL			\$1,467,934
Engineering	@ 13%		\$190,831
Contingency	@ 10%		\$146,793
TOTAL			\$1,805,559