CITY OF BLOOMINGTON

WORK SESSION NOTICE

109 E. OLIVE ST.

MONDAY, AUGUST 25, 2014, 5:25 P.M.

1. Call to Order
2. Roll Call
3. Public Comment
4. Removal of the Road Barrier on West Jefferson Street at Allin St. *(20 minutes)*
5. Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Addition Infrastructure Costs *(40 minutes)*
6. Adjourn

FOR COUNCIL: August 25, 2014

SUBJECT: Removal of the Road Barrier on W. Jefferson St. at Allin St.

RECOMMENDATION/MOTION: That the item be placed on the September 8, 2014 Council agenda with a staff recommendation.

STRATEGIC PLAN LINK: Goal 4. Strong neighborhoods.

STRATEGIC PLAN SIGNIFICANCE: Objective 4a. Residents feeling safe in the homes and neighborhoods, and 4e. Strong partnership with residents and neighborhood associations.

BACKGROUND: In 1997, the City blocked off the 700 block of Jefferson St. at the Allin St. intersection, creating a dead end on the block. The measure responded to drive-by shootings and a fire bombing in the 700 block. Conceptually, it ended the ability to drive by and reduced crime opportunities of those from outside the neighborhood. Symbolically, it represented a City and a neighborhood determined to confront trouble brought upon the neighborhood. The barrier created by the dead-ending is a grassy area with a sidewalk. It is adjacent to Friendship Park.

More than two (2) years ago, City officials began advocating for removal of the barrier. In the opinion of staff, the barrier has become an obstacle to serving the residents for the Police, Fire and Public Works departments.

- Police: While Friendship Park closes at 9 p.m., crowds of unsupervised young people lawfully congregate into the late evening along the barrier. As this is not park land, no law prevents them from gathering along the barrier. This disrupts the neighborhood and threatens the sense of security among the residents. When crimes do occur, the barrier hinders police who are trying to pursue suspects. The suspects need only run away, either west or east depending upon which side of the barrier a squad car is located.

- Fire: Fire and rescue calls in the 700 block of W. Jefferson bottleneck the street. The dead end lacks adequate vehicle turnaround space. Once in the block, emergency vehicles have to back out. Backing large vehicles down a street reduces safety.

- Public Works: Garbage trucks, recycling trucks, snow plows and other Public Works vehicles must also back out because of the lack of turning area at the barrier. Backing large vehicles down a street reduces safety.

Public input: Residents have been part of the conversation throughout discussion of removing the barrier. The City hosted a formal meeting for residents in May 2012. Police, Fire and Public Works hosted community meetings on January 14 and April 29 of 2014. The City followed up with a mailing to eighty (80) addresses, which included all listed property taxpayers for those properties in the assessor records and, when different, current residents in the 700 and 800 blocks

of W. Jefferson St. The mailing included an explanation of the issue and a survey, which participants could fill out online or return via mail. The City finds mixed feelings about removing the barrier but with a majority favoring the barrier's removal.

The wishes of the public: Through meeting comments, shows of hand and the survey, it appears clear that the majority of interested parties and individuals support staff's position that the barrier be removed. Formal survey responses were sparse. Six (6) respondents said the barrier should be removed (75 percent) and two (2) said it should not be removed (25 percent).

Traffic flow remains unchanged: During public meetings, members of the public also expressed opposition to a staff proposal to redirect traffic on parts of W. Jefferson and W. Monroe from one way traffic to two way. Additionally, the Salvation Army noted that drivers could not legally back into a loading dock if the 700 block of W. Jefferson St. changed to one way traffic. Given the established patterns and the desire of the residents and other concerned parties, staff dropped its proposal to change directional configurations on the two streets.

Options for payment/work: Staff from the respective departments desire the project be completed in the current fiscal year. Public Works estimates the work will cost $70,000 to $80,000, start to finish, if using a work maintenance contract. The work also could potentially be done in-house with the Engineering and Streets & Sewer divisions of Public Works. This would reduce the price to time and materials, but the unseen cost is that these employees often already have backlogs of work. Other work would then not be done.

COMMUNITY GROUPS/INTERESTED PERSONS CONTACTED: Since January 2014, two (2) public forums were held and a mail-in survey was sent to discuss the issue of the barrier and other issues. Public Works, Police, Fire and Administration have been active in the discussion.

FINANCIAL IMPACT:

Respectfully submitted for Council consideration.

Prepared by: Stephen Arney, Public Works Administration

Reviewed by: Jim Karch, PE CFM, Director of Public Works
Brendan Heffner, Chief of Police
Michael S. Kimmerling, Fire Chief

Recommended by:

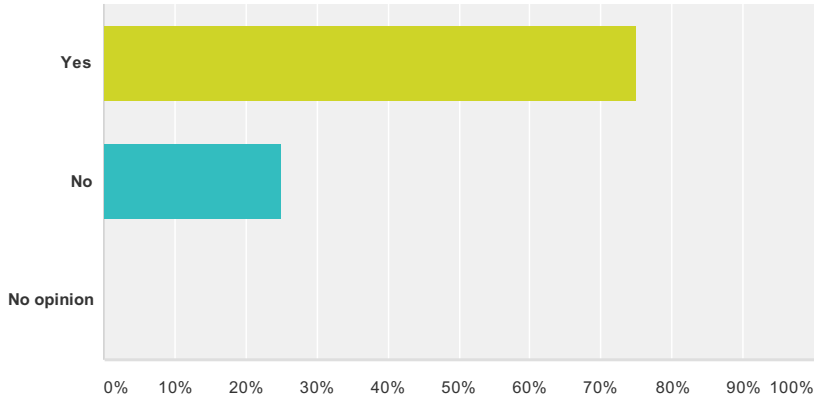
David A. Hales
City Manager

Attachments: Attachment 1. Survey Results
Attachment 2: Survey Summary
Attachment 3: Mailing area

W. Jefferson St. - 700 Block - Reopening

Q1 Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?

Answered: 8 Skipped: 0



Answer Choices	Responses	
Yes	**75.00%**	6
No	**25.00%**	2
No opinion	**0.00%**	0
Total		**8**

#	Your comments are welcome:	Date
1	Removing the barrier will allow more traffic into the area allowing opportunity for more problems in an already troubled area.	7/18/2014 8:21 AM
2	We believe the barrier was put up for good reason, but also see the benefits to removing it.	7/9/2014 9:24 PM
3	To help with public safety officials	6/23/2014 7:56 PM
4	The barrier makes access by service vehicles, snow plows, police, fire trucks, rescue squads etc. very difficult	6/20/2014 11:47 AM
5	Originally the barriers were put up because of drive by shootings. Saying this isn't an issue anymore isn't taking into account that someone has been shot or shot at the past 2 summers right at Mason and Jefferson.	6/17/2014 3:32 PM

Q2 Why are you not in favor of this proposal?

Answered: 2 Skipped: 6

#	Responses	Date
1	Streets on the east side are configured the same as W Jefferson and there are no issues with the garbage pickup etc there. Police still have access from N S E and W directions. Budget does not allow for non-essentials; the road has been closed 18 years why the sudden "urgency"	7/18/2014 8:22 AM
2	Many of the landlords who own the properties on Jefferson do not care about who they have live at the residences. Police parked at the intersection last year everyday because of issues with people who lived and hung out in front of the apartment building located at the intersection of Jefferson and Mason. It was one of these same individuals who was shot in the face last summer who was running away from that area. How much easier will it be for people to drive and shoot someone and keep going. There are also many kids who play and live at those apartments, and will be exposed to those opportunities.	6/17/2014 3:32 PM

Q3 On which block do you live?

Answered: 7 Skipped: 1

#	Responses	Date
1	700 block of W Jefferson	7/18/2014 8:23 AM
2	700 block of West Jefferson Street.	7/9/2014 9:28 PM
3	800	7/2/2014 7:34 AM
4	829 block	6/26/2014 10:08 AM
5	800 W. Jefferson	6/23/2014 7:56 PM
6	We own two houses at 708 and 720 West Jeff.	6/20/2014 11:49 AM
7	Jefferson (The Salvation Army)	6/17/2014 3:32 PM

Q4 Is there any other feedback you'd like to share with the City of Bloomington at this time?

Answered: 5 Skipped: 3

#	Responses	Date
1	There are cheaper alternatives to look at. Frivolous spending on unnecessary things (more pressing issues) Disallowing the west side the same rights as the east side.	7/18/2014 8:23 AM
2	Our hope is that the benefit to the neighborhood will outweigh the cost.	7/9/2014 9:28 PM
3	I would like to see Jefferson Street become a two way street also we have a lot of car that speed down Jefferson Street, speed bumps would put a stop to that	6/26/2014 10:08 AM
4	I believe things will work a lot better without the barrier. Thanks.	6/20/2014 11:49 AM
5	There are also a lot of youth programs that go on at The Salvation Army where kids are playing outside at times and/or crossing the street. On the other hand, it would make transporting bell ringers during the Christmas season easier. However, safety is more important to me, and is it the best use of the cities money. Would we block the road off again if drive by shootings become an issue again?	6/17/2014 3:32 PM

W. Jefferson St. - 700 Block - Reopening

#1

INCOMPLETE

Collector: Web Link (Web Link)
Started: Thursday, June 12, 2014 8:59:33 AM
Last Modified: Thursday, June 12, 2014 8:59:39 AM
Time Spent: 00:00:06
IP Address: 75.149.208.237

PAGE 1

Q1: **Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?**	Yes

PAGE 2

Q2: Why are you not in favor of this proposal?	*Respondent skipped this question*

PAGE 3

Q3: On which block do you live?	*Respondent skipped this question*
Q4: Is there any other feedback you'd like to share with the City of Bloomington at this time?	*Respondent skipped this question*

#2

COMPLETE

Collector: Web Link (Web Link)
Started: Tuesday, June 17, 2014 9:05:13 AM
Last Modified: Tuesday, June 17, 2014 1:31:55 PM
Time Spent: 04:26:42
IP Address: 75.146.97.81

PAGE 1

Q1: **Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?**

No,

Your comments are welcome:
Originally the barriers were put up because of drive by shootings. Saying this isn't an issue anymore isn't taking into account that someone has been shot or shot at the past 2 summers right at Mason and Jefferson.

PAGE 2

Q2: **Why are you not in favor of this proposal?**

Many of the landlords who own the properties on Jefferson do not care about who they have live at the residences. Police parked at the intersection last year everyday because of issues with people who lived and hung out in front of the apartment building located at the intersection of Jefferson and Mason. It was one of these same individuals who was shot in the face last summer who was running away from that area. How much easier will it be for people to drive and shoot someone and keep going. There are also many kids who play and live at those apartments, and will be exposed to those opportunities.

PAGE 3

Q3: **On which block do you live?**

Jefferson (The Salvation Army)

Q4: **Is there any other feedback you'd like to share with the City of Bloomington at this time?**

There are also a lot of youth programs that go on at The Salvation Army where kids are playing outside at times and/or crossing the street. On the other hand, it would make transporting bell ringers during the Christmas season easier. However, safety is more important to me, and is it the best use of the cities money. Would we block the road off again if drive by shootings become an issue again?

#3

COMPLETE

Collector: Web Link (Web Link)
Started: Friday, June 20, 2014 9:41:17 AM
Last Modified: Friday, June 20, 2014 9:48:35 AM
Time Spent: 00:07:18
IP Address: 75.150.223.129

PAGE 1

Q1: Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?

Yes,

Your comments are welcome:
The barrier makes access by service vehicles, snow plows, police, fire trucks, rescue squads etc. very difficult

PAGE 2

Q2: Why are you not in favor of this proposal?

Respondent skipped this question

PAGE 3

Q3: On which block do you live?

We own two houses at 708 and 720 West Jeff.

Q4: Is there any other feedback you'd like to share with the City of Bloomington at this time?

I believe things will work a lot better without the barrier. Thanks.

#4

COMPLETE

Collector: Web Link (Web Link)
Started: Monday, June 23, 2014 5:54:40 PM
Last Modified: Monday, June 23, 2014 5:56:17 PM
Time Spent: 00:01:37
IP Address: 98.226.221.26

PAGE 1

Q1: **Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?**	Yes, Your comments are welcome: To help with public safety officials

PAGE 2

Q2: **Why are you not in favor of this proposal?**	*Respondent skipped this question*

PAGE 3

Q3: **On which block do you live?**

800 W. Jefferson

Q4: **Is there any other feedback you'd like to share with the City of Bloomington at this time?**	*Respondent skipped this question*

#5

COMPLETE

Answers Entered Manually

Collector: Web Link - Manual Entry 2 (Web Link)
Started: Thursday, June 26, 2014 8:06:22 AM
Last Modified: Thursday, June 26, 2014 8:07:31 AM
Time Spent: 00:01:09
IP Address: 75.149.208.237

PAGE 1

Q1: **Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?**	Yes

PAGE 2

Q2: **Why are you not in favor of this proposal?**	*Respondent skipped this question*

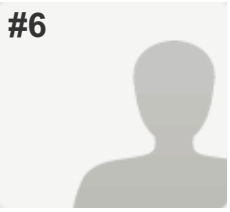
PAGE 3

Q3: **On which block do you live?**

829 block

Q4: **Is there any other feedback you'd like to share with the City of Bloomington at this time?**

I would like to see Jefferson Street become a two way street also we have a lot of car that speed down Jefferson Street, speed bumps would put a stop to that



COMPLETE

Collector: Web Link (Web Link)
Started: Wednesday, July 02, 2014 5:33:44 AM
Last Modified: Wednesday, July 02, 2014 5:34:29 AM
Time Spent: 00:00:45
IP Address: 204.94.39.142

PAGE 1

Q1: **Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?**

Yes

PAGE 2

Q2: **Why are you not in favor of this proposal?**

Respondent skipped this question

PAGE 3

Q3: **On which block do you live?**

800

Q4: **Is there any other feedback you'd like to share with the City of Bloomington at this time?**

Respondent skipped this question

#7

COMPLETE

Collector: Web Link (Web Link)
Started: Wednesday, July 09, 2014 7:21:28 PM
Last Modified: Wednesday, July 09, 2014 7:28:01 PM
Time Spent: 00:06:33
IP Address: 50.106.229.245

PAGE 1

Q1: Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?

Yes,

Your comments are welcome:
We believe the barrier was put up for good reason, but also see the benefits to removing it.

PAGE 2

Q2: Why are you not in favor of this proposal?

Respondent skipped this question

PAGE 3

Q3: On which block do you live?

700 block of West Jefferson Street.

Q4: Is there any other feedback you'd like to share with the City of Bloomington at this time?

Our hope is that the benefit to the neighborhood will outweigh the cost.

#8

COMPLETE

Answers Entered Manually

Collector: Web Link - Manual Entry 3 (Web Link)
Started: Friday, July 18, 2014 6:20:23 AM
Last Modified: Friday, July 18, 2014 6:23:12 AM
Time Spent: 00:02:49
IP Address: 12.160.1.190

PAGE 1

Q1: **Are you in favor of removing the barrier on Jefferson Street at Allin Street and reconnecting the streets?**

No,

Your comments are welcome:
Removing the barrier will allow more traffic into the area allowing opportunity for more problems in an already troubled area.

PAGE 2

Q2: **Why are you not in favor of this proposal?**

Streets on the east side are configured the same as W Jefferson and there are no issues with the garbage pickup etc there. Police still have access from N S E and W directions. Budget does not allow for non-essentials; the road has been closed 18 years why the sudden "urgency"

PAGE 3

Q3: **On which block do you live?**

700 block of W Jefferson

Q4: **Is there any other feedback you'd like to share with the City of Bloomington at this time?**

There are cheaper alternatives to look at. Frivolous spending on unnecessary things (more pressing issues)
Disallowing the west side the same rights as the east side.

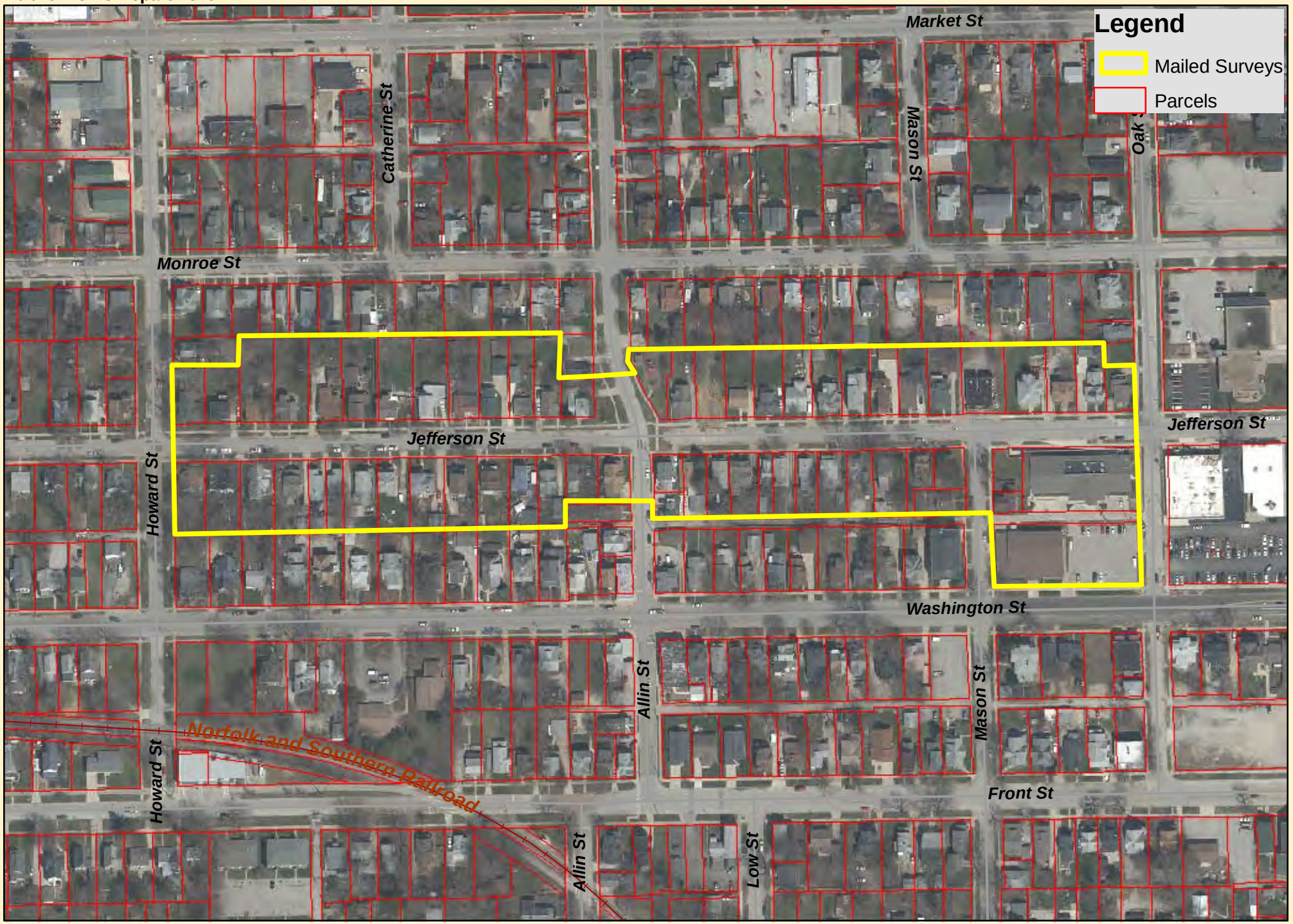
City of Bloomington ILLINOIS

Public Works Department

Jefferson St

0 115 230 460 Feet

DATE 07/28/2014



The Barrier

Police, Fire, Public Works and most residents believe the dead-end in the 700 block of West Jefferson Street should be eliminated

Overhead view of the barrier

Current configuration: With barrier

Past (and proposed for future): Without barrier

A closer look

Shifting perspectives on the barrier

- Reason for building the barrier: Mid-1990s drive-by shootings.
- Perspective today: It hinders police responding to an activity. Fire trucks and garbage and recycling trucks can't turn around. They have to back out.
- City staff recommends it be removed.
- Timetable: Not part of the budget for 2014 calendar year.


PANTAGRAPH.COM

City may reopen end of Jefferson Street block to curb crime

BLOOMINGTON — First barricaded in 1997 due to gang-related, drive-by shootings, the west end of the 700 block of West Jefferson Street could be reopened at the request of police officers who now see the closure as a hindrance to dealing with youth disturbances in the area.

The city is seeking feedback from residents on the possibility of reopening the block that has been dubbed "J-Block" by the visiting youths who disturb the area. Police have made 36 arrests within two blocks there since January.

Deputy City Manager Barb Adkins told a group of about 30 neighborhood residents during a community meeting Wednesday that police now say the barricade prevents a fluid patrol of the troubled area. City officials have no plans for any immediate decisions on changes, but another community meeting will be scheduled in about a month.

"We have a different set of problems now," Adkins said. "It's a safety thing for officers."

Residents at the meeting expressed hesitation about the idea, which was presented after several Bloomington police officers and directors from other city departments addressed resident concerns about unruly, harassing and sometimes criminal behavior.

Assistant Police Chief Robert Wall said police have increased patrol in the area, with 360 visits, 26 adult arrests, 10 juvenile arrests and 24 ordinance violations, mostly for disorderly conduct and fighting, within two blocks since January.

FOR COUNCIL: August 25, 2014

SUBJECT: Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Additional Infrastructure Costs

RECOMMENDATION/MOTION: To be Determined by City Council

STRATEGIC PLAN LINK: Goal 1. Financially sound City providing quality basic services; Goal 2. Upgrade City infrastructure and facilities; Goal 4. Strong neighborhoods, and Goal 5. Great place – livable, sustainable City.

STRATEGIC PLAN SIGNIFICANCE: Objective 1a. Budget with adequate resources to support defined services and level of services; 1d. City services delivered in the most cost-effective, efficient manner; 2a. Better quality roads and sidewalks; 4d. Improved neighborhood infrastructure, and 5b. City decisions consistent with plans and policies.

BACKGROUND: On September 26, 2005, Council approved an Annexation Agreement with the Grove on Kickapoo Creek, LLC. The Annexation Agreement requires the City to pay for oversizing sanitary trunk sewers, water mains and pavements in the Grove Subdivision. The Annexation Agreement does not require the developer to provide any notice of proposed developments, which would allow staff to adequately budget for oversizing costs. Staff submitted budget estimates based upon the attached Grove on Kickapoo Creek Construction Phases Map.
The Annexation Agreement also requires the City to pay the oversizing invoices within thirty (30) days of receipt of all documentation. As shown on the attached FY2015 budget documents, staff attempted to budget for oversizing costs related to the Grove Subdivision.

The developer's engineers have submitted construction plans for the Sixth Addition to the Grove Subdivision. This addition includes approximate oversizing costs shown in the following table. The estimated and requested budget costs vary since the developer is not obligated to provide notice of intended development.

GROVE ON KICKAPOO CREEK, 6th ADDITION – CITY OVERSIZING COSTS

INFRASTRUCTURE	ESTIMATED COST	REQUESTED BUDGET	APPROVED BUDGET
North Branch Sanitary Trunk Sewer	$500,000.00	$520,000.00	$0.00
Kickapoo Creek Road Water Main	$43,000.00	$307,000.00	$0.00
Kickapoo Creek Road & Pedestrian Underpass	Varies, Refer to Options Below	$200,000.00	$0.00

NORTH BRANCH SANITARY TRUNK SEWER
The 36 inch diameter north branch trunk sewer has been oversized to serve approximately 2,000 acres north of the Grove development. The current extension will construct the sewer approximately 200 feet north of the proposed addition.

KICKAPOO CREEK ROAD WATER MAIN
The 16 inch diameter water main has been oversized to serve the area north of the Grove development. The current extension will construct the water main to the northern limit of the proposed addition.

KICKAPOO CREEK ROAD & PEDESTRIAN UNDERPASS
Kickapoo Creek Road will eventually be a major arterial and is being constructed accordingly. The street is being oversized to a four lane facility with special base stabilization. The developer is only obligated to construct a two lane facility with standard base stabilization.

In addition, a pedestrian path or trail is planned below Kickapoo Creek Road. The trail in the subject area has been planned since development of the Grove Subdivision began. The trail was included in the Preliminary Plan and in many other plans and documents since. Responsibility for the trail crossing at Kickapoo Creek Road has been discussed with the developer for many years. To date, an agreement has not been reached regarding responsibility for construction of this crossing. Construction of a pedestrian underpass to accommodate the trail below the four (4) lane Kickapoo Creek Road is recommended by the engineering staff. The history of this issue is included with this memo. The following options are presented for Council Review.

Option No. 1 – Require construction of a pedestrian underpass at shared expense
As indicated above, staff recommends that the underpass be installed. Kickapoo Creek Road is a four (4) lane facility and will eventually be a major arterial street similar to Hershey Road or Towanda Avenue. Residents in the Ewing Park area often voice their concern about the lack of a safe location to cross Towanda Avenue. Construction of an underpass below Kickapoo Creek Road addresses this future concern by providing a safe walking and biking route for children traveling to Benjamin Elementary School, as well as the general public who will travel to the Kickapoo Creek Restoration Area and future park.

In 2009, a pedestrian underpass was constructed below Black Oak Boulevard to accommodate a future trail. The trail and underpass at this location were included in the Preliminary Plan. Since the underpass was shown on the Preliminary Plan, the developer did not contest paying for the portion of the underpass below a typical two (2) lane City street. The City paid for oversizing the underpass for the additional street width. In this case involving Kickapoo Creek Road, the underpass was not shown on the Preliminary Plan and the developers have raised concerns with its requirement. Photos of the Black Oak Boulevard underpass and an underpass at Hershey near G.E. Road are attached.

Despite the underpass not being shown on the Preliminary Plan, there are several publications and design guides which suggest that a grade separated crossing at this location is warranted. Included in the Trail Crossing Guidelines attachment is the US Department of Transportation (DOT) policy for Bicycle & Pedestrian Accommodations. As shown, the DOT encourages

convenient, safe and context-sensitive facilities to foster bicycle and pedestrian travel. The DOT also indicates that bicyclists and pedestrians should not be adversely affected by other transportation projects. The Illinois Department of Transportation's Bureau of Local Roads Design Manual indicates that bicycle crossings at high-volume multilane arterial highways should be signalized, grade separated or provide a median refuge for bicyclists. There is no median on Kickapoo Creek Road. An independent Grade-Separated Pedestrian Crossing study provides vehicular and pedestrian volumes where grade separation is recommended. Since this location is within an ongoing development, no vehicle or pedestrian volumes are available. According to the latest traffic study done in 2009, the Average Daily Traffic (ADT) on Hershey and Towanda near Empire St. is 17,700 and 17,100, respectfully. Projecting these figures forward at five percent (5%) per year to 2014, the approximate ADT for Hershey & Towanda is 23,000 and 20,000, respectfully. As previously indicated, Kickapoo Creek Road will be a high volume street and considered a major arterial street comparable to Hershey or Towanda. These vehicular volumes nearly meet the suggested guideline for a grade separated crossing. Finally, the City's Development Code requires basic consideration for the safety of both vehicular and pedestrian traffic in the design of all subdivision developments.

Staff recommends installation of the pedestrian underpass based on the current Preliminary Plan and believes the City is only responsible for the oversizing cost. The total estimated cost of the pedestrian underpass is $400,000, and the City's share of this would be $156,000. The developer's share just for the underpass would be approximately $244,000. The developer has indicated that this option is cost prohibitive for them and may delay or permanently prohibit development of this area.

Option No. 2 – Do not require the pedestrian underpass

Although engineering staff does not recommend this alternative, elimination of the proposed pedestrian underpass will resolve the responsibility issue and reduce the financial burden on both the developer and the City. If this alternative is pursued, pedestrians and bicyclists will be forced to cross Kickapoo Creek Road. If this crossing location remains a designated school walking route, a crossing guard will be required. Even if the underpass is not constructed, the City is responsible for the oversizing cost of Kickapoo Creek Road, with the City's share estimated to be $59,358. The developer would still remain obligated to grade for a bike path as shown on the Preliminary Plan.

Option No. 3 – Amend the Preliminary Plan to remove or move the trail

The developers submit that the trail along Kickapoo Creek Road was only contemplated to allow connection to a subsequent subdivision. They believe a subdivision west of the Grove is unlikely to be developed due to the anticipated Eastside Highway. Engineering staff disagree with this opinion due to the expected limited access requirements of the Eastside Highway. Typically limited access highways discourage commercial development. This usually results in residential development of the limited access controlled areas. Despite this difference of opinion, one option would be to amend the preliminary plan to remove or adjust the trail. This would eliminate the need for a pedestrian underpass and potentially eliminate or reduce the City's cost to accommodate a pedestrian crossing of Kickapoo Creek Road. If this option is pursued, Engineering staff prefer that the Amended Preliminary Plan show an alternate trail location and

provide specific details of the proposed crossing and cost sharing requirements. The City is still responsible for oversizing Kickapoo Creek Road at an estimated cost of $59,358.

Option No. 4. – Construct the Pedestrian Underpass at the City's sole cost
Keeping the bike trail in place as shown on the Preliminary Plan adds a viable amenity to the subdivision and City. If the City moves forward, at its sole cost, with constructing the pedestrian underpass, it would encourage the development of the area resulting in permitting fees, property taxes and construction jobs. It would also take advantage of infrastructure already constructed in the area. However, this comes with a $400,000 cost to construct the pedestrian underpass. Once the City's shared expense for oversizing Kickapoo Creek Road is added, the total cost to the City under this option would be an estimated $459,358.

OPTIONS SUMMARY

OPTION	ESTIMATED CITY COST	ADVANTAGES	DISADVANTAGES
1	$215,358	Safe pedestrian crossing is provided. Cost is shared between City and Developer.	Disagreement with developer. Area may not get developed.
2	$59,358	Minimizes City's Current Expense.	Safe pedestrian crossing is not provided. Crossing Guard and related long term expense will be required.
3	$59,358	Minimizes or defers City Expense.	Safe pedestrian crossing is delayed. Issue is not resolved and must be addressed in the future.
4	$459,358	Safe pedestrian crossing is provided.	City pays 100% of the cost.

COMMUNITY GROUPS/INTERESTED PERSONS CONTACTED: Grove on Kickapoo Creek, LLC, McLean County Unit District 5, Farnsworth Group.

FINANCIAL IMPACT: The sewer expenditure would occur under Sewer-Sewer Construction & Improvement (51101100-72550). Stakeholders can locate the Sewer budget in the FY 2015 Adopted Budget book titled "Other Funds & Capital Improvement Program" on pages 152-161. Discussions during the budget included retaining money in the Sewer fund balance to cover costs that may occur during the FY 2015 fiscal year related to The Grove. If Sewer exceeds their budget at the end of the year due to this expenditure, a budget amendment will be brought to the Council at that time. The Water Main oversizing expenditure would come from Water Transmission & Distribution-Water Main Construction & Improvement (50100120-72540).

Stakeholders can locate this in the FY 2015 Adopted Budget book titled "Other Funds & Capital Improvement Program" on page 138. If Sewer exceeds their budget at the end of the year due to this expenditure, a budget amendment will be brought to the Council at that time. The Kickapoo Creek Road & Pedestrian Underpass will require a budget amendment and a subsequent transfer from the General Fund Transfers-To Capital Improvement Fund (10019180-89410). The transfer would be to Capital Improvement-From General Fund (40100100-85100). The subsequent expenditure would be made out of Capital Improvement-Street Construction & Improvements (40100100-72530).

Respectfully submitted for Council consideration.

Prepared by:	Kevin Kothe, P.E., City Engineer
Reviewed by:	Sue McLaughlin, ICMA-CM, Interim Asst. City Manager
Financial & budgetary review by:	Chris Tomerlin, Budget Analyst Carla A. Murillo, Budget Manager

Recommended by:

David A. Hales
City Manager

Attachments:
Attachment 1. FY 2015 Budget Amendments effect on the General Fund
Attachment 2. FY 2015 Budget Amendments effect on the Capital Improvement Fund
Attachment 3. FY 2015 Budget Amendments effect on the Water Fund
Attachment 4. FY 2015 Budget Amendments effect on the Sewer Fund
Attachment 5. Trail Guidelines and Estimates
Attachment 6. Grove 6th Council Maps
Attachment 7. FY2015 Budget Information
Attachment 8. Photos
Attachment 9. Grove 6th Trail Underpass History

FY 2015 BUDGET AMENDMENTS PROJECTED EFFECT ON FUND BALANCE

GENERAL FUND		
Council Approved	**Description of Item**	**Totals**
4/30/2014	**Opening Unaudited General Fund Balance**	**$ 13,740,378**
6/23/2014	Request to accept the 2014 Edward Byrne Memorial Grant (JAG) and Approve a Budget Amendment to Account 10015110 - 79134 in the	$ 32,012
7/14/2014	Request to Approve a Budget Amendment to Account 10015110 - 70220 in the General Fund and Approve Request for Proposals (RFP) and Approval of Agreement for the Dry prinkler System Architectural and	$ 11,700
7/28/2014	Request to Approve a Budget Amendment to Accounts (10015110 – 72520) and (10015110 – 70420) in the General Fund Budget for	$ 108,281
7/28/2014	Request to Approve a Budget Amendment to Account 10016110 - 70425 in the General Fund and Approve Lease Agreement for 104 - 106 E. Oakland Ave., the former Connect Transit Bus Storage Depot, a/k/a the	$ 62,719
8/11/2014	Acquisition of Sugar Creek Packing Plant located at 412 East Street and Request to Approve a Budget Amendment to Accounts (10019180 - 89410), (40100100 - 85100) and (40100100 - 85100) and (40100100 -	$ 250,000
8/11/2014	Text Amendment to Chapter 21. Refuse, Section 300.6 Holiday Collection regarding Refuse and Recycling Collection on Holidays and to Request to Approve a Budget Amendment to Accounts (10019180 - 89544), (54404400 -85100) and (54404400-61150) in the General and	$ 38,400
08/25/2014(Pending Council Approval)	Request to Approve a Budget Amendment in the General Fund, Capital Improvement Fund, Water Fund, and Storm Water Fund for the settlement of disputed claims relating to Annexation Agreement for West Washington St.	$ 32,830
08/25/2014(Pending Council Approval)	Change Order for Sidewalk Funding and Request to Approve a Budget Amendment to Accounts (10019180 - 89410), (40100100 - 85100) and (40100100 - 72560) in the General and Capital Improvement Fund Budgets	$ 100,000
08/25/2014(Worksession) *	Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Addition Infrastructure Costs	$ 459,358
	Unaudited General Fund Balance including FY 2015 Council Approved & Pending Budget Amendments	**$ 12,645,078**
	Percentage of Fund Balance in relationship to Approved Budget of FY 2015 General Fund Expenditures in the amount of $91,244,899	**13.86%**

*** Worst Case Scenario-Worksession Item on August 25, 2014**

Note: This exhibit assumes that budgeted revenues and expenditures will be received and disbursed as budgeted for FY 2015 and therefore,these projections are subject to change.

FY 2015 BUDGET AMENDMENTS PROJECTED EFFECT ON FUND BALANCE

CAPITAL IMPROVEMENT FUND

Council Approved	Description of Item	Totals
4/30/2014	**Opening Unaudited Capital Improvement Fund Balance**	**$ 641,787**
06/09/204	Request to Approve a Budget Amendment to Account 40100100 – 70050 in the Capital Improvement Fund and Prepare Repair Documents and Construction Observation Structure Services for the Pepsi Ice Center Parking	$ 155,250
8/11/2014	Acquisition of Sugar Creek Packing Plant located at 412 East Street and Request to Approve a Budget Amendment to Accounts (10019180 - 89410), (40100100 - 85100) and (40100100 - 85100) and (40100100 - 72510) in the General and Capital Improvement Fund Budgets	$ (250,000)
8/11/2014	Acquisition of Sugar Creek Packing Plant located at 412 East Street and Request to Approve a Budget Amendment to Accounts (10019180 - 89410), (40100100 - 85100) and (40100100 - 85100) and (40100100 - 72510) in the General and Capital Improvement Fund Budgets	$ 250,000
08/25/2014(Pending Council Approval) [1]	Request to Approve a Budget Amendment in the General Fund, Capital Improvement Fund, Water Fund, and Storm Water Fund for the settlement of disputed claims relating to Annexation Agreement for West Washington St.	$ (32,830)
08/25/2014(Pending Council Approval) [1]	Request to Approve a Budget Amendment in the General Fund, Capital Improvement Fund, Water Fund, and Storm Water Fund for the settlement of disputed claims relating to Annexation Agreement for West Washington St.	$ 32,830
08/25/2014(Pending Council Approval) [1]	Change Order for Sidewalk Funding and Request to Approve a Budget Amendment to Accounts (10019180 - 89410), (40100100 - 85100) and (40100100 - 72560) in the General and Capital Improvement Fund Budgets	$ (100,000)
08/25/2014(Pending Council Approval) 1	Change Order for Sidewalk Funding and Request to Approve a Budget Amendment to Accounts (10019180 - 89410), (40100100 - 85100) and (40100100 - 72560) in the General and Capital Improvement Fund Budgets	$ 100,000
08/25/2014(Worksession) *	Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Addition Infrastructure Costs	$ (459,358)
08/25/2014(Worksession) *	Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Addition Infrastructure Costs	$ 459,358
	Unaudited Capital Improvement Fund Balance including FY 2015 Council Approved & Pending Budget Amendments	**$ 486,537**

[1] - This is a transfer from the General Fund(expenditure).

The net effect on the Capital Improvement fund is a wash and nets to zero.

*** Worst Case Scenario-Work * Worst Case Scenario-Worksession Item on August 25, 2014**

Note: This exhibit assumes that budgeted revenues and expenditures will be received and disbursed as budgeted for FY 2015 and therefore,these projections are subject to change.

FY 2015 BUDGET AMENDMENTS PROJECTED EFFECT ON FUND BALANCE

WATER FUND

Council Approved	Description of Item	Totals
4/30/2014	**Opening Unaudited Water Fund Balance**	**$ 23,169,467**
08/25/2014(Worksession)	Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Addition Infrastructure Costs	$ 43,000
	Unaudited Water Fund Balance including FY 2015 Council Approved & Pending Budget Amendments	**$ 23,126,467**

Note: This exhibit assumes that budgeted revenues and expenditures will be received and disbursed as budgeted for FY 2015 and therefore,these projections are subject to change.

FY 2015 BUDGET AMENDMENTS PROJECTED EFFECT ON FUND BALANCE

SEWER FUND

Council Approved	Description of Item	Totals
4/30/2014	**Opening Unaudited Sewer Fund Balance**	**$ 2,434,266**
7/28/2014	Final Change Order for Phase 1 Locust Street Combined Sewer Overflow (CSO) Elimination and Water Main Replacement Project and Request to Approve a Budget Amendment to Accounts (51101100 - 72555) and (53103100 - 72555) in the Sewer and Storm Water Fund Budgets	$ 67,370
08/25/2014(Worksession)	Pedestrian Crossings on Major Highways and Grove on Kickapoo Creek 6th Addition Infrastructure Costs	$ 500,000
	Unaudited Sewer Fund Balance including FY 2015 Council Approved & Pending Budget Amendments	**$ 1,866,896**

Note: This exhibit assumes that budgeted revenues and expenditures will be received and disbursed as budgeted for FY 2015 and therefore,these projections are subject to change.

GRADE-SEPARATED PEDESTRIAN CROSSINGS

Walter T. Anderson

ABSTRACT

Grade-separated crossings are widely used to accommodate pedestrian crossings at hazardous locations when at-grade solutions are not feasible. They are used primarily to segregate pedestrian populations from automobiles, enhance accessibility and connectivity for pedestrians to nearby local activity centers, and improve the transportation facility's overall level of service. Due to cost, it is important for decision makers to present qualitative determinations justifying the decision to implement these structures. This report presents an overview of research findings concerning pedestrian crossing behavior, applicability of grade-separated crossings (primarily overhead crossings), their justification, design concerns, and possible shortcomings in an attempt to offer directives on grade-separated crossings.

Literature sources were reviewed to determine criteria used in developing warrants and conditions used for pedestrian bridge implementation. An overview of driver-pedestrian interaction was provided to illustrate the concerns relating crash data and at-grade crossings. Warrants and criteria were compiled and detailed to provide insight on requirements and threshold values. Bridge requirements were then summarized to highlight options, specifications, and design considerations. Warranting criteria for overpass crossings are not uniform and many decisions for implementation are based on the locations of schools or fatal crashes. The research reviewed for this report provided insight on pedestrian activity, pedestrian bridge specifications, and concluded that Average Daily Traffic and Average Daily Pedestrians were sufficient indicators for placement of grade-separated crossings.

I. INTRODUCTION

In the United States, it is estimated that 8.5% of trips are made by pedestrians (New Jersey Department of Transportation 2006). Statistics show that in 1994 vehicle registration in the United States per 1,000 persons was 20% higher than the United Kingdom, which is the next leading country (Ribbens 1996). Our country's overall affluence, demand for quick and convenient travel, and relatively inexpensive fuel costs have all made walking the least attractive alternative. The often unintended method of segregating pedestrian activity from vehicles has a benefit of reducing likely pedestrian/vehicle interaction and conflicts. High occurrence of incidents, crashes, deaths, and other safety concerns are often the prime determinant for implementing crossing improvements. This report presents an overview of research findings concerning at-grade crossings, grade-separated crossings, their justification, advantages, and disadvantages in an attempt to offer guidance for initiating proactive crossing improvements.

Grade-separated pedestrian crossings have often been used to accommodate pedestrian activity in hazardous locations. In situations where initial planning efforts did not foresee the need for the grade-separated crossing prior to original construction, the retrofitting costs have been excessive. There are five types of grade-separated crossings, as described by Cottrell and Mu, which include: 1) bridges and overpasses, 2) underpasses and tunnels, 3) below-grade networks, 4) elevated walkways, and 5) skyways and skywalks (2004). Of these, the most practical for general roadway use are overpasses and underpasses which both have advantages and disadvantages associated with their usage. This report will deal primarily with overpass crossings.

II. APPLICATIONS

Grade-separated crossings are implemented to provide an additional crossing alternative, to connect activity centers, to provide continuity in bicycle/pedestrian trails, or to serve as a safety improvement. There are no common standards or guidelines for warranting at-grade or grade-separated crossings, so project initiation usually originates from a local need utilizing state or local criteria. At uncontrolled intersections where pedestrians and vehicles are not segregated, the effectiveness of a highway crossing is even more of a daunting task. Some of the common criteria used by state and local officials to determine adequacy in a particular location include the following:

- Vehicular Volume-*Average Daily Traffic (ADT)*
- Pedestrian Volume-*Average Daily Pedestrians (ADP)*
- Gap Time
- Vehicular Speed
- Sight Distance
- Effective Crossing Width
- Effectiveness of At-Grade Crossing
- Lane Configuration
- Median Type
- Distance to Next Facility
- Crash Data
- Pedestrian-Vehicle Incidents
- Origin-Destination Combinations
- Rural/Urban Designation
- Land Use
- Connectivity of Activity Centers (i.e. schools, parks, parking lots, etc.)
- Child, Disabled, or Elderly Usage

Of these criteria, vehicular and pedestrian volumes are the most common warrants used. There have been several studies and summarizations of warrants for use in planning new developments and incorporating grade-separated crossings with existing facilities; however, Cottrell and Mu document commonly used values (2004).

Although pedestrian-vehicle crashes occur less frequently than vehicle only crashes, their presence (especially pedestrian deaths) stand out more and carry more weight in planning and improvement situations. For this reason, pedestrian-vehicle crashes are more sensitive and require careful evaluation should a pattern seem evident. Young adults between the ages of 19 and 35 are the largest group of pedestrians; however,

school aged children and the elderly are overrepresented in accident statistics (Federal Highway Administration 2006). Crashes that are high profile or that occur near school locations often prompt the initiation of a grade-separated crossing even though crashes alone are not used as deciding criteria by most agencies. As Cottrell and Mu state, "[t]his is a reactive approach…criteria should indicate the need for a grade-separated crossing before a regrettable incident occurs" (2004). Sites should be prioritized based on the respective agency's criteria, but flexibility should be allowed for case-by-case analysis to account for concerns that may have been unaddressed by the agency's policies.

Since pedestrian use is less predictable and the origin-destination points are less structured, the value of the facility after implementation is assessed by how well the structure is received and utilized. The effectiveness of the grade-separation crossing depends on the ability of the pedestrian to access the structure and cross the highway as well as the pedestrian's perception on the structure's associated benefits. Cottrell and Mu state that a pedestrian subconsciously associates the benefits of utilizing an alternative route such as a pedestrian bridge (2004). That association is based on the effect of safety and travel time. The travel time component can be illustrated by the ratio, *R*, which is defined as the ratio of the time spent crossing the intersection using the overpass or underpass compared to the time required to cross the intersection using an at-grade crossing (Cottrell 2004). Therefore the more time saved by using the grade-separated crossing, the more probably the crossing will be used. If the ratio of expected usage is one or less (meaning the time required to travel the crossing is equal when crossing at-grade or above/below grade) then pedestrians will likely utilize the grade-separated crossing. For pedestrian usage of the grade-separated crossing to be 100%, the ratio, *R*, should be 0.75 or less (Cottrell 2004).

III. DRIVER-PEDESTRIAN INTERACTION

An overview of driver-pedestrian interaction can assist with analyzing warrants and illustrating the effect that traffic calming devices and pedestrian improvements may have on pedestrian safety. Some of the possible at-grade alternatives are painted crosswalks, crosswalk hatching, raised medians, raised intersections, raised crosswalks, curb extensions, traffic signals, pedestrian signals, and in-street "Yield to Pedestrian Signs". In addition to these, there are even more 'intelligent' approaches, such as, in-pavement crosswalk lighting or pedestrian detecting semi-actuated traffic signals. These alternatives are highly effective but their use may be limited to certain types of transportation facilities or areas that have lower speeds.

In the 2005 report, *Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations*, several case studies were evaluated to supplement the study being performed by the Federal Highway Administration (FHWA) (2005). The FHWA study examined 1) the effects of driver and pedestrian behavior as they related to crosswalks, 2) the effects of crosswalk placement (i.e. intersection or midblock), 3) differences between marked and unmarked crosswalks, and 4) the perception of safety as it relates to crosswalks and to pedestrians (2005). The research investigated the correlation of crashes with some of the commonly used criteria, as stated earlier, by developing linear prediction models.

The FHWA study determined that drivers decreased vehicle speeds when a pedestrian entered the crosswalk (2005). This is important to note because it was also reported that vehicles are more likely to stop as the vehicle's speed decreases (Federal Highway Administration 2005). The study also concluded that crosswalk usage increased where intersections were marked and pedestrians did not display a significant difference behavior in marked or unmarked crosswalks (Federal Highway Administration 2005). In unmarked crosswalks, Average Daily Pedestrians (ADP) was the most important parameter when correlating the reported data with crashes (Federal Highway Administration 2005). For marked crosswalks, Average Daily Traffic (ADT) and ADP were found to be significant factors, with ADT being the most significant factor (Federal Highway Administration 2005). In addition, the research concluded that raised medians/refuge islands were effective and that in Western states crashes were less prominent (Federal Highway Administration 2005). This is due to a more pedestrian-friendly subculture.

There was not enough information to conclude if crash severity was affected by crosswalk type. At marked crosswalk locations, the effect of multiple-threat crashes were solely represented. In some documents, the effects of severity were clearly linked to midblock crashes, and one source showed them to be three times more fatal than intersection crashes (Wisconsin Department of Transportation 2002). In relation to midblock crashes, a high recommendation was made to place bus stops on the far side of all intersections and to recommend that crosswalks should not be within 'close proximity' of intersections as to alleviate unexpected crossings. Additional recommendations from the FHWA study consisted of concerns relating to the sole use of marked crosswalks at locations where speeds are greater than 40 miles per hour, forecasted ADTs are greater than 12,000 (15,000 for raised medians), there is limited sight distance or complex intersections, or when heavy vehicles are prevalent (2005). These recommendations illustrate some of the at-grade alternatives that are used to decrease the frequency and severity of pedestrian crashes.

Some of the most influential accident factors are prevalent when a definite correlation is noticeable with pedestrian-vehicle segregation and pedestrian or driver behavior as illustrated by the study *Pedestrian Facilities in South Africa*. In this study, Ribbens stated that "[s]ome of the major causative factors identified were the lack of compliance with traffic signals both by drivers and pedestrians…and visibility problems" (1996). For comparison, in 1994, there were 4,122 pedestrians killed in South Africa and in 1998, there were 5,220 pedestrian crash related deaths in the entire United States (Ribbens 1996). While a lesser percentage of South African crashes undoubtedly arose from highway crossing, it is still essential to realize that pedestrian segregation does have great benefits.

Grade-separated crossings are more susceptible to nonuse due to possible pedestrian inconvenience or delay. For this reason, it cannot be overemphasized that the incorporation of any pedestrian improvement component be placed in a fashion understandable for pedestrians and placed in the current or most logical crossing location to promote compliance.

IV. JUSTIFICATION FOR IMPLEMENTATION

Due to the costs associated with pedestrian bridges, many resources state that it is not cost-effective to install them without first trying other remedies. Ultimately, pedestrian warrants are established by local and state criteria, which are heavily based on pedestrian and vehicular volumes. These criteria should not confuse the fact that all locations recommended for grade-separated crossings should be further analyzed on a case-by-case basis. Areas that have unusual circumstances should be further analyzed to ensure that projects are prioritized appropriately. Some of the basic criteria previously mentioned and general requirements are described in detail below.

Vehicular Volume – The Average Daily Traffic should be substantial. Some agencies use ADT in conjunction with ADP. Distinctions between roadway classifications (i.e. arterial, freeway, etc.) are generally used and values can be based on 4-hour volume, daily volume, or a minimum 8-hour average for the average day. Some agencies use lower ADT values when higher speeds have been noted. Typical thresholds obtained from literature for ADT are illustrated in Table 1.

Pedestrian Volume –Average Daily Pedestrians are generally evaluated in regards to ADT. In many cases a representative sample can be taken based on surveys onsite. Pedestrians should be counted individually and classified based on age (can be estimated), type of trip (i.e. work/school related, shopping, etc.), and mode (non-motorized method, if not walking). Other non-motorized methods are not traditionally included in pedestrian volumes; however, they should be classified separately if the numbers are significant. Bicyclists and in-line skaters should be grouped together and skaters, skate boarders, and all others should be included in another group. This information will help determine the reasonableness of certain safety alternatives considering that the anticipated use of these safety alternatives may vary depending on the other non-motorized modes utilizing the same location. Typical thresholds for ADP are illustrated in Table 1.

TABLE 1: Typical ADT and ADP values

WARRANT	*SUGGESTED VALUES*
VEHICULAR VOLUMES	ADT>35,000 and >10,000 (4-hr.)[1]; ADT>25,000 and >7,500 (4-hr.)[2] min. 8-hr.average of 600 or 400 for school routes
PEDESTRIAN VOLUMES	100 (4-hr.)[1] or 300 (4-hr.)[2]

1 – Freeway Facilities; 2 – Arterial Facilities

Gap Time – Gap time is measured in seconds and can be expressed as an hourly rate. It is a function of effective width (curb to curb) and the number of rows of pedestrians. The 85th percentile for speeds is used to determine the desired crossing width of the roadway or intersection.

Speed – Vehicle speed in itself is used as a warrant and it is a factor relating to sight distance and roadway type. Generally the posted speed limit is used in lieu of spot speed studies. For data intensive analysis or design purposes the 85th percentile may

be used. Some agencies use lower ADT values when concerning higher speeds at a particular facility.

Sight Distance – Sight distance is usually correlated with geometric conditions at the proposed location. Usually sight distance comprises reaction time and stopping distance.

Effective Crossing Width – Effective Crossing Width is the minimum distance that the pedestrian needs to cross to be removed from traffic. If a raised median or paved shoulder is available, then the distance only includes the distance from one edge of the travel way to the next available refuge.

Effectiveness of At-Grade Crossing – Some agencies only warrant the need for a grade-separated crossing based on the feasibility of providing an at-grade crossing. This would include geometric obstacles, highways, waterways, or railways.

Lane Configuration – The number of lanes are generally associated with the roadway classification. Any facility over three lanes may be a good candidate for a marked crosswalk; however, three lanes are usually not justifiable for a grade-separated crossing unless the facility is linking two or more activity centers. Some agencies stipulate that a warrant may be met if the highway has six lanes or more.

Median Type – Raised pavement medians are the most helpful median treatment because they reduce the effective crossing width and provide a safe area for refuge. Striped medians and center two-way turn lanes are helpful as well, but with less significant effect. A suggested median width is 10 feet.

Distance to Next Facility – The further the next intersection or crossing is the more likely pedestrians are to cross at random locations. Suggested values include distances greater than 600 feet or greater than 660 feet. In Ribbens' South African case study, freeway crossings were constructed at interchanges in 5-kilometer intervals (1996).

Crash Data – Crash data should be compiled, and normalized, for comparison and prioritization with similar locations. This data will need to be continually acquired over several years while accounting for land use and facility changes. Crash data can be analyzed by crash type, crash severity, crashes per crosswalk, or crashes per million crossings. Because the amount of crash data, number of crashes, and severity of crashes can vary greatly, crash data should not be utilized alone; however, severe situations should be rectified when feasibly possible.

Pedestrian-Vehicle Incidents – Pedestrian-Vehicle incidents can be counted and illustrated as an hourly rate. Incidents include crashes, near misses, and instances when pedestrians or vehicles have to make abrupt stops.

Origin-Destination Combinations – Some agencies and planning organizations state that planning for future pedestrian demand is a better and more realistic way to ensure that grade-separated crossings are used. The use of origin-destination analysis is closely linked to land use, ADT, and ADP.

Rural/Urban Designation – Urban areas usually require less justification because of higher populations. Some agencies warrant grade-separated crossings in rural areas for school activity zones due to the higher speeds and concentration of children while some warrant grade-separated crossings in urban areas when excessive pedestrian delay is experienced.

Land Use – The type of land utilized in an area greatly affects the type and the amount of traffic. Residential areas or commercial districts may get higher priority based on circumstances and the satisfaction of other criteria.

Connectivity of Activity Centers – Activity centers bring high concentrations of pedestrian traffic. These centers can include schools, entertainment or sporting complexes, shopping districts, or large parking lots. Connecting activity centers can minimize delay and travel time and are safer based on the placement of the entryway.

Child, Disabled, or Elderly Usage – Children, disable, and elderly are more prone to crashes for several reason. Inexperience, impairments, inability to react to multiple threats, slower reaction times, and increased vulnerability due to slower walking speeds are all realistic and sometimes deciding warrants when considering grade-separated crossings. Land use, crash data, and pedestrian volume counts can all be utilized to provide insight and to determine the population type.

V. BRIDGE REQUIREMENTS

Requirements for overpasses are comparable to those of vehicular bridges that allow for pedestrian usage. Bridges in particular are structural art forms that should consider functionality and aesthetics into the design. Specifications from organizations that should be considered include the American Association of State Highway and Transportation Officials, the American Concrete Institute, the American's with Disabilities Act, the American Institute of Steel Construction, the American Standards for Testing Materials, the Federal Highway Administration, the Manual of Uniform Traffic Control Devices, the Portland Cement Association, the Steel Structural Painting Council, the United States Coast Guard, the United States Forest Products Laboratory, and state and local building codes.

The bridge walkway should be a minimum of 6 feet wide to account for wheel chair use. Some state agencies recommend wider walkways to promote a safer bridge and to allow for snow clearance by maintenance vehicles. The walkway, stairs, and/or ramps should have smooth rails at a minimum height of 42 inches (54 inches for bicyclists). Stairs should have 7-inch risers and contrasting 11-inch treads. Stairs can have no greater than a 12-foot rise per rest area and ramps can have no greater than a 12 to 1 rise. Landings and rest areas are to be included and should be a minimum of 5 feet wide.

The bridge can be composed of steel, weathered steel, concrete, or another suitable material. Steel should be of high strength, blasted, and painted as necessary. The walkway deck can be made of asphalt, brick, concrete, rubberized coatings, steel grates, tile, or wood. The deck should be weather resistant, non-slip, low maintenance,

and durable. Wood decks should be graded, with no imperfections, and no spaces. Rails and other pedestrian accessible components should be finished smooth with materials such as stainless steel or aluminum. Fencing or walls can be made of galvanized or vinyl coated steel, or glass respectively. Lighting should be incorporated into the design for adequacy and aesthetics at entryways, on the bridge deck, and below the bridge. Roofing or enclosing the overpass is optional, but can help alleviate discomfort from the elements and reduce routine maintenance. Elevators are also optional and should be placed in well-lit areas and include a prominent and easily discernible safety call button.

Loading should encompass dead loads due to structural, roofing, and utility loads if applicable. Live loads should account for pedestrians, wind, and snow. If the structure connects to the main entrance of a building or if maintenance vehicles will be used then the live loading should be increased. The bridge structure should allow for temperature changes of 120 degrees Fahrenheit, and deflect less than $1/400^{th}$ of the overall length ($1/800^{th}$ of vehicle loads). The structure can be cambered by 2 percent of the total length to assist with drainage. Rainwater from the deck or roof should be redirected towards the end of the bridge by use of gutters or drainage pipes to eliminate 'waterfalls' from affecting approaching vehicles. Electric, gas, or other utilities should be accounted for and incorporated into the design if appropriate. Vibration should be limited for running and walking loads for the added convenience of the pedestrian. Heating cables can be considered to melt snow on the bridge deck, but they use a lot of electricity.

Asphalt, tile, and rubberized decks can contribute to pedestrian comfort. Steel grated decks can eliminate the need for drainage but they are not perceived to be safe by pedestrians. For wider bridges, bollards are recommended to limit vehicle intrusion while allowing maintenance vehicles to access the pathway. Stairways and ramps should be innovatively designed to reduce added crossing time or length while contributing to the architecture and overall aesthetics of the bridge. Lighting should be adequate but not excessive and should highlight entryways and the overall architecture. Light pollution should be kept to a minimum and can be effectively used by utilizing lamp hoods and path lighting.

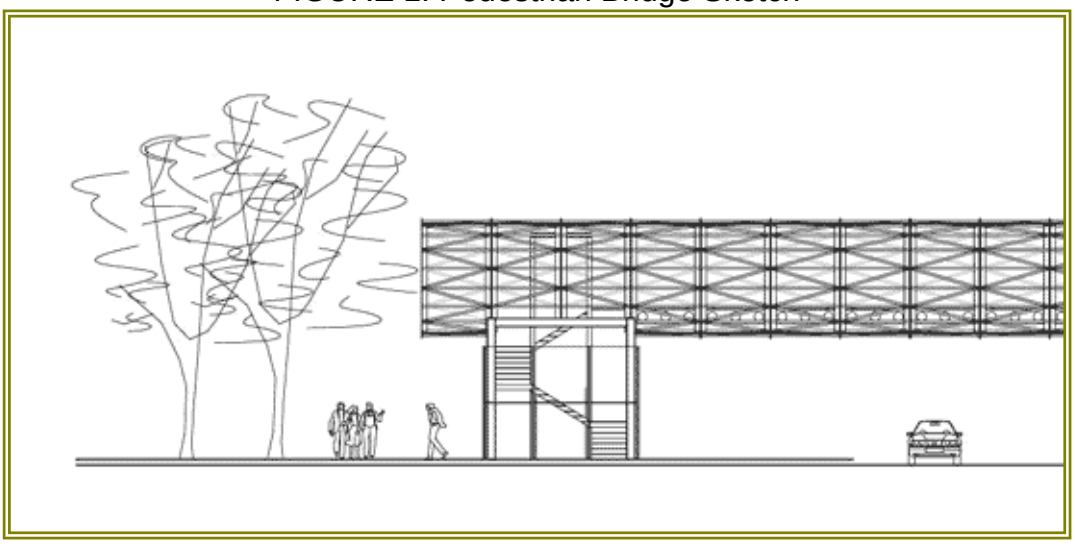
VI. BENEFITS, CONCERNS, AND COSTS

The benefits for implementing overpass structures are abundant. Safety can be considerably enhanced for areas that are wide or have numerous lanes, excessive vehicle volumes, high speeds, limited gaps, lengthy distances between crossings, or limited space for refuge areas. Reductions in pedestrian crash rates and rear-end collisions may also be noticeable from the safety effects obtained. In locations where it is not conducive to install at-grade crossings due to geometric or serviceability concerns, a grade-separated crossing can reduce delay for both pedestrians and vehicles, increase effective green times, and alleviate excessive pedestrian demand while improving the facility's overall level of service. Planning efforts can be used with origin-destination data to connect existing or future activity centers or decrease the length between them. Segregating pedestrians by using a grade-separated crossing at hazardous locations makes crossing less strenuous and more feasible for children, elderly, people with impairments, and multimodal users.

High crime areas discourage pedestrians from using grade-separated crossing. Accounting for bridge clearance, future highway expansion, and handicapped accessible ramps to satisfy the American's with Disabilities Act requirements usually lead to an increase in travel time unless the pedestrian facility is designed well to alleviate this disadvantage. A rendering of bridge designs are illustrated in Figures 1 and 2 to illustrate possible alternatives. For locations that are hazardous, barriers or guardrail may be installed to direct pedestrians to the entryway while discouraging them from crossing the intersection at grade.

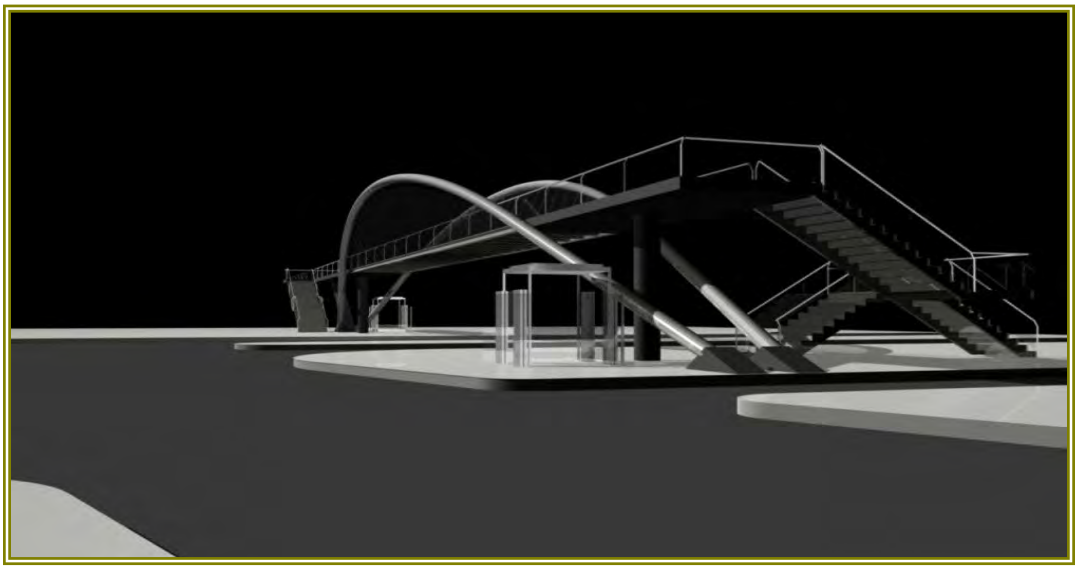
As with the addition of any structure, there are costs and maintenance obligations incurred. Overpasses are generally easier to maintain in comparison to underpasses. However, their benefits may not outweigh their added costs based on face value. Bridge overpasses can be newly constructed on site, prefabricated and delivered, or renovated and reused from another location. From the literature review, all three alternatives were found with prices ranging from $12,000 to $7,000,000 depending on the scale of the project. In many cases bicycle and pedestrian improvement projects may be eligible for federal funding as Transportation Enhancement Activities. There are several low-cost alternatives and federal funding options available depending on the circumstances of the project. Figures 1 and 2 depict basic renderings of bridge design and illustrate several of the requirements.

FIGURE 1: Pedestrian Bridge Sketch



Source: Illinois Institute of Technology Interprofessional Projects Program

FIGURE 2: Pedestrian Bridge Rendering



Source: Illinois Institute of Technology Interprofessional Projects Program

VII. CONCLUSION

There are no common standards or warrants for implementing at-grade or grade-separated crossings. Pedestrian warrants for crossing remedies are established at state and local levels. Many criteria are used, but ADT and ADP are the most prevalent and, in addition, they have proven to be good crash indicator variables. Crash data are not used by local and state agencies to establish warrants by themselves, but they do carry a lot of weight when sites are prioritized. Midblock crashes are of particular concern because they are the most severe of all pedestrian-vehicle crashes. Proper crosswalk placement can alleviate some midblock crashes.

Driver and pedestrian behavior can have a profound effect on the characteristics of the crashes and on the need for the grade-separated crossing. Pedestrian usage can vary, it is important that allowances be made for case-by-case analysis to account for abnormal conditions. Certain at-grade enhancements may not be appropriate for use depending on the given situations. Care should be taken not to make grade-separated crossings less convenient than the at-grade location in order to promote usage.

Bridges should reflect the personality of the local area, if possible. Specifications are parallel to standards relating to pedestrian usage on automobile facilities. Materials use is flexible and adaptable; therefore, bridge costs are considerably variable. Design should account for loading, utilities, proper drainage, and pedestrian comfort.

The benefits of adding a grade-separated crossing to a location are numerous; however, practicability is essential to justify the costs and to ensure that the structure is utilized.

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CITY OF BLOOMINGTON

GROVE ON KICKAPOO CREEK, 6TH ADDITION

KICKAPOO CREEK ROAD & PEDESTRIAN UNDERPASS

COST ESTIMATE (OPTION 1)

ITEM NO.	ITEM	UNIT	PLAN QTY	RATE	AMOUNT
1	12" STORM SEWER, TY. 1	LF	56	$50.00	$2,800.00
2	TRENCH BACKFILL - STORM SEWER	LF	56	$25.00	$1,400.00
3	STONE RIP-RAP, CLASS A6	SY	250	$80.00	$20,000.00
4	8" P.C. CONC. PAVEMENT	SY	1825	$40.00	$73,000.00
5	AGGREGATE BASE COURSE, TY. B	TN	825	$40.00	$33,000.00
6	EARTH EXCAVATION	CY	200	$10.00	$2,000.00
7	PEDESTRIAN UNDERPASS	LS	1	$400,000.00	$400,000.00
8	EROSION CONTROL	LS	1	$5,000.00	$5,000.00
9	TEMPORARY CULVERT	LS	1	$5,000.00	$5,000.00
10	CONSTRUCTION STAKING & LAYOUT	LS	1	$10,000.00	$10,000.00
				PAVEMENT TOTAL	$152,200.00
				PEDESTRIAN UNDERPASS TOTAL	$400,000.00
				GRAND TOTAL	$552,200.00

City Share of Pavement & Pedestrian Underpass (19' / 49')	39.0%
City Pavement Oversizing Cost	$59,358.00
City Pedestrian Underpass Oversizing Cost	$156,000.00
City Total Oversizing Cost	$215,358.00

CITY OF BLOOMINGTON

GROVE ON KICKAPOO CREEK, 6TH ADDITION

KICKAPOO CREEK ROAD & PEDESTRIAN UNDERPASS

COST ESTIMATE (OPTION 2 & 3)

ITEM NO.	ITEM	UNIT	PLAN QTY	RATE	AMOUNT
1	12" STORM SEWER, TY. 1	LF	56	$50.00	$2,800.00
2	TRENCH BACKFILL - STORM SEWER	LF	56	$25.00	$1,400.00
3	STONE RIP-RAP, CLASS A6	SY	250	$80.00	$20,000.00
4	8" P.C. CONC. PAVEMENT	SY	1825	$40.00	$73,000.00
5	AGGREGATE BASE COURSE, TY. B	TN	825	$40.00	$33,000.00
6	EARTH EXCAVATION	CY	200	$10.00	$2,000.00
7	EROSION CONTROL	LS	1	$5,000.00	$5,000.00
8	TEMPORARY CULVERT	LS	1	$5,000.00	$5,000.00
9	CONSTRUCTION STAKING & LAYOUT	LS	1	$10,000.00	$10,000.00
				PAVEMENT TOTAL	$152,200.00

City Share of Pavement & Pedestrian Underpass (19' / 49')	39.0%
City Pavement Oversizing Cost	$59,358.00

CITY OF BLOOMINGTON

GROVE ON KICKAPOO CREEK, 6TH ADDITION

KICKAPOO CREEK ROAD & PEDESTRIAN UNDERPASS

COST ESTIMATE (OPTION 4)

ITEM NO.	ITEM	UNIT	PLAN QTY	RATE	AMOUNT
1	12" STORM SEWER, TY. 1	LF	56	$50.00	$2,800.00
2	TRENCH BACKFILL - STORM SEWER	LF	56	$25.00	$1,400.00
3	STONE RIP-RAP, CLASS A6	SY	250	$80.00	$20,000.00
4	8" P.C. CONC. PAVEMENT	SY	1825	$40.00	$73,000.00
5	AGGREGATE BASE COURSE, TY. B	TN	825	$40.00	$33,000.00
6	EARTH EXCAVATION	CY	200	$10.00	$2,000.00
7	PEDESTRIAN UNDERPASS	LS	1	$400,000.00	$400,000.00
8	EROSION CONTROL	LS	1	$5,000.00	$5,000.00
9	TEMPORARY CULVERT	LS	1	$5,000.00	$5,000.00
10	CONSTRUCTION STAKING & LAYOUT	LS	1	$10,000.00	$10,000.00
				PAVEMENT TOTAL	$152,200.00
				PEDESTRIAN UNDERPASS TOTAL	$400,000.00
				GRAND TOTAL	$552,200.00

City Share of Pavement (19' / 49')	39.0%
City Share of Pedestrian Underpass	100.0%
City Pavement Oversizing Cost	$59,358.00
City Pedestrian Underpass Oversizing Cost	$400,000.00
City Total Oversizing Cost	$459,358.00

Bicycle & Pedestrian

Overview

Legislation

Guidance & Information

Funding

Publications

Meetings & Events

Resources

FHWA Contact

For more information, please contact Daniel Goodman, 202-366-9064.

State Coordinator Contact Information

Each State administers its own program. Contact your State Bicycle and Pedestrian Coordinator for guidance on State policies and project eligibility requirements.

United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations

Signed on March 11, 2010 and announced March 15, 2010

Purpose

The United States Department of Transportation (DOT) is providing this Policy Statement to reflect the Department's support for the development of fully integrated active transportation networks. The establishment of well-connected walking and bicycling networks is an important component for livable communities, and their design should be a part of Federal-aid project developments. Walking and bicycling foster safer, more livable, family-friendly communities; promote physical activity and health; and reduce vehicle emissions and fuel use. Legislation and regulations exist that require inclusion of bicycle and pedestrian policies and projects into transportation plans and project development. Accordingly, transportation agencies should plan, fund, and implement improvements to their walking and bicycling networks, including linkages to transit. In addition, DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate. Transportation programs and facilities should accommodate people of all ages and abilities, including people too young to drive, people who cannot drive, and people who choose not to drive.

Policy Statement

The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.

Authority

This policy is based on various sections in the United States Code (U.S.C.) and the Code of Federal Regulations (CFR) in Title 23—Highways, Title 49—Transportation, and Title 42—The Public Health and Welfare. These sections, provided in the Appendix, describe how bicyclists and pedestrians of all abilities should be involved throughout the planning process, should not be adversely affected by other transportation projects, and should be able to track annual obligations and expenditures on nonmotorized transportation facilities.

Recommended Actions

The DOT encourages States, local governments, professional associations, community organizations, public transportation agencies, and other government agencies, to adopt similar policy statements on bicycle and pedestrian accommodation as an indication of their commitment to accommodating bicyclists and pedestrians as an integral element of the transportation system. In support of this commitment, transportation agencies and local communities should go beyond minimum design standards and requirements to create safe, attractive, sustainable, accessible, and convenient bicycling and walking networks. Such actions should include:

- Considering walking and bicycling as equals with other transportation modes: The primary goal of a transportation system is to safely and efficiently move people and goods. Walking and bicycling are efficient transportation modes for most short trips and, where convenient intermodal systems exist, these nonmotorized trips can easily be linked with transit to significantly increase trip distance. Because of the benefits they provide, transportation agencies should give the same priority to

walking and bicycling as is given to other transportation modes. Walking and bicycling should not be an afterthought in roadway design.

- Ensuring that there are transportation choices for people of all ages and abilities, especially children: Pedestrian and bicycle facilities should meet accessibility requirements and provide safe, convenient, and interconnected transportation networks. For example, children should have safe and convenient options for walking or bicycling to school and parks. People who cannot or prefer not to drive should have safe and efficient transportation choices.
- Going beyond minimum design standards: Transportation agencies are encouraged, when possible, to avoid designing walking and bicycling facilities to the minimum standards. For example, shared-use paths that have been designed to minimum width requirements will need retrofits as more people use them. It is more effective to plan for increased usage than to retrofit an older facility. Planning projects for the long-term should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.
- Integrating bicycle and pedestrian accommodation on new, rehabilitated, and limited-access bridges: DOT encourages bicycle and pedestrian accommodation on bridge projects including facilities on limited-access bridges with connections to streets or paths.
- Collecting data on walking and biking trips: The best way to improve transportation networks for any mode is to collect and analyze trip data to optimize investments. Walking and bicycling trip data for many communities are lacking. This data gap can be overcome by establishing routine collection of nonmotorized trip information. Communities that routinely collect walking and bicycling data are able to track trends and prioritize investments to ensure the success of new facilities. These data are also valuable in linking walking and bicycling with transit.
- Setting mode share targets for walking and bicycling and tracking them over time: A byproduct of improved data collection is that communities can establish targets for increasing the percentage of trips made by walking and bicycling.
- Removing snow from sidewalks and shared-use paths: Current maintenance provisions require pedestrian facilities built with Federal funds to be maintained in the same manner as other roadway assets. State Agencies have generally established levels of service on various routes especially as related to snow and ice events.
- Improving nonmotorized facilities during maintenance projects: Many transportation agencies spend most of their transportation funding on maintenance rather than on constructing new facilities. Transportation agencies should find ways to make facility improvements for pedestrians and bicyclists during resurfacing and other maintenance projects.

Conclusion

Increased commitment to and investment in bicycle facilities and walking networks can help meet goals for cleaner, healthier air; less congested roadways; and more livable, safe, cost-efficient communities. Walking and bicycling provide low-cost mobility options that place fewer demands on local roads and highways. DOT recognizes that safe and convenient walking and bicycling facilities may look different depending on the context — appropriate facilities in a rural community may be different from a dense, urban area. However, regardless of regional, climate, and population density differences, it is important that pedestrian and bicycle facilities be integrated into transportation systems. While DOT leads the effort to provide safe and convenient accommodations for pedestrians and bicyclists, success will ultimately depend on transportation agencies across the country embracing and implementing this policy.

Ray LaHood, United States Secretary of Transportation

APPENDIX

Key Statutes and Regulations Regarding Walking and Bicycling

Planning Requirements

The State and Metropolitan Planning Organization (MPO) planning regulations describe how walking and bicycling are to be accommodated throughout the planning process (e.g., see 23 CFR 450.200, 23 CFR 450.300, 23 U.S.C. 134(h), and 135(d)). Nonmotorists must be allowed

to participate in the planning process and transportation agencies are required to integrate walking and bicycling facilities and programs in their transportation plans to ensure the operability of an intermodal transportation system. Key sections from the U.S.C. and CFR include, with italics added for emphasis:

- The scope of the metropolitan planning process "will address the following factors… (2) Increase the safety for motorized and *non-motorized users*; (3) Increase the security of the transportation system for motorized and *non-motorized users*; (4) Protect and enhance the environment, promote energy conservation, improve the quality of life…" 23 CFR 450.306(a). See 23 CFR 450.206 for similar State requirements.
- Metropolitan transportation plans "…shall, at a minimum, include…existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, *pedestrian walkways and bicycle facilities*, and intermodal connectors that should function as an integrated metropolitan transportation system…" 23 CFR 450.322(f). See 23 CFR 450.216(g) for similar State requirements.
- The plans and transportation improvement programs (TIPs) of all metropolitan areas "shall provide for the development and integrated management and operation of transportation systems and facilities (including *accessible pedestrian walkways and bicycle transportation facilities*)." 23 U.S.C. 134(c)(2) and 49 U.S.C. 5303(c)(2). 23 CFR 450.324(c) states that the TIP "shall include …trails projects, pedestrian walkways; and bicycle facilities…"
- 23 CFR 450.316(a) states that "The MPOs shall develop and use a documented participation plan that defines a process for providing…representatives of users of *pedestrian walkways and bicycle transportation facilities, and representatives of the disabled*, and other interested parties with reasonable opportunities to be involved in the metropolitan planning process." 23 CFR 450.210(a) contains similar language for States. See also 23 U.S.C. 134(i)(5), 135(f)(3), 49 U.S.C. 5303(i)(5), and 5304 (f)(3) for additional information about participation by interested parties.

Prohibition of Route Severance

The Secretary has the authority to withhold approval for projects that would negatively impact pedestrians and bicyclists under certain circumstances. Key references in the CFR and U.S.C. include:

- "The Secretary shall not approve any project or take any regulatory action under this title that will result in the severance of an existing major route or have significant adverse impact on the safety for nonmotorized transportation traffic and light motorcycles, unless such project or regulatory action provides for a reasonable alternate route or such a route exists." 23 U.S.C. 109(m).
- "In any case where a highway bridge deck being replaced or rehabilitated with Federal financial participation is located on a highway on which bicycles are permitted to operate at each end of such bridge, and the Secretary determines that the safe accommodation of bicycles can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations." 23 U.S.C. 217(e). Although this statutory requirement only mentions bicycles, DOT encourages States and local governments to apply this same policy to pedestrian facilities as well.
- 23 CFR 652 provides "procedures relating to the provision of pedestrian and bicycle accommodations on Federal-aid projects, and Federal participation in the cost of these accommodations and projects."

Project Documentation

- "In metropolitan planning areas, on an annual basis, no later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall cooperatively develop a listing of projects (including investments in *pedestrian walkways and bicycle transportation facilities*) for which funds under 23 U.S.C. or 49 U.S.C. Chapter 53 were obligated in the preceding program year." 23 CFR 450.332(a).

Accessibility for All Pedestrians

- Public rights-of-way and facilities are required to be accessible to persons with disabilities through the following statutes: Section 504 of the Rehabilitation Act of 1973 (Section 504) (29 U.S.C. §794) and Title II of the Americans with Disabilities Act of 1990 (ADA) (42 U.S.C. §§ 12131-12164).
- The DOT Section 504 regulation requires the Federal Highway Administration (FHWA) to monitor the compliance of the self-evaluation and transition plans of Federal-aid recipients (49 CFR §27.11). The FHWA Division offices review pedestrian access compliance with the ADA and Section 504 as part of their routine oversight activities as defined in their stewardship plans.
- FHWA posted its Clarification of FHWA's Oversight Role in Accessibility to explain how to accommodate accessibility in policy, planning, and projects.

Additional Resources

For more information about:

FHWA Bicycle and Pedestrian Program Resources

- FHWA's Bicycle and Pedestrian Program
- FHWA guidance documents on walking and bicycling
- Publications related to walking and bicycling
- Information about State and local resources
- Equestrian and Other Nonmotorized Use on Bicycle and Pedestrian Facilities
- Framework for Considering Motorized Use on Nonmotorized Trails and Pedestrian Walkways
- Manuals and Guides for Trail Design, Construction, Maintenance, and Operation
- Recreational Trails
- Shared-Use Paths Along or Near Freeways and Bicycles on Freeways
- Snow Removal on Sidewalks Constructed with Federal Funding
- Federal Aid funding resources for walking and bicycling facilities
- Federal funding spent on walking and bicycling facilities

Accessibility

- U.S. Access Board information about ADA for public rights of way
- Accessibility Guidance for Bicycle and Pedestrian Facilities, Recreational Trails, and Transportation Enhancement Activities

Pedestrian and Bicycle Safety

- FHWA Pedestrian and Bicycle Safety Program
- FHWA Pedestrian and Bicycle Safety Research
- The National Highway Traffic Safety Administration's Pedestrian and Bicycle Safety Programs

Context Sensitive Solutions

- FHWA and Context Sensitive Solutions

State Bicycle and Pedestrian Contacts

- State Bicycle and Pedestrian Coordinators

42-3.02(h) Bike Path Structures

The following criteria apply to structures for bike paths:

1. Width. The minimum clear width for a new bike path structure is the same width as the approach paved bicycle path. The desirable clear width also includes the minimum 2 ft (600 mm) shoulders. The overall width may be governed by access requirements for emergency, patrol, and maintenance vehicles.

2. Railings. Railings, fences, or barriers on both sides of a bicycle path structure should be a minimum of 4.5 ft (1.4 m) high. Smooth rub rails should be attached to the barriers at handlebar height of 3.5 ft (1.1 m).

3. Vertical Clearances. A minimum vertical clearance of 8 ft (2.4 m) should be provided for the bike path. However, vertical clearance may need to be greater to permit passage of maintenance vehicles, rescue vehicles, and ambulances. Rescue vehicles typically can exceed 9 ft (2.7 m) in width. Wherever practical, a vertical clearance of 10 ft (3.0 m) is desirable. Where the bike path crosses over highways or railroads, provide a minimum vertical clearance of 17 ft-3 in (5.3 m) over highways and 23 ft-0 in (7.0 m) over railroads. A variance for a vertical clearance over a highway will only be considered under extreme conditions where the bridge is located in an urban area.

4. Tunnels. The design of bike lane tunnels should follow the same guidance for size and overhead clearance, as discussed in Section 17-2 of the *BDE Manual*, with recognition of the types of traffic that need to be accommodated (e.g., emergency vehicles). With tunnels or box culverts exceeding 100 ft (30 m) in length, the users' sense of security is enhanced with larger openings (i.e., minimum 10 ft (3 m) high and 14 ft (4.2 m) wide). The alignment of the approaching path should provide a clear view through the structure, where practical. On long structures (e.g., under multilane highways), a shaft opening at the median can provide natural light and ventilation. Lighting should be considered in areas where security is a concern. Where bike lanes are routed under highway bridges, drainage from the bridge above should be routed to drain away from the path surface.

5. Additional Guidance. The AASHTO *Guide Specification for Design of Pedestrian Bridges* and the AASHTO *Standard Specifications for Highway Bridges* provides additional information applicable to the design of bike path structures.

42-3.02(i) Bike Paths/Highway Crossings

It is preferable that the crossing of a bicycle path and a highway be at a location significantly away from the influence of intersections with other highways.

If adequate gaps in vehicular traffic are not available, some form of crossing control is generally required. This can include flashing lights, signals, or a grade separation. The *ILMUTCD* provides guidance on proper marking and signage. Also, consider re-routing the path to a

nearby signalized intersection. However, any use of re-routing that causes excessive redundant travel may be perceived as a barrier and should not be used. At crossings of high-volume, multilane arterial highways where a signal or a grade separation is not provided, consider providing a median refuge area for bicyclists.

Designers should use engineering judgment to decide where these types of safety measures are necessary and cost-effective by considering traffic volumes, motor vehicle speeds, and anticipated usage.

For additional guidance, see Section 17-2 of the *BDE Manual*.

42-3.03 Accommodating On-Road Bicycle Travel

42-3.03(a) Rural Bicycle Facilities

Bicycle accommodation on rural cross sections consists of paving a portion of the shoulder. In addition to the benefits to the bicyclist, paved shoulders offer added safety, reduced maintenance, and a hard surface off the traveled way for mail delivery vehicles.

Paved shoulders marked as bike lanes should be smooth and maintained to provide a desirable riding surface. Provide minimum shoulder widths of 4 ft (1.2 m) where they are intended for bicycle travel. Additional width may be necessary in locations where vehicular speeds are in excess of 45 mph (70 km/h) or where there are a significant number of trucks and recreational vehicles. Additional width may also be necessary if fixed objects (e.g., traffic signs) are located too close to the bicycle facility. Provide pavement markings if part of the shoulder is designated exclusively for bicycle use. Barriers are required where a bicyclist could fall over obstacles such as guardrails.

Under normal circumstances, roads with shoulders less than 4 ft (1.2 m) wide should not be signed as bikeways.

42-3.03(b) Urban Bicycle Facilities

On-road urban bicycle facilities generally consist of the following:

1. Marked Bicycle Lanes. Bicycle lanes marked on curbed streets serve to separate bicycle traffic from motor vehicle traffic. They are always one-way facilities carrying traffic in the same direction as adjacent motor vehicle traffic. The following are minimum cross-section requirements:

    a. Curbed Streets Without Parking. The bicycle lane should be located next to the gutter. Provide a minimum lane width of 4 ft (1.2 m) adjacent to the curb and gutter, not including the width of the gutter flag, and 5 ft (1.5 m) adjacent to monolithic curbs; see Figure 42-3G.

The Grove on Kickapoo Creek Construction Phases

City of Bloomington Illinois
Public Works Department

0 250 500 1,000 Feet

DATE 10/3/2013

Legend

- Kickapoo Creek Pavement Existing
- Kickapoo Creek Pavement Proposed

Status

- Existing

TheGrovePhases

Layers

- ROW
- IGR Watermain Existing
- IGR Watermain Proposed
- 2100 East Rd Watermain Proposed
- 2nd Add Trunk Sewer
- East Branch Sanitary Existing
- East Branch Sanitary Proposed
- Forcemain
- Kickapoo Creek Watermain Existing
- Kickapoo Creek Watermain Proposed
- North Branch Sanitary Existing
- North Branch Sanitary Proposed
- West Branch Trunk Sanitary Existing

City's Share of Cost

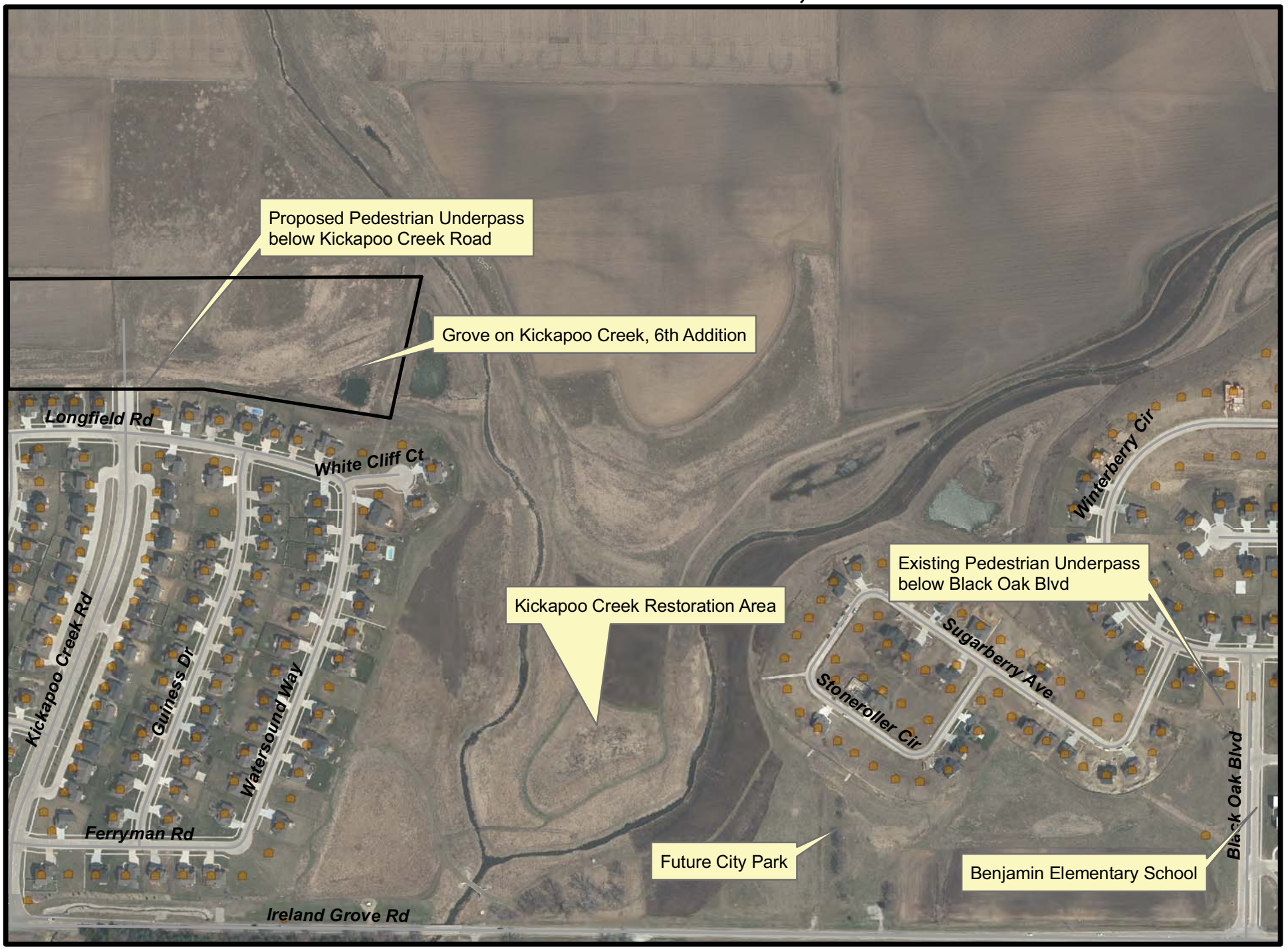
Pump Station	$2,404,834 (P)	**6th Addition (Future)**	
Force Main	$1,172,443 (P)	Ireland Grove Rd Water Main	$126,000 (F)
Brokaw Sewer	$2,974,384 (P)	2100 East Rd Water Main	$82,000 (F)
		2100 East Rd Resurfacing	$90,000 (F)
Original / 1st Addition			
West Branch Trunk Sewer	$132,978 (P)	**6A Addition (Future)**	
Kickapoo Creek Water Main	$70,000 (P)	2100 East Rd Water Main	$225,000 (F)
Kickapoo Creek Pavement	$245,000 (P)	2100 East Rd Resurfacing	$135,000 (F)
Ireland Grove Rd Water Main	$683,858 (P)	East Branch Trunk Sewer	$520,000 (F)
North Bra nch Trunk Sewer	$347,000 (P)		
East Branch Trunk Sewer	$532,355 (P)	**7th Addition (Future)**	
Ireland Grove Rd Safety Improv ements	$84,118 (P)	North Branch Trunk Sewer	$500,000 (F)
		Kickapoo Creek Pavement	$190,000 (F)
2nd Addition		Kickapoo Creek Water Main	$43,000 (F)
East Branch Trunk Sewer	$752,778 (P)		
Black Oak Blvd & Ped estrian Tunnel	$303,010 (P)	**8th Addition (Future)**	
Ireland G rove Rd Water Main	$289,965 (P)	Kickapoo Creek Pavement	$55,000 (F)
2nd Add Trunk Sewer	$130,800 (P)	Kickapoo Creek Water Main	$24,000 (F)
Creek Restoration Phase 1		**9th Addition (Future)**	
Stream Restore	$363,121 (P)	Kickapoo Creek Pavement	$200,000 (F)
		Kickapoo Creek Water Main	$48,000 (F)
3rd Addition		North Branch Trunk Sewer	$600,000 (F)
Kickapoo Creek Pavement	$66,748 (P)	Prairie Xing Pavement & Bridge	$370,000 (F)
Kickapoo Creek Water Main	$41,361 (P)	Prairie Xing Water Main	$60,000 (F)
Creek Restoration Phase 2		**10th Addition (Future)**	
Stream Restor e	$500,000 (P)	North Branch Trunk Sewer	$700,000 (F)
Creek Restoration Phase 3		**11th Addition (Future)**	
Stream Restore	$500,000 (P)	2100 East Rd Resurfacing	$72,000 (F)
		2100 East Rd Water Main	$113,000 (F)
5th Addition (FY 2014)		Prairie Xing Pavement	$53,000 (F)
East Branch Trunk Sewer	$989,001 (F)	Prairie Xing Water Main	$75,000 (F)

Paid Cost (P) = $11,594,753
Estimated Future Cost (F) = $5,209,000

8th Addition (FY 2013)
Kickapoo Creek Pavement $40,000 (F)
Kickapoo Creek Water Main $17,000 (F)

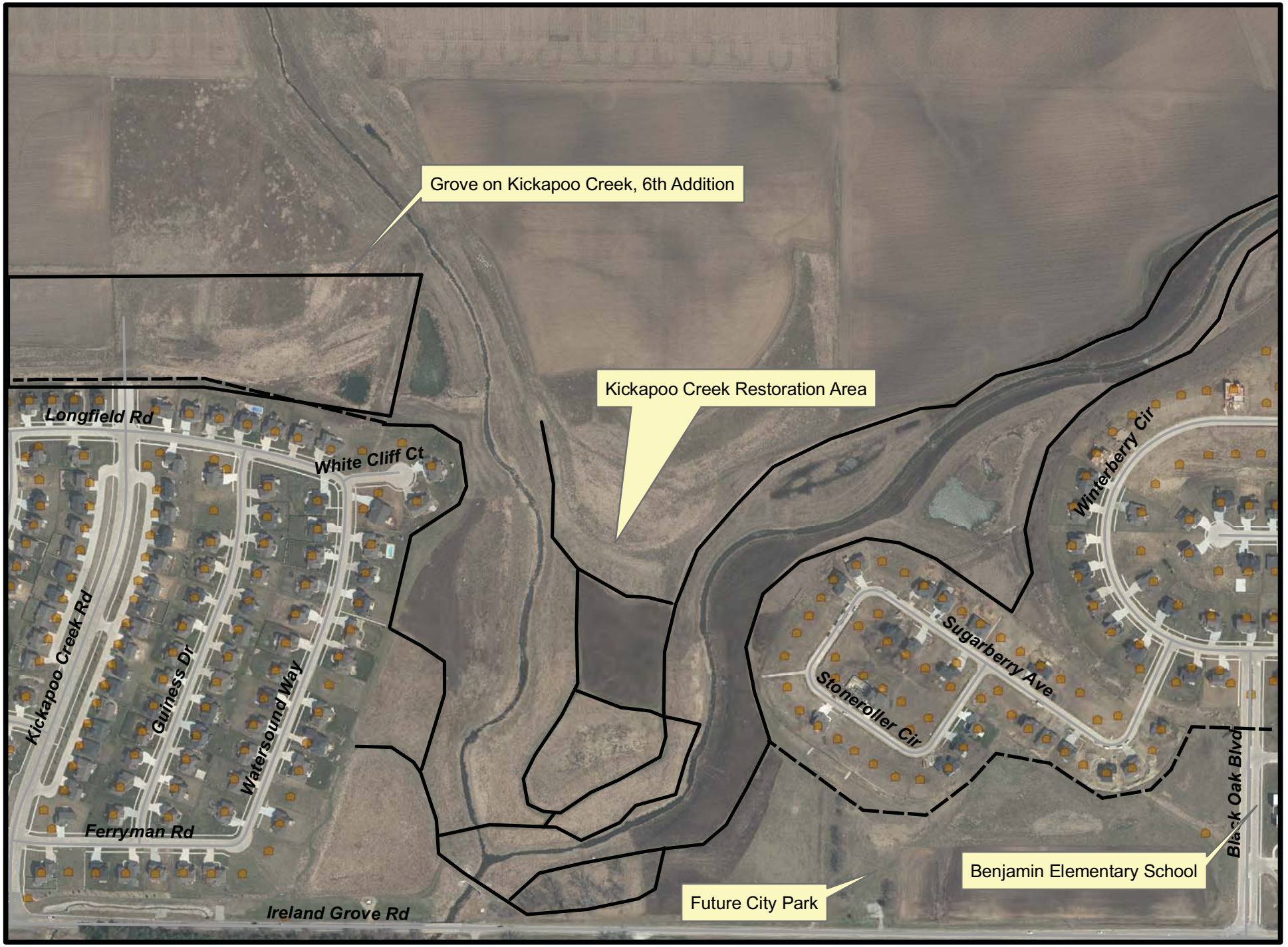
9th Add
Eglington Ct
Oakhurst Dr
Sun Valley Rd
Kickapoo Creek Rd
Prairie Crossing Rd
Future Trunk Sewer North Branch
Mount Carmel Rd
8th Add
Blevedere Ln
Bell Grove Ln
Castlebar Dr
Chancery Rd
7th Add
Finlen Ln
Strongbow Rd
Avondale Dr
10th Add
Arbor Hill Rd
Tree Hill Rd
Smithfield Dr
Thomastown Ave
Bellflower Dr
Creek Phase 3
Creek Phase 2
Creek Phase 1
3rd Add
Longfield Rd
Londonderry Rd
Kerry Hall Ct
Wicklow Dr
Original / 1st Add
Callahan Ct
Francesco Ln
Rathmore Rd
Kell Ave
Fleming Ln
Guiness Dr
Waterside Way
Existing Trunk Sewer North Branch
Existing Trunk Sewer East Branch
Ferryman Rd
Ireland Grove Rd
Forcemain to Brokaw Sewer
Prairie Crossing Rd
11th Add
Prairiefire Dr
Goodpastor Rd
Brookside Rd
6A Add
2100 East Rd
Future Trunk Sewer East Branch
Willow Creek Rd
Staghorne Way
Red Oak Ct
5th Add
Roughleaf Ave
Chinkapin Ct
2nd Add
Staghorne Way
4th Add
Shumard Ln
Spicebush Cir
Sugarberry Ave
Jackpine Rd
Grove Park
Black Oak Blvd
Benjamin School
6th Add
1200 North Rd

GROVE ON KICKAPOO CREEK, 6TH ADDITION



Prepared by Engineering
August 5, 2014

GROVE ON KICKAPOO CREEK TRAILS



0 250 500 1,000 Feet

Existing Unpaved Trail

Future Trail

Prepared by Engineering
August 18, 2014

THE GROVE ON KICKAPOO CREEK
AMENDED PRELIMINARY PLAN
BLOOMINGTON, ILLINOIS

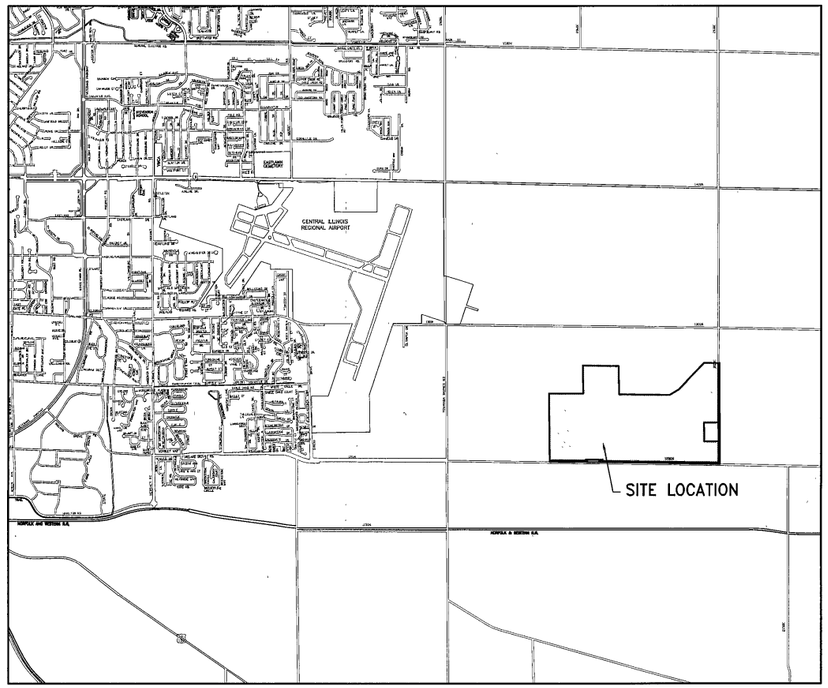
GENERAL NOTES

1. THIS DEVELOPMENT HAS AN AREA OF 464.70 ACRES (188.06 HECTARES) AND HAS BEEN SUBDIVIDED INTO 322 SINGLE FAMILY RESIDENTIAL LOTS AND 6 OUTLOTS AND WILL BE RE-SUBDIVIDED INTO 663 ADDITIONAL SINGLE FAMILY RESIDENTIAL LOTS AND 11 OUTLOTS. THERE WILL ALSO BE 20 ACRES DEDICATED FOR A PARK AND 15 ACRES HAVE BEEN DEDICATED FOR BENJAMIN SCHOOL – ADJACENT TO THE SCHOOL, 10 ACRES REMAIN AS R-2 AND S-2 ZONED PROPERTY.
2. THIS SITE WAS PREVIOUSLY ZONED FOR AGRICULTURAL USE BUT HAS SINCE BEEN REZONED TO A COMBINATION OF R-1-B (MEDIUM-DENSITY, SINGLE-FAMILY RESIDENTIAL DISTRICT), R-1-C (HIGHER/MEDIUM-DENSITY, SINGLE--FAMILY RESIDENTIAL DISTRICT) AND R-2 (MIXED RESIDENTIAL DISTRICT). IN ADDITION, THE CREEK AND GREENWAY AREAS ARE TO BE ZONED TO S-2 (PUBLIC LANDS AND INSTITUTIONAL DISTRICT).
3. IN THE R-1-B DISTRICT, THE FRONT AND REAR YARD SETBACK SHALL BE 30' AND THE SIDE YARD SETBACK SHALL BE 6'. IN THE R-1-C AND R-2 DISTRICTS, THE FRONT AND REAR YARD SETBACK SHALL BE 25' AND THE SIDE YARD SETBACK SHALL BE 6'. CORNER YARDS SHALL BE THE SAME AS FRONT YARDS, EXCEPT IN THE R-2 DISTRICT WHERE THEY SHALL BE 20'.
4. THE TWO EXISTING CREEKS AND SURROUNDING AREAS HAVE BEEN RECONSTRUCTED TO PROVIDE FOR WETLAND AND RECREATIONAL PURPOSES.
5. STORMWATER DETENTION IS PROVIDED AND IS LOCATED WHERE THE TWO CREEKS CONVERGE NORTH OF IRELAND GROVE ROAD. THE DETENTION AREA AND GREEN WAY AREAS SHALL BE OWNED AND MAINTAINED BY THE CITY OF BLOOMINGTON PARKS AND RECREATION DEPARTMENT.
6. ALL SANITARY SEWER, STORM SEWER, WATERMAIN AND STREETS SHALL BE CONSTRUCTED IN PUBLIC RIGHT-OF-WAY OR UTILITY EASEMENTS AND SHALL BE DEDICATED TO THE CITY OF BLOOMINGTON FOR MAINTENANCE AND OWNERSHIP.
7. ALL FIRE HYDRANTS SHALL HAVE A 6" GATE VALVE BE CONSTRUCTED ON STRAIGHT TEES.
8. ACCESSIBILITY RAMPS SHALL BE CONSTRUCTED AT ALL LOCATIONS WHERE THE SIDEWALK MEETS THE CURB.
9. NO DIRECT DRIVEWAY ACCESS SHALL BE ALLOWED OFF OF IRELAND GROVE ROAD (COUNTY ROAD 1200N), COUNTY ROAD 2100E OR KICKAPOO CREEK ROAD. LOTS THAT FRONT ON KICKAPOO CREEK ROAD SHALL OBTAIN ACCESS FROM A FRONTAGE ROAD. SAID FRONTAGE ROAD WILL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
10. A SANITARY PUMP STATION HAS BEEN CONSTRUCTED SOUTH OF IRELAND GROVE ROAD TO SERVE THIS AND FUTURE DEVELOPMENT IN THIS WATERSHED AREA.
11. A TURF PEDESTRIAN TRAIL HAS BEEN CONSTRUCTED THROUGH THE GREENWAY AND CREEK AREAS.
12. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM GIS CONTOUR MAPS AND FIELD SURVEYS DONE BY FARNSWORTH GROUP, INC. IN THE SUMMER OF 2005.
13. THE ISLAND INSIDE OF BLUERIDGE CIRCLE WILL BE PRIVATELY OWNED AND MAINTAINED.
14. PORTIONS OF THIS PROPERTY LIE WITHIN THE SPECIAL FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAPS 17113C0510E AND 17113C0550E EFFECTIVE DATE JULY 16, 2008. A CONDITIONAL LETTER OF MAP AMENDMENT MODIFYING THE SPECIAL FLOOD HAZARD AREA HAS BEEN ISSUED SEPTEMBER 21, 2009.

BOUNDARY DESCRIPTION:

A PART OF THE SOUTHEAST QUARTER OF SECTION 8 AND A PART OF SECTION 9, ALL IN TOWNSHIP 23 NORTH, RANGE 3 EAST OF THE THIRD PRINCIPAL MERIDIAN, MCLEAN COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 9. FROM SAID POINT OF BEGINNING, THENCE NORTH 887.10 FEET ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 9; THENCE WEST 605.00 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 90-00'-00" WITH THE LAST DESCRIBED COURSE; THENCE NORTH 720.00 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 270-00'-00" WITH THE LAST DESCRIBED COURSE; THENCE EAST 605.00 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 270-00'-00" WITH THE LAST DESCRIBED COURSE TO SAID EAST LINE; THENCE NORTH 1,055.52 FEET ALONG SAID EAST LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 90-00'-00" WITH THE LAST DESCRIBED COURSE TO THE NORTHEAST CORNER THEREOF; THENCE NORTH 1,270.69 FEET ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 WHICH FORMS AN ANGLE TO THE RIGHT OF 180-00'-00" WITH THE LAST DESCRIBED COURSE; THENCE WEST 600.00 FEET ALONG A LINE WHICH IS PARALLEL WITH THE SOUTH LINE OF SAID NORTHEAST QUARTER AND WHICH FORMS AN ANGLE TO THE RIGHT OF 90-58'-34" WITH THE LAST DESCRIBED COURSE; THENCE SOUTHWEST 1,432.61 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 132-50'-42" WITH THE LAST DESCRIBED COURSE; THENCE SOUTHWEST 415.51 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 195-09'-56" WITH THE LAST DESCRIBED COURSE TO A POINT ON SAID SOUTH LINE LYING 1,949.26 FEET WEST OF THE SOUTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE WEST 1,970.13 FEET ALONG SAID SOUTH LINE AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 9, SAID SOUTH LINES FORM AN ANGLE TO THE RIGHT OF 211-59'-23" WITH THE LAST DESCRIBED COURSE TO A POINT LYING 1,400.00 FEET EAST OF THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER; THENCE NORTH 1,100.00 FEET ALONG A LINE WHICH IS PARALLEL WITH THE WEST LINE OF SAID NORTHWEST QUARTER AND WHICH FORMS AN ANGLE TO THE RIGHT OF 268-35'-58" WITH THE LAST DESCRIBED COURSE; THENCE WEST 1,400.00 FEET ALONG A LINE WHICH IS PARALLEL WITH SAID SOUTH LINE AND WHICH FORMS AN ANGLE TO THE RIGHT OF 91-24'-02" WITH THE LAST DESCRIBED COURSE TO A POINT ON SAID WEST LINE LYING 1,100.00 FEET NORTH OF THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER; THENCE SOUTH 1,100.00 FEET ALONG SAID WEST LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 88-35'-58" WITH THE LAST DESCRIBED COURSE TO SAID SOUTHWEST CORNER; THENCE WEST 1,337.57 FEET ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 8 WHICH FORMS AN ANGLE TO THE RIGHT OF 271-14'-21" WITH THE LAST DESCRIBED COURSE TO A STONE AT THE NORTHWEST CORNER OF THE EAST HALF OF SAID SOUTHEAST QUARTER; THENCE SOUTH 2,661.94 FEET ALONG THE WEST LINE OF THE EAST HALF OF SAID SOUTHEAST QUARTER WHICH FORMS AN ANGLE TO THE RIGHT OF 88-42'-04" WITH THE LAST DESCRIBED COURSE TO THE SOUTHEAST CORNER THEREOF; THENCE WEST 1,334.77 FEET ALONG THE SOUTH LINE OF THE EAST HALF OF SAID SOUTHEAST QUARTER WHICH FORMS AN ANGLE TO THE RIGHT OF 91-14'-48" WITH THE LAST DESCRIBED COURSE TO THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE EAST 2,639.83 FEET ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 9 WHICH FORMS AN ANGLE TO THE RIGHT OF 180-13'-28" WITH THE LAST DESCRIBED COURSE TO THE SOUTHEAST CORNER THEREOF; THENCE EAST 2,658.88 FEET ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 9 WHICH FORMS AN ANGLE TO THE RIGHT OF 180-01'-45" WITH THE LAST DESCRIBED COURSE TO THE POINT OF BEGINNING, CONTAINING 466.58 ACRES, MORE OR LESS.



LOCATION MAP

-NTS-

LEGEND

EXISITING		PROPOSED	
	SANITARY MANHOLE	802.0	PAVEMENT ELEVATION
	STORM MANHOLE	795.1	STORM & SANITARY INVERT
	CLEANOUT		SANITARY MANHOLE
	FIRE HYDRANT		STORM MANHOLE
	GATE VALVE		FLARED END SECTION
	CURB INLET		CURB INLET
	BLOW-OFF ASSEMBLY		GATE VALE
8"SA	SANITARY SEWER		REDUCER
6"DT	DRAINTILE		FIRE HYDRANT
15"ST	STORM SEWER	8"W	WATERMAIN
674	GROUNG CONTOUR	21"ST	STORM SEWER
	TREE	8"SA	SANITARY SEWER
	TIMBERLINE		BIKE TRAIL BY OTHERS
			UTILITY EASEMENT
			BUILDING SETBACK
			NO ACCESS STRIP
			LIMITS OF PROPOSED SPECIAL FLOOD HAZARD ZONE

INDEX TO SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	OVERALL LAYOUT
3-22	PRELIMINARY PLAN
23	MISCELLANEOUS DETAILS

DEVELOPER

EASTLAKE L.L.C.
1701 TULLAMORE ROAD
BLOOMINGTON, ILLINOIS 61704
309-275-3390

ATTORNEY

JOHN PRATT
415 N. CENTER STREET
BLOOMINGTON, ILLINOIS 61701
309-828-2302

ENGINEER

THOMAS D. STOLTZ, P.E.
FARNSWORTH GROUP, INC.
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
309-663-8435

RECOMMENDATION OF PRELIMINARY PLAN APPROVAL BY THE PLANNING COMMISSION OF BLOOMINGTON, ILLINOIS:

"Notice is hereby given that this Amended Preliminary Plan of The Grove on Kickapoo Creek Subdivision shown hereon is recommended by the Planning Commission of Bloomington, Illinois, for City Council approval with the modifications contained in Appendix A (if any), which is attached hereto."

The Planning Commission of Bloomington, Illinois

Date: November 9, 2011

By: _____ Chairman

By: Mark Woolard Executive Secretary

NOTICE OF APPROVAL OF PRELIMINARY PLAN BY THE CITY COUNCIL OF BLOOMINGTON, ILLINOIS:

"The Amended Preliminary Plan of The Grove on Kickapoo Creek Subdivision shown hereon has received approval by the City Council of Bloomington, Illinois, subject to the modifications contained in Appendix A which is attached hereto."

The City Council of Bloomington, Illinois

Date: December 12, 2011

By: Stephen Stockton, Mayor

Attest: _____ City Clerk

1. ("CC")
CHISELED SQUARE ON N.E. WING WALL OF BRIDGE OVER KICKAPOO CREEK ON IRELAND GROVE ROAD, APPROX. 0.725 MILES (3844') WEST OF COUNTY ROAD 2100E. U.S.G.S. ELEV.= 800.66
2. ("DD")
CHISELED SQUARE ON CENTER OF NORTH HEADWALL OF 6'x9' BOX CULVERT ON IRELAND GROVE ROAD, APPROX. 0.90 MILES (4641') WEST OF COUNTY ROAD 2100E. U.S.G.S. ELEV.=798.06
3. ("EE")
CHISELED SQUARE ON EAST END OF NORTH HEADWALL OF 6'x8' BOX CULVERT ON IRELAND GROVE ROAD, APPROX. 0.975 MILES (5095') WEST OF COUNTY ROAD 2100E. U.S.G.S. ELEV.=800.65

THOMAS D. STOLTZ 048858 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

The GROVE On Kickapoo Creek GROW THE GROVE

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS: PL-2172L
CONTRACTORS SHALL CALL THE TOLL FREE J.U.L.I.E. TELEPHONE NUMBER, 1-800-892-0123, BEFORE STARTING EXCAVATION. ALLOW 48 HOURS FOR OTHER THAN EMERGENCY ASSISTANCE.

S.E. 1/4 SEC. 8, SEC. 9, T 23 N., R3E, 3 P.M.

Revisions #	Date.	Initials:
1	11/1/11	EMR

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

Drawn: EMR Date: 10/17/11
Designed: TDS Checked.: CNF

THE GROVE ON KICKAPOO CREEK BLOOMINGTON, ILLINOIS

AMENDED PRELIMINARY PLAN COVER SHEET

Book No.: 270/2764 Sheet No.: 1 OF 23
Project No.: 0090663.00 File No.: 24-7623-1

MATCHLINE SHEET 9
MATCHLINE SHEET 6

MATCHLINE SHEET 9
MATCHLINE SHEET 6

CONSTRUCTED

JACKPINE ROAD

SUGARBERRY AVENUE

SHUMARD LANE

PEDESTRIAN UNDERPASS

BLACK OAK BOULEVARD

PEDESTRIAN PATH AND BIKE TRAIL

UNIT 5 BENJAMIN ELEMENTARY SCHOOL

LOT 1 OF BENJAMIN SCHOOL SUBD.

PLAYGROUND

OUTLOT 1000

20 ACRE
ACTIVE PARK AREA

MATCHLINE SHEET 5
MATCHLINE SHEET 6

MATCHLINE SHEET 6
MATCHLINE SHEET 7

CONSTRUCTED

50' DEDICATED FOR RIGHT OF WAY

IRELAND GROVE ROAD

50' DEDICATED FOR RIGHT OF WAY

ROAD 1200N)

0 25 50 100
SCALE: 1"=50'

Revisions
Date Initials

Farnsworth GROUP
ENGINEERS ARCHITECTS SURVEYORS SCIENTISTS
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

Drawn: EMR Date: 10/17/11
Designed: TDB Checked.: GAD

THE GROVE ON KICKAPOO CREEK
BLOOMINGTON, ILLINOIS

AMENDED PRELIMINARY PLAN

Book No.: 270/2764 Sheet No.: 6 OF 23
Project No.: 0090663.00 File No.: 24-7623-1

MATCHLINE SHEET 14
MATCHLINE SHEET 11

OUTLOT 360

FINLEN LANE

LONGFIELD CREEK

PEDESTRIAN PATH AND BIKE TRAIL

15' DRAINAGE & UTILITY EASEMENT

OUTLOT 1000

LONGFIELD ROAD

KICKAPOO CREEK ROAD

DRIVE

WHITE-CLIFF COURT

GUINESS WAY

WATERSOUND WAY

OUTLOT 200

MATCHLINE SHEET 12
MATCHLINE SHEET 11
MATCHLINE SHEET 10
MATCHLINE SHEET 4

CONSTRUCTED

N

0 25 50 100
SCALE: 1"=50'

Revisions
Date: Initials.

Farnsworth GROUP
ENGINEERS ARCHITECTS SURVEYORS SCIENTISTS
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

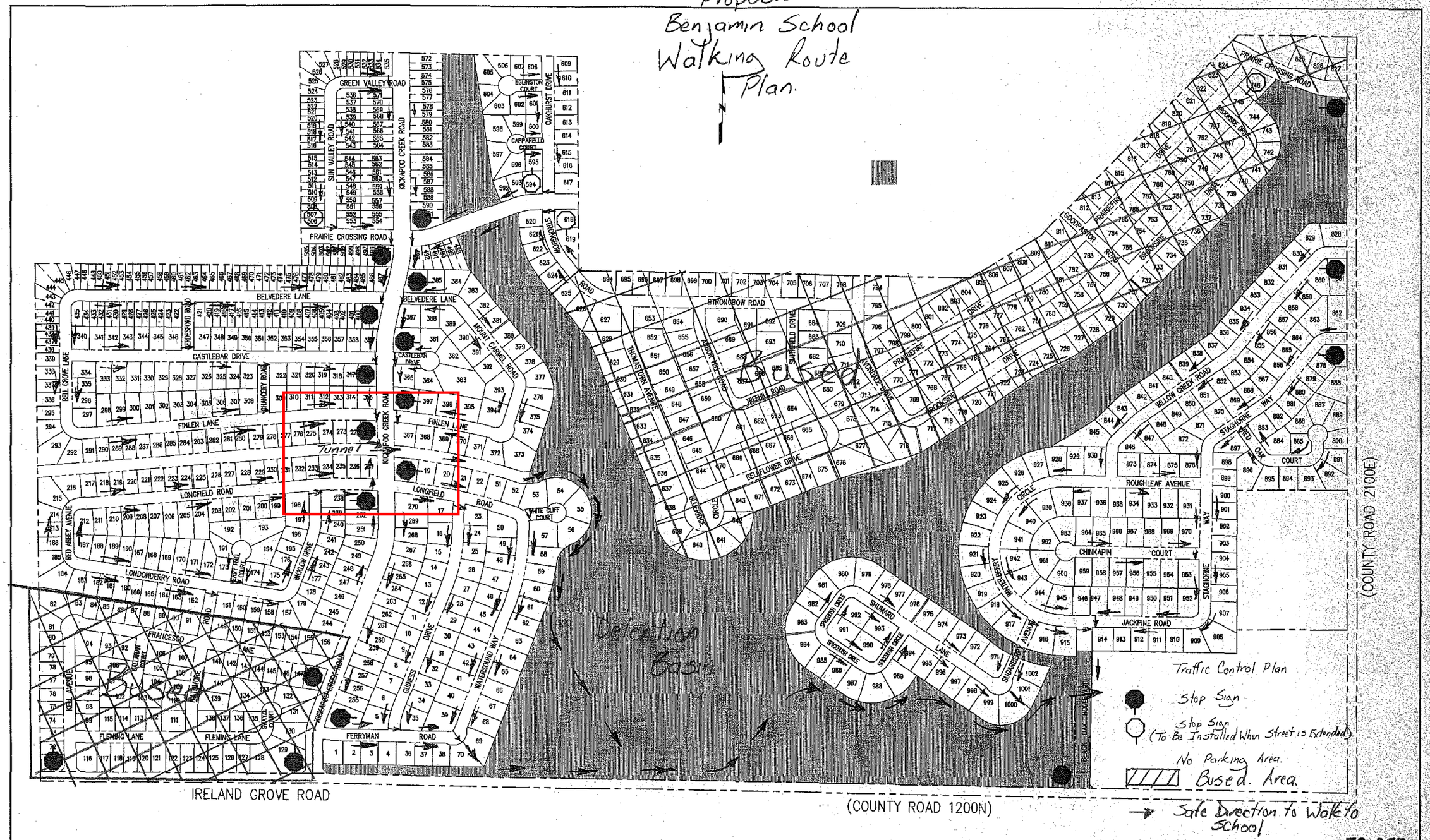
Drawn: EMR Date: 10/17/11
Designed: TDS Checked.: CNF

THE GROVE ON KICKAPOO CREEK
BLOOMINGTON, ILLINOIS

AMENDED PRELIMINARY PLAN

Book No.: 270/2754 Sheet No.: 11 OF 23
Project No.: 0090663.00 File No.: 24-7623-1

Proposed Benjamin School Walking Route Plan.



TP-257

Revisions #	Date:	Initials:

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

THE GROVE ON KICKAPOO CREEK
BLOOMINGTON, ILLINOIS

OVERALL LAYOUT

Drawn: TDS Date: 03/08/06
Designed: TDS Checked: GAD

Book No.: 270/264 Sheet No.: 2 OF 23
Project No.: 105726 File No.: 24-7623

City of Bloomington, Illinois
FY 2015 Proposed Capital Projects (All Funds)
Unfunded

Incorrectly Shown as Sewer. Should be Pavement.

	Approved FY 2014	Proposed FY 2015	Type	Recommended Funding Sources: General Fund	Net Assets	Gasoline/Diesel Tax (MFT)	Borrowing/ Bonds	Grants/ Private Funding	Charges for Services
Capital Improvement Fund *									
Phase 2 Locust Colton CSO Elimination & Water Main Replacement Land & Construction	$ -	$ 300,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
The Grove on Kickapoo Creek Subdivision Sewer Oversizing	$ -	$ 200,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Trail Resurfacing - Hershey Road to Streid Drive	$ -	$ 125,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Zoo Additional Parking, Drives and Fencing	$ -	$ 200,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Fire Station #2 Design	$ -	$ 50,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Fire Station #4 Architectural Fees	$ -	$ 200,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Headquarters Kitchen Renovation	$ -	$ 40,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Constitution Trail Resurface	$ 30,000	$ 30,000	Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Constitution Trail Resurface - Hershey Road to Airport Road	$ 125,000	$ 125,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Sub-Total:	**$ 155,000**	**$ 1,270,000**		$ -	$ -	$ -	$ -	$ -	$ -
Enterprise Fund(s)									
Water Fund *									
Phase 2 Locust Colton CSO Elimination & Water Main Replacement	$ -	$ 900,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 2 Locust Colton CSO Elimination & Water Main Replacement - non-eligible loan expenses	$ -	$ 50,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 3 Locust Colton CSO Elimination & Water Main Replacement - Design & Land	$ -	$ 80,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Sub-Total:	**$ -**	**$ 1,030,000**		$ -	$ -	$ -	$ -	$ -	$ -
Sewer Fund *									
Phase 2 Locust Colton CSO Elimination & Water Main Replacement Construction	$ -	$ 1,415,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 2 Locust Colton CSO Elimination & Water Main Replacement Construction - non-eligible loan expenses	$ -	$ 100,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 3 Locust Colton CSO Elimination & Water Main Replacement Design & Land	$ -	$ 110,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Sanitary Sewer and Manhole Testing (Sewer & Storm Water Master Plan)	$ -	$ 260,000	Recurring	$ -	$ 260,000	$ -	$ -	$ -	$ -
Broadmoor Sanitary Sewer - Footing Drain Survey - separation design	$ -	$ 120,000	Non-Recurring	$ -	$ 120,000	$ -	$ -	$ -	$ -
Grove On Kickapoo Creek 5th Addition Sewer Oversizing - further extension of original oversizing	$ -	$ 520,000	Non-Recurring	$ -	$ 520,000	$ -	$ -	$ -	$ -
Sub-Total:	**$ -**	**$ 1,625,000**		$ -	$ -	$ -	$ -	$ -	$ -
Storm Water Fund *									
Sugar Creek Flood Plain Study	$ -	$ 162,500	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Rowe Drive Drainage Way Improvements Design	$ -	$ 125,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 2 Locust Colton CSO Elimination & Water Main Replacement Construction	$ -	$ 1,415,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 2 Locust Colton CSO Elimination & Water Main Replacement Construction - non-eligible loan expenses	$ -	$ 100,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Phase 3 Locust Colton CSO Elimination & Water Main Replacement Design & Land	$ -	$ 110,000	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Sub-Total:	**$ -**	**$ 1,912,500**		$ -	$ -	$ -	$ -	$ -	$ -
Faithful & Gould Facility Study-All Fund	$ -	$ 7,537,469	Non-Recurring	n/a	n/a	n/a	n/a	n/a	n/a
Sub-Total:	**$ -**	**$ 7,537,469**		$ -	$ -	$ -	$ -	$ -	$ -
Total Unfunded:	**$ -**	**$ 13,374,969**	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Projects requested by departments but due to funding limitations, these projects have been excluded from the FY 2015 Budget

Grove 2nd Addition - Pedestrian Underpass and Drainage Culvert below Black Oak Boulevard

Hershey Road- Pedestrian Underpass / Drainage Structure at G.E. Road

CITY OF BLOOMINGTON
CAPITAL IMPROVEMENTS PROGRAM FY 2015 - FY 2019

FUNDING SOURCE(S)	*DEPARTMENT*	*CITY CONTACT PERSON*	*WARD*
WATER	Public Works - Engineering Division	Russ Waller	8

PROJECT TITLE	*ACCOUNT NUMBER(S)*
The Grove on Kickapoo Creek Subdivision Pavement Oversizing	50100120-72540

PROJECT DESCRIPTION/JUSTIFICATION

City share of water main oversizing in The Grove on Kickapoo Creek Subdivision per Annexation Agreement approved September 26, 2005. City is obligated to pay for oversizing water mains larger than what is required to serve the development, which is typically an 8" main. Agreement requires payment within 30 days after receipt of a valid invoice. Phasing schedule and estimated costs are based solely upon information provided by the developer. The schedule for future phases is uncertain.

Projected start date:		Projected completion date:		*REQUEST TYPE*
DESIGN BID:		DESIGN BID:		
DESIGN:		DESIGN:		☑ CONTINUATION
CONSTRUCTION BID:		CONSTRUCTION BID:		☐ REVISION
CONSTRUCTION:		CONSTRUCTION:		☐ NEW
BUDGET BASIS :	0% Design	INITIAL FISCAL YEAR :	2015	

EXPENSES	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**TOTAL**
PLANNING / DESIGN	$0	$0	$0	$0	$0	$0
LAND	$0	$0	$0	$0	$0	$0
CONSTRUCTION	$307,000	$43,000	$24,000	$60,000	$0	$434,000
EQUIPMENT / FURNISHINGS	$0	$0	$0	$0	$0	$0
TOTAL	$307,000	$43,000	$24,000	$0	$0	$434,000
REVENUES	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**TOTAL**
GENERAL FUND	$0	$0	$0	$0	$0	$0
MOTOR FUEL TAX	$0	$0	$0	$0	$0	$0
CAPITAL IMPROVEMENT	$0	$0	$0	$0	$0	$0
WATER	$307,000	$43,000	$24,000	$60,000	$0	$434,000
SANITARY SEWER	$0	$0	$0	$0	$0	$0
STORM WATER	$0	$0	$0	$0	$0	$0
BONDS	$0	$0	$0	$0	$0	$0
GRANTS / OTHER	$0	$0	$0	$0	$0	$0
TOTAL REVENUES	$307,000	$43,000	$24,000	$60,000	$0	$434,000
OPERATING	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**TOTAL**
PERSONNEL	$0	$0	$0	$0	$0	$0
MAINT./OPERATIONS	$0	$0	$0	$0	$0	$0
CAPITAL OUTLAY	$0	$0	$0	$0	$0	$0
TOTAL OPERATING COST	$0	$0	$0	$0	$0	09/10/2012
(OPERATING REVENUES)	$0	$0	$0	$0	$0	$0

Last Updated : 10/31/2013

CITY OF BLOOMINGTON
www.cityblm.org
PUBLIC WORKS DEPARTMENT

June 6, 2013

Vic Armstrong
Caldwell Banker - Heart of IL Realtors
802 S. Eldorado Rd
Bloomington, IL 61704-6090

Subject: The Grove at Kickapoo Creek Subdivision
Kickapoo Creek Road Pedestrian Underpass

Dear Mr. Armstrong;

The Kickapoo Creek Road pedestrian underpass has been discussed for several years now. City staff believes the underpass is necessary for the reasons discussed herein. In addition, staff believes that construction of the underpass should be performed in conjunction with Kickapoo Creek Road and that the City and developers should share the construction cost.

Approved Preliminary Plan
The approved Preliminary Plan for this development clearly depicts a bike/walking trail at the subject pedestrian underpass location.

City Development Code / Manual of Practice
Section 3.02 of the Manual of Practice (MOP) indicates that basic consideration for the safety of both vehicular and pedestrian traffic shall be included in the design of all subdivision developments. More specifically, this sections states that pedestrian-vehicular conflict points should be minimized. Furthermore, Section 5.02 of the MOP indicates that trails shall be designed in accordance with the current AASHTO standards. Page 12 of the 1999 AASHTO Guide for the Development of Bicycle Facilities indicates that trail-roadway intersections should be minimized. It further indicates that at-grade intersections on high-volume roadways and mid-block crossings should be analyzed with the bicyclist's needs in mind to determine the most appropriate crossing design treatments. With these requirements and the surface topography in mind, a grade separation structure is undoubtedly the most appropriate design treatment.

Future School Walking Route
City staff inquired about school walking routes in February 2009 and notified your consulting engineering firm about these design considerations on several occasions. Copies of these notifications are provided for your records. Furthermore, Mclean County Unit No. 5 School District was contacted regarding long term transportation from the Grove Subdivision to the Benjamin Elementary School. As indicated in the attached April 10, 2013 letter from Dr. Gary Niehaus, Unit 5 prefers that walking trails in the Grove at Kickapoo Creek be developed to allow

Post Office Box 3157
Bloomington, Illinois
61702-3157
309.434.2225 tel
309.434.2201 fax
For Hearing Impaired
TTY 309.829.5115

students to walk or ride to school. Since Kickapoo Creek Road is a major five-lane facility, a location where students can safely cross the road is needed. An at-grade pedestrian crossing will require a crossing guard, which creates an on-going long term cost for the City. Even though the City will share in the cost of the pedestrian underpass, staff recommends this approach to avoid long term crossing guard expense.

There has also been discussion about shared engineering fees between the City and developer relative to this pedestrian underpass. The City's Manual of Practice specifically states that engineering fees for oversizing infrastructure shall not be paid by the City. In addition, the attached Kickapoo Creek Restoration and Engineering Fee Agreement specifically states that the City is not responsible for engineering fees related to the Eastlake Annexation Agreements and Development.

Please feel free to contact me with any questions or concerns.

Sincerely,

Jim Karch, P.E. CFM
Director of Public Works

cc: David Hales, City Manager
Barbara J. Adkins, Deputy City Manager
John Kennedy, Director of Parks and Recreation
Todd Greenburg, Corporate Counsel
Kevin Kothe, City Engineer
Neil Finlen, Farnsworth Group

THE GROVE ON KICKAPOO CREEK
AMENDED PRELIMINARY PLAN
BLOOMINGTON, ILLINOIS

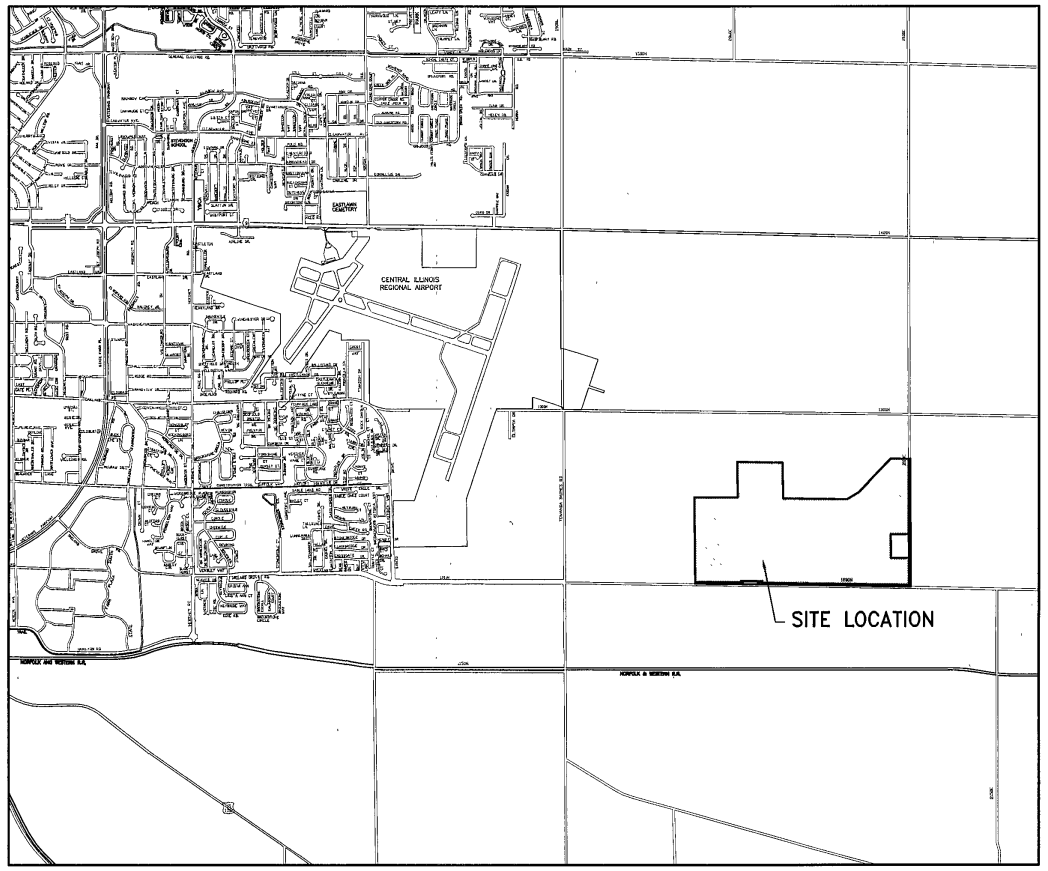
GENERAL NOTES

1. THIS DEVELOPMENT HAS AN AREA OF 464.70 ACRES (188.06 HECTARES) AND HAS BEEN SUBDIVIDED INTO 322 SINGLE FAMILY RESIDENTIAL LOTS AND 6 OUTLOTS AND WILL BE RE-SUBDIVIDED INTO 663 ADDITIONAL SINGLE FAMILY RESIDENTIAL LOTS AND 11 OUTLOTS. THERE WILL ALSO BE 20 ACRES DEDICATED FOR A PARK AND 15 ACRES HAVE BEEN DEDICATED FOR BENJAMIN SCHOOL – ADJACENT TO THE SCHOOL, 10 ACRES REMAIN AS R-2 AND S-2 ZONED PROPERTY.
2. THIS SITE WAS PREVIOUSLY ZONED FOR AGRICULTURAL USE BUT HAS SINCE BEEN REZONED TO A COMBINATION OF R-1-B (MEDIUM-DENSITY, SINGLE-FAMILY RESIDENTIAL DISTRICT), R-1-C (HIGHER/MEDIUM-DENSITY, SINGLE-FAMILY RESIDENTIAL DISTRICT) AND R-2 (MIXED RESIDENTIAL DISTRICT). IN ADDITION, THE CREEK AND GREENWAY AREAS ARE TO BE ZONED TO S-2 (PUBLIC LANDS AND INSTITUTIONAL DISTRICT).
3. IN THE R-1-B DISTRICT, THE FRONT AND REAR YARD SETBACK SHALL BE 30' AND THE SIDE YARD SETBACK SHALL BE 6'. IN THE R-1-C AND R-2 DISTRICTS, THE FRONT AND REAR YARD SETBACK SHALL BE 25' AND THE SIDE YARD SETBACK SHALL BE 6'. CORNER YARDS SHALL BE THE SAME AS FRONT YARDS, EXCEPT IN THE R-2 DISTRICT WHERE THEY SHALL BE 20'.
4. THE TWO EXISTING CREEKS AND SURROUNDING AREAS HAVE BEEN RECONSTRUCTED TO PROVIDE FOR WETLAND AND RECREATIONAL PURPOSES.
5. STORMWATER DETENTION IS PROVIDED AND IS LOCATED WHERE THE TWO CREEKS CONVERGE NORTH OF IRELAND GROVE ROAD. THE DETENTION AREA AND GREEN WAY AREAS SHALL BE OWNED AND MAINTAINED BY THE CITY OF BLOOMINGTON PARKS AND RECREATION DEPARTMENT.
6. ALL SANITARY SEWER, STORM SEWER, WATERMAIN AND STREETS SHALL BE CONSTRUCTED IN PUBLIC RIGHT-OF-WAY OR UTILITY EASEMENTS AND SHALL BE DEDICATED TO THE CITY OF BLOOMINGTON FOR MAINTENANCE AND OWNERSHIP.
7. ALL FIRE HYDRANTS SHALL HAVE A 6" GATE VALVE BE CONSTRUCTED ON STRAIGHT TEES.
8. ACCESSIBILITY RAMPS SHALL BE CONSTRUCTED AT ALL LOCATIONS WHERE THE SIDEWALK MEETS THE CURB.
9. NO DIRECT DRIVEWAY ACCESS SHALL BE ALLOWED OFF OF IRELAND GROVE ROAD (COUNTY ROAD 1200N), COUNTY ROAD 2100E OR KICKAPOO CREEK ROAD. LOTS THAT FRONT ON KICKAPOO CREEK ROAD SHALL OBTAIN ACCESS FROM A FRONTAGE ROAD. SAID FRONTAGE ROAD WILL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
10. A SANITARY PUMP STATION HAS BEEN CONSTRUCTED SOUTH OF IRELAND GROVE ROAD TO SERVE THIS AND FUTURE DEVELOPMENT IN THIS WATERSHED AREA.
11. A TURF PEDESTRIAN TRAIL HAS BEEN CONSTRUCTED THROUGH THE GREENWAY AND CREEK AREAS.
12. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM GIS CONTOUR MAPS AND FIELD SURVEYS DONE BY FARNSWORTH GROUP, INC. IN THE SUMMER OF 2005.
13. THE ISLAND INSIDE OF BLUERIDGE CIRCLE WILL BE PRIVATELY OWNED AND MAINTAINED.
14. PORTIONS OF THIS PROPERTY LIE WITHIN THE SPECIAL FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAPS 17113C0510E AND 17113C0550E EFFECTIVE DATE JULY 16, 2008. A CONDITIONAL LETTER OF MAP AMENDMENT MODIFYING THE SPECIAL FLOOD HAZARD AREA HAS BEEN ISSUED SEPTEMBER 21, 2009.

BOUNDARY DESCRIPTION:

A PART OF THE SOUTHEAST QUARTER OF SECTION 8 AND A PART OF SECTION 9, ALL IN TOWNSHIP 23 NORTH, RANGE 3 EAST OF THE THIRD PRINCIPAL MERIDIAN, MCLEAN COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 9. FROM SAID POINT OF BEGINNING, THENCE NORTH 887.10 FEET ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 9; THENCE WEST 805.00 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 90-00'-00" WITH THE LAST DESCRIBED COURSE; THENCE NORTH 720.00 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 270-00'-00" WITH THE LAST DESCRIBED COURSE; THENCE EAST 605.00 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 270-00'-00" WITH THE LAST DESCRIBED COURSE TO SAID EAST LINE; THENCE NORTH 1,055.52 FEET ALONG SAID EAST LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 90-00'-00" WITH THE LAST DESCRIBED COURSE TO THE NORTHEAST CORNER THEREOF; THENCE NORTH 1,270.69 FEET ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 WHICH FORMS AN ANGLE TO THE RIGHT OF 180-00'-00" WITH THE LAST DESCRIBED COURSE; THENCE WEST 600.00 FEET ALONG A LINE WHICH IS PARALLEL WITH THE SOUTH LINE OF SAID NORTHEAST QUARTER AND WHICH FORMS AN ANGLE TO THE RIGHT OF 90-58'-34" WITH THE LAST DESCRIBED COURSE; THENCE SOUTHWEST 1,432.61 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 132-50'-42" WITH THE LAST DESCRIBED COURSE; THENCE SOUTHWEST 415.51 FEET ALONG A LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 195-09'-56" WITH THE LAST DESCRIBED COURSE TO A POINT ON SAID SOUTH LINE LYING 1,948.26 FEET WEST OF THE SOUTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE WEST 1,970.13 FEET ALONG SAID SOUTH LINE AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 9, SAID SOUTH LINES FORM AN ANGLE TO THE RIGHT OF 211-59'-23" WITH THE LAST DESCRIBED COURSE TO A POINT LYING 1,400.00 FEET EAST OF THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER; THENCE NORTH 1,100.00 FEET ALONG A LINE WHICH IS PARALLEL WITH THE WEST LINE OF SAID NORTHWEST QUARTER AND WHICH FORMS AN ANGLE TO THE RIGHT OF 268-35'-58" WITH THE LAST DESCRIBED COURSE; THENCE WEST 1,400.00 FEET ALONG A LINE WHICH IS PARALLEL WITH SAID SOUTH LINE AND WHICH FORMS AN ANGLE TO THE RIGHT OF 91-24'-02" WITH THE LAST DESCRIBED COURSE TO A POINT ON SAID WEST LINE LYING 1,100.00 FEET NORTH OF THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER; THENCE SOUTH 1,100.00 FEET ALONG SAID WEST LINE WHICH FORMS AN ANGLE TO THE RIGHT OF 88-35'-58" WITH THE LAST DESCRIBED COURSE TO SAID SOUTHWEST CORNER; THENCE WEST 1,337.57 FEET ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 8 WHICH FORMS AN ANGLE TO THE RIGHT OF 271-14'-21" WITH THE LAST DESCRIBED COURSE TO A STONE AT THE NORTHWEST CORNER OF THE EAST HALF OF SAID SOUTHEAST QUARTER; THENCE SOUTH 2,661.94 FEET ALONG THE WEST LINE OF THE EAST HALF OF SAID SOUTHEAST QUARTER WHICH FORMS AN ANGLE TO THE RIGHT OF 88-42'-04" WITH THE LAST DESCRIBED COURSE TO THE SOUTHEAST CORNER THEREOF; THENCE WEST 1,334.77 FEET ALONG THE SOUTH LINE OF THE EAST HALF OF SAID SOUTHEAST QUARTER WHICH FORMS AN ANGLE TO THE RIGHT OF 91-14'-48" WITH THE LAST DESCRIBED COURSE TO THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE EAST 2,639.83 FEET ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 9 WHICH FORMS AN ANGLE TO THE RIGHT OF 180-13'-28" WITH THE LAST DESCRIBED COURSE TO THE SOUTHEAST CORNER THEREOF; THENCE EAST 2,658.88 FEET ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 9 WHICH FORMS AN ANGLE TO THE RIGHT OF 180-01'-45" WITH THE LAST DESCRIBED COURSE TO THE POINT OF BEGINNING, CONTAINING 466.58 ACRES, MORE OR LESS.



LOCATION MAP

–NTS–

LEGEND

EXISITING		PROPOSED	
	SANITARY MANHOLE	802.0	PAVEMENT ELEVATION
	STORM MANHOLE	795.1	STORM & SANITARY INVERT
	CLEANOUT		SANITARY MANHOLE
	FIRE HYDRANT		STORM MANHOLE
	GATE VALVE		FLARED END SECTION
	CURB INLET		CURB INLET
	BLOW-OFF ASSEMBLY		GATE VALE
8"SA	SANITARY SEWER		REDUCER
6"DT	DRAINTILE		FIRE HYDRANT
15"ST	STORM SEWER	8"W	WATERMAIN
674	GROUNG CONTOUR	21"ST	STORM SEWER
	TREE	8"SA	SANITARY SEWER
	TIMBERLINE		BIKE TRAIL BY OTHERS
			UTILITY EASEMENT
			BUILDING SETBACK
			NO ACCESS STRIP
			LIMITS OF PROPOSED SPECIAL FLOOD HAZARD ZONE

INDEX TO SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	OVERALL LAYOUT
3–22	PRELIMINARY PLAN
23	MISCELLANEOUS DETAILS

DEVELOPER
EASTLAKE L.L.C.
1701 TULLAMORE ROAD
BLOOMINGTON, ILLINOIS 61704
309-275-3390

ATTORNEY
JOHN PRATT
415 N. CENTER STREET
BLOOMINGTON, ILLINOIS 61701
309-828-2302

ENGINEER
THOMAS D. STOLTZ, P.E.
FARNSWORTH GROUP, INC.
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
309-663-8435

RECOMMENDATION OF PRELIMINARY PLAN APPROVAL BY THE PLANNING COMMISSION OF BLOOMINGTON, ILLINOIS:

"Notice is hereby given that this Amended Preliminary Plan of The Grove on Kickapoo Creek Subdivision shown hereon is recommended by the Planning Commission of Bloomington, Illinois, for City Council approval with the modifications contained in Appendix A (if any), which is attached hereto."

The Planning Commission of Bloomington, Illinois

Date: November 9, 2011

By: _____ Chairman

By: Mark Woolard Executive Secretary

NOTICE OF APPROVAL OF PRELIMINARY PLAN BY THE CITY COUNCIL OF BLOOMINGTON, ILLINOIS:

"The Amended Preliminary Plan of The Grove on Kickapoo Creek Subdivision shown hereon has received approval by the City Council of Bloomington, Illinois, subject to the modifications contained in Appendix A which is attached hereto."

The City Council of Bloomington, Illinois

Date: December 12, 2011

By: Stephen Stockton, Mayor

Attest: _____ City Clerk

1. ("CC")
CHISELED SQUARE ON N.E. WING WALL OF BRIDGE OVER KICKAPOO CREEK ON IRELAND GROVE ROAD, APPROX. 0.725 MILES (3844') WEST OF COUNTY ROAD 2100E. U.S.G.S. ELEV.= 800.66
2. ("DD")
CHISELED SQUARE ON CENTER OF NORTH HEADWALL OF 6'x9' BOX CULVERT ON IRELAND GROVE ROAD, APPROX. 0.90 MILES (4641') WEST OF COUNTY ROAD 2100E. U.S.G.S. ELEV.=798.06
3. ("EE")
CHISELED SQUARE ON EAST END OF NORTH HEADWALL OF 6'x8' BOX CULVERT ON IRELAND GROVE ROAD, APPROX. 0.975 MILES (5095') WEST OF COUNTY ROAD 2100E. U.S.G.S. ELEV.=800.65

THOMAS D. STOLTZ 048858 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

The GROVE on Kickapoo Creek GROW THE GROVE

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS: PL-21721
CONTRACTORS SHALL CALL THE TOLL FREE J.U.L.I.E. TELEPHONE NUMBER, 1-800-892-0123, BEFORE STARTING EXCAVATION. ALLOW 48 HOURS FOR OTHER THAN EMERGENCY ASSISTANCE.

S.E. 1/4 SEC. 8, SEC. 9, T 23 N., R3E, 3 P.M.

Revisions #	Date.	Initials:
1	11/1/11	EMR

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

Drawn: EMR Date: 10/17/11
Designed: TDS Checked.: CNF

THE GROVE ON KICKAPOO CREEK BLOOMINGTON, ILLINOIS

AMENDED PRELIMINARY PLAN COVER SHEET

Book No.: 2701/2764 Sheet No.: 1 OF 23
Project No.: 0090663.00 File No.: 24-7623-1

MATCHLINE SHEET 9
MATCHLINE SHEET 6

MATCHLINE SHEET 9
MATCHLINE SHEET 6

CONSTRUCTED

CONSTRUCTED

JACKPINE ROAD

SUGARBERRY AVENUE

SHUMARD LANE S.W.

PEDESTRIAN UNDERPASS

BLACK OAK BOULEVARD

PEDESTRIAN PATH AND BIKE TRAIL

UNIT 5 BENJAMIN ELEMENTARY SCHOOL

LOT 1 OF BENJAMIN SCHOOL SUBD.

PLAYGROUND

OUTLOT 1000

20 ACRE
ACTIVE PARK AREA

MATCHLINE SHEET 5
MATCHLINE SHEET 6

MATCHLINE SHEET 6
MATCHLINE SHEET 7

ROAD (1200N)

50' DEDICATED FOR RIGHT OF WAY

IRELAND GROVE ROAD

50' DEDICATED FOR RIGHT OF WAY

249 250 251 252 253 254 255 256 257 258 365 366 367 201 202 203 204 205 206 207 208

0 25 50 100
SCALE: 1"=50'

Revisions
Date: Initials

Farnsworth GROUP
ENGINEERS ARCHITECTS SURVEYORS SCIENTISTS
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

Drawn: EMR Date: 10/17/11
Designed: TDB Checked.: GAD

THE GROVE ON KICKAPOO CREEK
BLOOMINGTON, ILLINOIS

AMENDED PRELIMINARY PLAN

Book No.: 270/2764 Sheet No.: 6 OF 23
Project No.: 0090663.00 File No.: 24-7623-1

THE GROVE ON
KICKAPOO CREEK
BLOOMINGTON, ILLINOIS

AMENDED PRELIMINARY PLAN

Book No.: **ZOWZ24** Sheet No.: **11** Of **23**
Project No.: **009068300** File No.: **24-7623-1**

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com

Drawn: **EMR** Date: **10/7/24**
Designed: **TDB** Checked: **CNF**

Revisions # Date: Initials:

SCALE: 1"=50'
0 25 50 100

CONSTRUCTED

MATCHLINE SHEET 4
MATCHLINE SHEET 11
MATCHLINE SHEET 10
MATCHLINE SHEET 12
MATCHLINE SHEET 14

WATERSOUND WAY
GUINESS
WHITE-CLIFF COURT
ROAD
DRIVE
LONGFIELD
KICKAPOO CREEK ROAD
FINLEN LANE
LONGFIELD CREEK
PEDESTRIAN PATH AND BIKE TRAIL
15' DRAINAGE & UTILITY EASEMENT

OUTLOT 1000
OUTLOT 200
OUTLOT 360

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 51 52 53 54 55 56 57 58 59 60 61 62 63 64 79 80 81 82 83 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 357 358 379 538 539 540 541 542 543 544 545 546 661 662 663 664 665 666 667

From: Ryan Otto/Cityblm
To: nfinlen@f-w.com
cc: caldwellw@unit5.org, Russel Waller/Cityblm@Cityblm, John Kennedy/Cityblm@Cityblm, Jim Karch/Cityblm@Cityblm, tstoltz@f-w.com

Date: Tuesday, July 28, 2009 02:31PM
Subject: Grove Subd. - Student Transportation

Neil,

I was able to speak with Wes Caldwell, Unit 5 Transportation Supervisor, this afternoon regarding the bussing of students west of Kickapoo Creek Rd in the Grove. It is my understanding that Unit 5 is prepared to bus the students in this area until such time as sidewalks and trails are in place to allow access to the Benjamin school site. However, Wes indicated that Unit 5 prefers that a long term solution be developed to provide a safe crossing across Kickapoo Creek Rd so that these students can walk to school. It is also my understanding that Unit 5 is unable to make a commitment to bus these students indefinitely since the State of IL must approve areas for bussing that normally would walk to school. The State of IL must evaluate the walking route and deem it hazardous before the district could receive reimbursement for bussing in these areas.

I appreciate Wes Caldwell taking time to help us navigate through this issue and am copying him on this e-mail so that he can review my understanding of our conversation.

We will be in contact with you in the near future to discuss possible solutions to this issue.

Sincerely,
Ryan L. Otto, P.E.
Project Engineer
City of Bloomington - Public Works Department
115 E. Washington Street
P.O. Box 3157
Bloomington, Illinois 61702-3157
(309)434-2225, Fax (309)434-2201
rotto@cityblm.org

Attachments:

Longfield Creek Crossing at Kickapoo Rd.pdf

February 1, 2010

Mr. Neil Finlen, P.E.
Farnsworth Group
2709 McGraw Drive
Bloomington, IL 61704

Subject: The Grove at Kickapoo Creek Subdivision
Kickapoo Creek Road Pedestrian Underpass

Dear Mr. Finlen;

Your December 11, 2009 request for payment relative to the proposed Kickapoo Creek Pedestrian Underpass has been reviewed by various City staff. We are unable to submit the invoice for City Council consideration for the following reasons.

Approved Preliminary Plan

The approved Preliminary Plan for this development clearly depicts a bike trail at the subject pedestrian underpass location.

City Development Code / Manual of Practice

Section 3.02 of the Manual of Practice (MOP) indicates that basic consideration for the safety of both vehicular and pedestrian traffic shall be included in the design of all subdivision developments. More specifically, this sections states that pedestrian-vehicular conflict points should be minimized. Furthermore, Section 5.02 of the MOP indicates that trails shall be designed in accordance with the current AASHTO standards. Page 12 of the 1999 AASHTO Guide for the Development of Bicycle Facilities indicates that trail-roadway intersections should be minimized. It further indicates that at-grade intersections on high-volume roadways and mid-block crossings should be analyzed with the bicyclist's needs in mind to determine the most appropriate crossing design treatments. With these requirements and the surface topography in mind, a grade separation structure is undoubtedly the most appropriate design treatment.

Since the bike trail is shown on the approved Preliminary Plan, consideration of the trail-roadway crossing should have been included in the entire development design process. Furthermore, City staff inquired about school walking routes in February 2009 and notified your firm about these design considerations on several occasions beginning in June 2009. Design and construction costs to accommodate this code required consideration are not the City's responsibility.

115 E. Washington Street
Post Office Box 3157
Bloomington, Illinois
61702-3157
309.434.2225 tel
309.434.2201 fax
For Hearing Impaired
TTY 309.829.5115

Please feel free to contact me with any questions or concerns.

Sincerely,

Jim Karch, P.E. CFM
Director of Public Works

cc: David Hales, City Manager
John Kennedy, Director of Parks and Recreation
Todd Greenburg, Corporate Counsel
Kevin Kothe, City Engineer
Bill Doud, Grove LLC
Russ Waller

From: Allen Swanson/Cityblm
To: robinsms@unit5.org
cc: Russel Waller/Cityblm@Cityblm, Robert Siron/Cityblm@Cityblm

Date: Thursday, February 19, 2009 08:20AM
Subject: Benjamin School Walking Routes

Mark, attached is a draft walking route map for Benjamin School. Based on the current subdivision design, two large areas of this subdivision may need to be bused due to safety hazards and/or walking distance. Discussions are currently taking place concerning the need for the planned pedestrian tunnel under Kickapoo Creek Rd. between Longfield Rd. and Finlen Ln. If this safety feature is deleted from the subdivision design, it appears that all students living west of Kickapoo Creek Rd. attending Benjamin School will need to be bused based on safety hazards. Before I can proceed with the completion of the Benjamin School Walking Route Map, I need answers to the following questions:

1) What is the boundary of the walking area for Benjamin School?

2) Does Unit 5 intend to bus all students west of Kickapoo Creek Rd. and north of detention basin (creek area)?

3) Does Unit 5 believe that the pedestrian tunnel under Kickapoo Creek Rd. between Longfield Rd. and Finlen Ln. is needed to facilitate the safe movement of walking students to and from the school?

I will be placing this issue on the March 11, 2009 STAC agenda for discussion.

Allen E. Swanson
City of Bloomington
Engineering Department
Supervisor Traffic Systems
115 E. Washington St.
P.O. Box 3157
Bloomington, IL 61701
(309) 434-2437

Attachments:

Benjamin Walking Routes.pdf

June 8, 2009

Mr. Thomas D. Stoltz, P.E.
Farnsworth Group
2709 McGraw Drive
Bloomington, IL 61704

Subject: The Grove on Kickapoo Creek, Third Addition
City Project No. 50-07-43587-09-03
Construction Plan Review #1

Dear Mr. Stoltz:

The Public Works and Water Departments have reviewed the subject plan with a last revision date of May 5, 2009, and offer the following comments.

1. Please provide an estimate of cost in electronic format for all public improvements.
2. Lot Grading & Erosion Control Plans
   - A. It appears that a swale is intended to convey water along the west lot lines of lots 332-336. Please show a cross section for this swale.
   - B. Please provide details on how the existing waterway coming from the adjacent property to the west will tie into the new drainage channel. There appears to be a significant grade difference and the potential for severe erosion and maintenance issues.
   - C. Cross section A-A for the creek north of lots 336-358 shows a 4:1 max slope. The contours and elevations on the plans indicate a 3:1 slope. The preliminary plan shows a 5:1 slope. Please revise to a maximum of 4:1 slope and show grading for the future bike trail.
   - D. The construction of the creek north of lots 336-358 is proposed in two phases. This sequence does not appear to be possible due to the need to provide flood routing immediately and the significant grade differences between the existing and final grades. Please revise the plans to show the construction of the full creek area with this phase.
   - E. Please show erosion control for the creek area on the plans.
   - F. Please provide flood route calcs for the creek.
   - G. The flow velocity for flood route D-D between lots 348-349 exceeds the maximum allowable for a grass lined channel per the IL Urban Manual (Table 1, Page 840-5). Please provide a permanent (10 yr) TRM or other armament.
   - H. Please use the same boxed note regarding field tiles on this plan set as was used for the Grove Second Addition Plans.

115 E. Washington St.
Post Office Box 3157
Bloomington, Illinois
61702-3157
309.434.2225 tel
309.434.2201 fax
For Hearing Impaired
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www.cityblm.org

I. Please show a low flow drainage tile and inlets at each storm sewer outlet along the creek area. The City may be interested in exploring other alternatives to this tile if the creek is developed as a wetland area as part of this development.

J. Please revise note 6 to specify that the permanent channel erosion blanket be used to the high water elevation of the flood routes.

K. The width of the easement shown for section B-B on sheet 3 is incorrect.

L. Please show erosion control and temporary paved outlets the area where Kickapoo Creek Road approaches creek A-A.

M. Please show temporary construction entrances at all points where the site will be accessed from existing streets.

N. Please provide a temporary sediment basin per section 13.04 of the Manual of Practice for the site.

O. Please provide calculations and label the 100 Yr. Water Elevation for swale E-E on sheet 3.

P. Please revise all ditch check placements so that the bottom of the upstream check is at the same elevation as the top of the downstream check. Straw bale ditch checks are no longer allowed. Please use either rock check dams or propose other comparable products.

Q. Please provide finished grade and low opening elevations for all lots (i.e. "double bubble")

R. Please provide the project SWPPP for comment and a copy of the NOI or NPDES permit.

S. The contours for the berm between Longfield and Londonderry do not match the spot elevations. Please revise. It appears that the berm should be extended west to protect lot 322.

T. Please specify a detailed grading plan for lots 348 & 349.

U. Please revise the silt fence configurations to follow the grading contours or show additional ditch checks and protection along the silt fence where lateral or concentrated flows are expected to converge.

V. Please define the dimensions of the required outlet protection per the IL Urban Manual.

3. Sanitary Sewer Plans

A. Please indicate that on the plans that trench backfill (TBF) is required beneath the future sidewalk. The TBF lengths called out on the plans do not specify this requirement.

4. Storm Sewer Plans

A. Please show an end section for the outlet at 18+61 Kickapoo Creek Rd.

B. What grate is used for the TY 61 specified?

C. What type of grate will be used for the manhole at 263+30 on Line AA.

5. Water Main Plans

A. Please make the hydrant lead extension at Lot 305 a straight run. We prefer to have the hydrant lead straight vs. at the exact lot line.

B. Please revise Note #2 to comply with the Manual of Practice.

6. Draintile Plan

A. Some of the offset dimensions did not print out on sheet 11.

B. Please indicate that on the plans that trench backfill (TBF) is required beneath the future sidewalk. The TBF lengths called out on the plans do not specify this requirement.

7. Street Plan & Profile

A. Please specify that the truncated domes for sidewalk ramps use "Armortile" with red brick color as manufactured by Engineered Plastics Inc. or approved equal.

B. Please show 6" PCC sidewalk where the frontage roads cross the sidewalk.

C. Please verify the design speed for Kickapoo Creek Road and ensure that site distance has been met for the frontage roads and Longfield Road.

D. Please provide information regarding a pedestrian underpass beneath Kickapoo Creek Road. The grades shown do not appear to allow room for pedestrian use.

E. Please label the location, size and use for all utility conduits to be installed.

F. Please provide a pavement marking detail for Kickapoo Creek Road.

Should you have any questions, please contact us.

Sincerely,

Ryan L Otto

Ryan L. Otto, P.E.

cc: Russ Waller, City Engineer
Kevin Kothe, Design Engineer
Billy Phillips
Water Department
Planning and Code Enforcement Department
Engineering Department Permit Clerks
file

July 9, 2009

Mr. Thomas D. Stoltz, P.E.
Farnsworth Group
2709 McGraw Drive
Bloomington, IL 61704

Subject: The Grove on Kickapoo Creek, Third Addition
City Project No. 50-07-43587-09-03
Construction Plan Review #2

Dear Mr. Stoltz:

The Public Works and Water Departments have reviewed the subject plan received on June 19, 2009, and offer the following comments.

1. Please provide an estimate of cost in electronic format for all public improvements.
2. Please show the plan revision dates on all sheets.
3. Lot Grading & Erosion Control Plans
   - A. For the swale intended to convey water along the west lot lines of lots 332-336, please revise the spacing for the ditch checks to meet the standards of the IL Urban Manual
   - B. It appears that a silt fence is needed on the south side of Longfield Road to meet the minimum spacing requirements.
   - C. If the silt fence must cross contours, with the exception of the ends of the fence, gravel check dams placed perpendicular to the back of the fence shall be used to minimize concentrated flow and erosion along the back of the fence. The gravel check dams shall be approximately 1 foot deep at the back of the fence and be continued perpendicular to the fence at the same elevation until the top of the check dam intercepts the ground surface behind the fence. The gravel check dams shall consist of appropriately sized and specified rock for the fence line grade and contributing drainage area. The gravel check dams shall be located every 10 feet along the fence where the fence must cross contours.
   - D. There appears to be a significant grade difference and the potential for severe erosion and maintenance issues where the creek meets the west property line. Please protect this area with sufficient armament. The 20 SY of A4 rip rap shown is not sufficient.
   - E. Cross section G-G for the creek north of lots 355-358 shows a 3:1 max slope. Please revise to a maximum of 4:1 slope.

115 E. Washington St.
Post Office Box 3157
Bloomington, Illinois
61702-3157
309.434.2225 tel
309.434.2201 fax
For Hearing Impaired
TTY 309.829.5115
www.cityblm.org

F. Please be aware that the City will not accept the Longfield creek area until the entire section, including the needed fill on the north bank, is complete and fully stabilized.

G. Please show erosion control for the creek area on the plans.

H. The flood route calcs for the Longfield creek show the flows calculated for the offsite area at a CN=75. Since no upstream detention is planned for the upstream area, the entire 100-YR developed flow shall be conveyed to the Kickapoo Creek "detention" facility. Please revise the calculations to show the offsite area with a CN=83. Please revise the grades and building elevations along the creek as necessary to accommodate the increased flow.

I. Please line the entire 6' bottom of the flood route between lots 348 & 349.

J. Please show a low flow drainage tile and inlets at each storm sewer outlet along the Longfield Creek. The City will accept a fee-in-lieu of the tile system to provide wetland plantings along the banks. If this option is selected, please include permanent rock check dams or "trickles" on the plans and call to discuss this item more specifically.

K. Please revise note 6 to specify that the permanent channel erosion blanket be used to the high water elevation of the flood routes.

L. Please show channel erosion control blanket to the 100-YR HWL for the Longfield creek.

M. Please provide a temporary sediment basin per section 13.04 of the Manual of Practice for the site. The basin constructed with the original Grove Subdivision does not meet the standards of the IL Urban Manual.

N. Please revise all ditch check placements so that the bottom of the upstream check is at the same elevation as the top of the downstream check. Straw bale ditch checks are no longer allowed. Please use either rock check dams or propose other comparable products.

O. Several of the lots with LOEs the same as the building elevation appear to be graded such that a lookout might be possible. If lookouts are desired on these lots, then a "double bubble" should be added.

P. Please define the dimensions of the required outlet protection per the IL Urban Manual (see the Urban Standard for Rock Outlet Protection). Each outlet should have specific dimensions based on flows, velocities, and tailwater. Please show the dimensions for each outlet on the plan sheets for either the storm sewer or the lot grading.

4. Street Plan & Profile

A. Please also ensure that the turning site distance has been met for the frontage roads and Longfield Road. Your calculations appear to show that the stopping site distance requirement has been met.

B. Please provide information regarding a pedestrian underpass beneath Kickapoo Creek Road. Until Unit 5 approves a walking route for this development and commits to busing the areas west of Kickapoo Creek Road,

Road be raised to accommodate a possible future installation of a pedestrian box and culvert.

Should you have any questions, please contact us.

Sincerely,

Ryan L. Otto, P.E.
Project Engineer

cc: Russ Waller, City Engineer
Kevin Kothe, Design Engineer
John Kennedy
Billy Phillips
Water Department
Planning and Code Enforcement Department
Engineering Department Permit Clerks
file

July 22, 2009

Mr. Thomas D. Stoltz, P.E.
Farnsworth Group
2709 McGraw Drive
Bloomington, IL 61704

Subject: The Grove on Kickapoo Creek, Third Addition
City Project No. 50-07-43587-09-03
Construction Plans
Contingent Approval

Dear Mr. Stoltz:

The Public Works and Water Departments have reviewed and approve the subject plan received on July 17, 2009, contingent upon resolution of the following comments prior to beginning construction.

1. Please provide an estimate of cost in electronic format for all public improvements.
2. Lot Grading & Erosion Control Plans
   A. The flood route calcs for the Longfield creek show the flows calculated for the offsite area at a CN=75. Since no detention is planned for the upstream area, the entire 100-YR developed flow shall be conveyed to the Kickapoo Creek regional "detention" facility. Please revise the calculations to show the offsite area with a developed CN=83. Please revise the grades and building elevations along the creek as necessary to accommodate the increased flow. It appears that armament for the entire channel will be necessary with the increased velocities per BLR Section 38-1.06.
   B. Please reevaluate the rip rap specified where the creek meets the west property line. A3 rip rap does not appear to be sufficiently sized to accommodate the flows and velocities anticipated.
   C. The City will accept a fee-in-lieu of the tile system to provide wetland plantings along the banks of the Longfield creek. We look forward to continuing development of this proposal with you and the developer.
3. Street Plan & Profile
   A. Please provide information regarding a pedestrian underpass beneath Kickapoo Creek Road. Until Unit 5 approves a walking route for this development and commits to busing the areas west of Kickapoo Creek Road, we can not approve the grades on Kickapoo Creek Road as shown since the grades shown do not appear to allow room for pedestrian use. In lieu of a commitment from Unit 5, we will require that the grades on Kickapoo Creek

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we can not approve the grades on Kickapoo Creek Road as shown since the grades shown do not appear to allow room for pedestrian use.

Should you have any questions, please contact us.

Sincerely,

Ryan L. Otto, P.E.
Project Engineer

cc: Russ Waller, City Engineer
Kevin Kothe, Design Engineer
John Kennedy
Billy Phillips
Water Department
Planning and Code Enforcement Department
Engineering Department Permit Clerks
file

From: Ryan Otto/Cityblm
To: nfinlen@f-w.com
cc: caldwellw@unit5.org, Russel Waller/Cityblm@Cityblm, John Kennedy/Cityblm@Cityblm, Jim Karch/Cityblm@Cityblm, tstoltz@f-w.com

Date: Tuesday, July 28, 2009 02:31PM
Subject: Grove Subd. - Student Transportation

Neil,

I was able to speak with Wes Caldwell, Unit 5 Transportation Supervisor, this afternoon regarding the bussing of students west of Kickapoo Creek Rd in the Grove. It is my understanding that Unit 5 is prepared to bus the students in this area until such time as sidewalks and trails are in place to allow access to the Benjamin school site. However, Wes indicated that Unit 5 prefers that a long term solution be developed to provide a safe crossing across Kickapoo Creek Rd so that these students can walk to school. It is also my understanding that Unit 5 is unable to make a commitment to bus these students indefinitely since the State of IL must approve areas for bussing that normally would walk to school. The State of IL must evaluate the walking route and deem it hazardous before the district could receive reimbursement for bussing in these areas.

I appreciate Wes Caldwell taking time to help us navigate through this issue and am copying him on this e-mail so that he can review my understanding of our conversation.

We will be in contact with you in the near future to discuss possible solutions to this issue.

Sincerely,
Ryan L. Otto, P.E.
Project Engineer
City of Bloomington - Public Works Department
115 E. Washington Street
P.O. Box 3157
Bloomington, Illinois 61702-3157
(309)434-2225, Fax (309)434-2201
rotto@cityblm.org

Attachments:

Longfield Creek Crossing at Kickapoo Rd.pdf

guide for the development of bicycle facilities

american association of state highway and transportation officials

444 north capitol street, nw
washington, dc 20001
(202) 624-5800 (tel)
(202) 624-5806 (fax)
www.aashto.org

1999 prepared by the aashto task force on geometric design

- *Pavement surface quality*—Bikeways should be free of bumps, holes and other surface irregularities if they are to attract and satisfy the needs of bicyclists. Utility covers and drainage grates should be at grade and, if possible, outside the expected path of travel. Railroad crossings should be improved as necessary to provide for safe bicycle crossings.

- *Truck and Bus Traffic*—Because of their width, high-speed trucks, buses, motor homes and trailers can cause special problems for bicyclists. Where bus stops are located along a bicycle route, conflicts with bus loading and unloading and pavement deterioration, such as asphalt pavement shoving, may also be problems.

- *Traffic Volumes and Speeds*—For facilities on roadways, motor vehicle traffic volumes and speeds must be considered along with the roadway width. Commuting bicyclists frequently use arterial streets because they minimize delay and offer continuity for long trips. If adequate width for all vehicles is available on the more heavily traveled streets, it can be more desirable to improve such streets than adjacent streets. When this is not possible, a nearby parallel street may be improved for bicyclists, if stops are minimal and other route conditions are adequate. When such a parallel facility is improved, care must be taken that motor vehicle traffic is not diverted. While inexperienced bicyclists prefer more lightly-traveled streets, it should be remembered that preferred routes may change over time as skill levels change.

- *Bridges*—Bridges can serve an important function by providing bicycle access across barriers. However, some bridge features restrict bicycle access and/or create unfavorable conditions for bicyclists. The most common of these are curb-to-curb widths that are narrower than the approach roadways (especially where combined with relatively steep grades), open grated metal decks found on many spans, low railings or parapets, and certain types of expansion joints such as finger-type joints, that can cause steering difficulties.

- *Intersection Conditions*—A high proportion of bicycle crashes occur at intersections. Facilities should be selected so as to minimize the number of crossings, or intersections should be improved to reduce crossing conflicts. At-grade intersections on high-volume (or high-speed) roadways and mid-block crossings should be analyzed with bicyclists' needs in mind to determine the most appropriate crossing design treatments.

- *Costs/Funding*—Facility selection normally will involve a cost analysis of alternatives. Funding availability can limit the alternatives; however, it is very important that a lack of funds not result in a poorly designed or constructed facility. The decision to implement a bikeway plan should be made with a conscious, long-term commitment to a proper level of maintenance. When funding is limited, emphasis should be given to low-cost improvements such as bicycle parking, removal of barriers and obstructions to bicycle

From: Allen Swanson/Cityblm
To: robinsms@unit5.org
cc: Russel Waller/Cityblm@Cityblm, Robert Siron/Cityblm@Cityblm

Date: Thursday, February 19, 2009 08:20AM
Subject: Benjamin School Walking Routes

Mark, attached is a draft walking route map for Benjamin School. Based on the current subdivision design, two large areas of this subdivision may need to be bused due to safety hazards and/or walking distance. Discussions are currently taking place concerning the need for the planned pedestrian tunnel under Kickapoo Creek Rd. between Longfield Rd. and Finlen Ln. If this safety feature is deleted from the subdivision design, it appears that all students living west of Kickapoo Creek Rd. attending Benjamin School will need to be bused based on safety hazards. Before I can proceed with the completion of the Benjamin School Walking Route Map, I need answers to the following questions:

1) What is the boundary of the walking area for Benjamin School?

2) Does Unit 5 intend to bus all students west of Kickapoo Creek Rd. and north of detention basin (creek area)?

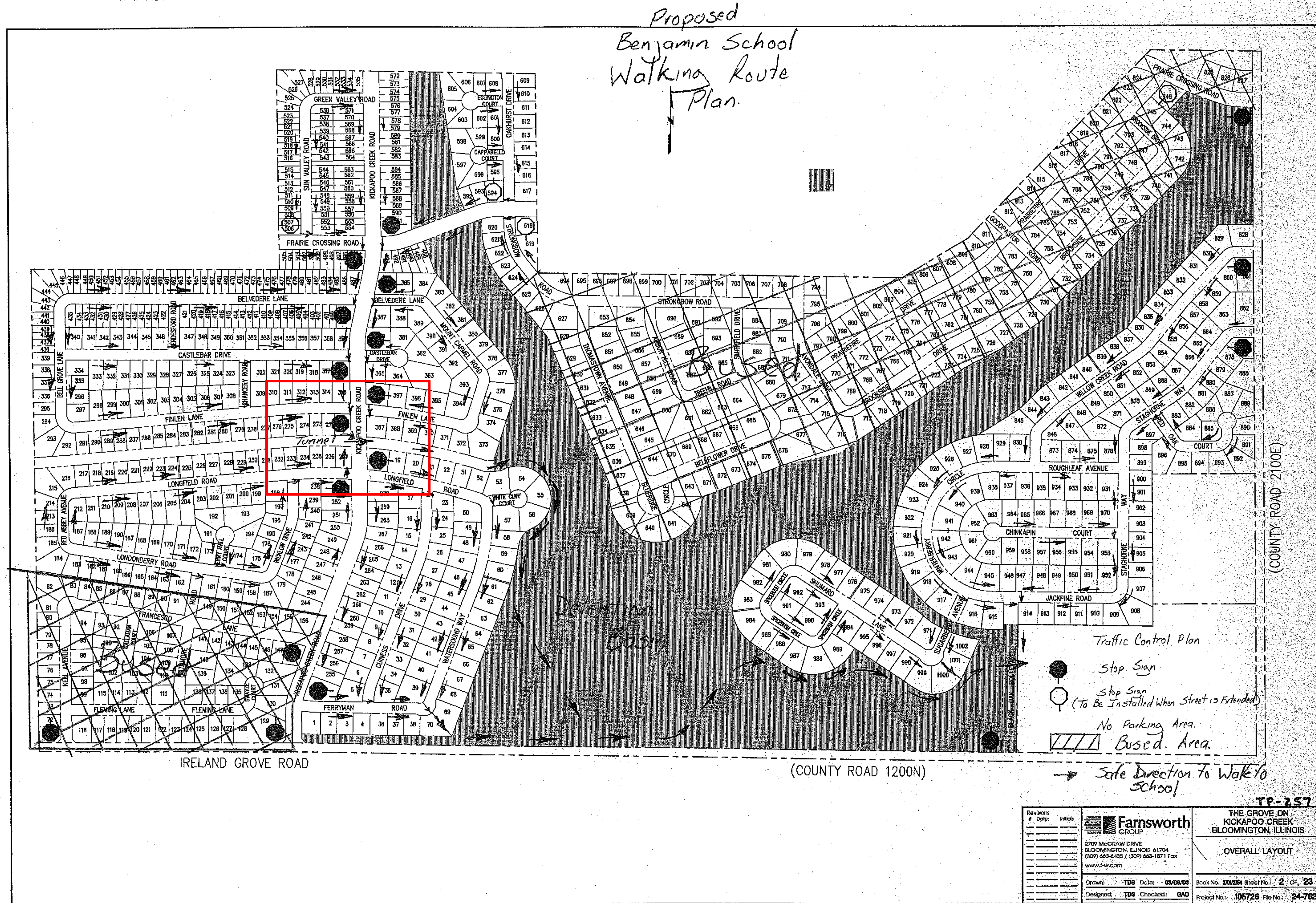
3) Does Unit 5 believe that the pedestrian tunnel under Kickapoo Creek Rd. between Longfield Rd. and Finlen Ln. is needed to facilitate the safe movement of walking students to and from the school?

I will be placing this issue on the March 11, 2009 STAC agenda for discussion.

Allen E. Swanson
City of Bloomington
Engineering Department
Supervisor Traffic Systems
115 E. Washington St.
P.O. Box 3157
Bloomington, IL 61701
(309) 434-2437

Attachments:

Benjamin Walking Routes.pdf


Proposed
Benjamin School
Walking Route
Plan.
(COUNTY ROAD 2100E)
(COUNTY ROAD 1200N)
IRELAND GROVE ROAD
KICKAPOO CREEK ROAD
Tunnel
Bused
Detention Basin
Traffic Control Plan
Stop Sign
Stop Sign (To Be Installed When Street is Extended)
No Parking Area.
Bused. Area.
Safe Direction to Walk to School
TP-257
Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / (309) 663-1571 Fax
www.f-w.com
THE GROVE ON KICKAPOO CREEK
BLOOMINGTON, ILLINOIS
OVERALL LAYOUT
Drawn: TDS Date: 03/08/05
Designed: TDS Checked: GAD
Book No.: 2701/264 Sheet No.: 2 OF 23
Project No.: 105726 File No.: 24-7623

McLean County Unit District No. 5
1809 West Hovey Avenue
Normal, IL 61761-4339

Office of the Superintendent

Phone: 309.452.4476
Fax: 309.452.7418
E-mail: district@unit5.org

April 10, 2013

Mr. Ryan Otto
Project Engineer
City of Bloomington – Public Works Department
115 East Washington Street
Bloomington, Illinois 61702-3157

Re: The Grove at Kickapoo Creek Subdivision

Dear Ryan,

When we were working with the City of Bloomington and the developers of the Grove at Kickapoo Creek in 2009, walking trails were to be established. It was determined that the students west of Kickapoo Creek would be bussed to Benjamin Elementary School until walking trails were in place.

Unit 5 would like to support all efforts to establish the Grove at Kickapoo Creek walking trails needed for students to be able to walk or ride to school.

The pedestrian underpass was designed and installed to help allow students to go from Benjamin Elementary School to the proposed park property. The safety factor was the primary reason for the pedestrian underpass.

The design of the box and associated appurtenances should be funded by the developer. The City of Bloomington and the developers worked together to establish a costing sharing breakdown for all parties.

Please feel free to call me if you have any questions,

Sincerely,

Gary C. Niehaus

Gary C. Niehaus
Superintendent

Cc: Neil Finlen, The Farnsworth Group

Finlen, Neil

From: Finlen, Neil
Sent: Friday, July 24, 2009 1:41 PM
To: Ryan Otto/Cityblm
Cc: caldwellw@unit5.org
Subject: RE: Grove - Bussing West of Kickapoo Creek Rd

Thanks -I'll make that request by way of this message.
Wes,
Would you see if this is OK and send it my way-thanks Neil
Sent from my Windows Mobile® phone.

From: Ryan Otto/Cityblm <rotto@cityblm.org>
Sent: Friday, July 24, 2009 1:36 PM
To: Finlen, Neil <nfinlen@F-W.com>
Cc: Russel Waller/Cityblm@Cityblm <rwaller@cityblm.org>
Subject: RE: Grove - Bussing West of Kickapoo Creek Rd

We are looking for confirmation that the students in the Grove subdivision that are west of Kickapoo Creek Road will be bussed by Unit 5. No walking route from this area will be designated by the City.

Ryan L. Otto, P.E.
Project Engineer
City of Bloomington - Public Works Department
115 E. Washington Street
P.O. Box 3157
Bloomington, Illinois 61702-3157
(309)434-2225, Fax (309)434-2201
rotto@cityblm.org

-----"Finlen, Neil" <nfinlen@F-W.com> wrote: -----

To: Ryan Otto/Cityblm <rotto@cityblm.org>
From: "Finlen, Neil" <nfinlen@F-W.com>
Date: 07/24/2009 12:26PM
Subject: RE: Grove - Bussing West of Kickapoo Creek Rd

Ryan,
Would you just give me the key words you would like to see and I'll go back to Unit 5.
Thanks Neil
Sent from my Windows Mobile® phone.

From: Ryan Otto/Cityblm <rotto@cityblm.org>
Sent: Friday, July 24, 2009 10:08 AM
To: Finlen, Neil <nfinlen@F-W.com>
Cc: Russel Waller/Cityblm@Cityblm <rwaller@cityblm.org>
Subject: Grove - Bussing West of Kickapoo Creek Rd

Neil,

Could you please obtain a letter from Unit 5 regarding the Kickapoo Creek Underpass. The attached e-mail is not sufficient. Otherwise we will require that the subdivision design be modified to accomodate a future pedestrian underpass.

Thanks,
Ryan L. Otto, P.E.
Project Engineer
City of Bloomington - Public Works Department
115 E. Washington Street
P.O. Box 3157
Bloomington, Illinois 61702-3157
(309)434-2225, Fax (309)434-2201
rotto@cityblm.org

-----Forwarded by Ryan Otto/Cityblm on 07/24/2009 10:04AM -----

To: Ryan Otto/Cityblm@Cityblm
From: Russel Waller/Cityblm
Date: 07/24/2009 10:01AM
Subject: Re: FW: Bussing

Ryan;

I agree. This is not acceptable. We need an official letter (not an email) which states that the students in the Grove subdivision that are west of Kickapoo Creek Road will be bussed. No walking route from this area will be designated.

Russ Waller
City of Bloomington
Public Works Department
Engineering Division
ph: (309) 434-2225
fax: (309) 434-2201

-----Ryan Otto/Cityblm wrote: -----

To: Russel Waller/Cityblm@Cityblm
From: Ryan Otto/Cityblm

Date: 07/24/2009 09:45AM
Subject: FW: Bussing

-----Forwarded by Ryan Otto/Citybim on 07/24/2009 09:43AM -----

To: Ryan Otto/Citybim <rotto@citybim.org>
From: "Finlen, Neil" <nfinlen@F-W.com>
Date: 07/23/2009 02:28PM
Subject: FW: Bussing

From: Caldwell, Wes [mailto:CALDWW@unit5.org]
Sent: Thursday, July 23, 2009 2:10 PM
To: Finlen, Neil
Subject: Bussing

Mr. Finlen,

As to our conversation, we will be transportation students from The Grove to Benjamin elementary.

Sincerely,

WC

Wes Caldwell

Unit 5 Transportation

Transportation Supervisor

caldww@unit5.org

WK(309)862-5019

Fax(309)862-5042

Finlen, Neil

From: Finlen, Neil
Sent: Thursday, August 27, 2009 11:54 PM
To: Ryan Otto/Cityblm; Stoltz, Tom
Cc: Russel Waller/Cityblm@Cityblm; Jim Karch/Cityblm@Cityblm; John Kennedy/Cityblm@Cityblm; Kevin Kothe/Cityblm@Cityblm; bill@doudbuilders.com
Subject: RE: Kickapoo Creek Road Underpass - The Grove

Ryan,
This evening I have requested a meeting of David Hales and Todd Greenburg after discussing this response with the development group.
Please check your schedules and I will see what works for the developers and their atty. so we can again meet and discuss this approach.
I might suggest that the annexation agreement be reviewed (Page 12) prior to getting together.
Thanks Neil

From: Ryan Otto/Cityblm [mailto:rotto@cityblm.org]
Sent: Thursday, August 27, 2009 10:42 AM
To: Stoltz, Tom
Cc: Finlen, Neil; Russel Waller/Cityblm@Cityblm; Jim Karch/Cityblm@Cityblm; John Kennedy/Cityblm@Cityblm; Kevin Kothe/Cityblm@Cityblm; bill@doudbuilders.com
Subject: Kickapoo Creek Road Underpass - The Grove

Tom,

In response to your 8/11/09 letter to Russ Waller regarding the engineering costs for preparing cost estimates and plans for the pedestrian underpass on Kickapoo Creek Road at Longfield Creek, we offer the following comments.
The design of the box and associated appurtenances should be funded by the developer. The City does not share in the engineering costs for oversizing.

The needed to safely convey pedestrian traffic across Kickapoo Creek Road is a need and concern for both the City and developer and a planning practice required by City Code.

Recognizing this need, the construction cost estimates for oversizing of the crossing facility are required to allow for budgeting and for establishing a cost sharing breakdown for all parties.

Thank you for your help.

Sincerely,

Ryan L. Otto, P.E.
Project Engineer
City of Bloomington - Public Works Department
115 E. Washington Street
P.O. Box 3157
Bloomington, Illinois 61702-3157
(309)434-2225, Fax (309)434-2201
rotto@cityblm.org

THE GROVE SUBD. Enq
(FORMERLY EASTLAKE SUBD)

STATE OF ILLINOIS)
)
COUNTY OF MC LEAN)SS.
)
CITY OF BLOOMINGTON)

I, Tracey Covert the duly appointed, qualified and City Clerk of the City of Bloomington, Illinois and in said capacity the keeper of the records of the meetings of the City Council do hereby certify that the foregoing is a true and complete copy of the Annexation Agreement providing for the Annexation of Certain Territory as Hereinafter described to the City of Bloomington, McLean County, Illinois, commonly located east of Towanda Barnes, north of Ireland Grove Rd., and south of East Oakland Ave.; consisting of approximately 450 acres, from A, Agricultural Distict to R - 1, High Density Single Family Residence District, R - 1B, Medium Density Single Family Residence District, R - 2 , Mixed Residence District, and S - 2, Public Lands and Institutions District; for land a/k/a The Grove at Kickapoo Creek passed by the affirmative vote of over 2/3 of all the members provided by law to be elected to the City Council in said City at a Regular Meeting thereof, held on the ~~27th~~ 26th day of September, 2005, the vote on the passage of said Agreement being taken by ayes and nays and entered upon the journal of the proceedings of said Council. I further certify that the said Agreement is in full force and effect.

Witness my hand and the seal of the said City this 3rd day of May, 2006.

Tracey Covert, City Clerk

RECEIVED
MAY 05 2006
By

Code. The amount of the guarantee shall be based on $125.00 per front foot. The bond and guarantee shall be for the frontage of the Eastlake development on Ireland Grove Road (except the Park and Greenway frontage) and on Road 2100 E.

Nothing in this agreement shall be construed as relieving Searls or Deneen from their responsibility to meet the code requirements for adjacent substandard street(s) at such time as they subdivide adjacent property.

3. Interior streets -

a) All interior streets shall be built by Owner to City subdivision code standards. Any oversizing or increased structural strength required by the City over and above what is required to serve this subdivision shall be installed by Eastlake and shall be paid for by the City within 30 days from billing by Eastlake. The Arterial Street at 2000 E shall not allow access from lots fronting thereon and shall have a 45 mph design speed.

b) The Owners may elect to construct one or more entrance gates for residential streets under the following conditions:

1. The street (including gate, pavement, curb, gutter & sidewalk) and storm sewer (including inlets and manholes) on the street thereby affected shall be considered a private street.

2. A viable homeowners association or other

responsible agency shall be transferred the maintenance responsibility (including snow removal) for said private street.

3. The City shall be granted access to said private street for maintenance of other utilities such as water and sanitary sewer.

4. Provisions shall be made to grant unimpeded access to said private street for all emergency vehicles and services (such as attachment of a Knox Box).

5. The City agrees to continue garbage collection on said private street(s) only to the extent there is unimpeded access for the City's collection vehicles and provisions of a hold harmless agreement.

6. The Homeowners Association shall supply the City with a hold harmless agreement.

c) Owner may construct a boulevard street from Ireland Grove Road north on the easterly side of the proposed residential development. The City shall reimburse one-half the cost of said boulevard street, where it is not adjacent to residential development, to Eastlake within 30 days of billing.

d) Owner shall include a grade separated pedestrian crossing under said street described in Paragraph IV A 3 C to facilitate pedestrian traffic, one-half the cost of which

shall be reimbursed to Eastlake by the City, within 30 days from billing.

e) The City may allow Developers to construct berms in outlots and signage in street medians. Any signage and berms constructed shall be per code and maintained by the homeowners association, which shall indemnify the City and hold the City harmless.

5. Traffic Impact Analysis - Owner shall prepare and submit a traffic impact analysis for the development. The analysis shall predict the traffic impacts on the interior streets, Ireland Grove Road and 2100 E. The Owner shall prepare an Intersection Design Study for the intersection of the Arterial Street entrance at 2000 E with Ireland Grove Road. If traffic signals are warranted at this location because of traffic generated by the Eastlake development, the Owner shall pay the cost of the signalization, with installation to be made when traffic from the development warrants the installation.

B. Water

1. To the Site: The Developer shall design and construct a water main of a size determined by the City to serve the tract if developed as depicted on the Sketch Plan along Ireland Grove Road from Towanda Barnes Road to the West line of the Eastlake property by. Eastlake shall have no

for seeding and seed the land with a seed mixture approved by the City. Owner shall provide erosion protection plantings for the stream restoration area. In the event grant funds are available for seeding, planting and/or preparation work, the City shall apply for those funds and if received, use them for this purpose.

3. If the amount of land dedicated is less than that required by Code, Developer shall pay and City shall accept a fee in lieu. If the amount of land dedicated exceeds that required by Code, Developer shall be allowed a credit against other fees due, based on a land value of $30,000 per acre.

a) Developer will dedicate a minimum of 300 foot wide greenway for the east branch of Kickapoo Creek and a minimum 250 foot wide greenway for the west branch north to the east west collector. The development shall be designed to maintain the 100 year flood within this greenway.

4. Eastlake shall "rough grade", within the public access way, for a future pedestrian/bike trail around the proposed greenway in consultation with the City in general conformance with the location shown on the sketch plan. The City shall construct the proposed pedestrian/bike trail at least 10 feet in width. The City shall pay the entire cost of designing and

constructing this trail.

V. MODEL HOMES -

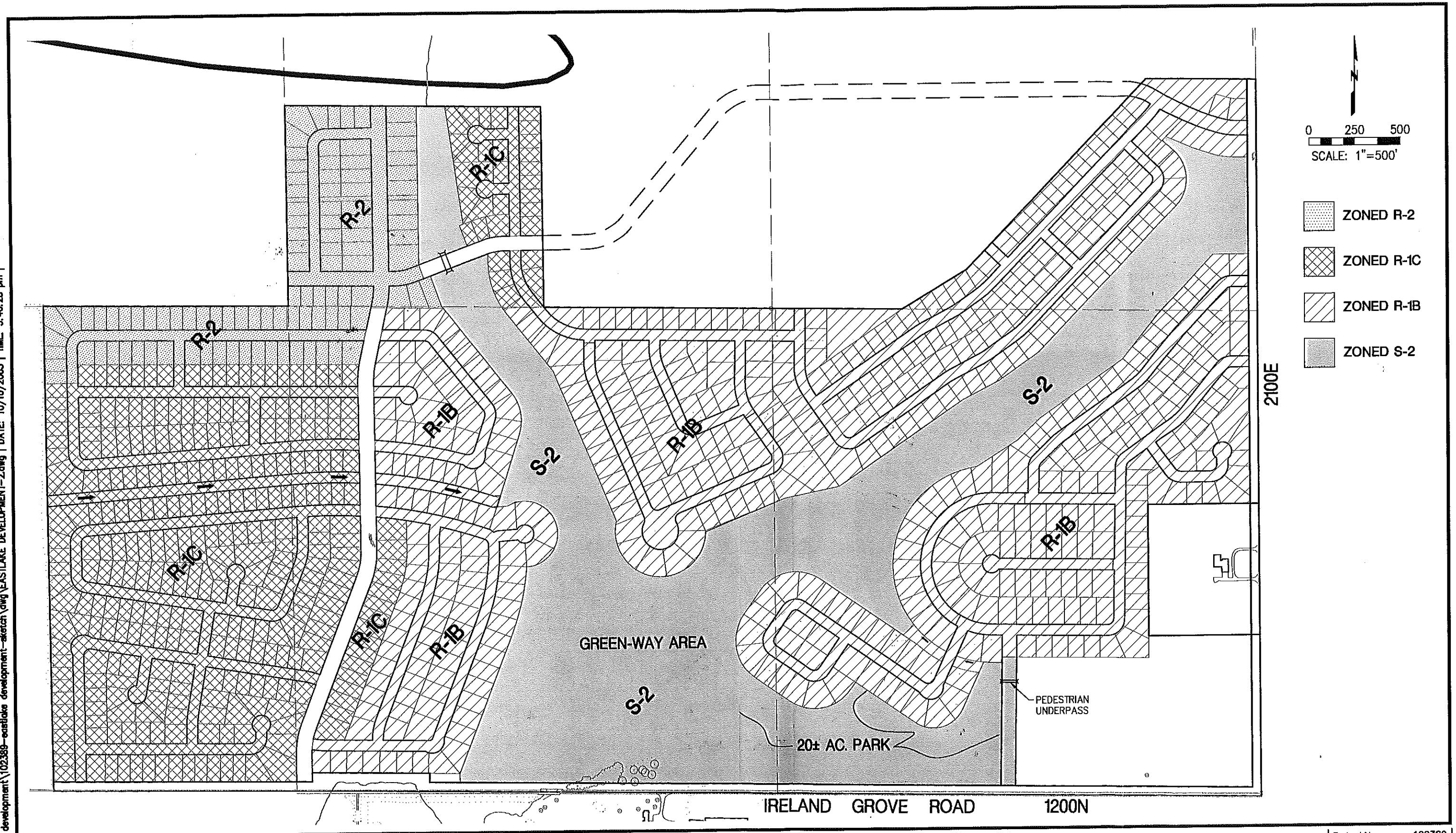
A. The City shall allow the construction of up to ten model single family homes and/or zero lot line homes on the premises for presentation and sale purposes, provided water, sewer and a gravel base road surface are installed before construction commences. The location of the model homes may change from time to time and place to place as the Owner desires. Notwithstanding the foregoing, no conveyance of title shall take place of any model home or multiple family structure until a final subdivision plat is of record for the lot on which said model home is located. No certificate of occupancy shall be issued for any model home or multiple family structure until an approved street is in place to provide access to the lot on which said model home is located.

VI. BONDING -

The Owner may fulfill the bonding requirements of Chapter 24, Section 3.16 of the City's Code as it pertains to sureties for uncompleted public improvements for any tract of land by posting a $250,000.00 revolving commercial surety bond from an insurance company reasonably acceptable by the City, a revolving letter of credit on a local financial institution, or a revolving cash escrow. The Owner shall provide a substandard roadway surety in addition to the revolving surety for uncompleted public improvements.

VII. OTHER ANNEXATIONS - The Owner, not later than thirty

Exhibit D



Farnsworth GROUP
2709 McGraw Drive

EASTLAKE DVELOPMENT

ZONING PLAN

Project No:	102389
Book No:	
Drawn by:	RLW
Approved:	
Date:	10/1/05

1

KICKAPOO CREEK RESTORATION
AND ENGINEERING FEE AGREEMENT

This Agreement is made this 14th day of June, 2011, between EASTLAKE, LLC, an Illinois Limited Liability, (hereinafter referred to as "EASTLAKE") and the City of Bloomington, a municipal corporation (hereinafter referred to as "CITY").

Whereas, EASTLAKE and CITY are parties to two separate annexation agreements (hereinafter referred to as the "Annexation Agreements"), one of which is the Annexation Agreement dated April 21, 2005, by and between CITY, EASTLAKE and Deneen Brothers Farms, LLC., Richard A. Searls, Jr., Thomas J. Searls, Richard A Searls, III, Stephen J. Searls, John D. Searls, and the second of which is the Annexation Agreement dated November 24, 2008, by and between the CITY and EASTLAKE and Community Unit School District No. Five, Mclean and Woodford Counties, Illinois; and

Whereas, the Annexation Agreements outline cost sharing for public improvements in the Grove on Kickapoo Creek Subdivision to the City of Bloomington and the additions thereto (hereinafter referred to as the "Development") and both the CITY and EASTLAKE are desirous of clarifying this cost sharing; and

Whereas, the Development includes a three phase Creek Restoration Project, which is funded in part by an Illinois Environmental Protection Agency 319 Grant accepted by CITY at the May 26, 2009 City Council Meeting; and

Whereas, Phase I and Phase II of the Creek Restoration Project are finished and an illustration of Phase III of the Creek Restoration Project is attached hereto as Exhibit A and incorporated herein; and

Whereas, both CITY and EASTLAKE are desirous of clarifying the cost sharing as it relates to Phase III of the Creek Restoration Project.

Now, therefore, the parties hereto agree as follows:

1. EASTLAKE shall pay any and all cost necessary for Corn Belt Electric to relocate an electric line that runs through a certain parcel of land that Eastlake has dedicated to CITY so that said line is installed along the perimeter of the dedicated parcel. Exhibit B attached hereto and incorporated herein illustrates the existing electric line to be relocated and the new location for the electric line along Ireland Grove Road and Black Oak Boulevard.

2. CITY shall pay EASTLAKE the sum of $54,162.05 as a reimbursement for engineering fees that have been paid by EASTLAKE for the construction of a water main. CITY shall make this payment to EASTLAKE within thirty (30) days of the execution of this Agreement.

3. EASTLAKE has paid $668,438.63 in adjacent substandard street fees for the Development in accordance with the Annexation Agreements. EASTLAKE's total obligation for adjacent substandard street fees per the Annexation Agreements is $755,138.75. Therefore, EASTLAKE has a total of $86,700.12 of adjacent substandard street fee obligation remaining pursuant to the Annexation Agreements.

4. Phase III of the Creek Restoration Project shall be completed as follows:

A. EASTLAKE shall make the surveys, obtain all necessary easements, prepare plans and specifications, receive bids and award the construction contract, furnish engineering inspection during construction and cause the improvement to be built in accordance with the plans, specifications and contract.

B. EASTLAKE shall pay for all right-of-way, construction and engineering costs, subject to reimbursement by the CITY as hereinafter stipulated.

C. CITY will fund 100% of the Engineering Design and Public Construction costs up to a combined maximum amount of $500,000. All cost above this maximum will be EASTLAKE's responsibility. CITY and EASTLAKE agree that the estimated costs and cost proration for Phase III of the Creek Restoration Project are as follows:

	CITY Responsibility:		EASTLAKE Responsibility:	
	Estimated Cost	Rate	Estimate Cost	Rate
Right-of-Way and Easements:	$0	0%	N/A	100%
Engineering – Design, Plans and Specifications	$70,000	100%	$0	0%
Engineering – Construction Inspection	$10,000	100%	N/A	0%
Construction – Public	$420,000	100%	N/A	0%
Construction – Private	$0	0%	N/A	100%

D. EASTLAKE shall provide to CITY for review and approval the plans, specifications, and construction cost estimates which clearly distinguish between Public and Private work. The public and private restoration areas are shown on the attached Exhibit A.

E. CITY shall provide written approval of that portion of the plans and

specifications relative to the CITY obligations described herein, prior to EASTLAKE's advertising for the proposed improvement. Said plans and specifications shall be acceptable to CITY prior to providing the written approval.

F. CITY agrees that upon receipt of an invoice for the Engineering Design of this improvement, CITY will pay to EASTLAKE 100% of its Engineering Design obligation incurred under this Agreement. The submitted invoice shall include sufficient documentation to justify the cost, including but not limited to, hours and rates of design professionals, receipt for reimbursables, and equipment hours and rates.

G. CITY further agrees that upon award of the Construction Contract for this improvement, CITY will pay to EASTLAKE in a lump sum an amount equal to 80% of CITY's obligation incurred under this Agreement and CITY will pay to EASTLAKE the remainder of the obligation in a lump sum upon satisfactory completion of the project.

H. EASTLAKE shall obtain CITY's written concurrence prior to awarding the Construction Contract to any and all Contractors.

I. EASTLAKE shall obtain CITY's written approval of all change orders relative to this improvement prior to authorizing said change orders.

J. EASTLAKE shall obtain CITY's written acceptance of the public improvements prior to making final payment to the Contractor(s).

K. EASTLAKE shall provide CITY with adequate books, records, and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with this Agreement. EASTLAKE shall cooperate fully with an audit conducted by CITY Auditors and other State Auditors and to provide full access to all relevant materials. Failure to provide the books, records, and supporting documents required by this paragraph shall establish a presumption in favor of CITY for the recovery of any funds paid by CITY under this Agreement for which adequate books, records, and supporting documentation are not available to support their purported disbursement.

5. Except as set forth herein, EASTLAKE hereby releases CITY of and from any further responsibility to pay or reimburse EASTLAKE for engineering fees relating to the Annexation Agreements and the Development.

6. Except as set forth herein and any public improvement inspection fees required by the Bloomington City Code relating to the Development, CITY hereby releases EASTLAKE of and from any further responsibility to pay or reimburse CITY for engineering fees relating to the Annexation Agreements and the Development.

7. Should either party be required to incur attorney's fees, costs, and/or other expenses, (including expenses of litigation) as a result of the other party's failure to perform any obligation pursuant to the terms hereof, then the party so failing to perform shall be liable to the other party for any reasonable attorney's fees, costs, and expenses (including expenses of litigation) incurred by such other party.

8. This Settlement Agreement contains the complete understanding of the parties with respect to the matters contained herein and supersedes all other agreements, express or implied, oral or written with respect to these matters and any such agreements are merged with this Settlement Agreement.

City of Bloomington, a Municipal Corporation ("CITY")

By: _____

Attest: _____

Eastlake, LLC, an Illinois Limited Liability Company ("EASTLAKE")

By: _____
William C. Doud, Member

Attest: _____
R. Michael Hundman, Member

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