



# ZIONSVILLE

FOR ALL THE RIGHT REASONS

**ZIONSVILLE TOWN COUNCIL  
MEETING AGENDA  
FOR**

Tuesday, January 3, 2017 at 7:00 PM  
Zionsville Town Hall – Beverly Harves Meeting Room  
1100 West Oak Street

1. OPENING
  - A. CALL MEETING TO ORDER
  - B. PLEDGE OF ALLEGIANCE
  - C. Election Of Officers For 2017
    - I. President
    - II. Vice President
2. APPROVAL OF THE MEMORANDUM OF THE December 19, 2016 REGULAR MEETING (Copy Posted).

Documents:

[DECEMBER 19 2016 TOWN COUNCIL MEETING MEMORANDA.PDF](#)

3. DEPARTMENTAL MONTHLY REPORTS  
Monthly Reports submitted by the Town management staff for Council review and posted on the Town's website ([WWW.ZIONSVILLE-IN.GOV](http://WWW.ZIONSVILLE-IN.GOV)).
4. REQUEST TO SPEAK
5. OLD BUSINESS
6. NEW BUSINESS
  - A. Consideration Of Appointments To Various Boards, Commissions, And Committees.
  - B. Petition For Zone Map Change To Rezone 71.58+/- Acres From The (R1) Rural Residential Zoning District, To The (R2) Rural Residential Zoning District To Provide For A Residential Subdivision (Note: Forwarded With An Unfavorable Recommendation From The Plan Commission).

Documents:

NORTHFIELDS PC EXECUTED CERTIFICATION AND ORDINANCE.PDF  
AMBERLEY TOWN COUNCIL BOOKLET.PDF

7. OTHER MATTERS

8. ADJOURN



**ZIONSVILLE TOWN COUNCIL  
MEETING MEMORANDA  
FOR**

Monday, December 19, 2016 at 7:30 AM  
Zionsville Town Hall Community Room  
1100 West Oak Street

Date of Preparation: December 19, 2016

Members Present: Susana Suarez, President; Elizabeth Hopper, Vice-President; Bryan Traylor, Jeff Papa, Joshua Garrett  
Also Present: Tim Haak, Mayor; Ed Mitro, Deputy Mayor; Heather Willey, Town Attorney; Amy Lacy, Director of Finance & Records and Town Department Staff.

1. OPENING

- A. Call meeting to order – in President Suarez’s absence, Vice President Hopper called the meeting to order.
- B. Pledge of Allegiance

2. APPROVAL OF THE MEMORANDUM OF THE December 5, 2016 REGULAR MEETING (copy posted).

**COUNCIL ACTION:** Councilor Traylor moved to approve the Memoranda of the December 5, 2016 Town Council Meeting. Councilor Papa seconded the motion.  
The Memoranda of the December 5, 2016 meeting was approved by a vote of four in favor, zero opposed.

3. REQUEST TO SPEAK – There being no Requests to Speak submitted, Vice President Hopper asked the audience if there was anyone wishing to speak on any matter. There was no response.

4. OLD BUSINESS – President Suarez arrived and presided over the remainder of the meeting.

- A. Consideration of an Ordinance amending the Zionsville Town Code (Traffic Code amendment – two-way traffic designation for Plum Street and Eighth Street). **(ORDINANCE #2016-21)**  
**COUNCIL ACTION:** Councilor Garrett moved to adopt Ordinance #2016-21 on final reading. Vice President Hopper seconded the motion.  
Ordinance #2016-21 was adopted on final reading by a vote of five in favor, zero opposed.
- B. Consideration of an Ordinance establishing the “Local Road & Bridge Matching Fund”. **(ORDINANCE #2016-22)**  
**COUNCIL ACTION:** Vice President Hopper moved to adopt Ordinance #2016-22 on final reading. Councilor Traylor seconded the motion.  
Ordinance #2016-22 was adopted on final reading by a vote of five in favor, zero opposed.
- C. Consideration of an Ordinance to Amend the Zoning Ordinance for the Town of Zionsville. **(ORDINANCE #2016-23)**  
**COUNCIL ACTION:** Councilor Traylor moved to adopt Ordinance #2016-23 on final reading. Councilor Garrett seconded the motion.  
Ordinance #2016-23 was adopted on final reading by a vote of five in favor, zero opposed.

5. NEW BUSINESS – None

6. OTHER MATTERS

Director of Finance and Records Amy Lacy distributed a packet to the Council including information regarding the Town of Zionsville's Nepotism Policy, requesting that they complete the Annual Certification of Elected Officials form, as well as the Disclosure of Relatives form if applicable.

7. ADJOURN

**COUNCIL ACTION:** Vice President Hopper moved to adjourn the meeting and Councilor Traylor seconded the motion. The motion was approved by a vote of five in favor, zero opposed.

The next regular Town Council meeting is scheduled for Tuesday January 3, 2017 @ 7:00 PM in the Zionsville Town Hall Beverly Harves Meeting Room.

The Town Council adjourned to the Town Hall Fireplace Room immediately after the meeting to watch a Webinar on Uniform Internal Control Standards for Political Subdivisions. Before viewing the Webinar Councilor Papa reviewed the statute regarding Internal Controls and stated that it did not require Council Members to participate in the Internal Controls Training. Attorney Heather Willey concurred. The Councilors elected not to view the Uniform Internal Controls Standards for Political Subdivisions Webinar.

Respectfully submitted,

Amelia Lacy, Director of Finance & Records  
Town of Zionsville

DRAFT



**CERTIFICATION TO THE  
TOWN COUNCIL  
OF THE TOWN OF ZIONSVILLE, BOONE COUNTY, INDIANA**

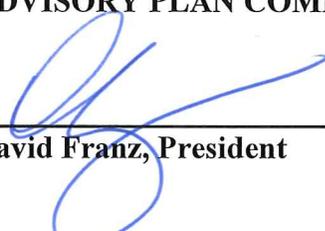
December 19, 2016

To the Town Council of the Town of Zionsville, Indiana:

Be it advised that, pursuant to Indiana Code 36-7-4, on December 19, 2016 the Town of Zionsville Advisory Plan Commission (the "Commission"), by a vote of 5 in favor and 1 opposed, gave an, **Unfavorable Recommendation** to proposal 2016-57-Z to rezone 71.58+/- acres from the (R-1) Rural Residential Zoning District, to the (R2) Rural Residential Zoning District to provide for a residential subdivision and located in the jurisdiction of the Town of Zionsville, Boone County Indiana.

The Town of Zionsville Advisory Plan Commission hereby certifies proposal #2016-57-Z to rezone 71.58+/- acres from the (R1) Rural Residential Zoning District, to the (R2) Rural Residential Zoning District (a copy of which is attached to this Certification and incorporated here by this reference) to the Town Council of Zionsville, Indiana, with an Unfavorable Recommendation.

**TOWN OF ZIONSVILLE  
ADVISORY PLAN COMMISSION**

  
\_\_\_\_\_  
**David Franz, President**

Attest: \_\_\_\_\_



**Wayne DeLong, AICP  
Secretary, Town of Zionsville Advisory Plan Commission**

Exhibit 1

**Legend**

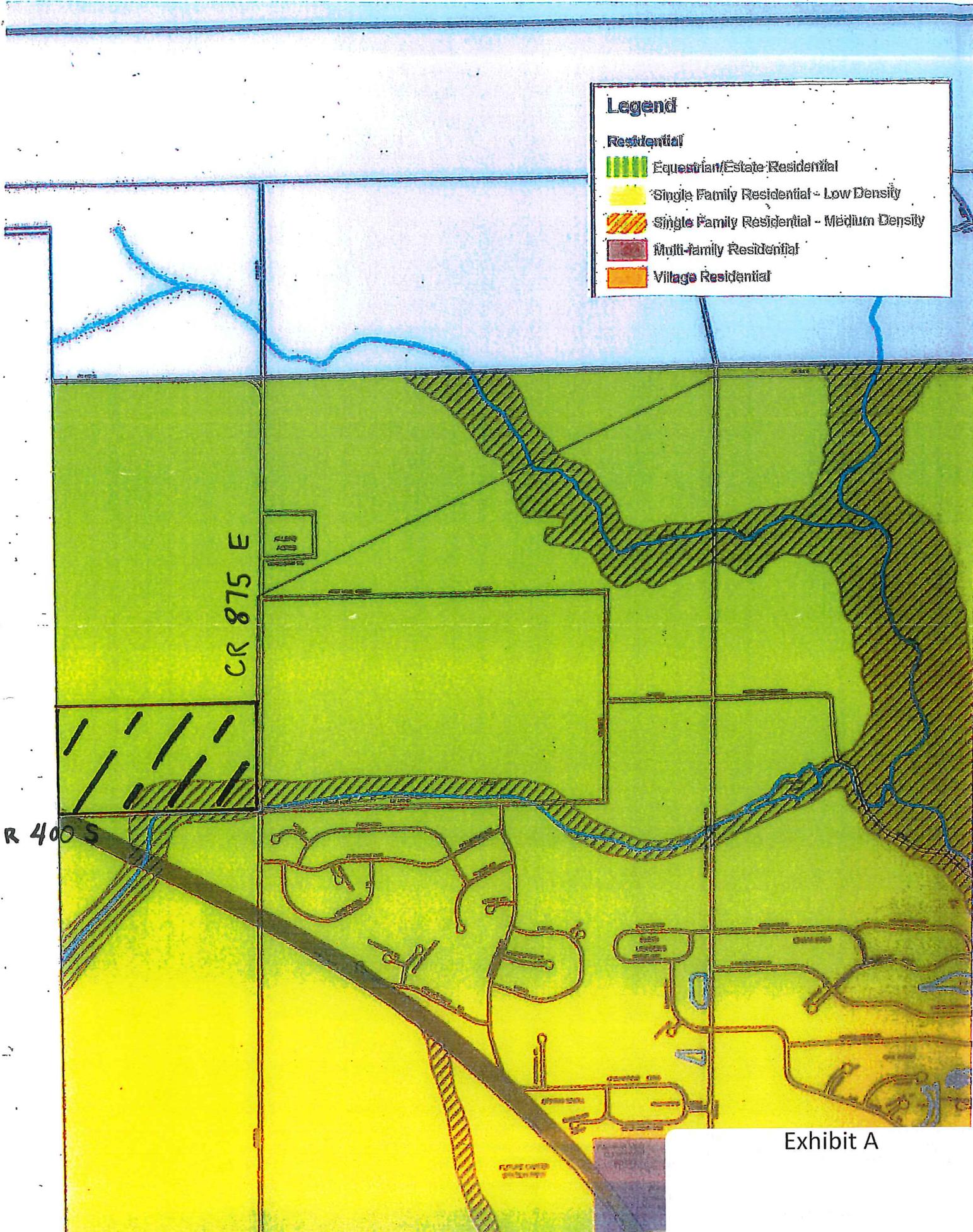
**Residential**

-  Equestrian/Estate Residential
-  Single Family Residential - Low Density
-  Single Family Residential - Medium Density
-  Multi-family Residential
-  Village Residential

CR 875 E

CR 400 S

Exhibit A



## Exhibit A

**LAND DESCRIPTION (13.201 ACRES, ±)**

(Part of Deed Record 242, Pages 683-685)

Part of the Northeast Quarter of Section 28, Township 18 North, Range 2 East, Eagle Township, Boone County, Indiana, more fully described as follows:

Commencing at the Northwest corner of the Northeast Quarter of said Section 28; thence along the approximate center line of County Road 400 South and the Section line, North 88°39'35" East (assumed bearing) 940.34 feet to the Point of Beginning; thence continue along the approximate center line of County Road 400 South and the Section line, North 88°39'35" East 405.03 feet; thence along the approximate center line of County Road 875 East and the Quarter Quarter Section line, South 00°39'05" East 1213.07 feet; thence along the center line of the former Cleveland, Cincinnati, Chicago & St. Louis Railway, North 64°27'54" West 706.93 feet; thence along part of an East described line of the Wabash Valley Power Association, Inc. property as described in Deed Record 217, Pages 135-151, Boone County Recorder's Office, North 00°17'55" West 494.87 feet; thence along the South described line of the Mark E. Goodwin and Diana L. Goodwin property recorded as Instrument #0503068, North 88°39'35" East 231.13 feet; thence along the East described line of said Goodwin Property, North 01°20'18" West 398.62 feet to the Point of Beginning, containing 13.201 Acres, more or less, subject to the right of way for County Road 400 South on and along the North boundary and subject to the right of way for County Road 875 East on and along the East boundary.

**LAND DESCRIPTION (71.678 ACRES, ±)**

(Part of Deed Record 242, Pages 683-685)

Part of the Southeast Quarter and part of the Southwest Quarter of Section 21, Township 18 North, Range 2 East, Eagle Township, Boone County, Indiana, more fully described as follows:

Beginning at the Southeast corner of the Southwest Quarter of said Section 21; thence along the approximate center line of County Road 400 South and the Section line, South 88°41'48" West (assumed bearing) 1020.34 feet; thence along the East described line of the Darrin A. Goodwin and Martina Martens Goodwin property recorded as Instrument #9711860, Boone County Recorder's Office, North 00°23'02" West 1321.27 feet; thence along part of the South described line of the Carter Properties, Inc. property recorded as Instrument #0409181 and part of the South described line of the J. Chris Shepard property recorded as Instrument #9603193 and the Quarter Quarter Section line, North 88°42'06" East 1014.29 feet; thence continue along said Shepard property and the Quarter Quarter Section line, North 88°37'19" East 1346.36 feet; thence along the approximate center line of County Road 875 East and the Quarter Quarter Section line, South 00°35'53" East 1322.00 feet; thence along the approximate center line of County Road 400 South and the Section line, South 88°39'35" West 1345.24 feet to the Point of Beginning, containing 71.678 Acres, more or less, subject to the right of way for County Road 400 South on and along the South boundary and subject to the right of way for County Road 875 East on and along the East boundary. Also, subject to the maintenance easement for the Simpson Legal Tile Drain measured 75.00 feet on each side of the tile.

**ORDINANCE NO. 2017 -  
OF THE TOWN OF ZIONSVILLE,  
INDIANA**

**AN ORDINANCE TO AMEND  
THE OFFICIAL ZONING MAP  
OF THE TOWN OF  
ZIONSVILLE  
PURSUANT TO INDIANA CODE 36-7-4-608**

**Plan Commission Petition No. 2016-57-Z**

**WHEREAS**, I.C. 36-7-4-600, confers upon Zionsville Town Council the power to determine reasonable zoning requirements for property within the Town's corporate boundaries, and Section 194.201 of the Town of Zionsville Zoning Ordinance sets forth the process to amend the Town's Official Zone Map; and

**WHEREAS**, the property described in Exhibit B to the Certification attached hereto as Exhibit 1 ("Property"), in the Town of Zionsville, is currently zoned (R1) Rural Residential Zoning District and

**WHEREAS**, the Town of Zionsville Advisory Plan Commission certified on December 19, 2016 to the Zionsville Town Council an Unfavorable Recommendation for rezoning the Property to (R2) Rural Residential Zoning District

**WHEREAS**, the Zionsville Town Council has been requested to amend the Official Zone Map for the Town of Zionsville, Indiana, as amended, and fix a time when the same shall take effect.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF ZIONSVILLE, INDIANA, THAT:**

**1. Official Zone Map Amendment**

- (a) The Official Zone Map of the Town of Zionsville Zoning Ordinance is hereby amended to rezone the Property located in the Town of Zionsville, illustrated and listed on Exhibit A to the attached Certification, from its current (R1) Rural Residential Zoning District zoning classification to the (R2) (Rural Residential Zoning District as further described in Exhibit 1) zoning classification. Such Property shall be subject to the conditions and restrictions adopted and imposed by the Town Council, if any.
- (b) The Director of Finance and Records and Staff are directed to comply with Section 194.201 of the Zoning Ordinance by taking all actions required thereby to implement this Zone Map Amendment.

**2. Construction of Clause Heading:** The clause headings appearing herein have been provided for convenience and reference and do not purport and shall not be deemed to define,

limit or extend the scope or intent of the clause to which they appertain.

3. **Repeal of Conflicting Ordinances:** The provisions of all other Town ordinances in conflict with the provisions herein, if any, are of no further force or effect and are hereby repealed.

4. **Severability:** If any part of this Ordinance shall be held invalid, such part shall be deemed severable and the invalidity thereof shall not affect the remainder of this Ordinance.

5. **Effective Date:** The provisions of this Ordinance shall be in full force and effect from and after its passage and adoption.

Introduced and filed on the \_\_\_\_\_ day of \_\_\_\_\_, 2017.

**DULY PASSED AND ADOPTED** this \_\_\_\_\_ day of \_\_\_\_\_, 2017, by the Town Council of the Town of Zionsville, Boone County, Indiana, having been passed by a vote of \_\_\_\_\_ in favor and \_\_\_\_\_ opposed.

**TOWN COUNCIL OF THE TOWN OF ZIONSVILLE,  
BOONE COUNTY, INDIANA**

Signature	YEA	NAY
Josh Garrett Member		
Elizabeth Hopper Member		
Jeff Papa Member		
Tom Schuler Member		
Kevin Spees Member		
Susana Suarez Member		
Bryan Traylor Member		

I hereby certify that the foregoing Resolution was delivered to the Town of Zionsville Mayor Tim Haak on the \_\_\_\_\_ day of \_\_\_\_\_ 2017, at \_\_\_\_\_ m.

ATTEST: \_\_\_\_\_  
Amelia Lacy, Director, Department of Finance and Records

**MAYOR'S**  
**APPROVAL**

\_\_\_\_\_  
**Tim Haak, Mayor**

\_\_\_\_\_  
**DATE**

**MAYOR'S**  
**VETO**

\_\_\_\_\_  
**Tim Haak, Mayor**

\_\_\_\_\_  
**DATE**

**Andrew B. Buroker**  
*Partner*  
andy.buroker@FaegreBD.com  
Direct +1 317 569 4616

**Faegre Baker Daniels LLP**  
600 East 96<sup>th</sup> Street • Suite 600  
Indianapolis • Indiana 46240-3789  
Main +1 317 569 9600  
Fax +1 317 569 4800

December 21, 2016

**VIA ELECTRONIC MAIL**

Zionsville Town Council  
c/o Edward J. Mitro, Deputy Mayor  
Town of Zionsville  
1100 W. Oak Street  
Zionsville, IN 46077

Re: Beazer Homes Indiana, LLP Amberley Re-Zoning

Dear Zionsville:

I am writing to you as representative for the Zionsville Town Council with respect to the Zionsville Plan Commission's certification to the Council of the re-zoning proposal by Beazer Homes Indiana, LLP ("Beazer"), Docket #2016-57-Z, from the December 19, 2016 Plan Commission meeting. You have advised me that this proposal will be certified to the Zionsville Town Council this week as required under IC 36-7-4-605. In order to fully certify this proposal, you have requested and we are providing to you with this letter our materials relating to Beazer's re-zoning proposal that have been presented at the Plan Commission meetings. I understand that you will provide these copies to the Town Councilors. I will send an electronic version of this material to you as well.

As a result of the short time frame from the December 19<sup>th</sup> Plan Commission meeting to the Town Council for its meeting of January 3<sup>rd</sup> and in order to allow the Town Councilors adequate time to review Beazer's materials for this proposal since this is during the holiday season between Christmas and New Year's, I request on behalf of Beazer as the petitioner of this proposal that you delay the Town Council's consideration of this proposal to the Tuesday, January 17 meeting or the Monday, February 6 meeting of the Town Council. IC 36-7-4-608(d) and (g) provides that this proposal can be considered and voted on by the Town Council within 90 days after the proposal is certified and at the first meeting after the proposal is certified or at any subsequent meeting within the 90 day period. I am happy to discuss with you your wishes with respect to which of these meetings you and the Town Council prefer to consider this proposal.

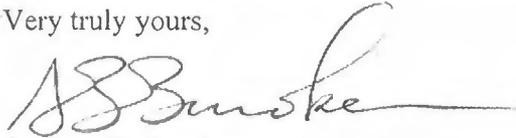
Edward J. Mitro

-2-

December 21, 2016

I am available to discuss with you at your convenience this request. Thank you for your assistance.

Very truly yours,

A handwritten signature in black ink, appearing to read "A Buroker", with a long horizontal flourish extending to the right.

Andrew B. Buroker  
Attorney for Petition

cc: Ty Rinehart, Beazer Homes Indiana, LLP  
India Olson, Faegre Baker Daniels

**Transcription of Recommendation Motion by Zionsville Plan Commission  
On Docket No. 2016-57-Z for Beazer Homes Indiana Re-Zoning Petition  
December 19, 2016**

David Franz: When I look at the map and kind of sketch some stuff out, I see a logical break point in this R1 because it's bordered by R2, R-SF-2, and then it goes straight north R1. If there is a logical break point, we're talking probably about 300 acres, I'm estimating, that is currently R1 that if we extend that R2, we're talking about 550 homes vs 275 – 300 homes. That is where this thing gets to be more problematic to me is that the longer term. It's not 49 homes; it's not really a big deal when you look at this thing at this point in time. You go from 300 to 600 homes, that is a much bigger deal. And kind of like the dominos you're talking about, we're putting into place. Obviously there has got to be a lot of road work, a lot of improvements to get up there, which don't exist today. And that's the problem, you know, getting to that point.

Jay Parks: And on your map, that break point is 300 south right?

Franz: Yeah

Franz: Any further comments, questions?

Kevin Schiferl: Mr. Franz, I have a motion I would like to make.

Franz: Please do.

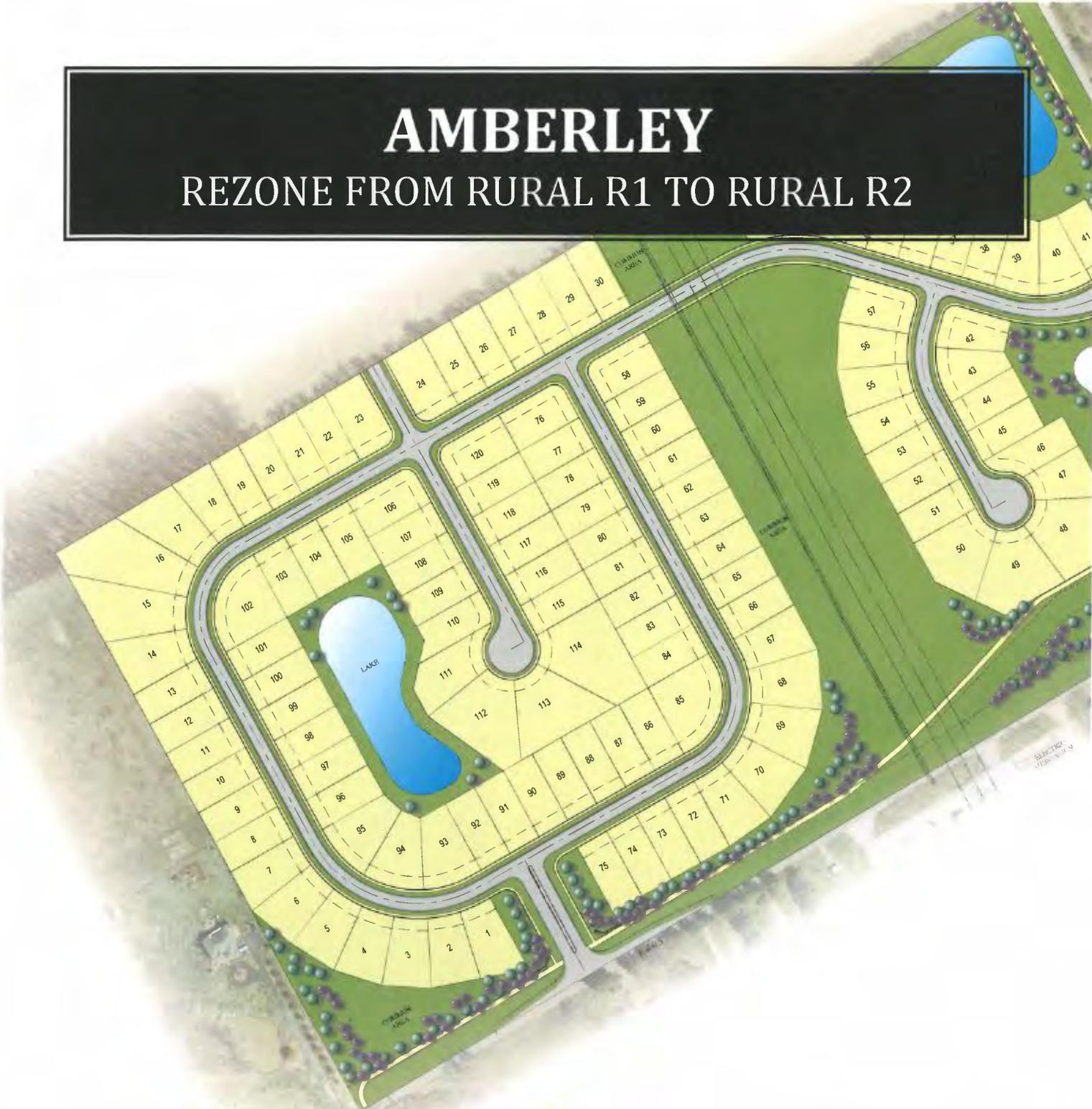
Schiferl: I would move that we forward this on to the Town Council for it to decide, as it needs to do, with an unfavorable recommendation. And my basis for that has to do with the fact that we need to fix roads other than the roads immediately adjoining this for the very reason that you just mentioned. Back in 2005 the intersection of 500 and 875, which many here will know is a 5 way stop, not a roundabout, was recommended for improvement. This will absolutely effect that intersection. There are no ifs, ands, or any way about that and until the Town tells us what they're going to do with the road so we can have direction on responsible development, I think it is irresponsible for us to send things with favorable recommendations to it.

Franz: Okay, if you would please, can you make that a much more concise statement?

Schiferl: Yeah, I said the reason why. I move that we make an unfavorable recommendation to the Town Council. I was just stating my reason why.

# AMBERLEY

## REZONE FROM RURAL R1 TO RURAL R2

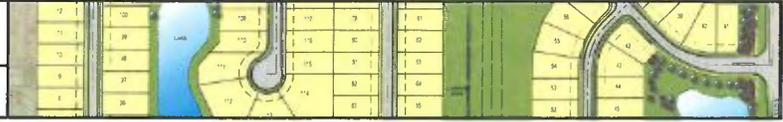


PRESENTED BY  
ANDREW B. BUROKER, ESQ.  
FAEGRE BAKER  
DANIELS

Town Council | January 3, 2016

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**AMBERLEY**



**Petitioner:**

**Ty Rinehart**  
Director of Land Acquisition

**Beazer Homes Indiana LLP**  
9405 Delegates Row  
Indianapolis, IN 46240

**Attorney:**

**Andrew B. Buroker, Esq.**  
India Olson, Land Use Planner

**Faegre Baker Daniels, LLP**  
600 East 96th Street, Suite 600  
Indianapolis, Indiana 46240  
telephone. 317.569.9600  
fax. 317.569.4800

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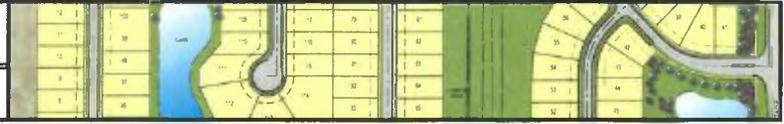
<b>Tab 1</b>	<b>Executive Summary</b>
<b>Tab 2</b>	<b>Aerial Location Exhibit</b>
<b>Tab 3</b>	<b>Adjacent Subdivisions Map</b>
<b>Tab 4</b>	<b>Concept Plan</b>
<b>Tab 5</b>	<b>Draft Architectural Standards</b>
<b>Tab 6</b>	<b>Exhibit B - Home Elevations</b>
<b>Tab 7</b>	<b>Entryway Monument</b>
<b>Tab 8</b>	<b>Projected Home Pricing</b>
<b>Tab 9</b>	<b>Public Improvements</b>
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<b>Tab 11</b>	<b>ZCS School Analysis</b>
<b>Tab 12</b>	<b>Traffic Study</b>
<b>Tab 13</b>	<b>Preliminary Road and Shoulder Exhibit</b>
<b>Tab 14</b>	<b>Other Subdivision Lot Widths</b>
<b>Tab 15</b>	<b>Description of Materials</b>

TAB 1	
AMBERLEY	

# Tab 1

## EXECUTIVE SUMMARY

### AMBERLEY



Beazer Homes Indiana LLP (“Beazer”) is pleased to introduce its newest Zionsville single-family residential development ~~Northfields~~ **Amberley**, a 120-lot subdivision located generally on the 71.58 +/- acres located at the northwest corner of CR East 400 South and CR South 875 East, near the Rail Trail and just northeast of the Hampshire subdivision currently under development near the intersection of CR 800 East and CR 500 South (please see the Aerial Location Map at Tab 2). Beazer respectfully requests approval of its Petition for Zone Map Change to rezone the land to R2 for the development of this proposed subdivision.

#### About the Concept Plan

Northfields is a thoughtfully designed single-family residential neighborhood. Careful and strategic design created the opportunity for over 39% of the total 71.58 +/- acres to be dedicated to open space and common area, while incorporating limitations from the overhead power lines, ~~150'~~ **45'** legal drain, and the substation located on the south side of CR East 400 South. Homeowners will enjoy views of the three ponds and will benefit from direct access to the twelve foot shared-use trail that will connect Northfields to the Zionsville Rail Trail. The Concept Plan can be found at Tab 4.

#### About the Homes

Northfields will feature a mix of one-story and two-story single-family homes with Beazer’s newest designs, from its Crossroads Collection, ranging in size from 2,000 to 3,500+ square feet, with an expected average sales price of \$400,000. Exteriors will include masonry, stone, fiber cement siding, decorative garage doors, shakes and dimensional shingles. The Home Elevations are included at Tab 5.

If this rezoning is approved, Beazer plans to start development activity in ~~2018~~ **2019** with homes to come in late ~~2018~~ **2020**. The homes will be built over a four year period, with approximately 30 homes built every year starting in ~~2018~~ **2020** and concluding development in ~~2021~~ **2023**.

Thank you for your consideration.

TAB 2  
AMBERLEY



# Tab 2

AERIAL LOCATION EXHIBIT

AMBERLEY



Site



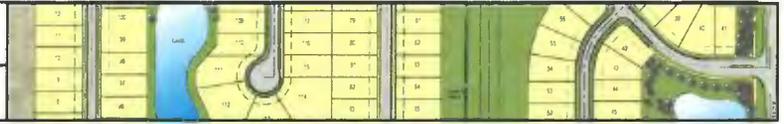
Rail Trail



NORTH

TAB 3

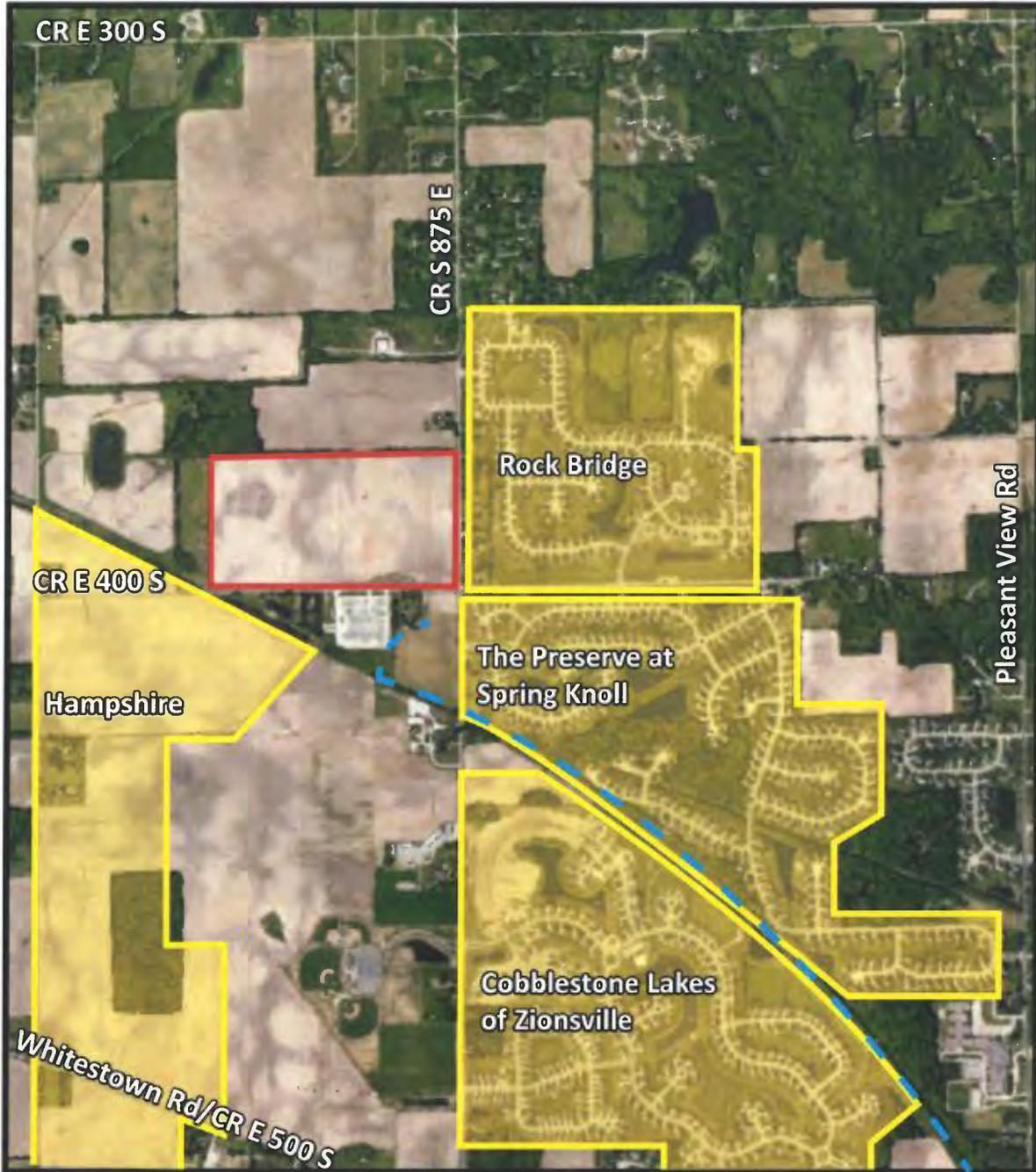
AMBERLEY



# Tab 3

ADJACENT SUBDIVISIONS MAP

AMBERLEY



Site



Rail Trail



Adjacent Subdivisions



NORTH

TAB 4  
AMBERLEY



# Tab 4

CONCEPT PLAN

AMBERLEY



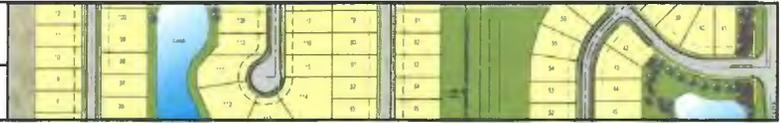
CR East 400 South

CR South 875 East



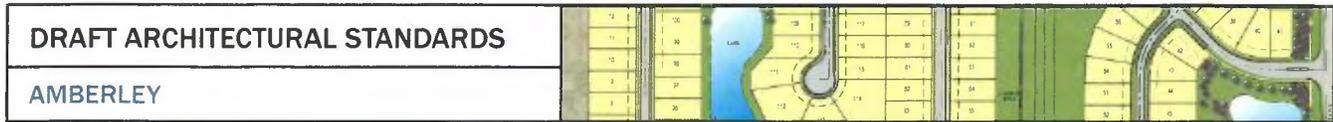
TAB 5

AMBERLEY



# Tab 5





**NORTHFIELDS AMBERLEY ARCHITECTURAL STANDARDS  
(70' LOTS)**

**Building Design:**

The architectural design of all improvements to be located on the lot is subject to prior approval of the Review Board.

**Building Standards**

**1) Lot Width:**

Minimum of 70 feet at front building line

**2) Minimum Square Footage (livable space under roof, excluding garage and covered patios and porches):**

One-story home: 2000

Two-story home: 2200

**3) Side Yard Setbacks:**

5 feet minimum

10 feet minimum between residences

Aggregate 10 feet

**4) Roofs:**

Roofs will be pitched from a range of 6:12 to 14:12.

Minimum Front to back: 6/12

Minimum Front gables: 8/12

Ancillary roofs such as porches, bays, walkways may be less than the minimum requirement.

Roofs should be clad in wood shingles, slate, diamond tab, dimensional or other quality asphalt shingles, and may have up to 20% of the total roof area be or metal.

All attic vents, turbines, flues and other roof penetrations, other than ridge vents, must be to the rear or side of the home to reduce visibility from the street and shall be painted to match the color of the roof or flat black except those made of metal which may be left natural.

**5) Roof Overhangs:**

Minimum framed front and rear overhang: 12 inches

Note: Where masonry meets an overhang, the overhang shall measure a minimum of six (6) inches.

**6) Roof Ridgeline:**

- A. A one-story home shall have a minimum of three (3) ridgelines.
- B. A two-story home shall have a minimum of three (3) ridgelines.
- C. Ridgelines shall only be considered if they are horizontal ridges which form the peak of a pitched area. Roof systems with ridgelines over covered and enclosed porches shall count.

**7) Corner Breaks:**

- A. A one-story home shall have a minimum of three (3) corner breaks on the front facade and two (2) corner breaks on the rear facade.
- B. A two-story home shall have a minimum of three (3) corner breaks on the front facade and two (2) corner breaks on the rear facade.
- C. Outer corners along a covered porch and outer corners along the facade that are outside of a covered porch shall count towards this requirement. First and second floor corners not aligned or in plane with one another shall count separately.

**8) Foundations:**

All home foundations shall be on slab, partial basement or full basement. No full crawl space foundations shall be permitted.

**9) Windows:**

- A. A one-story home shall have a minimum of two (2) windows on the front facade and four (4) windows on the rear facade.
- B. A two-story home shall have a minimum of four (4) windows on the front facade and four (4) windows on the rear facade.

Windows within a screened porch shall count towards this requirement.

Windows shall be wood, aluminum clad, vinyl or vinyl clad. Glass shall be clear and free of color except where frosted, hammered, glass block or textured glass are used on the sides and rear of home.

**10) Garages:**

All homes must have a minimum of two-car attached garage. ~~Garage doors will be architecturally treated.~~

**11) Masonry Requirements:**

- A. Acceptable masonry materials include the following: brick, limestone, natural stone, cultured stone and stucco finished composite panel board.
- B. All homes shall have a minimum of fifty percent (50%) masonry on the front façade. Homes with a historical architectural style<sup>1</sup> that lends itself to the use of less masonry do not need to meet the fifty percent (50%) requirement on the front facade.

**12) Siding Requirements:**

- A. Acceptable siding materials include the following: wood, LP siding, fiber cement siding (e.g. HardiePlank) or similar composite materials.
- B. Aluminum and vinyl siding are not permitted.

**13) Landscaping:**

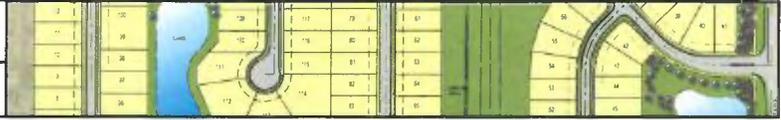
- A. Plantings:
  - 1. 15 shrubs
  - 2. 3 yard trees (two shade trees/one ornamental tree) –1 in front yard, 2 in back yard (2" minimum caliper outside planting bed)
  - 3. 1 shade tree (2" minimum caliper) to be planted between the curb and sidewalk, which shall be planted on average every 60' on center (easements shall be taken into account)
- B. Lawns:
  - 1. All front yards shall be sodded. All side yards and rear yards must be seed with straw at a minimum and no irrigation is required.
  - 2. Corner lot homes which have two elevations substantially parallel to a public street shall have lawns comprised of sod, along those two elevations (with or without irrigation). All other side yards and rear yards must be seeded with straw a minimum and no irrigation is required.
  - 3. Corner lot homes which are set at an angle to the public streets, lacking an elevation substantially parallel to either abutting public street, shall have a front lawn comprised of sod (with or without irrigation). All other side and rear yards must be seeded with straw at minimum and no irrigation is required.

---

**1** Historical architectural styles are styles such as those identified in Exhibit B. The Architectural Review Board ("ARB") shall have the authority to determine whether or not a specific house plan qualifies as a historical architectural style

DRAFT ARCHITECTURAL STANDARDS

AMBERLEY



**14) Miscellaneous:**

- A. A not-for-profit ~~Northfields~~ Amberley Homeowners Association shall be incorporated and related Declaration of Covenants, Conditions and Restrictions and By-Laws shall be created prior to platting any section of ~~Northfields~~ Amberley.
- C. All driveways shall be concrete.
- D. Public sidewalks are required on all lots.
- E. Uniform mailboxes shall be required.
- F. Dumpsters and or trash bins are required on all lots once framing begins and shall be removed prior to receiving a Certificate of Occupancy.

TAB 6	
AMBERLEY	

# Tab 6

**EXHIBIT B - HOME ELEVATIONS**

**AMBERLEY**



**EXHIBIT B - HOME ELEVATIONS**

**AMBERLEY**



**Hamilton "Arts and Crafts"**



**Hamilton "Prairie"**



**Hamilton "French Country"**



**Hamilton "Traditional"**

<b>EXHIBIT B - HOME ELEVATIONS</b>		
AMBERLEY		



EXHIBIT B - HOME ELEVATIONS

AMBERLEY



Porter "Arts and Crafts"



Porter "Prairie"



Porter "French Country"



Porter "Traditional"

EXHIBIT B - HOME ELEVATIONS

AMBERLEY



**EXHIBIT B - HOME ELEVATIONS**

**AMBERLEY**



**Benton "Arts and Crafts"**



**Benton "Prairie"**



**Benton "French Country"**



**Benton "Traditional"**

TAB 7

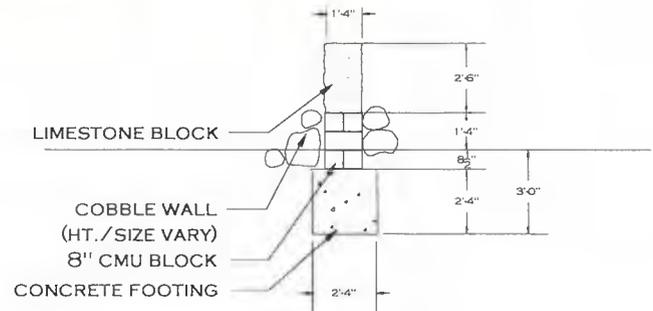
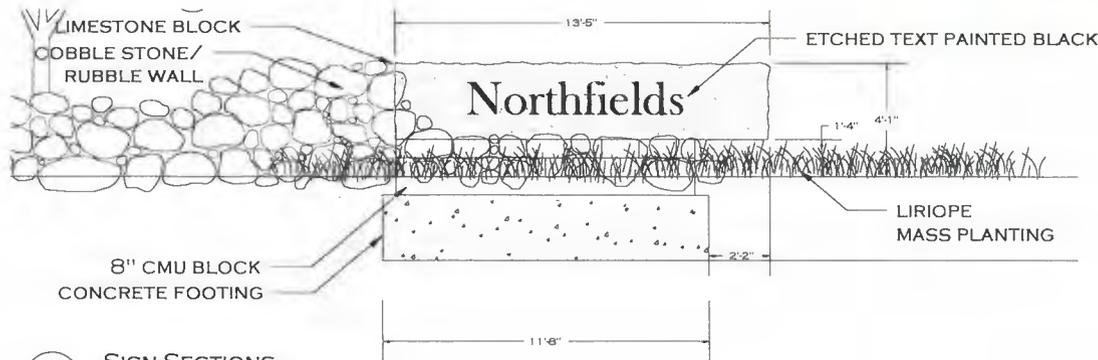
AMBERLEY



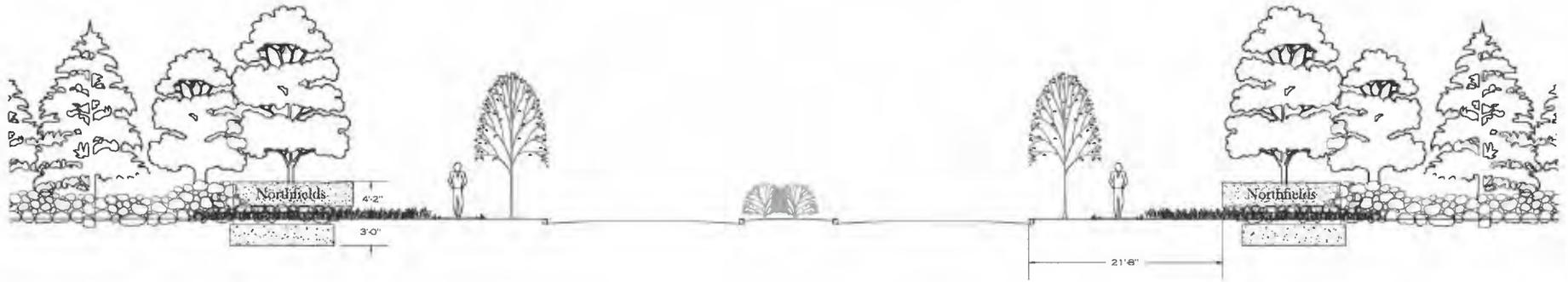
# Tab 7



<b>ENTRYWAY MONUMENT</b>	
<b>AMBERLEY</b>	



1 SIGN SECTIONS  
 008 SCALE 1/4" = 1'-0"

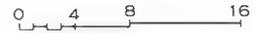


2 SIGN/ENTRY ELEVATION  
 008 SCALE 3/32" = 1'-0"

**OEG** | OUTDOOR ENVIRONMENTS GROUP  
 WWW.OEGGROUP.COM  
 5102 FREYN DRIVE  
 INDIANAPOLIS, IN 46254  
 317 292 9776

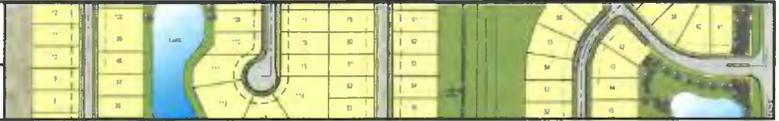
**Northfields of Zionsville**  
 ZIONSVILLE, INDIANA

DESIGN BY: OEG DATE: 10.28.2016  
 DRAWN BY: SGS/JEP



TAB 8

AMBERLEY



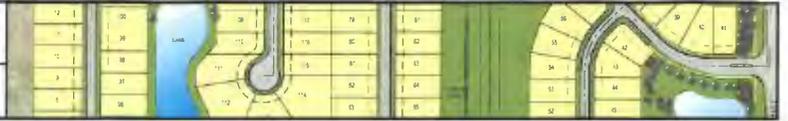
# Tab 8



<b>Northfields Amberley Projected Home Pricing for 2020</b>						
Plan Name	Benton	Morgan	Porter	Shelby	Hamilton	Whitley
Square Footage	2,164	2,485	2,654	2,880	3,109	3,371
Base Price	\$ 276,990	\$ 286,990	\$ 296,990	\$ 306,990	\$ 316,990	\$ 326,990
Options	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 100,000	\$ 100,000
Lot Premium	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500
Total Sale Price	\$ 379,490	\$ 389,490	\$ 399,490	\$ 409,490	\$ 429,490	\$ 439,490
Pricing assumes 2% annual appreciation from current pricing						

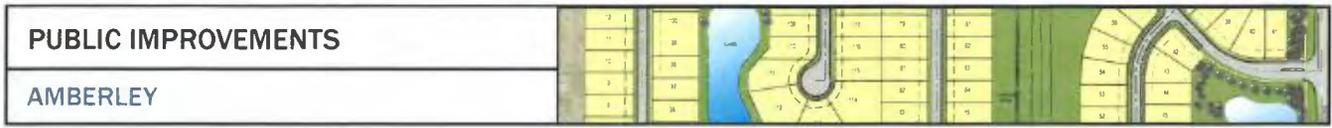
TAB 9

AMBERLEY



# Tab 9





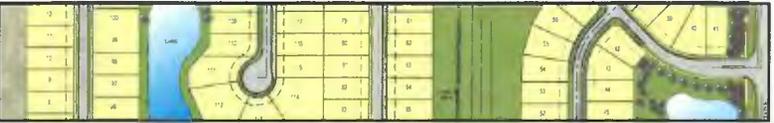
**Northfields Amberley Development Cost**

Fees

Road Impact Fees	\$ 121,000
Park Impact Fees	\$ 146,520
Sanitary	\$ 483,000
Storm water	\$ 24,000
	<u>\$ 774,520</u>

Infrastructure

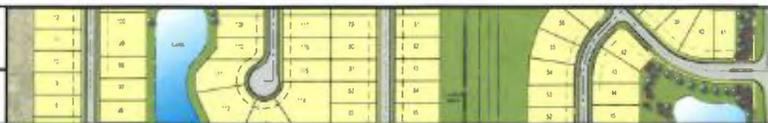
Erosion Control	\$ 135,000
Earthwork	\$ 760,000
Storm Sewer	\$ 910,000
Sanitary Sewer	\$ 620,000
Water	\$ 385,000
Roads	\$ 950,000
Walking paths	\$ 75,000
Common area landscaping	\$ 50,000
Entry walls	\$ 60,000
	<u>\$3,945,000</u>

TAB 10	
AMBERLEY	

# Tab 10

## INCLUDED FEATURES

AMBERLEY



# Northfields Crossroads Collection Included Features

### Energy Saving

- Air barrier & ductwork sealing to prevent air passing in and out of your home
- Advanced framing techniques to allow for more insulation in walls
- R15 wall insulation, R49 attic insulation to increase thermal resistance
- Dual-pane windows with a high performance
- High-efficiency Goodman ® 13-SEER HVAC system
- Energy saving Honeywell Focus PR08000™ programmable thermostat
- Energy saving Compact Fluorescent Light (CFL) bulbs
- Whirlpool ® Energy Star ® dishwashers for better efficiency
- Two frost proof exterior hose bibs
- Sealed barrier Tyvek® house wrap
- 92.1% efficient gas furnace
- Mastic sealed ductwork
- MERV 8 filters
- Moen ® anti-scald low flow faucets

### Quality Construction

- Exterior elevations with siding, brick and stone available (per plan)
- Steel raised panel insulated overhead garage door, prewired for opener
- Fiber cement siding
- 12" side roof overhangs (per plan)
- LP SmartSide ® trim
- CertainTeed ® dimensional shingles
- Engineered I-joist floor system for quieter floors
- Aluminum gutters & downspouts on front & rear of home
- Two exterior electrical outlets

### Interior and Design Finishes

- 9' First floor ceilings
- Kwikset ® interior door hardware
- Moen ® faucets
- Smooth walls and textured ceilings
- Low VOC paint
- 6 panel interior doors
- Pre-wired for two phone and cable outlets (per plan)
- Bronze exterior light fixtures
- Nickel interior lighting package
- 3 ¼ " base trim and 2 ¼ " cased openings
- Window grids per plan
- Polished edged plate glass 36" tall mirrors above full vanities

### Kitchen

- Whirlpool ® stainless steel appliances including range, dishwasher & vent hood to the exterior
- 36" Birch Cabinets
- Crown molding
- Moen ® chrome faucet with side sprayer
- Ice maker line

### Owner's Suite

- Birch vanity cabinets
- Cultured marble vanity top
- Sterling Vikrell ® fiberglass shower/tub for easy maintenance
- Armstrong ® resilient flooring
- Walk-in closet with ventilated shelving (per plan)
- Polished edged plate glass 36" tall mirrors above full vanities
- Bath accessories

### Secondary Bathrooms

- Birch vanity cabinets
- Cultured marble vanity top
- Sterling Vikrell ® fiberglass shower/tub for easy maintenance
- Armstrong ® resilient flooring
- Polished edge plate glass 36" tall mirrors above full vanities
- Bath accessories

### Community Amenities

- Sodded front yard/seeded side and rear
- Professionally landscaped common areas
- Professionally managed homeowners association

### The Beazer Experience

- Third party tested Energy Star® Certified Home for energy
- One-year Beazer Homes limited warranty
- Additional limited two-year/ten-year warranty provided by PWS
- Pre-construction, pre-drywall and homeowner orientations
- Beazer Homes Design Studio with options available to personalize your new home
- Mortgage choices allow for the most competitive rates and financing options

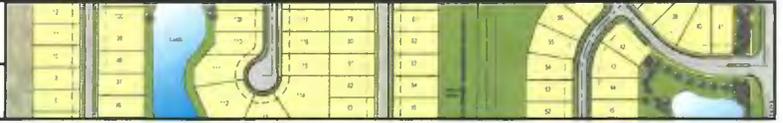


\*Due to our consistent efforts to improve our homes, Beazer reserves the right to make changes without notice or obligation to plans, elevations and pricing. Illustrations and specifications are believed correct at time of publication, and are not intended to create any warranty or contract rights. All plans, specifications, features, materials and appliances are subject to availability, change or substitution deemed advisable by Beazer Homes or as required by local building code or law. This feature sheet does not represent all standard specifications in your home. Details listed may vary depending on the plan, elevation and options chosen. Please consult your New Home Counselor for details. © 2014 Beazer Homes. 11.1.16



TAB 11

AMBERLEY



# Tab 11



ZCS SCHOOL ANALYSIS

AMBERLEY



**Zionsville Community Schools  
Summary of the Projected Annual Fiscal Impact  
of Proposed Development**

**SUMMARY:**

**Projected Fiscal Impact per year of housing developments on school district:**

<u>Property:</u>	<u>Estimated Total Number of New Students</u>	<u>Estimated Annual Revenues</u>	<u>Estimated Annual Expenses</u>	<u>Difference - Net Impact on School District</u>
Northfields	120.00	\$ 997,843	\$ 1,022,453	\$ (24,610)

NOTICE: This document was prepared using input data supplied by the requester. The accuracy of the input data has not been established by the Zionsville Community Schools, and the Zionsville Community Schools does not express any opinion concerning the accuracy of the input data shown in this document. This document does not constitute either an expressed or implied endorsement of either the input data used in the calculations shown in this document, nor of the proposed housing development itself. The information contained herein is provided for informational purposes only and should not be construed as representing any official opinion or position of the Zionsville Community Schools regarding this matter.

**Projected Annual Revenue to be Generated by Proposed Development:**

**I. Local Revenue Based on Property Taxes**

	Number of Housing Units	Avg. Market Value	Expected Total value
Single Family Homes	120	\$ 400,000.00	\$48,000,000
Empty Nester Homes	0	\$ -	\$0
Townhomes/Condos	0	\$ -	\$0
Apartments	0	\$ -	\$0
Estimated Total GROSS Residential Assessed Value			<b>\$48,000,000</b>

Non-residential property	Market Value	Assessed valuation
Commercial property	\$0	\$0
Industrial property	\$0	\$0
Total Non Residential Assessed Value		<b>\$0</b>

Less: Existing AV of development property - 71.58 acres @ \$1,927.91/acre	-\$138,000
Total new Assessed Value	<b>\$47,862,000</b>
Estimated New Net Taxable Value	<b>\$27,192,000</b>
Estimated New Net Taxable Value NOT subject to TIF	<b>\$27,192,000</b>

Projected 2017 School Tax Rates by Fund Subject to Circuit Breaker		Revenue by Fund:
Debt Service	\$0.7156	\$ 194,586
Capital Project	\$0.1700	\$ 46,226
Transportation	\$0.1358	\$ 36,927
Bus Replacement	\$0.0083	\$ 2,257
Penson Debt	\$0.0255	\$ 6,934

Total Property Taxes Due School Corp. \$ 286,930

2016 Tax Rates for Other Entities		
Boone County	\$0.2168	\$ 58,952
Town of Zionsville	\$0.6384	\$ 173,594
Hussey-Mayfield Library	\$0.0622	\$ 16,913

Total Property Taxes Due Other Entities \$ 249,459

**Estimated Gross Tax Bills Total Subject to Circuit Breaker** \$ 536,389

**Circuit Breaker Limit - 1% of AV** \$ 480,000

**Circuit Breaker Credit - Difference between Gross Tax and Circuit Breaker Limit** \$ 56,389

Pro -Rata Allocation of Circuit Breaker Credit by Tax Rate	Pct. Of Total Tax Rate	
<b>Zionsville Community Schools</b>	\$1.0552	53.5% <b>\$ 30,163</b>
Boone County	\$0.2168	11.0% \$ 6,197
Town of Zionsville	\$0.6384	32.4% \$ 18,249
Hussey-Mayfield Library	\$0.0622	3.2% \$ 1,778
Total Tax Rates	\$1.9726	<b>Circuit Breaker Credits \$ 56,387</b>

**Property Tax Revenue for Schools net of Pro-Rata Share of Circuit Breaker Loss** **\$ 256,767**

<b>Add: Referendum Fund</b>	<b>Projected 2017 Rate</b>	
\$0.2138		Revenue: \$ 58,136

**TOTAL Property Tax Revenue for Schools** **\$ 314,903**

**II. State Revenue Based on Enrollment**

IN DOE Certified 2017 Revenue per student:

Basic Grant plus Complexity	\$ 5,152.76
Avg. Categoricals	\$ 538.41

Est. Total State Aid \$ 5,691.17

Est. Students per housing unit	Est. Total New Housing Units	Est. Total New Students
1.00	120	120.0
	0	0.0
	0	0.0
	0	0.0

Combined Total Estimated New Students 120.0

**Net Revenue from State Funding for Zionsville Community Schools** **\$ 682,940**

**Net Total Revenue Generated by Property Taxes and State Funding for schools** **\$997,843**

Projected Annual Expenses per Additional Students from Proposed Development

**I. General and Referendum Fund Expenses**

2017 Budget Projection for Expenditures	\$ 47,263,921.00
Total ADM	6,611.00
Average cost per student	\$ 7,149.00
Total Estimated Number of New Students	120

**Total General Fund Expense per year** **\$857,880**

**II. Transportation Fund Expenses**

2017 Projected Expenditures	\$ 3,628,959.00
Total ADM	6,611.00
Average cost per student	<u>\$549.00</u>

**Total Transportation Expense per year** **\$65,880**

**III. Bus Replacement and Pension Bond Expenses**

2017 Projected Expenditures	\$ 868,960.00
Total ADM	6,611.00
Average cost per student	<u>\$131.44</u>

**Total Bus Replacement Expense per year** **\$15,773**

**IV. Capital Project Fund Expenses**

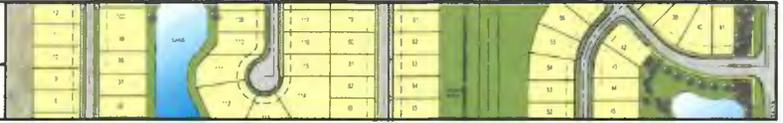
2017 Projected Expenditures	\$ 4,570,225.00
Total ADM	6,611.00
Average dollars raised per student	<u>\$691.00</u>

**Total CPF Expense per year** **\$82,920**

<b>Combined grand total of estimated expenses for additional students for all funds</b>	<b><u>\$1,022,453</u></b>
---	---------------------------

TAB 12

AMBERLEY



# Tab 12



8365 Keystone Crossing, Suite 201  
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Transportation & Site Engineering  
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# ***TRAFFIC IMPACT STUDY***

## ***PROPOSED RESIDENTIAL DEVELOPMENT***

***CR 400 S & CR 875 E***

***ZIONSVILLE, INDIANA***

---

***PREPARED FOR***



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***OCTOBER 2016***

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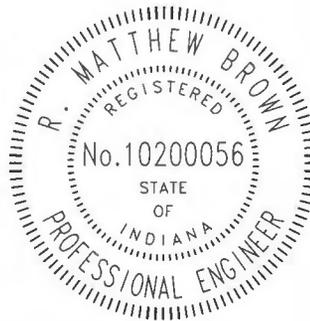
**CERTIFICATION**

I certify that this **TRAFFIC IMPACT STUDY** has been prepared by me and under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

A&F ENGINEERING Co., LLC



R. Matt Brown, P.E.  
Indiana Registration 10200056



Rahul M. Rajbhara, E.I.  
Traffic Engineer



Antoun Fadoul  
Traffic Engineer



Dixian Qiu, E.I  
Traffic Engineer

## ***INTRODUCTION***

This **TRAFFIC IMPACT STUDY**, prepared at the request of the City of Zionsville, on behalf of Beazer Homes, is for a proposed single family residential development that is to be located at the northwest corner of CR 400 S and CR 875 E in Zionsville, Indiana.

## ***PURPOSE***

The purpose of this analysis is to determine what affect the proposed development will have on the existing adjacent roadway system. This analysis will identify any roadway deficiencies that may occur when this site is developed.

Conclusions will be reached that will determine if the roadway system can accommodate the anticipated traffic volumes or will determine the modifications that will be required to the system if there will be deficiencies in the system resulting from the changes.

Recommendations will be made that will address the conclusions resulting from this analysis. These recommendations will address feasible roadway system improvements that will accommodate the proposed development generated traffic volumes such that there will be safe ingress and egress, to and from the proposed development, with minimal interference to traffic on the public street system.

## ***SCOPE OF WORK***

The scope of work for this analysis is as follows:

First, obtain peak hour turning movement traffic volume counts between the hours of 6:00 A.M. to 9:00 A.M. and 4:00 P.M. to 7:00 P.M. at the existing study intersection of CR 400 S & CR 875 E.

Second, estimate the number of peak hour trips that will be generated by the proposed development.

Third, assign and distribute the generated traffic volumes from the proposed development to the study intersections.

Fourth, conduct a turn lane analysis along CR 400 S and CR 875 E at the proposed access drives based on the sum of existing traffic volumes and generated traffic volumes from the proposed development.

Fifth, prepare a capacity analysis and level of service analysis at each of the study intersections for each of the following scenarios:

*Scenario 1: Existing Traffic Volumes* – Based on existing roadway conditions and existing peak hour traffic volumes.

*Scenario 2: Sum of Existing Traffic Volumes and Generated Traffic Volumes* – Based on sum of the existing traffic volumes and generated traffic volumes from the proposed development.

Sixth, prepare recommendations for the roadway cross-sections that will be needed to accommodate the total volumes for each of the scenarios listed above.

Finally, prepare a **TRAFFIC IMPACT STUDY** report documenting all data, analyses, conclusions and recommendations to best provide for the safe and efficient movement of traffic through the study area.

### ***DESCRIPTION OF THE PROJECT***

The proposed residential development will consist of 121 single family detached housing units. As proposed, the development will be served by a full access drive along CR 400 S and a full access drive along CR 875 E. **Figure 1** is an area map showing the location and general layout of the site.

### ***STUDY AREA***

The study area for this analysis has been defined to include the following intersections:

- CR 400 S & CR 875 E
- CR 875 E & East Access Drive
- CR 400 S & South Access Drive

**Figure 2** shows the existing intersection geometrics of CR 400 S & CR 875 E.

### ***DESCRIPTION OF ABUTTING STREET SYSTEM***

CR 875 E – is a north/south, two lane undivided roadway to the east of the proposed development with a posted speed limit of 40 mph in the vicinity of the site. According to the City of Zionsville Thoroughfare Plan, CR 875 E is classified as a Rural Major Collector.

CR 400 S – is an east/west, two lane undivided roadway to the south of the proposed development with a posted speed limit of 30 mph in the vicinity of the site. According to the City of Zionsville Thoroughfare Plan, CR 400 S is classified as a Local Road.



**FIGURE 1**  
**AREA MAP**

**TRAFFIC IMPACT STUDY**  
**BEAZER HOMES**  
**ZIONSVILLE, INDIANA**



**CR 400 S & CR 875 E**

**FIGURE 2**  
**EXISTING INTERSECTION**  
**GEOMETRICS**

**TRAFFIC IMPACT STUDY**  
**BEAZER HOMES**  
**ZIONSVILLE, INDIANA**

### EXISTING TRAFFIC VOLUMES & PEAK HOUR

Peak hour turning movement traffic volume counts were obtained at the intersection of CR 400 S and CR 875 E by A&F Engineering Co., LLC. These counts include all "through" traffic and all "turning" traffic at the intersection. The counts were made between the hours of 6:00 AM and 9:00 AM and 4:00 PM and 7:00 PM during a typical weekday in October 2016. Based on the traffic volumes, the AM peak hour at the study intersection occurs from 7:00 AM and 8:00 AM while the PM peak hour occurs from 5:15 PM and 6:15 PM. The existing peak hour traffic volumes are shown on **Figure 3**. The count output summary sheets for all traffic counts are included in the **Appendix**.

### GENERATED TRAFFIC VOLUMES FOR PROPOSED DEVELOPMENT

The estimate of newly generated traffic is a function of the development size and of the character of the land use. The *ITE Trip Generation Manual*<sup>1</sup> was used to calculate the number of new trips that will be generated by the proposed development. This report is a compilation of trip data for various land uses as collected by transportation professionals throughout the United States in order to establish the average number of trips generated by those land uses. **Table 1** is a summary of the total trips that will be generated during the peak hours at the development site.

TABLE 1 – TOTAL GENERATED TRIPS FOR PROPOSED DEVELOPMENT

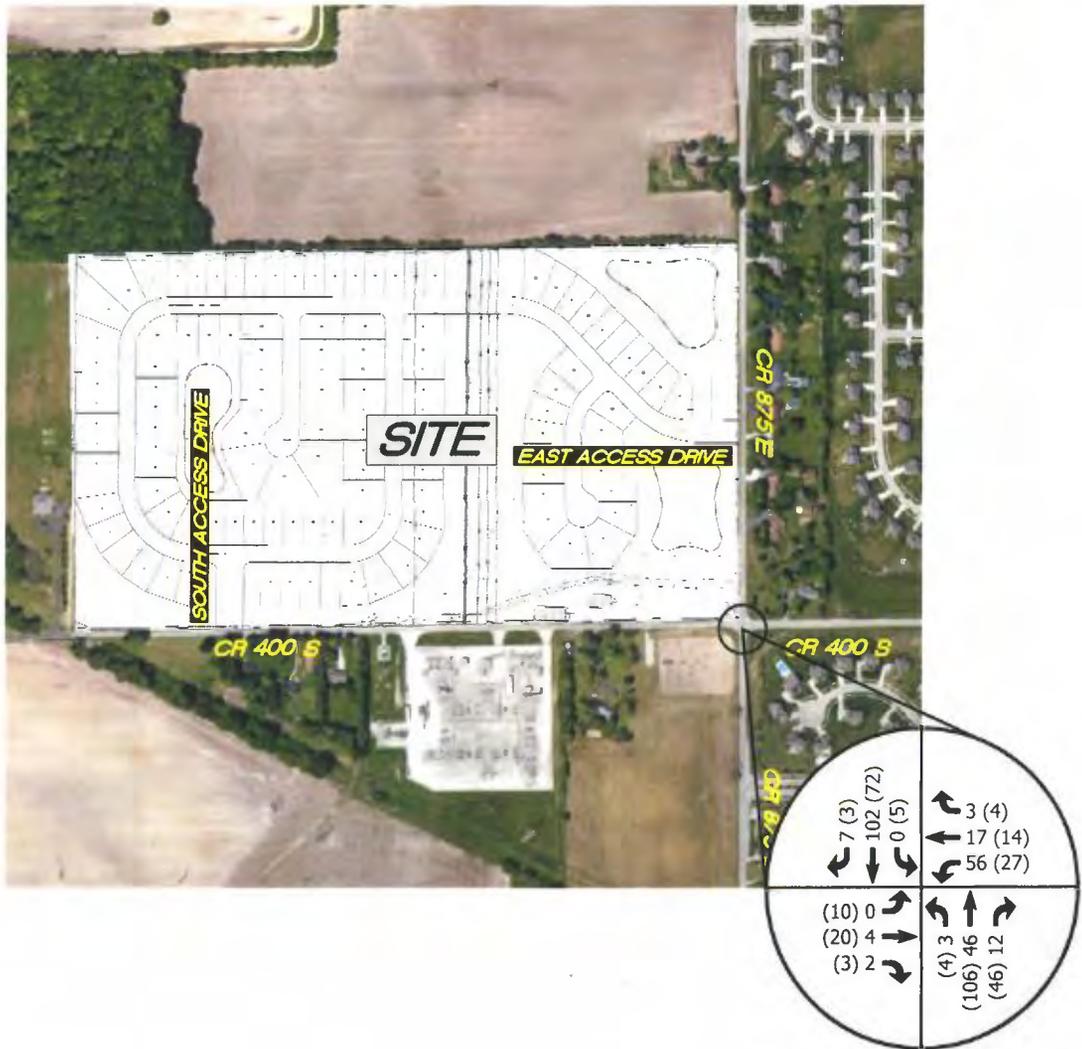
DEVELOPMENT INFORMATION			GENERATED TRIPS			
LAND USE	ITE CODE	SIZE	AM ENTER	AM EXIT	PM ENTER	PM EXIT
Residential	210	121 DU	24	70	79	46

### PASS-BY & INTERNAL TRIPS

Pass-by trips are trips that are already in the existing traffic stream along the adjacent public roadway system that enter a site, utilize the site, and then return back to the existing traffic stream. Residential developments do not typically generate a significant number of pass-by trips. Therefore, pass-by trip reductions were not included in this analysis.

An internal trip results when a trip is made between two or more land uses without traversing the external public roadway system. The proposed development is a single land use only. Therefore, internal trip reductions were not included in this analysis.

<sup>1</sup> *Trip Generation Manual*, Institute of Transportation Engineers, Ninth Edition, 2012.



**LEGEND**  
 XX = A.M. PEAK HOUR  
 (XX) = P.M. PEAK HOUR  
 \* = NEGLIGIBLE

**FIGURE 3**  
**EXISTING TRAFFIC VOLUMES**

**TRAFFIC IMPACT STUDY**  
**BEAZER HOMES**  
**ZIONSVILLE, INDIANA**

## ***ASSIGNMENT AND DISTRIBUTION OF GENERATED TRIPS***

The study methodology used to determine the traffic volumes from the proposed development that will be added to the street system is defined as follows:

1. The volume of traffic that will enter and exit the project site must be assigned to the access points and to the public street system. Using the traffic volume data collected for this analysis, traffic to and from the proposed development has been assigned to the proposed driveways and to the public street system that will be serving the site.
2. To determine the volumes of traffic that will be added to the public roadway system, the generated traffic must be distributed by direction to the public roadways at their intersection with the driveways. For the proposed development, the trip distribution was based on the location of the development, the existing traffic patterns, and the assignment of generated traffic.

The assignment & distribution percentages for the proposed development generated traffic are shown on **Figure 4**.

## ***GENERATED TRIPS ADDED TO THE STREET SYSTEM***

The total generated traffic volumes that can be expected from the proposed development have been assigned to each of the study intersections. These volumes were determined based on the previously discussed trip generation data, assignment of generated traffic and distribution of generated traffic. The total peak hour generated traffic volumes from the proposed development are shown in **Figure 5**.

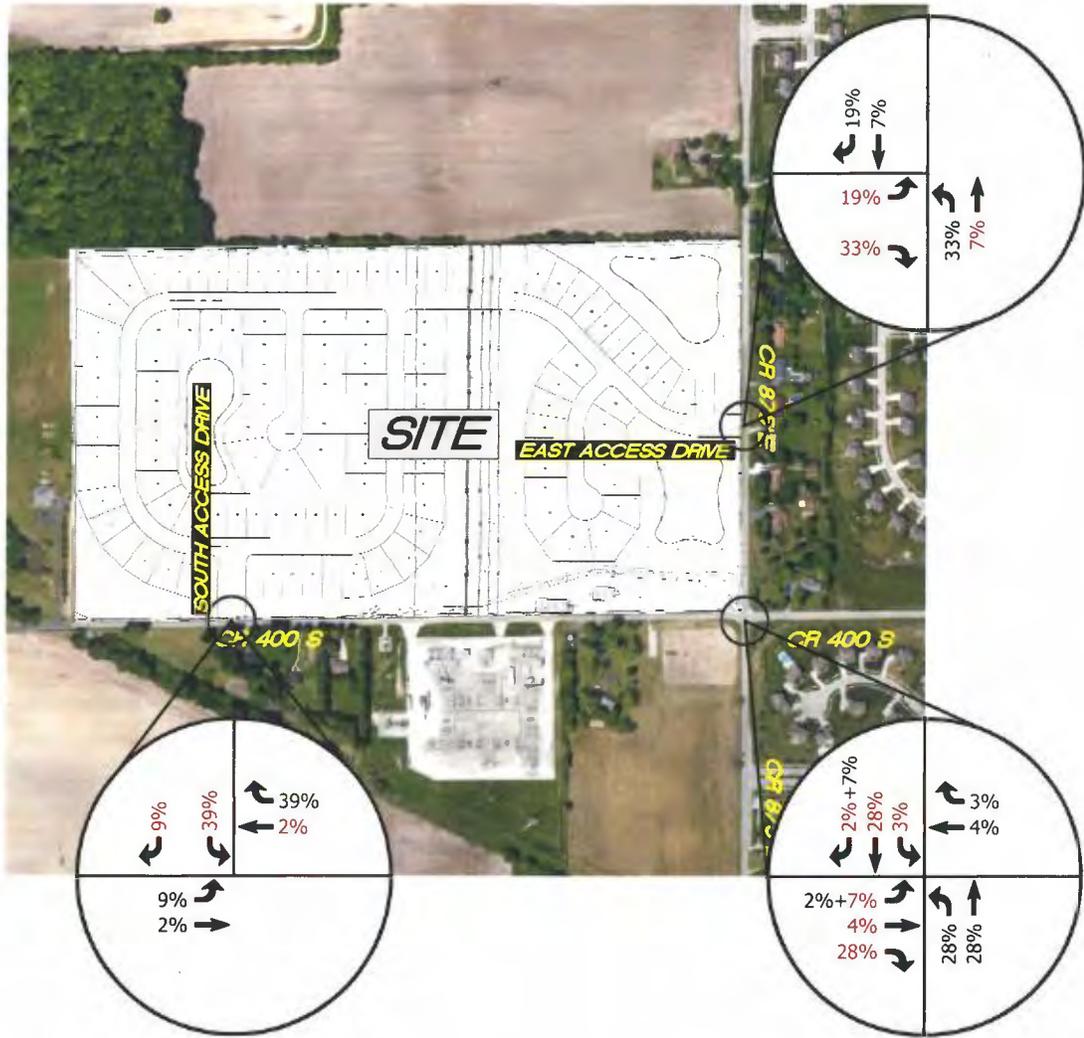
## ***TURN LANE ANALYSIS***

A left-turn lane analysis was conducted along CR 875 E and CR 400 S at the proposed access drives based on the sum of existing traffic volumes and generated traffic volumes from proposed development per the guidelines set forth in Section 46-4.01 of the *INDOT Design Manual*<sup>2</sup>.

According to the analysis, left-turn lanes are not warranted along the County Road at either driveway location. Figures depicting the turn lane warrant analysis are included in the **Appendix**.

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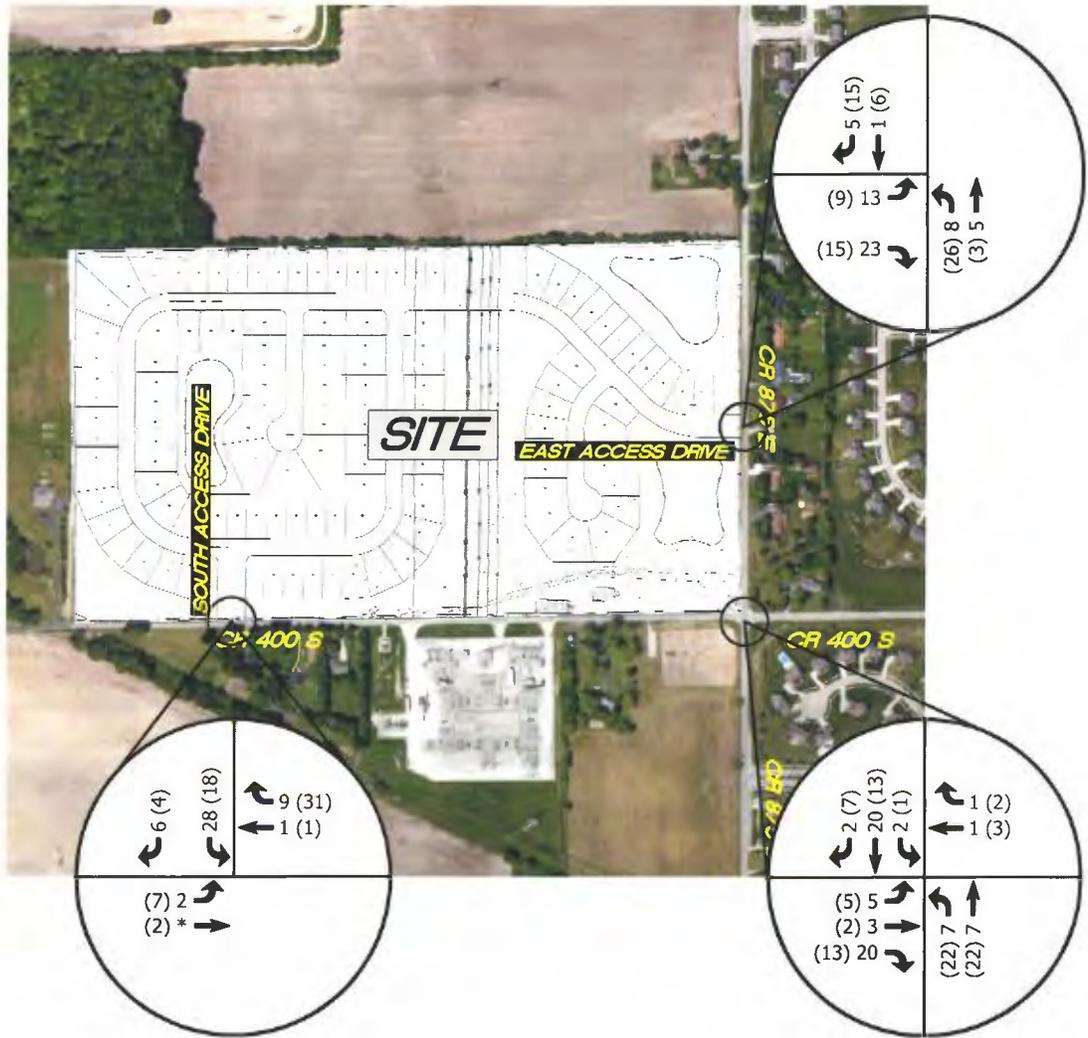
<sup>2</sup> *INDOT Design Manual*, Indiana Department of Transportation, 2013



**LEGEND**  
 XX = INBOUND TRAFFIC  
 XX = OUTBOUND TRAFFIC  
 \* = NEGLIGIBLE

**FIGURE 4**  
**ASSIGNMENT & DISTRIBUTION**  
**OF GENERATED TRAFFIC VOLUMES**  
**FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY**  
**BEAZER HOMES**  
**ZIONSVILLE, INDIANA**



**LEGEND**  
 XX = A.M. PEAK HOUR  
 (XX) = P.M. PEAK HOUR  
 \* = NEGLIGIBLE

**FIGURE 5**  
**TOTAL GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY  
 BEAZER HOMES  
 ZIONSVILLE, INDIANA**

**CAPACITY ANALYSIS**

The "efficiency" of an intersection is based on its ability to accommodate the traffic volumes that approach the intersection. It is defined by the Level-of-Service (LOS) of the intersection. The LOS is determined by a series of calculations commonly called a "capacity analysis". Input data into a capacity analysis include traffic volumes, intersection geometry, and number and use of lanes. To determine the LOS at each of the study intersections, a capacity analysis has been made using the recognized computer program *Synchro/SimTraffic*<sup>3</sup>. This program allows intersections to be analyzed and optimized using the capacity calculation methods outlined within the *Highway Capacity Manual (HCM)*<sup>4</sup>. The following list shows the delays related to the levels of service for unsignalized intersections:

<u>Level of Service</u>	<u>Control Delay (seconds/vehicle)</u>
A	Less than or equal to 10
B	Between 10.1 and 15
C	Between 15.1 and 25
D	Between 25.1 and 35
E	Between 35.1 and 50
F	greater than 50

**CAPACITY ANALYSIS SCENARIOS**

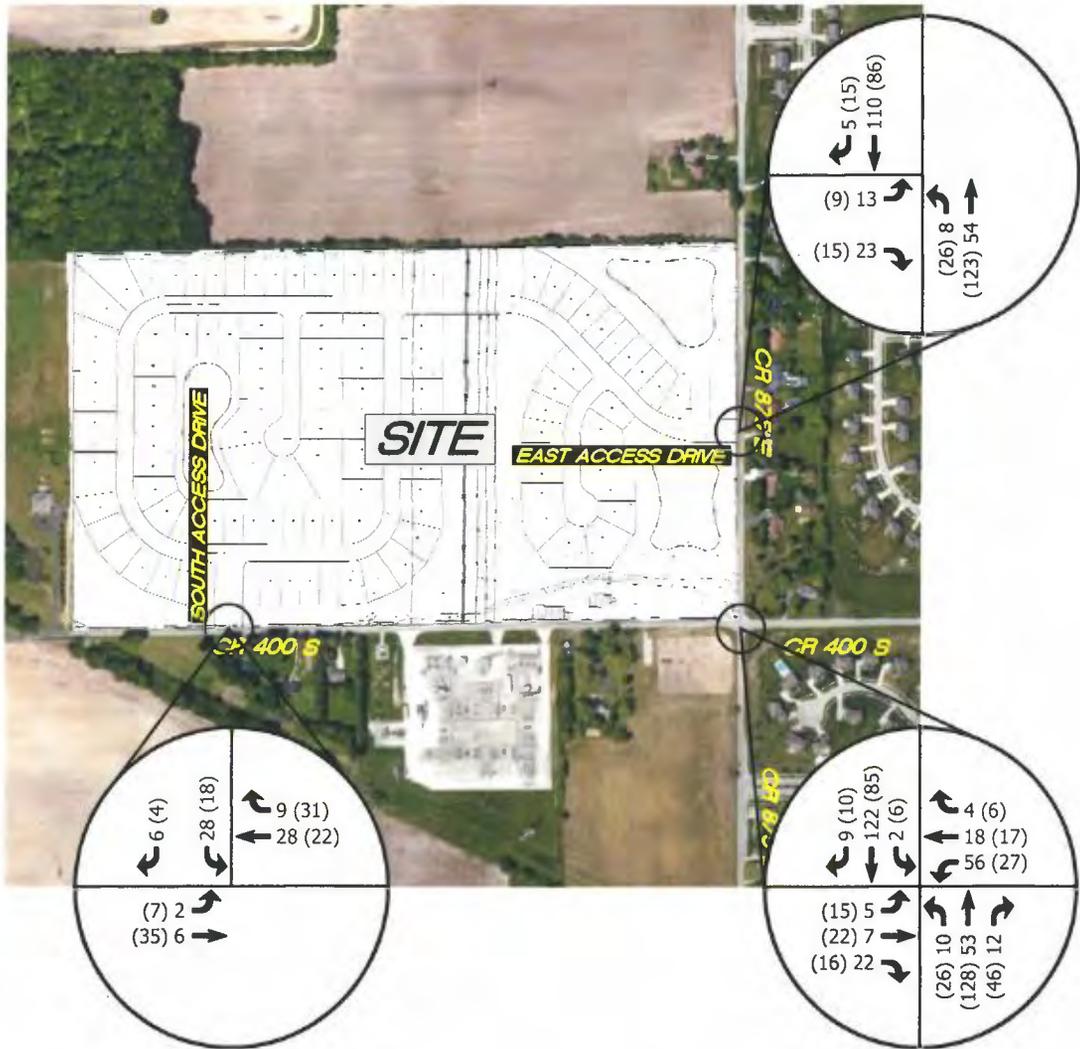
To evaluate the proposed development's effect on the public street system, the total generated traffic volumes from the proposed development were added to the existing traffic volumes to determine the adequacy of the existing roadway network. In addition, recommendations can be made to improve the public street system so it will accommodate the future traffic volumes. An analysis has been made for the AM peak hour and PM peak hour at the study intersections for the following scenarios:

*Scenario 1: Existing Traffic Volumes* – Based on existing roadway conditions and existing peak hour traffic volumes.

*Scenario 2: Sum of Existing Traffic Volumes and Generated Traffic Volumes* – Based on sum of the existing traffic volumes and generated traffic volumes from the proposed development. **Figure 6** is a summary of these traffic volumes at the study intersections for the AM and PM peak hours.

<sup>3</sup> *Synchro/SimTraffic 9.1*, Trafficware, 2015.

<sup>4</sup> *Highway Capacity Manual (HCM)* Transportation Research Board, National Research Council, Washington, DC, 2010.



**LEGEND**  
 XX = A.M. PEAK HOUR  
 (XX) = P.M. PEAK HOUR  
 \* = NEGLIGIBLE

**FIGURE 6**  
**SUM OF EXISTING TRAFFIC VOLUMES & GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY  
 BEAZER HOMES  
 ZIONSVILLE, INDIANA**

The following tables summarize the level of service results at each of the study intersections. The *Synchro* (HCM 2010) intersection reports illustrating the capacity analysis results are included in the **Appendix**.

TABLE 2 – LEVEL OF SERVICE SUMMARY: CR 400 S & CR 875 E

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Northbound Left-Turn	A	A	A	A
Southbound Left-Turn	A	A	A	A
Eastbound Approach	B	A	B	B
Westbound Approach	B	B	B	B

Note: Intersection level of service is not calculated for two-way stop controlled intersections.

DESCRIPTION OF SCENARIOS:

SCENARIO 1: Existing Traffic Volumes with Existing Intersection Geometrics and Two-Way Stop Control.

SCENARIO 2: Sum of Existing and Proposed Development Generated Traffic Volumes with Existing Intersection Geometrics and Two-Way Stop Control.

TABLE 3 – LEVEL OF SERVICE SUMMARY: CR 875 E & EAST ACCESS DRIVE

MOVEMENT	AM PEAK	PM PEAK
	Scenario 2	
Eastbound Approach	A	A
Northbound Left-Turn	A	A

Note: Intersection level of service is not calculated for two-way stop controlled intersections.

DESCRIPTION OF SCENARIOS:

SCENARIO 2: Sum of Existing and Proposed Development Generated Traffic Volumes with Proposed Intersection Conditions\*.

\*The proposed intersection conditions include the construction of the proposed access drive one inbound lane and two outbound lanes, the addition of an exclusive southbound right-turn lane and stop-sign control with the driveway stopping for CR 875 E.

TABLE 4 – LEVEL OF SERVICE SUMMARY: CR 400 S & SOUTH ACCESS DRIVE

MOVEMENT	AM PEAK	PM PEAK
	Scenario 2	
Southbound Approach	A	A
Eastbound Left-Turn	A	A

Note: Intersection level of service is not calculated for two-way stop controlled intersections.

DESCRIPTION OF SCENARIOS:

SCENARIO 2: Sum of Existing and Proposed Development Generated Traffic Volumes with Proposed Intersection Conditions\*.

\*The proposed intersection conditions include the construction of the proposed access drive one inbound lane and two outbound lanes, the addition of an exclusive eastbound right-turn lane and stop-sign control with the driveway stopping for CR 400 S.

## ***CONCLUSIONS & RECOMMENDATIONS***

The conclusions and recommendations that follow are based on existing traffic volume data, the assignment and distribution of generated traffic volumes, capacity analyses/level of service results, turn lane analysis results, and a field review conducted at the site.

### CR 875 E & CR 400 S

A capacity analysis review for the existing traffic volumes and sum of existing and proposed development generated traffic volumes has shown that all the approaches to this intersection operate at acceptable levels of service during the AM and PM peak hour with the existing intersection conditions. Therefore, no improvements are recommended at this location.

### CR 875 E & EAST ACCESS DRIVE

A capacity analysis review for the sum of existing and proposed development generated traffic volumes has shown that all approaches to this intersection will operate at acceptable levels of service during the AM and PM peak hour with the proposed intersection conditions.

The proposed intersection conditions include the following:

- Construction of a full access drive with one inbound lane and two outbound lanes.
- Addition of a southbound right-turn lane, which should be at least 100 feet in length with a 100 foot taper.
- Stop-sign control, with the driveway stopping for CR 875 E.

### CR 400 S & SOUTH ACCESS DRIVE

A capacity analysis review for the sum of existing and proposed development generated traffic volumes has shown that all approaches to this intersection will operate at acceptable levels of service during the AM and PM peak hour with the proposed intersection conditions.

The proposed intersection conditions include the following:

- Construction of a full access drive with one inbound lane and two outbound lanes.
- Addition of a westbound right-turn lane, which should be at least 100 feet in length with a 100 foot taper.
- Stop-sign control, with the driveway stopping for CR 400 S.

# ***TRAFFIC IMPACT STUDY***

## ***APPENDIX***



***8365 Keystone Crossing Boulevard, Suite 201  
Indianapolis, IN 46240  
Phone: (317) 202-0864 Fax: (317) 202-0908***

## *TURN LANE ANALYSIS*

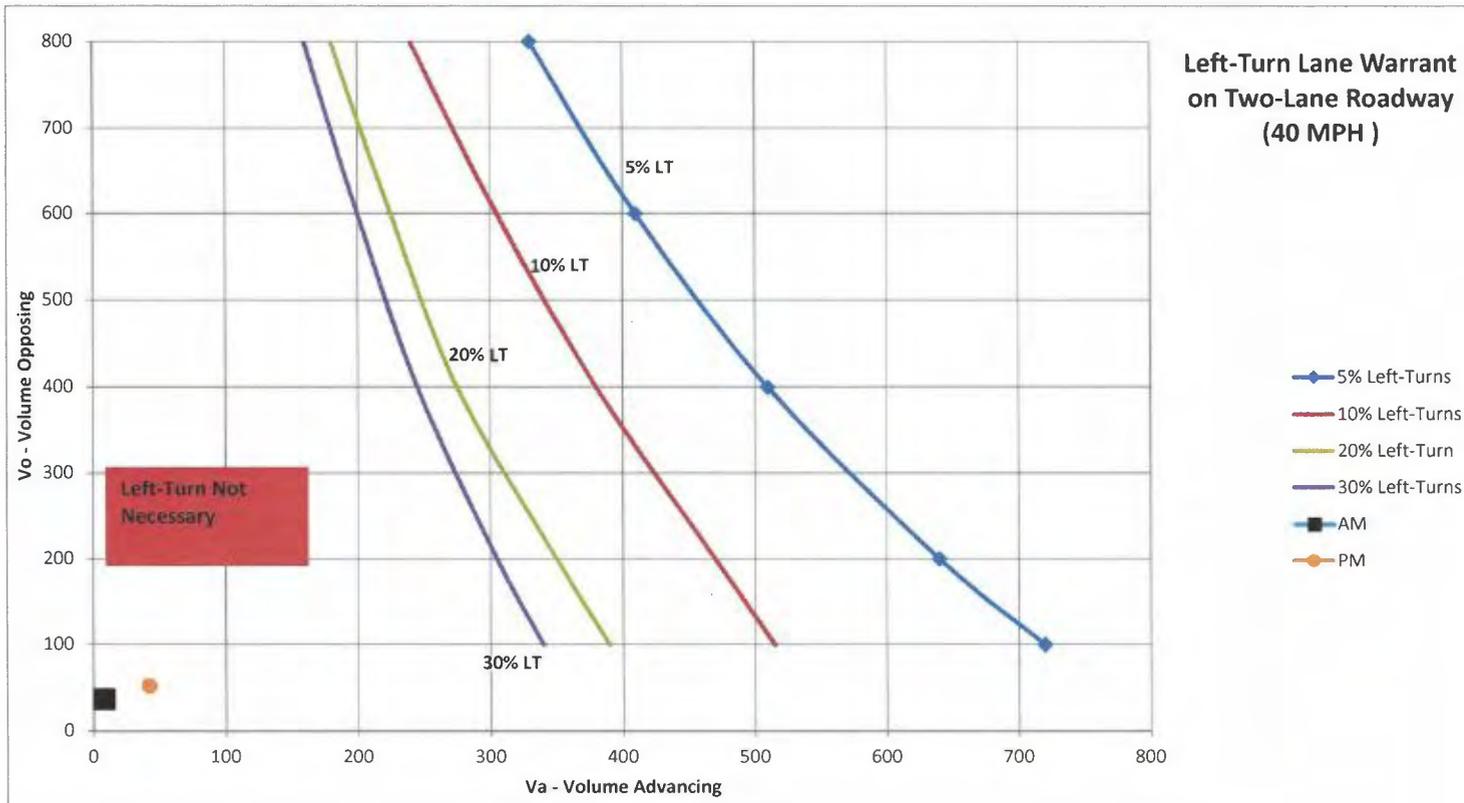
**CR 875 E & East Access Drive**

Operating Speed (mph)	Opposing Volume (veh/h)	Advancing Volume (veh/h)			
		5% Left Turns	10% Left Turns	20% Left Turns	30% Left Turns
40	800	330	240	180	160
	600	410	305	225	200
	400	510	380	275	245
	200	640	470	350	305
	100	720	515	390	340

AM

PM

INPUT		MET?
Advancing Volume (Va)	8	
Opposing Volume (Vo)	37	NO
Left-Turn Percentage	25%	
Advancing Volume (Va)	42	
Opposing Volume (Vo)	53	NO
Left-Turn Percentage	17%	



***CR 875 E & CR 400 S***

***TRAFFIC VOLUME COUNTS  
CAPACITY ANALYSIS***

A & F ENGINEERING CO., LLC  
TRAFFIC VOLUME SUMMARY

CLIENT :  
INTERSECTION :  
DATE :  
COUNTED BY :

Beazer Homes  
CR 875 E & CR 400 S  
10/12/2016  
AF

TOTAL VEHICLES (PASSENGER CARS + TRUCKS)												
	AM PEAK HOUR VOLUMES BEGINS 7:00 AM				OFF PEAK HOUR VOLUMES BEGINS				PM PEAK HOUR VOLUMES BEGINS 5:15 PM			
	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL
NORTHBOUND	3	46	12	61					4	106	46	156
SOUTHBOUND	0	102	7	109					5	72	3	80
EASTBOUND	0	4	2	6					10	20	3	33
WESTBOUND	56	17	3	76					27	14	4	45

PEAK HOUR FACTOR						
	AM PEAK HOUR FACTOR		OFF PEAK HOUR FACTOR		PM PEAK HOUR FACTOR	
	APPROACH	INTERSECTION	APPROACH	INTERSECTION	APPROACH	INTERSECTION
NORTHBOUND	0.95				0.91	
SOUTHBOUND	0.80	0.86			0.87	0.97
EASTBOUND	0.75				0.55	
WESTBOUND	0.83				0.80	

TRUCK PERCENTAGE												
	AM PEAK HOUR PERCENTAGE				OFF PEAK HOUR PERCENTAGE				PM PEAK HOUR PERCENTAGE			
	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL
NORTHBOUND	0.0%	2.2%	8.3%	3.3%					0.0%	0.0%	0.0%	0.0%
SOUTHBOUND	0.0%	5.9%	0.0%	5.5%					0.0%	0.0%	0.0%	0.0%
EASTBOUND	0.0%	25.0%	50.0%	33.3%					10.0%	0.0%	0.0%	3.0%
WESTBOUND	3.6%	0.0%	0.0%	2.6%					0.0%	0.0%	0.0%	0.0%

HOURLY SUMMARY									
HOUR			NB	SB	NB+SB	EB	WB	EB+WB	TOTAL
6:00 AM	TO	7:00 AM	24	50	74	6	32	38	112
7:00 AM	TO	8:00 AM	61	109	170	6	76	82	252
8:00 AM	TO	9:00 AM	60	76	136	5	40	45	181
4:00 PM	TO	5:00 PM	158	74	232	5	27	32	264
5:00 PM	TO	6:00 PM	154	76	230	28	39	67	297
6:00 PM	TO	7:00 PM	118	70	188	25	41	66	254
TOTAL VOLUME			575	455	1030	75	255	330	1360
PERCENTAGE			42.3%	33.5%	75.7%	5.5%	18.8%	24.3%	100.0%

A & F ENGINEERING CO., LLC  
TRAFFIC VOLUME SUMMARY

CLIENT :  
INTERSECTION :  
DATE :

Beazer Homes  
CR 875 E & CR 400 S  
10/12/2016

DIRECTION OF TRAVEL : NORTHBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
AM TIME PERIOD												
6:00 AM - 7:00 AM	3	0	3	16	1	17	4	0	4	23	1	24
7:00 AM - 8:00 AM	3	0	3	45	1	46	11	1	12	59	2	61
8:00 AM - 9:00 AM	2	4	6	38	3	41	10	3	13	50	10	60
PM TIME PERIOD												
4:00 PM - 5:00 PM	1	0	1	101	6	107	50	0	50	152	6	158
5:00 PM - 6:00 PM	3	0	3	105	0	105	46	0	46	154	0	154
6:00 PM - 7:00 PM	4	0	4	71	0	71	43	0	43	118	0	118
PASSENGER	16 80.0%			376 97.2%			164 97.6%			556 96.7%		
TRUCK	4 20.0%			11 2.8%			4 2.4%			19 3.3%		
BOTH	20 3.5%			387 67.3%			168 29.2%			575 100.0%		

DIRECTION OF TRAVEL : SOUTHBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
AM TIME PERIOD												
6:00 AM - 7:00 AM	2	0	2	44	0	44	4	0	4	50	0	50
7:00 AM - 8:00 AM	0	0	0	96	6	102	7	0	7	103	6	109
8:00 AM - 9:00 AM	2	0	2	58	14	72	2	0	2	62	14	76
PM TIME PERIOD												
4:00 PM - 5:00 PM	6	0	6	61	4	65	3	0	3	70	4	74
5:00 PM - 6:00 PM	3	0	3	71	0	71	2	0	2	76	0	76
6:00 PM - 7:00 PM	4	0	4	63	0	63	2	1	3	69	1	70
PASSENGER	17 100.0%			393 94.2%			20 95.2%			430 94.5%		
TRUCK	0 0.0%			24 5.8%			1 4.8%			25 5.5%		
BOTH	17 3.7%			417 91.6%			21 4.6%			455 100.0%		

DIRECTION OF TRAVEL : EASTBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
AM TIME PERIOD												
6:00 AM - 7:00 AM	1	0	1	1	0	1	3	1	4	5	1	6
7:00 AM - 8:00 AM	0	0	0	3	1	4	1	1	2	4	2	6
8:00 AM - 9:00 AM	2	0	2	2	0	2	1	0	1	5	0	5
PM TIME PERIOD												
4:00 PM - 5:00 PM	2	0	2	0	0	0	3	0	3	5	0	5
5:00 PM - 6:00 PM	5	1	6	17	0	17	4	1	5	26	2	28
6:00 PM - 7:00 PM	10	0	10	12	0	12	3	0	3	25	0	25
PASSENGER	20 95.2%			35 97.2%			15 83.3%			70 93.3%		
TRUCK	1 4.8%			1 2.8%			3 16.7%			5 6.7%		
BOTH	21 28.0%			36 48.0%			18 24.0%			75 100.0%		

DIRECTION OF TRAVEL : WESTBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
AM TIME PERIOD												
6:00 AM - 7:00 AM	22	1	23	9	0	9	0	0	0	31	1	32
7:00 AM - 8:00 AM	54	2	56	17	0	17	3	0	3	74	2	76
8:00 AM - 9:00 AM	26	0	26	12	0	12	2	0	2	40	0	40
PM TIME PERIOD												
4:00 PM - 5:00 PM	20	0	20	1	0	1	6	0	6	27	0	27
5:00 PM - 6:00 PM	25	0	25	11	0	11	3	0	3	39	0	39
6:00 PM - 7:00 PM	30	0	30	10	0	10	1	0	1	41	0	41
PASSENGER	177 98.3%			60 100.0%			15 100.0%			252 98.8%		
TRUCK	3 1.7%			0 0.0%			0 0.0%			3 1.2%		
BOTH	180 70.6%			60 23.5%			15 5.9%			255 100.0%		

Intersection

Int Delay, s/veh 3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	4	2	56	17	3	3	46	12	0	102	7
Future Vol, veh/h	0	4	2	56	17	3	3	46	12	0	102	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	25	50	4	0	0	0	2	8	0	6	0
Mvmt Flow	0	5	2	65	20	3	3	53	14	0	119	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	202	197	123	193	194	60	127	0	0	67	0	0
Stage 1	123	123	-	67	67	-	-	-	-	-	-	-
Stage 2	79	74	-	126	127	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.75	6.7	7.14	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.75	-	6.14	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.75	-	6.14	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.225	3.75	3.536	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	761	660	814	762	705	1011	1472	-	-	1547	-	-
Stage 1	886	752	-	938	843	-	-	-	-	-	-	-
Stage 2	935	790	-	873	795	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	741	659	814	755	704	1011	1472	-	-	1547	-	-
Mov Cap-2 Maneuver	741	659	-	755	704	-	-	-	-	-	-	-
Stage 1	884	752	-	936	841	-	-	-	-	-	-	-
Stage 2	908	788	-	865	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	10.4	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1472	-	-	704	750	1547	-	-
HCM Lane V/C Ratio	0.002	-	-	0.01	0.118	-	-	-
HCM Control Delay (s)	7.5	0	-	10.2	10.4	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

**Intersection**

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	20	3	27	14	4	4	106	46	5	72	3
Future Vol, veh/h	10	20	3	27	14	4	4	106	46	5	72	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	10	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	21	3	28	14	4	4	109	47	5	74	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	237	251	76	239	229	133	77	0	0	157	0	0
Stage 1	86	86	-	141	141	-	-	-	-	-	-	-
Stage 2	151	165	-	98	88	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	701	656	991	719	674	922	1535	-	-	1435	-	-
Stage 1	902	827	-	867	784	-	-	-	-	-	-	-
Stage 2	833	766	-	913	826	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	683	651	991	696	669	922	1535	-	-	1435	-	-
Mov Cap-2 Maneuver	683	651	-	696	669	-	-	-	-	-	-	-
Stage 1	899	824	-	864	782	-	-	-	-	-	-	-
Stage 2	812	764	-	884	823	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	10.5	0.2	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1535	-	-	682	702	1435	-	-
HCM Lane V/C Ratio	0.003	-	-	0.05	0.066	0.004	-	-
HCM Control Delay (s)	7.4	0	-	10.6	10.5	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	7	22	56	18	4	10	53	12	2	122	9
Future Vol, veh/h	5	7	22	56	18	4	10	53	12	2	122	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	14	5	4	0	0	0	2	8	0	5	0
Mvmt Flow	6	8	26	65	21	5	12	62	14	2	142	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	257	251	147	261	249	69	152	0	0	76	0	0
Stage 1	152	152	-	92	92	-	-	-	-	-	-	-
Stage 2	105	99	-	169	157	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.64	6.25	7.14	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.64	-	6.14	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.64	-	6.14	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.126	3.345	3.536	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	700	632	892	688	657	1000	1441	-	-	1536	-	-
Stage 1	855	749	-	910	823	-	-	-	-	-	-	-
Stage 2	906	790	-	828	772	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	674	626	892	657	650	1000	1441	-	-	1536	-	-
Mov Cap-2 Maneuver	674	626	-	657	650	-	-	-	-	-	-	-
Stage 1	847	748	-	902	816	-	-	-	-	-	-	-
Stage 2	871	783	-	795	771	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	11.2	1	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1441	-	-	786	667	1536	-	-
HCM Lane V/C Ratio	0.008	-	-	0.05	0.136	0.002	-	-
HCM Control Delay (s)	7.5	0	-	9.8	11.2	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0	-	-

Intersection												
Int Delay, s/veh	3.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	22	16	27	17	6	26	128	46	6	85	10
Future Vol, veh/h	15	22	16	27	17	6	26	128	46	6	85	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	23	16	28	18	6	27	132	47	6	88	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	326	338	93	334	319	156	98	0	0	179	0	0
Stage 1	105	105	-	209	209	-	-	-	-	-	-	-
Stage 2	221	233	-	125	110	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.17	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	618	586	970	623	601	895	1508	-	-	1409	-	-
Stage 1	889	812	-	798	733	-	-	-	-	-	-	-
Stage 2	770	716	-	884	808	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	588	571	970	583	586	895	1508	-	-	1409	-	-
Mov Cap-2 Maneuver	588	571	-	583	586	-	-	-	-	-	-	-
Stage 1	871	808	-	782	718	-	-	-	-	-	-	-
Stage 2	731	702	-	840	804	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	11.4	1	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1508	-	-	658	610	1409	-	-
HCM Lane V/C Ratio	0.018	-	-	0.083	0.085	0.004	-	-
HCM Control Delay (s)	7.4	0	-	11	11.4	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	-	-

## *CR 875 E & EAST ACCESS DRIVE*

### *CAPACITY ANALYSIS*

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗		↕	↕	↗
Traffic Vol, veh/h	13	23	8	54	110	5
Future Vol, veh/h	13	23	8	54	110	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	5	0
Mvmt Flow	14	25	9	59	120	5

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	196	120	120
Stage 1	120	-	-
Stage 2	76	-	-
Critical Hdwy	6.4	6.2	4.1
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	797	937	1480
Stage 1	910	-	-
Stage 2	952	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	792	937	1480
Mov Cap-2 Maneuver	792	-	-
Stage 1	910	-	-
Stage 2	946	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1480	-	792	937	-	-
HCM Lane V/C Ratio	0.006	-	0.018	0.027	-	-
HCM Control Delay (s)	7.4	0	9.6	8.9	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗		↖	↗	↘
Traffic Vol, veh/h	9	15	26	123	86	15
Future Vol, veh/h	9	15	26	123	86	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	10	16	28	134	93	16

Major/Minor

	Minor2	Major1		Major2	
Conflicting Flow All	283	93	93	0	-
Stage 1	93	-	-	-	-
Stage 2	190	-	-	-	-
Critical Hdwy	7.1	6.2	4.1	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	673	970	1514	-	-
Stage 1	919	-	-	-	-
Stage 2	816	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	663	970	1514	-	-
Mov Cap-2 Maneuver	663	-	-	-	-
Stage 1	901	-	-	-	-
Stage 2	800	-	-	-	-

Approach

	EB	NB	SB
HCM Control Delay, s	9.4	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt

	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1514	-	663	970	-	-
HCM Lane V/C Ratio	0.019	-	0.015	0.017	-	-
HCM Control Delay (s)	7.4	0	10.5	8.8	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

***CR 400 S & SOUTH ACCESS DRIVE***

***CAPACITY ANALYSIS***

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	↗
Traffic Vol, veh/h	2	6	28	9	28	6
Future Vol, veh/h	2	6	28	9	28	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	33	0	0	0	0
Mvmt Flow	2	7	30	10	30	7

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	30	0	41
Stage 1	-	-	30
Stage 2	-	-	11
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1596	-	975
Stage 1	-	-	998
Stage 2	-	-	1017
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1596	-	974
Mov Cap-2 Maneuver	-	-	974
Stage 1	-	-	998
Stage 2	-	-	1016

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1596	-	-	-	974	1050
HCM Lane V/C Ratio	0.001	-	-	-	0.031	0.006
HCM Control Delay (s)	7.3	0	-	-	8.8	8.5
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection

Int Delay, s/veh 2.1

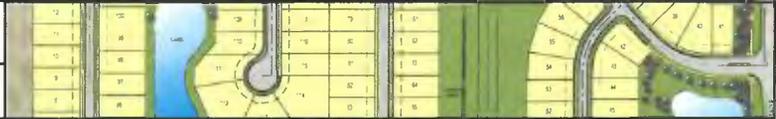
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	↗
Traffic Vol, veh/h	7	35	22	31	18	4
Future Vol, veh/h	7	35	22	31	18	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	3	0	0	0	0
Mvmt Flow	8	38	24	34	20	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	24	0	77
Stage 1	-	-	24
Stage 2	-	-	53
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1604	-	931
Stage 1	-	-	1004
Stage 2	-	-	975
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1604	-	926
Mov Cap-2 Maneuver	-	-	926
Stage 1	-	-	1004
Stage 2	-	-	970

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1604	-	-	-	926	1058
HCM Lane V/C Ratio	0.005	-	-	-	0.021	0.004
HCM Control Delay (s)	7.3	0	-	-	9	8.4
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

TAB 13  
AMBERLEY

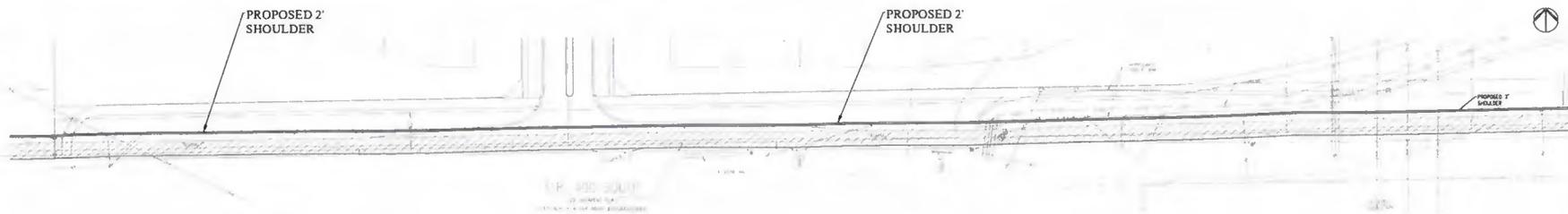
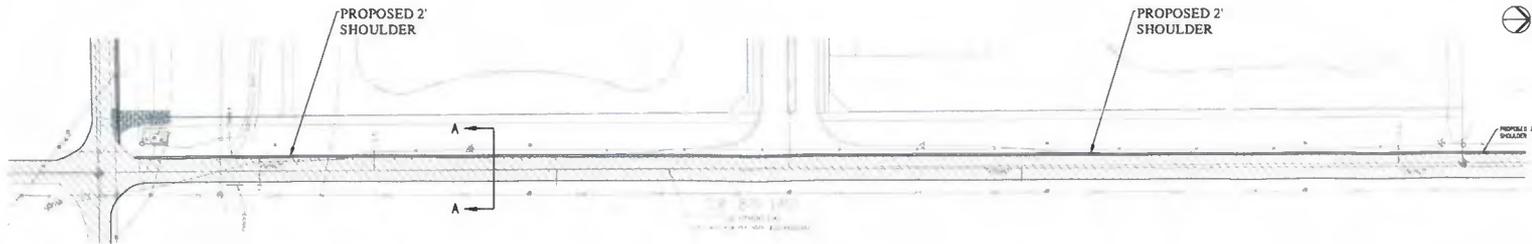


# Tab 13

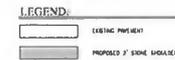
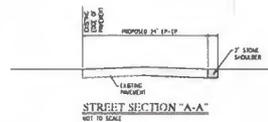
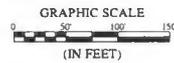


**PRELIMINARY ROAD AND SHOULDER EXHIBIT**

**AMBERLEY**



FOR CONTINUATION SEE ABOVE



FOR CONTINUATION SEE BELOW

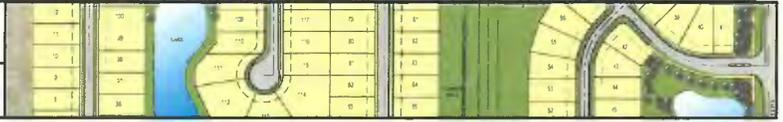
**NORTHFIELDS**  
**C.R. 875 EAST AND C.R. 400 SOUTH SHOULDER EXHIBIT**  
ZIONSVILLE, INDIANA  
DECEMBER 2, 2016



Plot Date: Dec. 02, 2016 10:00am Proj: 2016-11-18-112-5 Amberley - Northfields Shoulder Exhibit Layout: LAYOUT Rev: 06/04  
 C:\Users\jw\Documents\Projects\2016-11-18-112-5 Amberley - Northfields Shoulder Exhibit\Layout.dwg

TAB 14

AMBERLEY



# Tab 14



**OTHER SUBDIVISION LOT WIDTHS**

**AMBERLEY**



Map ID	Subdivision	Smallest Lot Width	Zoning
1	Rock Bridge	80'	R-SF-2
2	The Preserve at Spring Knoll	90'	R-SF-2
3	Cobblestone Lakes of Zionsville	65'	R-SF-2
4	Hampshire	70'	R-SF-2
5	<del>Northfields</del> Amberley	70'	R2
6	Vonterra	65'	R2
7	The Willows	65'	R2
8	Oxford Woods	100'	R-SF-2
9	Hidden Pines	75'	R2
10	Maple Grove	60'	R3 (Whitestown)

**OTHER SUBDIVISION LOT WIDTHS**

**AMBERLEY**



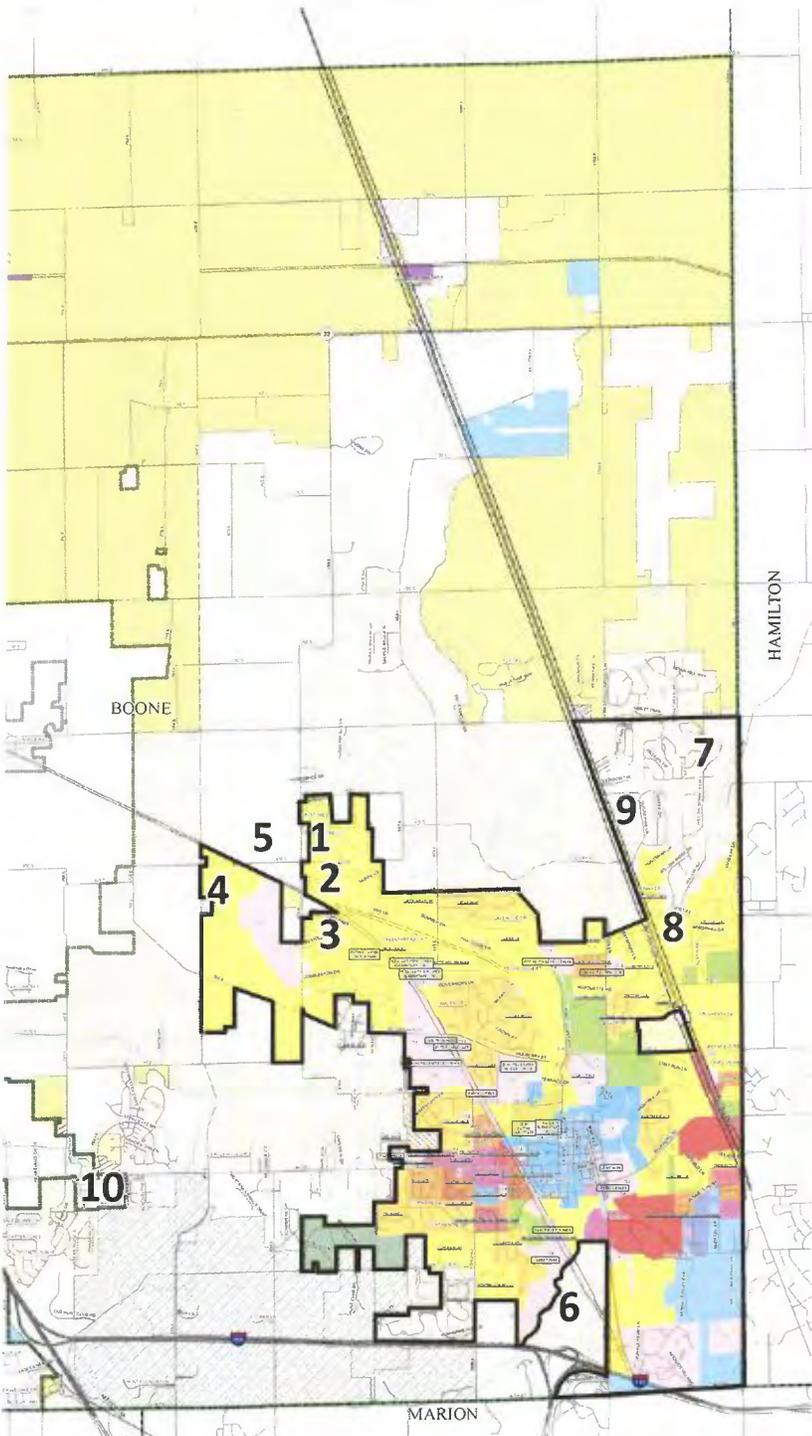
**TOWN OF ZIONSVILLE  
ZONING MAP  
JANUARY 1, 2015**



**ZIONSVILLE**  
FOR ALL THE RIGHT REASONS



LEGEND	
<b>Urban Zoning Districts</b>	<b>Rural Zoning Districts</b>
RE	AG
R-SF-1	RE
R-SF-2	R1
R-SF-3	R2
R-SF-4	R3
R-MF-1	R4
R-MF-2	LB
B-0	PB
B-1	UB
B-2	GB
B-3	I-1
VBO	I-2
I-ORT	I-3
I-1	AZ
I-2	Zionsville Town Service District
I-3	Zionsville Rural Service District
<b>SPECIAL USE ZONING</b>	Disputed Corporate Limits
OPEN LAND	Michigan Road Overlay
R-V	Whitesboro
PUD	County Line
	Township Line
	Water Features
	Highways
	Streets



RECOMMENDED BY THE PLAN COMMISSION, AND APPROVED AND ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF ZIONSVILLE, AND AS AMENDED BY ZONING ORDINANCES

- JEFF PAPA, PRESIDENT
- TIM HAAS
- ELIZABETH HOPPER
- STEVE MANDY
- TOM SCHILLER
- SUSANNA SUAREZ
- GIANCACC OLMER

All real property located within the corporate boundaries of the Town of Zionsville and under the jurisdiction of the Plan Commission as set forth in the Ordinance is hereby divided into Districts as shown on the Official Zoning Map which, together with all explanatory matter, is incorporated by reference and declared to be a part of the Ordinance.

Plan Commission President: *[Signature]* Plan Commission Secretary: *[Signature]*

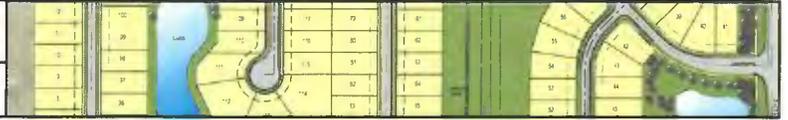
"This is to certify that this is the Official Zoning Map of the Town of Zionsville, County of Boone, State of Indiana"

01/01/2015  
Date of Adoption



TAB 15

AMBERLEY



# Tab 15



DESCRIPTION OF MATERIALS

AMBERLEY



FaegreBD.com

**FAEGRE BAKER  
DANIELS**

USA ▾ UK ▾ CHINA

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Indianapolis ▾ Indiana 46240-3789  
Main +1 317 569 9600  
Fax +1 317 569 4800

December 12, 2016

**VIA COURIER**

Janice Stevanovic  
Planner II/Project Manager  
Town of Zionsville  
1100 West Oak Street  
Zionsville, IN 46077

Re: Beazer Homes Supplemental Materials

Dear Janice:

Enclosed you will find supplemental materials for the December 19, 2016 Plan Commission meeting and public hearing for Beazer Homes' Northfields Project and re-zoning petition. Enclosed are fifteen (15) copies of the following to provide to the Plan Commission members:

1. Draft Northfields Architectural Standards. These are not required by the Town's ordinance for a re-zoning. If they are requested, these are typically approved as commitments in the development plan approval petition, not the re-zoning, and the development plans for Hidden Pines and Vonterra, both R-2 zoned projects, did not commit to or submit any architectural standards. These are being provided as further indication that this is a quality development. In preparation for the Plan Commission meeting next Monday, although this is not the development plan approval stage, I am providing to you the color elevations for the new Crossroads Collection series of homes that Beazer will offer in the Northfields subdivision. As we have presented, this is a new series of homes by Beazer, intended to be new, upscale and quality that support our re-zoning of the Goodwin Farm to R-2 classification. There are a total of 6 different home series, including one one-story and 5 two-story series, and each series has 4 choices of elevations. We previously provided these to you as part of our supplemental booklet on Friday, November 4, and I am re-sending these to you as there are only 6 series of homes as we removed one of the one-story home series from this project.
2. Projected home pricing chart for 2020 by model style, as support for the average home price information and that Northfields will be a quality development.

DESCRIPTION OF MATERIALS	
AMBERLEY	

Janice Stevanovic

-2-

December 12, 2016

3. "Included Features" in the homes proposed in the Crossroads Collection. Again, these are provided to note the quality of homes to be built in Northfields.
4. Development fees and infrastructure costs as to the scope of public improvements budgeted and proposed to be made as part of this project.
5. A list of other subdivisions within the Town for the lot widths and zoning classification to represent that 70' lots are not undersized or out of scale for what is commonly found in other subdivisions within the Town.
6. Preliminary road and shoulder exhibit generated from discussions with the Town as to the 2' shoulder, 24' pavement width added on the north side of CR E 400 S and the west side of CR S 875 E. This also exhibits that no passing blisters are shown as Beazer's traffic study from A&F Engineering indicated that this level of traffic from only 120 lots does not warrant passing blisters, the neighbors do not want them, and there is not adequate right of way to construct them.
7. Revised colored site plan exhibit. Please note that this previously shown 150' legal drain area in the southeast corner of the property has been reduced to 45' based on talks with the Boone County Surveyor, which would be 10' on the north side and 35' on the south side of the legal drain, and that this area can be reduced since the legal drain is now an enclosed underground pipe.
8. The Hampshire subdivision site plan, which development plan was approved by the Town in 2015, for reference to the proximity of its already approved 70' lots in the north section (orange colored) just west of Northfields and which will abut both sides of CR 400 S.

We will also provide a set of these materials to the neighbors who attended our meeting and addressed the Plan Commission at the public hearing. Please let me know if you have any questions on these materials. Thank you Janice.

Best regards,



India A.J.B.B. Olson

Cc: Ty Rinehart, Beazer Homes  
Andrew B. Buroker, Esq.

Enclosures