DECEMBER 13, 2017
Amended and reposted 3:00 p.m., Thursday, December 7, 2017

7:00 P.M. CITY OF ELLISVILLE – PLANNING AND ZONING COMMISSION

I. Call to Order – Chairman Curtis Boggs

II. Pledge of Allegiance

III. Roll Call

IV. Approval of Agenda

V. Approval of Minutes – November 8, 2017

VI. Public Hearings

1) The Planning and Zoning Commission will discuss and consider a City-initiated petition for Text Amendments to Title IV, Land Use, Chapter 400: Zoning Regulations pertaining to (1) Fences, and (2) Setbacks.

Action on Petition #17-12-01

2) The Planning and Zoning Commission will discuss and consider the petition of Freddy’s Frozen Custard and Steakburgers for (1) a change in zoning to C-5 Planned District; and (2) Site Plan and Right of Way dedication; and (3) a Conditional Use Permit to allow a drive-through facility associated with the property located at 15627 Manchester Road within the C-3 Commercial Zoning District.

Action on Petition #17-12-01

VII. Resolutions

1) Resolution honoring Commissioner Greg Sanborn for his service as a Planning and Zoning Commissioner

2) Resolution honoring Commissioner Nanci Sticksel for her service as a Planning and Zoning Commissioner

VIII. Adjournment

After adjournment, a reception will be held to honor Commissioners Sanborn and Sticksel for their many years of service.

Respectfully submitted,

LEIGH A. DOHACK
City Clerk

The City of Ellisville is working to comply with the American With Disabilities Act mandates. Individuals who require an accommodation to attend a meeting should contact City Hall, 636-227-9660 (V/TDD) at least 48 hours in advance.
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Memo

To: Chairman Curtis Boggs and Members of the Planning and Zoning Commission
From: Ada Hood, City Planner
Meeting Date: December 13, 2017
Re: PUBLIC HEARING: City Initiated petition to consider Text Amendments to Title IV, Land Use, Chapter 400: Zoning Regulations pertaining to (1) Fences, and (2) Setbacks.

SUMMARY
This is a City Initiated petition to consider Text Amendments to Title IV, Land Use, Chapter 400: Zoning Regulations pertaining to fences and setbacks.

PROCESS
All text amendments to the land use regulations require a public hearing at the Planning and Zoning Commission level, a recommendation from the Planning and Zoning Commission, a public hearing at the City Council level and a decision via an ordinance.

PROPOSED CHANGES
Fences
- Adding language to create an exception for garden and deer fencing.
- No permit required
- Establishes maximum height (5' for garden fences and 6' for deer fencing)
- Requires that all posts or panels be staked in the ground (versus a footing).

Setbacks
- Every lot must provide a front yard setback
- The front yard is determined by the City Planner, based on existing street location, existing lot configuration and good planning practices

RECOMMENDATION
Staff recommends the Planning and Zoning Commission holds a public hearing to solicit input on the proposed text amendments, as required by code, and forwards a positive recommendation.
AN ORDINANCE AMENDING TITLE IV: LAND USE, CHAPTER 400: ZONING REGULATIONS, OF THE MUNICIPAL CODE OF THE CITY OF ELLISVILLE, TO REVISE REGULATIONS PERTAINING TO FENCES, AS PROVIDED HEREIN.

WHEREAS, the City has initiated text amendments to Title IV, Land Use, Chapter 400: Zoning Regulations, Section 400.360 Fences and Walls, of the Municipal Code of the City of Ellisville, to revise regulations pertaining to fences; and

WHEREAS, a public hearing was held by the Planning and Zoning Commission of the City of Ellisville on December 13, 2017, pursuant to legal notices and Title IV, Land Use, of the Municipal Code of the City of Ellisville, to amend said land use regulations; and

WHEREAS, a public hearing was held by the Council of the City of Ellisville on December 20, 2017, pursuant to legal notices and Title IV, Land Use, of the Municipal Code of the City of Ellisville, to amend said land use regulations; and

WHEREAS, all persons present at such hearings were given an opportunity to be heard and were heard; and

WHEREAS, the Council finds that amendment of said land use regulations will not adversely affect the character of the neighborhood, traffic conditions, fire hazards, public utility facilities and other matters pertaining to the public health, safety and general welfare of the community; and

WHEREAS, a copy of the proposed Ordinance was made available for public inspection prior to its consideration by the Council.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF ELLISVILLE, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1: Title IV, Land Use, Chapter 400: Zoning Regulations, of the Municipal Code of the City of Ellisville, is hereby amended by adopting revisions to Subsection D of Section 400.360 Fences and Walls, as set forth in Exhibit A, attached hereto and incorporated herein by reference.

SECTION 2: All other Sections and Subsections of Title IV, Land Use, Chapter 400: Zoning Regulations, of the Municipal Code of the City of Ellisville, shall remain in full force and effect.

SECTION 3: This Ordinance shall be in full force and effect from and after its passage and approval by the Council.
This Bill No. ________ having been read by title or in full two times prior to passage and having been duly considered and voted upon was finally passed and approved this _____ day of __________ , 2017.

First Reading votes:  
DATE: __________

Second Reading votes:  
DATE: __________

<table>
<thead>
<tr>
<th>MCGRATH</th>
<th>AYE</th>
<th>NAY</th>
<th>ABSTAIN</th>
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<td>CHISMARICH</td>
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<td>BAKER</td>
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<td>NEWHOUSE</td>
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<td>DUFFY</td>
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<td>POOL</td>
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<td>PAUL</td>
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Approved as to legal content and form:

______________________________  
City Attorney
Section 400.360 Fences and Walls.

D. Exceptions.

1. Chain-link fences may be allowed for single-family and institutional uses, gardens and planter beds with the approval of the Council.

2. Existing chain-link fences in the "R-1" Single-Family Residential Zoning District may be replaced with chain-link fencing without Council approval.

3. Deer fencing erected along a rear or side yard is not subject to the requirements of this Section so long as said deer fencing meets the following requirements:
   a. Fencing must be constructed of dark, heavy-weight open mesh plastic material ranging from 1.5 inches x 1.5 inches and 2 inches x 2.5 inches that blends in with the background and allows a clear view through the fence; and
   b. Fencing posts may be constructed of wood, metal, or vinyl rods staked into the ground. Posts may not be permanently affixed.
   c. Fencing may not exceed six (6) feet in height.

4. Decorative fencing that is not permanently affixed to the ground is not subject to the requirements of this Section so long as said decorative fencing meets the following specifications:
   a. Fencing must be constructed of wood, metal or vinyl; and
   b. Fencing posts may be constructed of wood, metal or vinyl rods staked into the ground. Post may not be permanently affixed.
   c. Fencing may not exceed five (5) feet in height.
AN ORDINANCE AMENDING TITLE IV: LAND USE, CHAPTER 400: ZONING REGULATIONS, OF THE MUNICIPAL CODE OF THE CITY OF ELLISVILLE, TO REVISE REGULATIONS PERTAINING TO BUILDING SETBACKS AND YARDS, AS PROVIDED HEREIN.

WHEREAS, the City has initiated text amendments to Title IV, Land Use, Chapter 400: Zoning Regulations, Article VIII: Supplemental Regulations, of the Municipal Code of the City of Ellisville, to revise regulations pertaining to building setbacks and yards; and

WHEREAS, a public hearing was held by the Planning and Zoning Commission of the City of Ellisville on December 13, 2017, pursuant to legal notices and Title IV, Land Use, of the Municipal Code of the City of Ellisville, to amend said land use regulations; and

WHEREAS, a public hearing was held by the Council of the City of Ellisville on December 20, 2017, pursuant to legal notices and Title IV, Land Use, of the Municipal Code of the City of Ellisville, to amend said land use regulations; and

WHEREAS, all persons present at such hearings were given an opportunity to be heard and were heard; and

WHEREAS, the Council finds that amendment of said land use regulations will not adversely affect the character of the neighborhood, traffic conditions, fire hazards, public utility facilities and other matters pertaining to the public health, safety and general welfare of the community; and

WHEREAS, a copy of the proposed Ordinance was made available for public inspection prior to its consideration by the Council.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF ELLISVILLE, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1: Title IV, Land Use, Chapter 400: Zoning Regulations, of the Municipal Code of the City of Ellisville, is hereby amended by adding a new Section to Article VIII: Supplemental Regulations, as set forth in Exhibit A, attached hereto and incorporated herein by reference.

SECTION 2: Title IV, Land Use, Chapter 400: Zoning Regulations, of the Municipal Code of the City of Ellisville, Section 400.090 Definitions is hereby amended by replacing the definition of “Yard, Front” with the following:

Page 1 of 3
BILL NO. __________

YARD, FRONT

An open area extending across the full width of a lot between a principal building and the roadway right of way. The front yard for lots without street frontage shall be determined as set forth in Section 400.467.

SECTION 3: All other Sections and Subsections of Title IV, Land Use, Chapter 400: Zoning Regulations, of the Municipal Code of the City of Ellisville, shall remain in full force and effect.

SECTION 4: This Ordinance shall be in full force and effect from and after its passage and approval by the Council.

This Bill No. _________ having been read by title or in full two times prior to passage and having been duly considered and voted upon was finally passed and approved this ______ day of __________, 2017.

First Reading votes:
DATE: __________

MCGRATH
CHISMARICH
BAKER
NEWHOUSE
DUFFY
POOL
PAUL

AYE NAY ABSTAIN

Second Reading votes:
DATE: __________

AYE NAY ABSTAIN

ATTEST:

CITY OF ELLISVILLE

CITY CLERK

MAYOR ADAM Q. PAUL

Approved as to legal content and form:

City Attorney
Article VIII Supplemental Regulations
Section 400.467 Building Setbacks and Yards.

A. Interior Lots. All lots must have a front yard. If a lot does not have street frontage, the City Planner shall determine the front, rear and side lot lines and yards of such lot based on proximity of the nearest public street, existing lot configuration of abutting lots and good planning practices.

B. Appeals. Any person directly affected by a decision of the City Planner under this Section may appeal to the City Council. Appeals must be filed with the Council, in writing, no later than fourteen (14) days following the date of the decision so appealed. Appeals from the decision of the City Council shall be made to the Board of Adjustment in accordance with Section 400.140.
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Memo

To: Curtis Boggs, Chairman and Members of the Planning and Zoning Commission
From: Ada Hood, City Planner
Meeting
Date: December 13, 2017
Re: Petition of Freddy’s Frozen Custard and Steakburgers for consideration and approval of (1) a zone change to C-5 Planned District; (2) Site Plan and Right of Way dedication; and (2) a Conditional Use Permit to allow a drive through facility associated with the property located at 15627 Manchester Road within the C-3 Commercial Zoning District.

SUMMARY
The applicant is proposing to develop a new Freddy’s restaurant with a drive through on the property located at 15627 Manchester Road. The subject property is zoned C-3 Commercial and located at the northwest intersection of Manchester Road and Mar El.

PROCESS
The applicant is requesting to rezone the lot to a C-5 Planned District designation. The C-5 Planned District designation would allow the project to reduce the required setbacks, while allowing the City maximum control of the property. The applicant is also seeking a conditional use permit to allow the drive through facility at the subject site. Finally, the applicant will need ARB approval for the design and materials.

A public hearing is required at the Commission and Council level. Decision is via an ordinance by the City Council.

ZONE CHANGE
The applicant is proposing to zone the lot to C-5 Planned District designation. The designation allows for restaurants and drive through facilities. The designation also allows the City to have maximum control over the use, operating procedures and site design to mitigate negative impacts.

COMPREHENSIVE PLAN
The rezoning request is for the property located at 15627 Manchester Road. The adopted Plan designates the property for retail use.

Retail Commercial
The retail commercial land use category is intended primarily for retail and offices uses. This category will allow a broad range of retail uses from florists to new car dealers and will include many uses allowed in the City’s commercial zoning districts. Office uses will primarily consist of business and professional offices. Specific retail commercial land uses will be regulated by the City’s zoning regulations. In addition to commercial buildings, this land use classification will include schools, churches, government buildings, parks and similar institutional and recreational uses that are commonly found in retail commercial areas. Urban low-density and medium density residential developments may also be allowed within this land use category.

The Commission will need to determine whether the request is consistent with the Comprehensive Plan.

**RIGHT OF WAY DEDICATION**

The applicant is proposing to dedicate a strip of land along Mar El Court to accommodate a dedicated right hand turn lane.

**CONDITIONAL USE**

The applicant is also requesting approval of a conditional use permit (CUP) to allow the operation of a drive through facility associated with the restaurant. For anyone not familiar with Freddy’s, it is similar to a Culver’s Restaurant. The traffic consultant recommends a visit to the Freddy’s Cottleville location if you want to better understand the traffic volumes.

**SITE PLAN**

The restaurant will measure 3,232 square feet in size with 98 seats. The outdoor patio area will measure 274 square feet in size with 24 seats. An outdoor freezer will add another 235 square feet. According to the applicant the building height is 26’. However, staff believes the building height is closer to 29’, when measured from the lowest point on any elevation to the highest point on any elevation, as the code requires.

The City’s third party traffic consultant has reviewed the plans and her report is attached for your review. The applicant has implemented the traffic consultant’s recommendations as part of their plans.

**Parking**

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>52</td>
<td>51</td>
</tr>
</tbody>
</table>

The applicant is requesting approval from the Council to allow more than maximum number of parking spaces.

**Setbacks**

<table>
<thead>
<tr>
<th>Front Building Setback</th>
<th>149’ from CL Manchester</th>
<th>69’ from CL Marel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Building Setback</td>
<td>54’ from west PL</td>
<td></td>
</tr>
<tr>
<td>Rear Building Setback</td>
<td>98’ from north PL</td>
<td></td>
</tr>
<tr>
<td>Front Landscape Buffer</td>
<td>7’ along Manchester</td>
<td>8’ along Marel</td>
</tr>
</tbody>
</table>
The City’s third party landscape architect has reviewed the plans and his report is attached for your review. As per his review, the landscape meets the requirements. Staff notes that the elimination of the 9 parking spaces along the northern property line will result in a better buffer for the adjacent residential property.

For comparison, the table below itemizes some of the differences between the original submittal and the current project:

### FREDDY’S STEAKBURGERS

<table>
<thead>
<tr>
<th>PLAN CHANGES</th>
<th>ORIGINAL SUBMITTAL</th>
<th>NEW SUBMITTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOT SIZE</td>
<td>78,343 S.F.</td>
<td>48,224 S.F.</td>
</tr>
<tr>
<td># OF LOTS</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>BUILDING SIZE</td>
<td>3,232 S.F.</td>
<td>3,232 S.F.</td>
</tr>
<tr>
<td>FLOOR AREA RATIO (F.A.R.)</td>
<td>0.040</td>
<td>0.070</td>
</tr>
<tr>
<td>FRONT BLDG SETBACK</td>
<td>69’ FROM CENTERLINE MAR / 149’ FROM CL MANCHESTER</td>
<td>69’ FROM CENTERLINE MAR / 149’ FROM CL MANCHESTER</td>
</tr>
<tr>
<td>SIDE BLDG. SETBACK</td>
<td>54’ FROM WEST PL</td>
<td>54’ FROM WEST PL</td>
</tr>
<tr>
<td>REAR BLDG. SETBACK</td>
<td>174’ FROM NORTH PL</td>
<td>98’ FROM NORTH PL</td>
</tr>
<tr>
<td>FRONT LANDSCAPE SETBACK</td>
<td>8’ FROM MAR EL R.O.W. / 18’ FROM MANCHESTER R.O.W.</td>
<td>8’ FROM MAR EL R.O.W. / 7’ FROM MANCHESTER R.O.W.</td>
</tr>
<tr>
<td>SIDE LANDSCAPE SETBACK</td>
<td>5’ FROM WEST PL</td>
<td>5’ FROM WEST PL</td>
</tr>
<tr>
<td>REAR LANDSCAPE SETBACK</td>
<td>60’ FROM NORTH PL</td>
<td>3’ FROM NORTH PL</td>
</tr>
<tr>
<td>BUILDING HEIGHT</td>
<td>26’ - 0”</td>
<td>26’ - 0”</td>
</tr>
<tr>
<td>PARKING REQUIRED</td>
<td>36 SPACES</td>
<td>36 SPACES</td>
</tr>
<tr>
<td>PARKING PROVIDED</td>
<td>65 SPACES</td>
<td>51 SPACES</td>
</tr>
<tr>
<td>NUMBER OF SEATS</td>
<td>110</td>
<td>98</td>
</tr>
<tr>
<td>NUMBER OF LIGHT STDS.</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>STORMWATER</td>
<td>ABOVE GROUND INFILTRATION BASIN</td>
<td>UNDERGROUND DETENTION BASIN</td>
</tr>
</tbody>
</table>

**RECOMMENDATION**

Staff recommends the Planning and Zoning Commission holds a public hearing and solicits input as required by the Zoning Code.

1. That the 9 parking spaces located along the northern property line are eliminated; and
2. That a landscape buffer measuring at 20 feet in width be installed along the northern property line; and
3. Any other conditions deemed necessary by the Commission.
City of Ellisville
One Weis Avenue
Ellisville, MO 63011
(636) 227-9660 FAX: (636) 227-9486

APPLICATION COVER SHEET

(please type or print)
ALL APPLICABLE SECTIONS OF APPLICATION MUST BE COMPLETE
AND CONSISTENT WITH SUBMITTED MATERIALS

Property Address: 15627 MANCHESTER ROAD/

Project Description: PART OF LOT 11 OF LOUIS KESSLER SUBDIVISION (SEE ATTACHED LEGAL DESCRIPTION)

PART A: PARTIES IN INTEREST
The full legal name of each party listed below (partnership, corporation, etc.) is required for review of the application(s). Having different individuals represent an Applicant at different meetings during the review process may result in unnecessary confusion and delay. Consequently, in the interest of promoting clarity, a consistency, and expediency, the City requests all Applicants, at the time of filing their Application, to identify a primary or principal APPLICANT (either attorney or non-attorney; corporations should see Notice below) who can be expected to attend each of the meetings during the Petition review process.

Notice to Applicants
In matters which qualify as contested cases under Section 536.010(2) R.S.Mo. corporations may not be represented by non-attorneys when the Council sits as an administrative tribunal. Non-attorney representation in such matters may constitute the practice of law under Section 484.010 RS.Mo. All Applicants are cautioned to consult with an attorney prior to undertaking non-attorney representation.

Name and Title of APPLICANT: PREMIER CIVIL ENGINEERING
Address: 308 TCW COURT, LAKE SAINT LOUIS, MO 63367

Phone Number: 314-925-7444 Email dstosz@premiercivil.com

Name of Business Owner(s) - if different than above: TWIN SPIRES DEVELOPMENT LLC (CONTRACT PURCHASER)
Address: 1776 MONTANO RD. NW, SUITE 25, ALBUQUERQUE, NM 87107

Phone Number: 505-453-0800 Email gregsoflo@yahoo.com or mkellman@swcp.com

Name of Property Owner(s) - if different than above: HARD CORNER LLC
Address: 120 SOUTH CENTRAL AVE., STE. 110, ST. LOUIS, MO 63105

Phone Number: 309-655-5345 Email

Name of Architect, Landscape Architect, Planner or Engineer: PREMIER CIVIL ENGINEERING
Address: 308 TCW COURT, LAKE SAINT LOUIS, MO 63367

Phone Number: 314-925-7444 Email dstosz@premiercivil.com/mfogarty@premiercivil.com

Revised: August 25, 2014
PART B: SITE DESCRIPTION

Legal Address of Property: 15627 MANCHESTER ROAD
Locator No.: 23T640465

Lot No.: Block No.: Current Zoning: C-3
Current Use of Site: VACANT MEDICAL OFFICE

Proposed Use of Site: FAST FOOD RESTAURANT WITH DRIVE-THRU

PART C: APPLICATIONS FILED (List the applications you will submit (i.e. Conditional Use Permit, Site Plan, etc.). A Letter addressed to the City must be submitted. The letter should completely describe who, what, why, where and when.

REZONING, CONDITIONAL USE PERMIT, SITE PLAN, AND ARB


PART D: AUTHORIZATION (FULL LEGAL NAME IS REQUIRED)

Signature of Applicant (Required): [Signature] Date: 11-3-17

Title/Interest in Property: Purchaser

Signature of Property Owner (Required): [Signature] Date: 11-3-2017

Title/Interest in Property: CO-TRUSTEE

PNC BANK, N.A. Co-Truster 11-6-17

Revised: August 25, 2014
City of Ellisville
One Weis Avenue
Ellisville, MO 63011
(636) 227-9660    FAX: (636) 227-9486

APPLICATION FOR
CONDITIONAL USE PERMIT

(please type or print)

ALL APPLICABLE SECTIONS OF APPLICATION MUST BE COMPLETE.
APPLICATION MUST BE CONSISTENT WITH SUBMITTED MATERIALS.
THIRTY-ONE (31) SETS OF SIGNED & SEALED DRAWINGS PLANS MUST BE FOLDED TO
APPROXIMATELY 8 ½ x 11 or 8 ½ x 14 IN SIZE. A $350.00 APPLICATION FEE AND $50.00
PUBLIC HEARING DEPOSIT MUST ACCOMPANY THIS APPLICATION

| Property Address: | 15627 MANCHESTER ROAD |
| Applicant:        | PREMIER CIVIL ENGINEERING |

PART A: BUILDING CONSTRUCTION

| Estimated Cost of Construction : | 24,224 S.F. |
| No. of Stories : | ONE STORY |
| Total Square Footage of Site: | 48,224 S.F. |
| Total Square Footage of Building(s): | 3,232 S.F. |
| Ratio of Total Square Footage of Building(s) to Total Square Footage of Site: | 3,232/48,224 = 0.07 FAR |
| Building(s) Height(s): | 26'-0" |
| Number of Floors: | ONE |
| Total Number of Available Parking Spaces: | 51 PROVIDED |
| Number of Parking Spaces as Required by the Zoning Ordinance: | 36 REQUIRED (11 PER 1,000 SQ. FT.) |
| Describe the Reason for Requesting a Conditional Use Permit: | FAST FOOD RESTAURANT LOCATED WITHIN PROPOSED C-5 ZONING DISTRICT |

Briefly describe the disposal of Trash, Delivery and Loading for Operation (Location and Hours): COMPACTOR AND TRASH ENCLOSURE AT SOUTHWEST CORNER OF PARKING

Architectural review is required for any exterior renovation or façade changes. If any of these items are part of the project, complete an Architectural Review Board Application.

PART B: AMENDING AN EXISTING CONDITIONAL USE PERMIT

Please describe the proposed amendment:

Revised: July 25, 2014
Please describe why the proposed amendment is necessary:


PART C: MULTI-TENANT/MIXED USE

Total Square Footage of: Retail: ______ Residential: ______ Office: ______ Other: ______

How Many Dwelling Units Will Result From The Project: ______ Square Footage Per Unit: ______

Number of Floors Retail: ______ Residential: ______ Office: ______ Other: ______

Total Number of Parking Spaces: Retail: ______ Residential: ______ Office: ______ Other: ______

Provide a tabulation of the total square footage of the site and what percentage and amount of square footage will be reserved for off-street parking, open spaces, parks, etc.

<table>
<thead>
<tr>
<th>Intended Use</th>
<th>Square Footage</th>
<th>Percentage</th>
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PART D-1: RESTAURANTS

Briefly describe the type and character of the operation: RESTAURANT W/DRIVE-THRU SERVICE

Hours of Operation: SUN-THRU 11AM-11PM & FRI-SAT 11AM-12AM

Will a liquor license be requested? Yes ___ No X If yes, which type: __________________________

Square Footage of Proposed Use: 3,232 S.F. No. of seats: 98

Number of Parking Spaces: 51 No. Employees: 10 P.S. Valet Parking? Yes ___ No X

Location of Parking Facilities: ON-SITE

If restaurant is to offer deliveries, please describe this operation: N/A

Does the restaurant intend to participate in a recycling program? Yes ___ No X

PART D-2: OUTDOOR DINING/SEATING

Please provide a copy of survey showing building line, property line, right-of-way line, proposed seating plan and landscaping.

Seating only? Or full service? SEATING Square Footage of Patio: 320 S.F.

Same Menu (Yes/No): YES Same Hours (Yes/No): YES

Description of Furniture: CONCRETE PEDESTAL

Description and proposed location of Pedestrian Barrier: METAL FENCING

Description of Landscaping:  

Description of Lighting:  

PART E-1: TELECOMMUNICATION INSTALLATIONS

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<tr>
<th>Location of Antenna(s): N/A</th>
<th>Type of Antenna(s):</th>
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<tbody>
<tr>
<td>No. of Antenna(s):</td>
<td>Dimension(s):</td>
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</table>

<table>
<thead>
<tr>
<th>Location of cabinets(s): N/A</th>
<th>Type of cabinets(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of cabinets(s):</td>
<td>Dimension(s):</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location of wiring/cable: REAR OF BUILDING</th>
<th>Type of wiring/cable: 1/4&quot; &amp; 1-3&quot; CONDUIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lineal Feet: TBD BY PROVIDER</td>
<td>How will wiring/cable be screened: UNDERGROUND SERVICE</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Location of screening/</th>
<th>Type of screening(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosures: N/A</td>
<td>enclosures:</td>
</tr>
<tr>
<td>Dimension(s):</td>
<td>Color/Description:</td>
</tr>
</tbody>
</table>

Will any illumination be used: N/A  By what method:  

PART E-2: LEASE AND MAINTENANCE

Fully executed lease: TBD  How long is lease for:  

Any Easements: Describe:  

Yes / No

Who will provide any maintenance: Describe:  

PART F: ENVIRONMENTAL STATEMENT

Will the proposed request will not adversely impact the environment?: NO

Has a Phase I Assessment or Phase II Environmental Report/Study been prepared in association with this request?  

Yes  (Yes or No) If yes, please submit a copy of the report/study with this application.

By filing this application you acknowledge and are aware that the City may require a partial or comprehensive environmental assessment, impact analysis, or report, in conformity with Chapter 415, Environmental Report of the Land Use Regulations, at any time during the application or approval process.

PART G: CRITERIA

It shall be the responsibility of the applicant to clearly establish that the following criteria have been met (Respond Yes or No)

1. The use will not have any adverse effect on traffic conditions

2. In the event that the proposed commercial use of building is a multi-tenant, mixed-use building as defined by Section 500.430.A.2. the applicant must consider screening procedures as described in Section 500.430.A.4. shall be considered by the Commission whether there is any effect on traffic conditions, in addition to any other evidence presented pursuant to the permit procedure.
PART H: CHECKLIST

x Five full size copies of plans must be submitted initially for staff review. Additional plan sets (31 copies) will be required later to forward to the Planning and Zoning Commission and/or City Council.

x The public hearing deposit is used to cover the cost of publishing in the local paper as required by law. Depending on what the actual cost of the publication, an applicant may be owed a small refund or may be billed for additional monies.

One fully executed copy of the lease, if applicable.

x Location map, including north arrow and map scale.

x Zoning district, subdivision name, lot number, dimensions and area, and zoning of adjacent parcels where

Revised: July 25, 2014
**Application for Site Plan Review**

All applicable sections of application must be complete. Application must be consistent with submitted materials. Plans must be folded to approximately 8 1/2 x 11 or 8 1/2 x 14 in size. A $50.00 application fee must accompany this application.

---

**Property Address:** 15627 Manchester Road

**Applicant:** PREMIER CIVIL ENGINEERING

**PART A: SITE DEVELOPMENT**

Briefly describe the intended project and use: Fast Food Restaurant with Drive Thru

- Is the intended use: Permitted: X Conditionally Permitted: X Part of a Planned Development: NO

- Total Square Footage of Site: 48,224 s.f. Total Square Footage of Building(s): 3,232 s.f.

- Ratio of Total Square Footage of Building(s) to Total Square Footage of Site:
  \[
  \frac{3,232}{48,224} = 0.07 \text{ FAR}
  \]

- Building Lot Coverage: 0.07 acres/6% Total Impervious Lot Coverage: 0.79 acres/71.8%

- Setbacks: Required: 60' from centerline of Mar-El Provided: 69' from centerline of Mar-El

- Buffer Landscape: Required: 25' from adj. residential Provided: See Site Plan

- Parking Lot Landscape: Required: 7 trees/1200 sq. ft. Provided: 7 trees/2,154 sq. ft.

- Fence: Required: Yes Location: North Property Line Type/Material: Vinyl Height: 6'

- Wall (Screen/Sound): Required: No Location: Type/Material: Height: 

- Public Art or Benefit Provided: Yes Describe: Green Way marker along Manchester Road

Briefly describe the disposal of Trash, Delivery and Loading for Operation (Location and Hours):

Trash Enclosure along west property line

Architectural review is required for any exterior renovation or façade changes. If any of these items are part of the project, complete an Architectural Review Board Application.

**PART B: PERFORMANCE STANDARDS**

Revised: July 25, 2014
All land, buildings and uses must comply with the following performance standards. Other project or use specific factors may be regulated to protect the public health, welfare and safety as well as to protect the character of the neighborhood.

Vibration. Will the use be so operated that the maximum ground vibration generated is not perceptible without instruments at any point on the lot line of the lot on which the use is located, excluding vehicular traffic unrelated to the subject use? Yes

Noise. Will the use be so operated that the maximum volume of sound or noise generated does not exceed seventy (70) decibels at any point on the lot line of the lot on which the use is located? Yes

Odor. Will the use be so operated that no offensive or objectionable odor is perceptible at any point on the lot line of the lot on which the use is located? Yes

Smoke. Will the use be so operated that no smoke from any source shall be emitted of a greater density than the density described as No. I on the Ringelmann Chart as published by the United States Bureau of Mines? Yes

Toxic gases. Will the use be so operated that there is no emission of toxic, noxious or corrosive fumes or gases? Emission of dirt, dust, fly ash and other forms of particulate matter. Emission of dirt, dust, fly ash and other forms of particulate matter shall not exceed eighty-five hundredths (85/100) pounds per one thousand (1,000) pounds of gases of which amount not to exceed five-tenths (5/10) pounds per one thousand (1,000) pounds of gases shall be of such size as to be retained on a three hundred twenty-five (325) mesh U.S. Standard Sieve. In the case of emission of fly ash or dust from a stationary furnace or combustion, device these standards shall apply to a condition of fifty (50) percent excess air on the stack at full load, which standards shall be varied in proportion to the deviation of the percentage of excess air from fifty (50) percent. Will the project comply with this standard? Yes

Air pollution. Every form of objectionable odors, smoke, toxic gases, particulate matter such as dirt, dust, fly ash, must be restricted to specific low levels of emissions as set forth in Ord. No. 3347 of St. Louis County Code titled; Air Pollution Control Code, Chapter 612, as amended from time to time. Will the project/use comply with this standard? Yes

Radiation. Every amount of radioactive emissions must be restricted to that considered safe by the Federal Radiation Board Standards, as amended from time to time. Will the use/project comply with this standard? Yes

Operations, heat and glare. Every operation producing intense glare or heat must be enclosed so that they are imperceptible at any lot line without instruments. Will the project/use comply with this standard? Yes

Additional Standards applicable to all new restaurants and fast food restaurants, and upon change of ownership of existing restaurants and fast food restaurants, with the exception of Bar B Que Restaurants as defined in Section 30-18: (Ord. #2288, Sect. 2, 11-18-99)

Grease extraction efficiency: Exhaust system shall have grease extraction efficiency of at least 90% as tested by an approved agency. Will the use/project comply with this standard? Yes

Maintenance: Equipment shall be maintained at intervals as recommended by the manufacturer and property maintenance performed in accordance with manufacturer’s instructions. Will the use/project comply with this standard? Yes

Cleaning: Hoods, grease removal devices, fans, ducts and other appurtenances shall be cleaned to bare metal at frequent intervals prior to surfaces becoming heavily contaminated with grease or oily sludge. Will the use/project comply with this
PART C: STORM WATER QUALITY PROTECTION STANDARDS:
All development and redevelopment must comply with storm water quality protection standards. To the maximum extent feasible, the development plan should preserve and/or protect existing natural resource areas that facilitate pollutant removal and reduce runoff.

1. Can land disturbance be minimized? No, due to parking requirements
2. Can additional greenspace be preserved? No, due to parking requirements
3. Can proposed development be located in already developed areas? Site is a redevelopment
4. Can stormwater be captured and infiltrated into the ground? No
5. Can stormwater be captured and reused for irrigation or décor? Unlikely due to site characteristics
6. Could permeable surface materials be used to promote infiltration and limit runoff? No
7. Can land disturbance be restricted to less sensitive areas? No
8. Is the development located outside the 100 year flood plain? Yes
9. Is the development located outside the stream bank setback buffer? Yes
10. Does the development warrant engineering channel protection controls (because of size or stream bank erosion problems)? None that are aware of
11. Does the development plan avoid sensitive areas? Yes
12. Does the site development plan utilize stormwater credits? Yes
13. Does the site development plan show structural BMPs? What is the acreage of drainage to the BMP? Will the BMP be above or below ground? Underground detention system, 90% of site.
14. Who will be responsible for maintaining storm water controls? Are the structural BMP shown on the plan appropriate for the entity or person responsible for maintenance? Anvil Development LLC/Yes
15. Is over 1 acre of impervious area being added? No
16. Is the development tributary to any existing basins that need to be upgraded? No

PART D: ENVIRONMENTAL STATEMENT
Will the proposed request will not adversely impact the environment? No

Has a Phase I Assessment or Phase II Environmental Report/Study been prepared in association with this request? Yes (Yes or No) If yes, please submit a copy of the report/study with this application.

By filing this application you acknowledge and are aware that the City may require a partial or comprehensive environmental assessment, impact analysis, or report, in conformity with Chapter 415, Environmental Report of the Land Use Regulations, at any time during the application or approval process.

PART E: CHECKLIST
- Existing and proposed (1) Site Plan, (2) Landscaping Plan and (3) Natural Resources Plan. Scale may be 1"=20'-0".
- Five full size copies of plans must be submitted initially for staff review. Additional plan sets will be required later to forward to the Planning and Zoning Commission and/or City Council.
- Boundary Map showing all boundaries, existing setbacks and other physical features.
- Location map showing north arrow.

Revised: July 25, 2014
Application for Rezoning/Text Amendment

All applicable sections of application must be complete. Application must be consistent with submitted materials. Plans must be folded to approximately 8 1/2 x 11 or 8 1/2 x 14 in size. A $200.00 application fee and $50.00 public hearing deposit must accompany this application.

Property Address: 15627 Manchester Road

Applicant: PREMIER CIVIL ENGINEERING

PART A: REZONING (LOT AND ZONING INFORMATION)

Existing No. of lots: 1 Lot size(s): 1.19AC Proposed No. of lots: 1 Lot size(s): 1.10 AC. After R.O.W. Ded.

Existing zoning C-3 Proposed Zoning: C-5 PLANNED COMMERCIAL

PART B: TEXT AMENDMENT

Existing Text:

Proposed Text:

PART C: COMPREHENSIVE PLAN

Explain how the proposed rezoning/text amendment is consistent with the Comprehensive Plan.

Rezoning of property to C-5 will allow reduced setback requirements to allow the site to be pushed further south and east to provide parking per city requirements and shall be compatible with permitted uses in accordance with Ellisville's Comprehensive Plan.

Revised: July 25, 2014
PART D: ENVIRONMENTAL STATEMENT

Will the proposed request will not adversely impact the environment? _______________ [NO ADVERSE IMPACT TO ENVIRONMENT]

Has a Phase I Assessment or Phase II Environmental Report/Study been prepared in association with this request? YES (Yes or No) If yes, please submit a copy of the report/study with this application.

By filing this application you acknowledge and are aware that the City may require a partial or comprehensive environmental assessment, impact analysis, or report, in conformity with Chapter 415, Environmental Report of the Land Use Regulations, at any time during the application or approval process.

PART E: CHECKLIST

X Five full size copies of plans must be submitted initially for staff review. Additional plan sets will be required later to forward to the Planning and Zoning Commission and/or City Council.

X The public hearing deposit is used to cover the cost of publishing in the local paper as required by law. Depending on what the actual cost of the publication, an applicant may be owed a small refund or may be billed for additional monies.

X A detailed description and specific reason(s) the applicant is seeking the desired amendment, supplement, change, modification or repeal of any provision of this chapter.

X Also explain the section of the City’s Code or chapter that would be impacted by the proposed change and the extent of this impact. If more than one section would be affected, each individual impact is to be detailed separately.

X Location map, including north arrow and map scale.

X Existing and proposed zoning district, subdivision name, lot number, dimensions and area of the proposed for rezoning, and zoning of adjacent parcels where different than said subject property.

X A certified metes and bounds description of the property which would be affected by the proposed zoning district change.

X Proposed use of the subject property, if any.

X Location and identification of all right-of-way and easements (existing and proposed).
PARCEL DESCRIPTION:

PART OF LOT 11 OF LOUIS KESSLER'S SUBDIVISION IN U.S. SURVEY 2716 AND SECTION 33, TOWNSHIP 45 NORTH, RANGE 4 EAST, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 9 PAGE 72 OF THE ST. LOUIS CITY (FORMER COUNTY) OF ST. LOUIS, MISSOURI, AND DESCRIBED AS: BEGINNING IN THE NORTH LINE OF MANCHESTER ROAD, AS WIDENED, DISTANT NORTH 89 DEGREES 36 MINUTES, EAST, 400 FEET FROM THE WEST LINE OF SAID LOT 11; THENCE NORTH 0 DEGREES 43 MINUTES EAST, PARALLEL TO THE WEST LINE OF SAID LOT 11, 170 FEET TO A POINT; THENCE SOUTH 89 DEGREES 36 MINUTES WEST, 180 FEET TO A POINT ON THE EAST LINE OF A TRACT OF LAND CONVEYED TO HUBERT F. REINECKE BY DEED RECORDED IN BOOK 2251 PAGE 442; THENCE NORTH 0 DEGREES 43 MINUTES EAST, ALONG THE EAST LINE OF SAID REINECKE TRACT, 90 FEET TO THE SOUTHWEST CORNER OF A TRACT OF LAND CONVEYED TO JOHN W. PETERSON BY DEED RECORDED IN BOOK 4195 PAGE 132; THENCE NORTH 89 DEGREES 36 MINUTES EAST, ALONG THE SOUTH LINE OF SAID PETERSON TRACT, 315.52 FEET, MORE OR LESS, TO A POINT IN THE WEST LINE OF MAR-EL COURT, 40 FEET WIDE; THENCE ALONG THE WEST LINE OF MAR-EL COURT, SOUTH 0 DEGREES 13 MINUTES WEST, 260 FEET, MORE OR LESS, TO ITS INTERSECTION WITH THE NORTH LINE OF MANCHESTER ROAD, AS WIDENED; THENCE ALONG THE NORTH LINE OF MANCHESTER ROAD, SOUTH 89 DEGREES 36 MINUTES WEST, 139.38 FEET TO THE POINT OF BEGINNING.
City of Ellisville
One Weis Avenue
Ellisville, MO 63011
(636) 227-9660 FAX: (636) 227-9486

APPLICATION FOR PLANNED DEVELOPMENT

(please type or print)
ALL APPLICABLE SECTIONS OF APPLICATION MUST BE COMPLETE.
APPLICATION MUST BE CONSISTENT WITH SUBMITTED MATERIALS.
THIRTY-ONE (31) SETS OF SIGNED & SEALED DRAWINGS PLANS MUST BE FOLDED TO
APPROXIMATELY 8 1/2 x 11 or 8 1/2 x 14 IN SIZE. A $500.00 APPLICATION FEE AND $50.00
PUBLIC HEARING DEPOSIT MUST ACCOMPANY THIS APPLICATION

Property Address: 15627 MANCHESTER ROAD
Applicant: PREMIER CIVIL ENGINEERING

PART A: PROPOSED PROJECT
Briefly describe the project and intended use(s) CONSTRUCTION OF A FAST CASUAL
RESTAURANT WITH A DRIVE-THRU

Please provide a tabulation of how the Total Square Footage in the project breaks down for each intended use.
Examples of uses are the principle building, parking, storage, landscaping, deck/patio, or other:

<table>
<thead>
<tr>
<th>Intended Use</th>
<th>Designated Square Footage of Floor Area</th>
<th>Percentage</th>
<th>Conditional Use or Permitted Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESTAURANT</td>
<td>3,232 SQ. FT.</td>
<td>6.7%</td>
<td>CONDITIONAL</td>
</tr>
<tr>
<td>PATIO</td>
<td>320 SQ. FT.</td>
<td>.7%</td>
<td>PERMITTED</td>
</tr>
<tr>
<td>PARKING</td>
<td>31,040 SQ. FT.</td>
<td>64.4%</td>
<td>PERMITTED</td>
</tr>
<tr>
<td>LANDSCAPING</td>
<td>13,632 SQ. FT.</td>
<td>28.2%</td>
<td>PERMITTED</td>
</tr>
</tbody>
</table>

How does proposed development meet good planning practices, enhance the City and surrounding neighborhood?
SEE ATTACHED LETTER

How does the proposed development meet the general planning goal of the City and the City's Comprehensive Plan?
SEE ATTACHED LETTER
How does the development implement the Great Streets Master Plan and the Bikeable Walkable Community Plan?
SEE ATTACHED LETTER

Give a statement showing how the proposed Planned Development differs from the zoning ordinance:
SEE ATTACHED LETTER

Explain why this difference from the zoning ordinance is necessary for the project to proceed:
SEE ATTACHED LETTER

What aspects of this project make it unusual and desirable enough for the City to allow the flexibility from the zoning ordinance:
SEE ATTACHED LETTER

What, if any, public benefit is the developer willing to provide the City:

Adjacent Land Use:
How is the proposed development compatible with the surrounding neighborhood?
SEE ATTACHED LETTER

Describe impact on the surrounding neighborhood or the City as a whole?
SEE ATTACHED LETTER

Describe buffering be provided to protect adjacent land uses from light, noise, etc.?
SEE ATTACHED LETTER

How are the operating and delivery hours compatible with the adjacent land use?
SEE ATTACHED LETTER

Architecture:
How are the architecture and building materials consistent with a high quality development and adjacent area?
SEE ATTACHED LETTER

Describe how the development preserves significant architectural/environmental features of the property.
SEE ATTACHED LETTER

Describe how the development preserves the designated historical features of the property.
SEE ATTACHED LETTER

Landscape:
Demonstrate how the landscaping is appropriate for the scale of the development and enhances greenspace in the City.

SEE ATTACHED LETTER

What provisions will be made for care and maintenance of greenspace areas?

SEE ATTACHED LETTER

Traffic:
Will street and other means of access to the proposed development be suitable and adequate to any anticipated traffic without overloading the adjacent streets?

SEE ATTACHED LETTER

If not, how will this be resolved?

SEE ATTACHED LETTER

How does the internal circulation of the proposed development allow for movement of vehicles and pedestrians?

SEE ATTACHED LETTER

Utilities:
Are the existing or proposed utility services adequate for the proposed development?

SEE ATTACHED LETTER

PART B: AMENDMENT

Briefly describe the project as approved:

Briefly describe the amendment to the project:

PART H: CHECKLIST

X Eight (8) full size copies of plans must be submitted initially for staff review. Additional plan sets will be required later (31 copies) to forward to the Planning and Zoning Commission and/or City Council.

X The public hearing deposit is used to cover the cost of publishing in the local paper as required by law. Depending on what the actual cost of the publication, an applicant may be owed a small refund or may be billed for additional monies.

$800 deposit for Landscape Plan Review. Depending on what the actual cost of the third party review, an applicant may be owed a refund or may be billed for additional monies.

$6,000 deposit for Traffic Report. Depending on what the actual cost of the third party review, an applicant may be owed a refund or may be billed for additional monies.
Novemer 10, 2017

Ada Hood
Director and City Planner, AICP
One Weis Avenue
Ellisville, MO 63011

RE: Application for Planned Development
PCE Project Number 174901

Mrs. Hood
Please let this letter serve as an addition to the Application for Planned Development. Due to the one-line items, additional room is needed to explain each question regarding the application. Please reference below for how each item.

Application Question
How does the proposed development meet good planning practices, enhance the City and surrounding neighborhood?

Response
The proposed Freddy’s redevelopment project meets the City’s comprehensive plan for the proposed use. The developer has agreed to the enhancements along the Manchester Road corridor and provide the Greenway marker and wider sidewalks along Manchester Road. This project will add a right turn lane onto Mar El Court which will allow for left and right turns onto Manchester Road. A 6’ tall sight-proof vinyl fence and landscaping is proposed along the north property line to provide screening between the commercial and residential zonings.

Application Question
How does the proposed development meet the general planning goal of the City and the City’s Comprehensive Plan?

Response
The City’s comprehensive plan was adopted June 8th, 2011. The proposed project location is in the retail corridor. Parking has been located to the north of the site except along the front door to help move the building as close to Manchester as possible.

Appendix A of City’s Comprehensive Plan specifically discusses Key recommendations for Transportation. On Page 28, Access Management Guidelines are stated as follows: “Access management strategies along arterials such as Manchester Road provide for the safe and efficient access to individual properties while ensuring the traffic moves smoothly and efficiently along the corridor. In general, MoDOT will use the standards outlined for major arterials in approving changes to transportation and access management along the Manchester Road corridor, and will consider modifications to standards for major arterials on a case by case basis.” The next paragraph discusses Establishing a Grid Network of Streets and improve the overall traffic flow. The fourth paragraph discusses Connection Parking Lots and Cross Access Agreements for commercial properties. The previously mentioned items have been addressed as part of this project. Due diligence has been done to ensure the proposed access shown
meets the City's ordinances and Comprehensive Plan.

**Application Question**

How does the proposed development implement the Great Streets Master Plan and Bikeable Walkable Community Plan?

**Response**

Appendix B of the Comprehensive Plan discusses ideas to promote a Bikeable and Walkable Community. The proposed Freddy's provides pedestrian friendly routes to the building and provides a Bike Rack for people who would want to visit the site on their bike. The routes proposed are clearly designated with a brick texture in the pavement to differentiate the proposed pedestrian routes into the site in an aesthetically pleasing manner.

**Application Question**

Give a statement showing how the proposed Planned Development differs from the zoning ordinance:

**Response**

The proposed Planned Development differs from the zoning ordinance per the following:

**Item 1 – Building and Landscape Setbacks**

- Front Landscape Setback Required: 20 Feet for Manchester Road and Mar-El Court
- Front Landscape Setback Provided: 7.6 Feet for Manchester Road and 8' for Marl El Court

The Manchester Road Landscape Setback reduction request is based on two items. The Sprint store cross access required the property to be located further south slightly to match the existing driveway. The second reason was to allow for the Mar-El Court ¾ access to align across the street with the existing driveway. The driveway alignment is good engineering practice and meets the City and MoDOT design guidelines.

The Mar El- Court Landscape Setback reduction is requested due to the fourteen feet of property that will be converted into right of way for the construction of the left turn lane on Mar-El Court. The building was pushed as far south as possible to provide a greater buffer from the residents to the proposed building.

**Application Question**

Explain why this difference from the zoning ordinance is necessary for the project to proceed:

**Response**

If the setbacks proposed were not accepted, the project could not construct the turn lane on Mar-El Court nor provide the parking required per the city's ordinance.
Application Question
What aspects of this project make it unusual and desirable enough for the city to allow flexibility from the zoning ordinance:

Response
The proposed project boundary shape is unusual however it provides a unique opportunity to push the building along Manchester Road to create the corridor feel that is shown in the City’s comprehensive Plan. The proposed turn lane would allow for better circulation for Mar El and the cross access from the Sprint Store to the project site will provide an emergency relief should an accident or emergency maintenance occur at the intersection of Mar El and Manchester. The proposed utilities along Mar El are planned to be relocated underground unless Ameren UE, Charter Communication or AT&T state otherwise. This will help enhance the Manchester Corridor further.

Application Question
What, if any, public benefit is the developer willing to provide the City:

Response
The developer has agreed to the specific lighting and greenway marker along Manchester Road. In addition, a turn lane, new wider sidewalks, relocation of utilities along Mar El Court underground, cross access with the Sprint Store, reconstruction of the curbs along Manchester Road, and a new bus stop.

Adjacent Land Use:

Application Question
How is the proposed development compatible with the surrounding neighborhood?

Response
The proposed development is along the Manchester Corridor which has a mixed use of retail, commercial, office and public spaces. This diverse use along Manchester allows for the proposed development to enhance the corridor. Along Manchester Road, neighboring residential is located to the north with minimal buffers. To the west is the existing Sprint Store which is commercial and to the east is a gym. Another custard user with a similar layout is just east of this proposed site.

Application Question
Describe the impact on the surrounding neighborhood or the City as a whole?
Response

The impact per the traffic study would be the generating approximately 98 new vehicle trips during the weekday midday peak hour, 75 new trips during the weekday pm peak hour and 66 new trips in the Saturday midday peak hour. This data is based on a vacant site. During all three tie periods studied, the level of service for the southbound approach would degrade one level, with both the midday peak hour for the weekday and Saturday degrading from a Level of Service “D” to “E”. The increase requires mitigation of the turn lane which improves the existing Level of Service for the right turns on Manchester however the left turns movements would remain an “E” Level of Service. While the Level of Service is degraded with the left turn movements the stacking which is noticed by drivers will be diminished from today’s conditions. In addition, the construction of an entrance on Mar-El Court is due to the Manchester Road access into the site is only a right-in/right-out. If this movement was a full access, the access point could be reduced further or removed. However, the access point is not a full access due to the location of the median that was constructed by MoDOT. MoDOT will not remove or reduce the median length. As such, the entrance proposed will not allow vehicles to go north on Mar-El to cut through to exit at Flesher Drive and Manchester Road.

Application Question

Describe buffering being provided to protect adjacent land uses from light, noise etc.?

Response

The proposed development proposes a retaining wall varying in height from 5 foot to 11 foot, landscaping and a 6-foot-tall sight-proof vinyl fence along the property line adjacent to the residential property to provide screening and sound reduction. The speaker for the drive-thru order board is located to the south of the site to mitigate and direct the noise towards Manchester Road. The noise generated should not exceed the noise of the traffic on Manchester Road. Lighting proposed is non-LED as requested by Mrs. Ada Hood to avoid additional glare.

Application Question

How are the operating and delivery hours compatible with the adjacent land uses?

Response

Deliveries for the proposed development typically occur prior to opening around 8 or 9 AM during the weekdays. Deliveries are typically once a week except for local vendors. (For example, Soda Truck Driver delivery schedule varies from food deliveries). Operating hours closely mimic existing restaurants along the north side of Manchester Road currently. The operating hours proposed are as follows:

Sunday through Thursday: 10:30 AM to 10:00 PM
Friday and Saturday: 10:30 AM to 11:00 PM
Architecture:

Application Question
How are the architecture and building material consistent with a high-quality development and adjacent area?

Response
The proposed building materials for the development is Stucco and Brick. The brick color is a Red Colorado or Shale Blend. The mainly brick facade compliments the existing brick buildings along Manchester Road and the neutral tones provide a symmetry from a color perspective.

Application Question
Describe how the development preserves significant architectural/environmental features of the property.

Response
The development proposed the existing structure to be removed. The existing building has a cement block structure that has been painted white with blue awnings. The existing building doesn’t match the look and feel for the Manchester corridor that the City’s comprehensive plan is looking for.

Application Question
Describe how the development preserves the designated historical features of the property.

Response
The property does not have any historical features.

Landscape:

Application Question
Demonstrate how the landscaping is appropriate for the scale of the development and enhances greenspace in the City.

Response
The proposed landscaping provides a continuous row of trees and shrubs along the Manchester and Mar-El Corridors. Additional landscaping along the Northwest and West Property lines have been proposed to provide an overall appearance of a wooded site in 10-15 years. The White Pine and Norway Spruces along the north can grow a foot a year which will greatly enhance the landscaping that is there today. The height of the trees will complement the building facade for a modern restaurant development that is pleasing for the customers and residents of Ellisville.
Application Question
What provisions will be made for the care and maintenance of greenspace areas?

Response
The proposed development will also have a landscape contractor for maintenance and care of plants and trees. Typically, the store manager will coordinate a replacement of a tree and/or shrub. Standard grass maintenance is by the landscape contractor.

Traffic:

Application Question
Will street and other means of access to the proposed development be suitable and adequate to any anticipated traffic without overloading the adjacent streets?

Response
Per City code, the traffic study was completed by Lochmueller group and no mention of the streets being overloaded via the proposed development was mentioned in the report. The report did suggest mitigation as previously mentioned in this letter in greater detail. The proposed entrance on Mar-El Court is placed at the proposed location due to the access only being a right-in/right-out on Manchester Road. Therefore, with a right-in/right out only on Manchester Road, Emergency Vehicles and Fire Trucks would be required to make an illegal maneuver to access the site and risk an accident.

The proposed development is classified as a Motor Vehicle Oriented Business (MVOB). Section 400.430 discussed the requirements of a MVOB. Per the traffic study and our review, the proposed development either meets or exceeds the requirements in Section 400.430. Section 400.490 Item A Subsections 5 and 8 discussed the parking and loading requirements for Commercial and Multi-Family Developments. Below is the excerpt from Subsection 8:

"Ingress and egress shall be provided from a side street where available, unless otherwise required by the City. Ingress and egress from a residential or other lesser class of street, shall require that both sides of the portion of the entire street which abuts the entire subject property frontage is improved City street standards, to and including the point of intersection or convergence with the major street, including right-of-way dedication, pavement, curbs and gutters, sidewalks, landscaping, etc., as required by the Council."

Per our conceptual meetings with the City Council requested that the access be removed on Mar-El, the access proposed on Mar-El is required due to not being able to provide access for emergency vehicles. As a requirement of approval by Metro West Fire Protection District, the District provided Premier the Fire Truck specifications so we could utilize our vehicle turning software to ensure emergency responders could access the site. When closing off the access from Mar-El, emergency responders are required to make an illegal U-turn to enter the site. Station 4 at Clayton Road is the closest station and would be required to take Clayton, to Kehrs Mill to Manchester Road. This would increase the response time significantly which is unacceptable per Metro West's mission statement which is as follows:

"The Metro West Fire Protection District strives to continually provide the best quality emergency response services, and the most current lifesaving information for our residents and businesses."
We provide the best in fire protection, rescue services, and EMS pre-hospital care. In addition, we place a heavy emphasis on fire prevention, disaster preparedness, emergency management, training, and injury prevention for all ages. The vision of the Metro West Fire Protection District is to be THE leader in providing public safety, protection, and education by setting the benchmark for all service delivery through international accreditation and excellence in responsiveness. We firmly believe that our organizations fire suppression, paramedic/EMS, rescue, all hazards preparedness/injury prevention, emergency management, and specialty services make us standout as a leader."

Therefore, should this project be denied, the end user of this property would still require the access on Mar-El which meets the City’s ordinance for providing access from the side street. Freddy’s is willing to address the turn lane and which will reduce queue times from today’s traffic conditions.

Application Question
If not, how will this be resolved?
Response
Per the traffic study, the level of service reduction is not an overloading of the side street. Moreover, to address the level of service concerns a turn lane will be constructed.

Application Question
How does the internal circulation of the proposed development allow for movement of vehicles and pedestrians?
Response
The internal circulation allows for one way movements around the building and two way movements in the parking area to the north. This allows pedestrian friendly access to the building and reduces conflicts due to the drive-thru.

Utilities:
Application Question
Are the existing or proposed utility services adequate for the proposed development?
Response
Yes, existing utilities are available to the site. The existing sanitary is controlled by MSD and is sufficient for the project. The existing sanitary line size is eight inches. The existing storm sewers onsite will be used for the stormwater runoff after the detention basin. The detention basin is adequately sized to accommodate Channel Protection Runoff, Water Quality Volume, and detain up to the one percentile storm (100-year) with one foot of freeboard. Sufficient electric, gas, water and communications are available and are adjacent to the proposed project.
In closing, I hope you find the responses to the Planned Development Application questions answered in a satisfactory manner. The City of Ellisville's high stature and forward thinking by its staff, Planning Commission and City Council provides a community that compliments or exceeds their municipal neighbors and remains why small and large businesses, residents and business owners remain for many years. I truly hope the City of Ellisville and Freddy's can work together to provide an opportunity that would allow for a depreciated property to be resurrected while providing protections for the residents that neighbor this project.

Sincerely,

Matt Fogarty
Premier Engineering, Architecture and Survey, LLC
November 10, 2017
Planning and Zoning Commission Members
City of Ellisville
#1 Weis Avenue
Ellisville, MO 63011

RE: Freddy’s Frozen Custard and Steakburgers
15627 Manchester Road
PCE Job. No. 175701

Dear Commission Members,

On behalf of Twin Spires Development, LLC owners for the proposed Freddy’s, I respectfully request the City of Ellisville’s approval for a Site Development Plan for the proposed Freddy’s at 15327 Manchester Road in U.S. Survey 2716 and Section 33, Township 45 North, Range 4 East, St. Louis County, Missouri.

The site consists of 1 lot equaling 1.10 acres (excluding 0.09 acres of right-of-way dedication. The site is currently developed with a medical office on a 1.19 acre lot located in C-3 zoning. As part of the approval process we will also be requesting rezoning of the parcel to a C-5 Planned Commercial. All existing improvements on site are proposed to be removed with the construction of the restaurant. Proposed improvements to the site include grading, landscaping, paving, and the construction of a 3,232 square foot, one-story drive-thru restaurant. Access to the site will be from an existing right-in/right-out entrance on the adjacent Sprint site to the west via a cross access easement and a proposed three-quarter access on Mar-El Court. In addition, an additional lane will be added to Mar-El Court to provide dedicated right and left run lanes to alleviate any congestion concerns on the existing street. Required utility connections will be made to existing utilities located on the east and south property lines. An underground detention basin will be provided to meet MSD’s detention and water quality requirements. It is the developer’s intention to comply with all applicable ordinances and design criteria for this site.

The principle contact for correspondence will be:
Premier Civil Engineering
Debbie L. Stosz
dstosz@pcestl.com
Phone: 314-925-7444 Ext. 103 Fax: 314-925-7459

Please find enclosed for your review, an Application for Site Plan Review, 5 sets of plans and a $50.00 application fee.

If you have any questions and/or comments, please contact us at your earliest convenience.

[Signature]
Debbie L. Stosz
Enclosures
December 1, 2017

Ms. Ada Hood, AICP
City Planner
City of Ellisville
#1 Weiss Avenue
Ellisville, MO 63011

RE: Freddy's Frozen Custard and Steakburgers
15627 Manchester Road
PCE Project No. 175701

Ms. Hood,

Per your comments dated November 22, 2017 for the submittal on November 9, 2017 we have provided a response to your comments below.

Missouri Department of Transportation

What is the proposed Greenway Marker within MODOT's right of way? Notation has been revised to depict a proposed Monument Address Bollard.

Metro West Fire Protection District

1. No Comments.

Landscape Plan

2. Report will be sent under separate cover. Landscape comments were not received prior to this submittal therefore we are submitting the previously submitted landscape plan.

Engineering

1. It will be necessary to obtain Site Improvement Permit. Site Improvement Permit will be submitted with Construction Drawings.
2. It will be necessary to obtain approval of the landscaping plan from the city's third party landscape planner. Landscape comments were not received prior to this submittal therefore we are submitting the previously submitted landscape plan.
3. It will be necessary to obtain approval from Missouri Department of Transportation for all work within Manchester Road right-of-way. Plans will be submitted for approval to MODOT prior to construction plan approval.
4. It will be necessary to remove the existing asphalt shoulder along Manchester Road. Existing asphalt shoulder is noted to be removed on development plan.
5. It will be necessary to obtain approval from the Metropolitan St. Louis Sewer District including storm water casements, water quality maintenance agreements, etc. It is understood approval will be required from MSD prior to construction plan approval.
6. It will be necessary to obtain a Land Disturbance Permit from the Department of Natural Resources. Land Disturbance Permit will be obtained prior to construction approval.
7. Provide Storm Water Pollution Prevention Plan (SWPP). SWPPP will be provided with construction plans.
8. The existing storm sewer system that runs from the northeast corner of the ATT property at #15655 Manchester Road, north across the backyards of #16 Mar El Court and #20 Mar El Court and connects to an Area Inlet along Mar El Court, is a private storm sewer and not located within an easement. It will be necessary to obtain MSD approval of the storm sewer for maintenance and obtain an easement for the existing storm sewer. MSD approval and easement for storm sewer located on Freddy's site will be obtained prior to construction plan approval.
9. It will be necessary to obtain approval from Missouri American Water and the Metro West Fire Protection District for water mains, fire hydrants, etc. Approvals will be obtained prior to construction plan approval.
10. It will be necessary to provide a photometric lighting plan. A photometric plan is included with this submittal and will also be included with the construction plan submittal.
11. Add note to install pavement striping on Mar El Court including solid white line and double yellow center line. Notations have been added as well as Note #38 stating installation of striping and markings.
12. It will be necessary to provide an Engineer's cost estimate of the site improvements (Excel format). This document will be used to establish the escrow. Once the cost estimate is approved, the owner will need to establish an escrow via a bond or irrevocable letter of credit. Engineer's Cost Estimate and escrow agreement will be provided and approved prior to construction plan approval.

Parking/Circulation/Traffic

Traffic Impact Study attached. Traffic engineer comments were incorporated into plan with first submittal.

Planning

1. Prior to demolition of the building, an inspection should be conducted by a Missouri Licensed asbestos inspector and lead inspector. Acknowledged.
2. All on-site lighting must comply with Section 400.350 and 400.351 of the municipal code. Information has been passed on to lighting engineer and Note 20 revised to state same.
3. Lighting is not 0 FC at northern property line. Revised photometric plan is included with this submittal.
4. Light fixtures are angled; they should be directed straight down. Revised photometric plan is included with this submittal showing revised fixtures.
5. Consider adding "Ellisville" as part of the monument signage. Developer will take this into consideration and will address during signage review process.
6. Please review section 400.490(1) of the Zoning Code regarding pedestrian accessibility, crosswalks and walkways and ascertain your plans are in compliance. Plan is in compliance with our interpretation of Section 400.490(1).
7. All menu boards and drive-through related signage will need ARB approval. Make sure your ARB application addresses this. Understood that ARB approval is required for all signage, Note 34 on plan states same.

8. The signage proposed on the west will require a sign waiver approval from the ARB, make sure your ARB application addresses this. The ARB application is included with this submittal and includes the waiver.

9. The trash enclosure should incorporate brick. Or you may ask the City Council ARB to approve the split face block. Dumpster enclosure will incorporate brick, noted on plan.

10. You must complete and submit a Planned District Application for the C-5 zoning. Planned Development Application is included with this submittal. There will be a fee associated with the application. The publication/public hearing deposit/fee is not needed. Completed Planned District Application and fee is included with this submittal.

11. Please consider eliminating the entire parking row along the northern property line to provide a buffer abutting the residential home. Developer respectfully requests that parking row remain in order to provide parking required to meet the customer needs. A letter has been provided from the property owner of 16 Mar El stating they have no objections to the plan as shown.

12. It appears 16 Mar El is no longer included in this project and will remain residential. Please verify. Correct, 16 Mar El will not be a part of this project and is to remain residential.

Please let us know if we can be of any further assistance in this process.

Debbie L. Stosz
Ms. Ada Hood, AICP
City Planner
#1 Weiss Avenue
Ellisville, MO 63011

RE: Freddy’s Frozen Custard and Steakburgers – 16 Mar El Court – Support of Project

Ms. Hood,

We would like to make the City of Ellisville aware that we support the proposed Freddy’s Frozen Custard and Steakburgers project located directly south of our property. We have reviewed the site plan from Premier Civil Engineering dated 11-10-2017 and have no concerns regarding the project.

We were told that the City has concerns regarding the parking and wall locations due to their being close to our existing property line. We find them acceptable, especially considering the small amount of room available to Freddy’s, as we saw on the plans that they are losing part of their property to a turn lane on Mar El Court.

We have always known that it was inevitable that a business would be developed on that corner lot, and are glad to see plans for a family friendly restaurant in our neighborhood. The plans show that it will be shielded from view of our house by a light-proof fence and have adequate paved and lighted off-street parking located at a distance from our house. We also think the proposed landscaping by the parking lot will help assure the privacy of our back yard.

We appreciate your consideration. Please contact me at 309-655-5345 with any questions you may have.

Sincerely,

Gregory A. Strickfaden
Vice President

Member of The PNC Financial Services Group
301 SW Adams Street Peoria Illinois 61602-1500
www.pnc.com
Ms. Ada Hood, A.I.C.P.
Director of Planning and Community Development
City of Ellisville
1 Weis Avenue
Ellisville, Mo 63011

Re: Landscape Plan Review #2
Freddy’s Ellisville - 15527 Manchester Rd.
terraspec Job No. 11003.40

Dear Ms. Hood:

Per your request we have reviewed the submitted Landscape Plan for the above referenced project and submit for consideration the following comments.

The minimum landscape requirements for this site, as identified in the City’s Code, the City’s “Street Tree and Landscape Guide” and outlined in our previous review letter, have been satisfied on the submitted plan, with the exception that the adjacent streets have not labeled as requested.

General Comment

Plant material selections and locations utilized on the submitted landscape plan are in keeping with the City’s intent to improve the appearance, quality and quantity of landscaped areas that are visible from public roadways and adjacent developments and are considered suitable for the St. Louis area.

If there are any questions or additional information is required, please don’t hesitate to contact this office.

Sincerely,

Kenneth J. Keitel, PLA, ASLA
Landscape Architect
Dear Ms. Hood,

The Lochmueller Group has completed the traffic impact study for a proposed development in the northwest quadrant of Manchester Road and Mar-El Court in Ellisville, Missouri. The site will be redeveloped as a Freddy's Frozen Custard & Steakburgers restaurant. It would be comprised of approximately 3,232 SF. The site is located in the northwest corner of the intersection of Manchester Road with Mar-El Court, as shown in Figure 1.

Access to the site is proposed via a full access drive located on Mar-El Drive, which is to be located approximately 245 feet north of Mar-El's intersection with Manchester Road and directly opposite the existing drive serving the rear parking area behind 15623 Manchester Road. In addition, there is a cross access easement in place that would provide access to the existing right turn only in front of the Sprint...
store located at 15631 Manchester Road. Figure 2 illustrates the preliminary site plan (provided by others).

Figure 2: Preliminary Site Plan (by others)

The purpose of this traffic impact study is to summarize the amount of traffic that would be generated by the restaurant and identify the impacts of the development-generated traffic upon the surrounding road system. This study also evaluates the feasibility and location of providing access onto Mar-El Court, if other off-site road improvements are necessary to accommodate the additional traffic and offers mitigation measures to offset any external impacts. The traffic impact study focuses on the midday and afternoon peak periods of a typical weekday as well as the peak Saturday period, given the nature of the development. These time periods were chosen since they represent the peak periods of operation for the proposed use as well as peak periods along this section of Manchester Road.
EXISTING CONDITIONS

To identify the traffic impacts associated with the proposed redevelopment, it was first necessary to quantify roadway, traffic, and operating conditions as they currently exist.

Existing Roadway Network

The study area road system was inventoried to identify existing roadway types, lane configuration, functional classifications, posted speeds, access provisions, and intersection control. The traffic data was collected at the following intersections:

- Manchester Road & Mar-El Court (unsignalized, full access)
- Manchester Road & Ranchmoor Trail/Phillips 66 Entrances and Top-Tier Entrance (unsignalized, full access)
- Manchester Road & Flesher Drive/Store Driveway (unsignalized, full access)
- Manchester Road & Sprint Store Driveway (unsignalized, right turn access only)
- Mar-El Court & Rear Parking Area behind 15623 Manchester Road (unsignalized, full access)

Manchester Road (Missouri Route 100) is categorized as a principal arterial route, which travels in the east-west direction. Within the study area, it has a speed limit of 40 mph. It is mainly a four-lane road with a two-way left turn lane in the middle. West of Mar-El Court, Manchester Road includes raised medians rather than a continuous two-way left turn lane. As a result, many of the access drives are restricted to right turns only, including the access drive serving the existing Sprint Store adjacent to the subject site.

Mar-El Court, Flesher Drive, and Ranchmoor Trail are local streets with a speed limit of 20 mph and serve the purpose of circulating traffic through the residential areas located north of Manchester Road. All of these are two-lane roadways with a width of approximately 22 feet. It should be noted that three commercial driveways currently exist on Mar-El Court; one to the subject site and two serving the commercial building located at 15623 Manchester Road. Likewise, Flesher Drive also provides access via two driveways to the Bedroom Store, located at 15599 Manchester Road. Ranchmoor does not provide any access to commercial uses.

The existing lane configuration and traffic control at the intersections included in the study area are depicted in Figure 3.

Existing Traffic Volumes

To quantify study area traffic volumes, turning movement counts (TMCs) were performed at the subject intersections on Thursday, August 10, 2017 from 11:00 AM to 1:00 PM and 4:00 PM to 6:00 PM, and on Saturday, August 12, 2017 from 11:00 AM to 2:00 PM. At the City's request, the intersection of Manchester Road & Ranchmoor Trail/Phillips 66 driveways was counted on November 2 and November 4, 2017 and added to the traffic impact study. Based on the collected data, the peak hours were determined to occur from noon to 1:00 PM during the weekday midday, from 5:00 to 6:00 PM during the weekday evening, and from 11:30 AM to 12:30 PM during the Saturday midday period. There was no pedestrian activity during any of the count periods. It should be noted that the weekday morning peak
period was not included in the analysis since the proposed restaurant would not be open for business during this time (the proposed restaurant would not open until 10:30 AM).
It is acknowledged that the existing traffic data (with the exception of the data collected at Ranchmoor) was collected during the summer months when schools are not yet open. Therefore, in order to determine if there is a need to adjust the collected data to reflect conditions representative of schools in session, the data was compared with historical traffic data provided by the Missouri Department of Transportation (MoDOT) for April and early May 2016.

Table 1 summarizes the comparison of the April/May 2016 data to the August 2017 data for each of the critical time periods considered. As can be seen, generally the August 2017 traffic volumes were higher than the April/May 2016 traffic volumes. Therefore, no adjustments were made to the existing August 2017 traffic data, which is illustrated in Figure 4.

### Table 1: Comparison of Traffic Volumes along Manchester Road

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Peak Hour Considered</th>
<th>Percentage Difference from April/May 2016 to August 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Eastbound Manchester Road</td>
</tr>
<tr>
<td>Manchester Road (Route 100) and Mar El Court</td>
<td>Weekday Midday</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>Weekday PM</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td>Weekend Midday</td>
<td>1.7%</td>
</tr>
<tr>
<td>Manchester Road (Route 100) and Flesher Drive</td>
<td>Weekday Midday</td>
<td>12.8%</td>
</tr>
<tr>
<td></td>
<td>Weekday PM</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>Weekend Midday</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Furthermore, it should be noted that the proposed development would replace an existing Whole Body Care shop, which would have generated a nominal amount of traffic. In an effort to be conservative, deductions in the existing traffic volumes were not taken as a means of reflecting the removal of this use.

A review of the accident data from Mid-September 2016 to Mid-September 2017 for this stretch of Manchester Road revealed that there were 3 accidents at the intersection with Ranchmoor Trail, 2 accidents at the intersection with Mar-El Court, and 1 accident at the intersection with Flesher Drive. Of those, only 1 accident at Ranchmoor Trail and the 1 accident at Flesher Drive were attributable to a motorist failing to yield while turning onto or off of Manchester Road. The remainder of the accidents were attributable to rear end collisions (inattention, following too close, etc.) on Manchester Road itself.
Figure 4: Existing Traffic Volumes

Legend
X/X/X - Weekday
Midday/Weekday PM/Saturday
Midday Traffic Volumes (vph)
Weekday Midday peak - 12:00 PM to 1:00 PM
Weekday PM peak - 5:00 PM to 6:00 PM
Saturday Midday peak - 11:30 AM to 12:30 PM

Manchester Rd

Manchester Rd

Manchester Rd

Manchester Rd

Manchester Rd

Legend
X/X/X - Weekday
Midday/Weekday PM/Saturday
Midday Traffic Volumes (vph)
Weekday Midday peak - 12:00 PM to 1:00 PM
Weekday PM peak - 5:00 PM to 6:00 PM
Saturday Midday peak - 11:30 AM to 12:30 PM
Existing Operating Conditions

Traffic operating conditions at the study intersections were evaluated based upon the existing traffic volumes presented in Figure 4 in an effort to quantify existing operating conditions. The analysis was completed using Synchro 10 traffic modeling software, which is based upon the methodologies outlined in the "Highway Capacity Manual" (HCM) published by the Transportation Research Board.

The performance of a transportation system is quantified by Levels of Service (LOS), which are measures of traffic flow that consider factors such as speed, delay, interruptions, safety, and driver comfort and convenience. There are six levels of service ranging from LOS A ("free flow") to LOS F ("oversaturated").

Levels of service criteria vary depending upon the roadway component being evaluated. Intersections are most commonly evaluated, since roadway capacity is typically dictated by the number of vehicles that can be served at critical intersections. For intersections, the criteria are based on delay and the type of control (i.e., whether it is signalized or unsignalized). Signalized intersections reflect higher delay tolerances as compared to unsignalized and roundabout locations because motorists are accustomed to and accepting of longer delays at signals. For signalized and all-way stop intersections, the average control delay per vehicle is estimated for each movement and then aggregated for each approach and the intersection as a whole. For intersections with partial (side-street) stop control, delay is calculated for the minor movements only (side-street approaches and major road left-turns), since through traffic on the major road is not required to stop.

Table 2 summarizes the thresholds for intersection levels of service, as defined in the Highway Capacity Manual. LOS C, which is normally used for highway design, represents a roadway with volumes ranging from 70 percent to 80 percent of its capacity. However, Level D is considered an acceptable condition during peak periods in urban and suburban areas.

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Delay per Vehicle (sec/veh) Signalized</th>
<th>Unsignalized/Roundabout</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&lt; 10</td>
<td>0-10</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 10-20</td>
<td>&gt; 10-15</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 20-35</td>
<td>&gt; 15-25</td>
</tr>
<tr>
<td>D</td>
<td>&gt; 35-55</td>
<td>&gt; 25-35</td>
</tr>
<tr>
<td>E</td>
<td>&gt; 55-80</td>
<td>&gt; 35-50</td>
</tr>
<tr>
<td>F</td>
<td>&gt; 80</td>
<td>&gt; 50</td>
</tr>
</tbody>
</table>

The existing operating conditions at the five unsignalized intersections included in the study area are summarized in Table 3. As shown, existing conditions at the critical movements during the three time periods considered are acceptable, with a few noted exceptions. The northbound approach (private drive) to the intersection of Manchester Road with Flesher Drive during the Saturday midday peak hour operates at a LOS E. However, the northbound volume of traffic approaching the intersection of Manchester Road and Flesher Drive is minimal (less than 10 vph) and the vehicular delay is less than 40 seconds and therefore, arguably, is tolerable. Similarly, both the northbound and/or southbound approaches to the intersection of Manchester Road with Ranchmoor Trail/Phillips 66 during would operate at a LOS E during all three time periods considered. It should be noted that the adjacent signalized intersection to the
west, at Bo Beuckman Ford, would create some gaps in the traffic flow along Manchester Road that motorists turning into and out of Ranchmoor and/or Phillips 66 could take advantage of. However, in an effort to be conservative, this signal was not included in the analysis since it was beyond the study area. If this signalized intersection was taken into consideration, the delay associated with the turns from either Ranchmoor and/or Phillips 66 would be slightly lower.

Table 3: Existing Traffic Operating Conditions

<table>
<thead>
<tr>
<th>Intersection/Approach</th>
<th>Weekday Midday</th>
<th>Weekday PM</th>
<th>Saturday Midday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS (Delay)</td>
<td>Max. Queue</td>
<td>LOS (Delay)</td>
</tr>
<tr>
<td><strong>Mar-El Court @ Site Main Entrance/Driveway (Unsignalized)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Westbound Shared Left/Right</td>
<td>(8.7)</td>
<td>&lt;10'</td>
<td>A (8.8)</td>
</tr>
<tr>
<td><strong>Manchester Road @ Ranchmoor Trail/Phillips 66 Entrances and Top-Tier Entrance (Unsignalized)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>E (26.5)</td>
<td>28'</td>
<td>E (27.3)</td>
</tr>
<tr>
<td>Southbound Shared Left/Through/Right</td>
<td>(16.0)</td>
<td>&lt;10'</td>
<td>E (40.3)</td>
</tr>
<tr>
<td><strong>Manchester Road @ Sprint Entrance/Driveway (Unsignalized)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southbound Right Turn into Manchester Road</td>
<td>(15.6)</td>
<td>&lt;10'</td>
<td>C (16.6)</td>
</tr>
<tr>
<td><strong>Manchester Road @ Mar-El Court (Unsignalized)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Left Turn Into Mar-El Court</td>
<td>B (13.6)</td>
<td>&lt;10'</td>
<td>B (14.7)</td>
</tr>
<tr>
<td>Southbound Shared Left/Right</td>
<td>(19.9)</td>
<td>&lt;10'</td>
<td>C (23.1)</td>
</tr>
<tr>
<td><strong>Manchester Road @ Flesher Drive/Store Driveway (Unsignalized)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Left Turn Into Flesher Drive</td>
<td>B (13.2)</td>
<td>&lt;10'</td>
<td>B (14.4)</td>
</tr>
<tr>
<td>Westbound Left Turn into Driveway</td>
<td>A (0.2)</td>
<td>&lt;10'</td>
<td>A (0.1)</td>
</tr>
<tr>
<td>Northbound Shared Left/Right</td>
<td>B (14.8)</td>
<td>&lt;10'</td>
<td>A (0.0)</td>
</tr>
<tr>
<td>Southbound Shared Left/Right</td>
<td>D (29.1)</td>
<td>10'</td>
<td>D (27.7)</td>
</tr>
</tbody>
</table>

Delay presented in seconds per vehicle

1There are three northbound approaches of Manchester Road and Ranchmoor Trail intersection: Phillips 66 West Entrance, Phillips 66 East Entrance, and Top-Tier Entrance. As all these entrances are very closely spaced and both Phillips 66 West Entrance and Top-Tier drive carried a nominal amount of traffic. Therefore, the volumes for these drives were combined and were analyzed as a single northbound approach.
PROPOSED DEVELOPMENT

The site will be redeveloped as a Freddy's Frozen Custard & Steakburgers restaurant. It would be comprised of approximately 3,232 SF. A drive-thru facility would be provided, which would be served via two order lanes.

Access to the site is proposed via a full access drive located on Mar-El Drive, which is to be located approximately 245 feet north of Mar-El's intersection with Manchester Road and directly opposite the existing drive serving the rear parking area behind 15623 Manchester Road. It is presumed that the new access drive would be under STOP control, similar to the exit from 15623 Manchester Road's rear parking lot. Traffic on Mar-El Court would continue to have the right-of-way. In addition, the Freddy's site would be able to utilize the existing cross access easement across the Sprint Store property that would provide access to the existing right turn only Manchester Road.

Trip Generation

In forecasting the proposed use's impact upon traffic conditions, it was necessary to identify the site's trip generation potential, as any impacts to the surrounding road system would be tied to the net increase in traffic above and beyond the existing volumes. Generally, it is accepted practice to use the Trip Generation Manual published by Institute of Transportation Engineers (ITE) to estimate a site's trip generation. The Manual provides trip generation rates for both high-turnover (sit down) restaurants and fast-food restaurants with drive-through window. However, it was evident after a visit to an existing Freddy's that the proposed restaurant did not fit easily into either of these two categories.

Therefore, trip generation data was collected from the existing Freddy's Frozen Custard & Steakburgers restaurant located in Cottleville, Missouri along Mid Rivers Mall Drive. This site was chosen due to the similarities with the Ellisville site in terms of the suburban nature and surrounding commercial development. Furthermore, based upon information provided by the petitioner, it is our understanding that the Ellisville location is anticipated to outperform the Cottleville store by 5%. Therefore, the resulting trip counts from Cottleville were increased accordingly. The resulting trip generation for the site is summarized in Table 4.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Size (s.f.)</th>
<th>ITE Code</th>
<th>Weekday Midday Peak Hour</th>
<th>Weekday PM Peak Hour</th>
<th>Saturday Midday Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,232</td>
<td>-</td>
<td>In</td>
<td>Out</td>
<td>Total</td>
</tr>
<tr>
<td>Freddy's Frozen Custard &amp; Steakburgers</td>
<td></td>
<td></td>
<td>64</td>
<td>68</td>
<td>132</td>
</tr>
<tr>
<td>Total Vehicular Trips</td>
<td>64</td>
<td></td>
<td>68</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>New Trips (75%)</td>
<td>47</td>
<td></td>
<td>51</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>Pass-By Trips (25%)</td>
<td>17</td>
<td></td>
<td>17</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>
Given the nature of the proposed use, pass-by traffic would be attracted to the site in conjunction with another trip they were already making along Manchester Road and would then continue in the direction originally headed. According to the ITE Trip Generation Handbook, 2nd Edition, the pass-by trips for a high turnover sit down restaurant and a fast food restaurant are 43% and 50% respectively. However, in an effort to be more conservative, a lower pass-by percentage of 25% was applied to the site’s trips based on engineering judgment.

As shown above, the proposed development would generate approximately 98 new vehicle trips during the weekday midday peak hour, 75 new trips during the weekday pm peak hour and 66 new trips in the Saturday midday peak hour. There will also be approximately 34 and 26 trips in the midday and afternoon peak hours of the weekday, respectively, that were already on the road network that will now patronize the new restaurant (pass-by traffic). Similarly, 22 trips would be drawn to the new restaurant from Manchester Road during the Saturday midday peak hour.

**Directional Distribution**

The site’s trip generation was assigned to the study area roadways in accordance with an anticipated directional distribution that reflects prevailing traffic patterns as well as the anticipated market area for the restaurant. The proposed directional distribution percentages are presented in Table 5 below. As shown, all of the site’s trips are expected to use Manchester Road to travel to/from the site, with the vast majority utilizing the access drive on Mar-El Court. It was assumed that 95% of the trips would use this drive to enter the site while 90% of the trips would use it to exit the site. The remainder of the traffic would utilize the cross access easement across the Sprint Store property to access Manchester Road directly.

<table>
<thead>
<tr>
<th>Origin/Destination</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To/From East on Manchester Road</td>
<td>50%</td>
</tr>
<tr>
<td>To/From West on Manchester Road</td>
<td>50%</td>
</tr>
</tbody>
</table>

It should be noted that the above information regarding trip generation, pass-by percentages and directional distribution was presented to the City of Ellisville and MoDOT in a Technical Memorandum on August 24th 2017 for their review. No comments were received disputing these assumptions and the traffic analysis was completed.

**Trip Assignment**

The distribution percentages were multiplied by the new trip generation to obtain the total site generated traffic that consists of new trips coming to the restaurant and pass-by trips from the adjacent roads. The site generated new trips, pass-by trips, and total site generated trips are shown in Figure 5, Figure 6 and Figure 7 respectively.
Figure 5: Site Generated Traffic (New Trips)
Figure 6: Site Generated Traffic (Pass-by Trips)
Figure 7: Total Site Generated Traffic
FORECASTED CONDITIONS

Forecasted Traffic Volumes

The forecasted scenario represents conditions with the Freddy’s Frozen Custard & Steakburgers restaurant in place. The site generated traffic volumes (new and pass-by trips) from Figure 7 were combined with the existing traffic volumes in Figure 4, resulting in the forecasted traffic volumes illustrated in Figure 8, which form the basis of the future conditions analysis.

Figure 8: Forecasted Traffic Volumes
Forecasted Operating Conditions

The future operating conditions were evaluated to determine the adequacy of the road network to accommodate traffic generated by the proposed development and to mitigate external impacts. These conditions are summarized in Table 6, presented as the level of service, average delay per vehicle, and 95th percentile queues.

Table 6: Forecasted Operating Conditions

<table>
<thead>
<tr>
<th>Intersection/ Approach</th>
<th>Weekday Midday</th>
<th>Weekday PM</th>
<th>Saturday Midday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS (Delay)</td>
<td>Max. Queue</td>
<td>LOS (Delay)</td>
</tr>
<tr>
<td>Mar-El Court @ Site Main Entrance/Driveway (Unsignalized)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Shared Left/Right</td>
<td>A (8.7)</td>
<td>&lt;10'</td>
<td>A (8.6)</td>
</tr>
<tr>
<td>Westbound Shared Left/Right</td>
<td>B (11.2)</td>
<td>&lt;10'</td>
<td>B (10.7)</td>
</tr>
<tr>
<td>Northbound Left Turn into Freddy's Restaurant</td>
<td>A (5.9)</td>
<td>&lt;10'</td>
<td>A (5.0)</td>
</tr>
<tr>
<td>Manchester Road @ Ranchmoor Trail/Phillips 66 Entrances and Top-Tier Entrance (Unsignalized)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>E (27.4)</td>
<td>29'</td>
<td>E (28.0)</td>
</tr>
<tr>
<td>Southbound Shared Left/Through/Right</td>
<td>C (16.2)</td>
<td>&lt;10'</td>
<td>E (41.5)</td>
</tr>
<tr>
<td>Manchester Road @ Sprint Entrance/Driveway (Unsignalized)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southbound Right Turn into Manchester Road</td>
<td>C (16.1)</td>
<td>&lt;10'</td>
<td>C (16.9)</td>
</tr>
<tr>
<td>Manchester Road @ Mar-El Court (Unsignalized)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Left Turn into Mar-El Court</td>
<td>B (14.6)</td>
<td>10'</td>
<td>C (15.8)</td>
</tr>
<tr>
<td>Southbound Shared Left/Right</td>
<td>E (35.8)</td>
<td>60'</td>
<td>D (34.1)</td>
</tr>
<tr>
<td>Manchester Road @ Flesher Drive/Store Driveway (Unsignalized)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Left Turn into Flesher Drive</td>
<td>B (13.4)</td>
<td>&lt;10'</td>
<td>B (14.7)</td>
</tr>
<tr>
<td>Westbound Left Turn into Driveway</td>
<td>A (0.2)</td>
<td>&lt;10'</td>
<td>A (0.1)</td>
</tr>
<tr>
<td>Northbound Shared Left/Right</td>
<td>C (15.1)</td>
<td>&lt;10'</td>
<td>A (0.0)</td>
</tr>
<tr>
<td>Southbound Shared Left/Right</td>
<td>D (30.1)</td>
<td>10'</td>
<td>D (29.4)</td>
</tr>
</tbody>
</table>

Delay presented in seconds per vehicle

¹There are three northbound approaches of Manchester Road and Ranchmoor Trail intersection: Phillips 66 West Entrance, Phillips 66 East Entrance, and Top-Tier Entrance. As all these entrances are very closely spaced and both Phillips 66 West Entrance and Top-Tier drive carried a nominal amount of traffic. Therefore, the volumes for these drives were combined and were analyzed as a single northbound approach.
Table 6 indicates that the critical movements during the three time periods considered would continue to operate comparable to the existing conditions, with the exception of the southbound approach of Mar-El Court to Manchester Road. During all three time periods considered, the level of service for the southbound approach would degrade, with both the midday peak hour for the weekday and Saturday degrading to a LOS E. While it’s debatable as to whether a LOS E during peak periods is acceptable for an unsignalized approach to Manchester Road, the increase in delay is attributable solely to the introduction of the Freddy’s site generated traffic and therefore, an attempt to mitigate it should be proposed.

Currently, the southbound approach of Mar-El Court to Manchester Road is comprised of a single lane that accommodates both left and right turning movements. The introduction of dedicated southbound turn lanes to serve left and right turn traffic separately is an appropriate improvement for consideration. To do so would allow left-turning traffic to wait for a gap in the traffic flows along Manchester Road without impeding right-turning traffic destined to the west. Table 7 compares the forecasted operating conditions at the intersection of Mar-El Court with Manchester Road with and without separate southbound turn lanes.

### Table 7: Forecasted Operating Conditions with and without Improvements

<table>
<thead>
<tr>
<th>Mar-El Court &amp; Manchester Road</th>
<th>Weekday Midday</th>
<th>Weekday PM</th>
<th>Saturday Midday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection/ Approach</td>
<td>LOS (Delay)</td>
<td>Max. Queue</td>
<td>LOS (Delay)</td>
</tr>
<tr>
<td>Shared Southbound Approach (Existing Condition)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Left Turn into Mar-El Court</td>
<td>B (14.6)</td>
<td>10’</td>
<td>C (15.8)</td>
</tr>
<tr>
<td>Southbound Shared Left/Right</td>
<td>E (35.8)</td>
<td>60’</td>
<td>D (34.1)</td>
</tr>
<tr>
<td>Separate Southbound Left &amp; Right Turn Lanes (Improved Condition)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound Left Turn into Mar-El Court</td>
<td>B (14.6)</td>
<td>10’</td>
<td>C (15.8)</td>
</tr>
<tr>
<td>Southbound Left Turn Lane</td>
<td>E (39.8)</td>
<td>30’</td>
<td>E (42.2)</td>
</tr>
<tr>
<td>Southbound Right Turn Lane</td>
<td>C (17.7)</td>
<td>16’</td>
<td>C (18.1)</td>
</tr>
</tbody>
</table>

Delay presented in seconds per vehicle.

Clearly, the introduction of the separate southbound left and right turn lanes on Mar-El Court’s approach to Manchester Road improves the anticipated operating conditions for this approach. While the left turning motorists would experience a delay comparable to improvements not being implemented, the right-turning motorists would experience an improved operating condition, resulting in acceptable levels of service. Furthermore, the maximum queue would be diminished for both movements. Therefore, it is recommended that Freddy’s Frozen Custard and Steakburgers Restaurant widen Mar-El Court to accomplish this improvement. Figure 9 illustrates the recommended improvement, assuming a 90 foot long storage lane.
In addition, there may be concerns raised by the residents along Mar-El Court and/or Lemar Drive that patrons of the Freddy’s Frozen Custard and Steakburgers restaurant would opt to turn right out of the site, travel northward on Mar-El Court to Lemar Drive and over to Flesher Drive. It is our opinion that this route is unattractive to patrons for two primary reasons:

- It is not evident that traveling north on Mar-El Court would provide alternative access to Manchester Road. Therefore, this route would only be attractive to residents along Mar-El Court, Lemar Drive, Lemar Park Drive, and/or Flesher Drive who would have awareness of the connection.
- To travel north on Mar-El Court to Lemar Drive to Flesher Drive as an alternate route is nearly 9/10 of a mile only to arrive at an unsignalized intersection with Manchester Road, as opposed to traveling 250 feet to the south on Mar-El Court to arrive at an unsignalized intersection with Manchester Road. In short, there is nothing to be gained in terms of saved travel time.
Consequently, minimal to no restaurant patrons are anticipated to travel Mar-El Court to the north of the site, unless they are residents of the immediate area. However, it is suggested that if the residents would like further assurance that traffic would not travel north on Mar-El Court, the City could consider requiring the construction of a raised island within the site's access drive onto Mar-El Court that would restrict the left turn out of the site, as shown in Figure 10. This physical improvement, coupled with the appropriate signage and enforcement, should discourage any patrons from traveling north on Mar-El Court.

Figure 10: Suggested Island for the Access Drive on Mar-El Court

Please be advised that the implementation of this suggestion would also restrict any residents of Mar-El Court, Lemar Drive, Lemar Park Drive, and/or Flesher Drive from exiting the site and using the local roads as a means of traveling home. Rather, they too would have to turn right out of the site, travel south to the unsignalized intersection with Manchester Road, turn left onto Manchester Road and then turn left again onto Flesher Road in order to travel home.
Internal Circulation Review

Lastly, the internal circulation within the site itself was reviewed and determined to be acceptable. The proposed restaurant would have a one-way, counter clockwise circulatory drive around the restaurant itself in order to accommodate the drive-thru operation. On the west side of the building, where this drive aisle would be adjacent to angled parking, the drive would be twenty (20) foot wide. On the east side of the building, this drive would be allocated so that there was a ten (10) foot drive-thru lane adjacent to a fifteen (15) foot bypass/drive lane (no parking is provided on the east side of the building). In addition, accessible parking would be provided adjacent to the restaurant and accessed via the one-way drive. The remainder of the site's parking would be located northwest of the restaurant. Twenty four (24) foot wide drive aisles, coupled with nine (9) foot by nineteen (19) foot parking, is to be provided and would result in a sixty two (62) foot module, which is adequate for circulation.

The drive-thru would consist of two order stations and one pickup/payment window. To determine the queue size associated with the restaurant’s drive-thru operations, observations were made during the three critical time periods at the existing Cottleville Freddy's Frozen Custard & Steakburgers. During these periods a maximum of two vehicles were observed backed up behind the order station, due in part to a backup from the pickup/payment window (it should be noted that although the Cottleville location had two order stations, only one was in operation during all three time periods observations were conducted, thereby presenting a worst case scenario). As proposed, the site would be able to accommodate a total of four to five vehicles back from the pickup/payment window, as well as two vehicles back from both order stations. Therefore, there should be more than adequate queueing for the drive-thru at the proposed Ellisville location.

CONCLUSIONS

Lochmueller Group has completed the preceding study to address the traffic impacts associated with the proposed Freddy’s Frozen Custard & Steakburgers at Manchester Road and Mar-El Court in Ellisville, Missouri. The evaluation resulted in the following conclusions:

- The proposed development would generate approximately 98 new vehicle trips during the weekday midday peak hour, 75 new trips during the weekday pm peak hour and 66 new trips in the Saturday midday peak hour. There will also be approximately 34 and 26 trips in the midday and afternoon peak hours of the weekday, respectively, that were already on the road network that will now patronize the new restaurant (pass-by traffic). Similarly, 22 trips would be drawn to the new restaurant from Manchester Road during the Saturday midday peak hour.

- During the three time periods considered, the critical forecasted traffic movements at the study's unsignalized intersections would continue to operate comparable to the existing conditions, with the exception of the southbound approach of Mar-El Court to Manchester Road. During all three time periods, the level of service for the southbound approach would degrade one level, with both the midday peak hour for the weekday and Saturday degrading to a LOS E. The increase in delay is attributable solely to the introduction of the Freddy's site generated traffic and therefore, mitigation was proposed.
The construction of separate southbound left and right turn lanes on Mar-El Court’s approach to Manchester Road improves the anticipated operating conditions for this approach. While the left turning motorists would experience a delay comparable to improvements not being implemented, the right-turning motorists would experience an improved operating condition, resulting in acceptable levels of service (LOS C). Furthermore, the maximum queue would be diminished for both movements. Therefore, it is recommended that Freddy’s Frozen Custard and Steakburgers Restaurant widen Mar-El Court to provide a dedicated southbound right-turn lane of 90 feet in length (Figure 9).

It is suggested that if the residents of Mar-El Court would like assurance that traffic would not travel north on Mar-El Court, the City could consider requiring the construction of a raised island within the site’s access drive onto Mar-El Court that would restrict the left turn out of the site (Figure 10), appropriate signage and enforcement.

We trust that this traffic study adequately describes the forecasted traffic conditions that should be expected in the vicinity of the proposed Freddy’s Frozen Custard & Steakburgers restaurant in Ellisville, Missouri. Please contact me at (314) 621-3395 if you have any questions or comments concerning this report.

Sincerely,

Lochmueller Group, Inc.

Julie M. Nolfo, PE, PTOE
Project Liaison
November 2, 2017

Ms. Julie Nolfo, P.E, PTOE
Project Liaison
Lochmueller Group
411 N. 10th St., Suite 200
St. Louis, MO 63101
<<Transmitted via e-mail>>

Dear Ms. Nolfo:

MoDOT Traffic has reviewed Lochmueller’s traffic study for the proposed Freddy’s Frozen Custard on Manchester Rd. (Missouri Route 100) at Mar-El Ct. in Ellisville, and offers the following comments.

- Page 2 – There should be a space or a hyphen to separate ‘development generated’ in the bottom paragraph.
- Page 3 – There is a reference to Figure 1 which may need to be to Figure 3 instead.
- Page 4 – There is a second Figure 1 which needs to be relabeled as Figure 3.
- Page 5 – There is a statement ‘Error! Reference source not found..’ that does not make sense.
- Page 19 – The first bullet point has ‘in the’ listed twice in a row.

The forecasted operating conditions for the southbound approach at Manchester Rd. and Mar-El Ct. actually degrade two (2) levels of service from C to E during the weekday midday peak, which is projected to be the biggest of the three peak periods. Based on this projection, MoDOT will also ask that the southbound dedicated right turn lane be installed to mitigate the projected increase in traffic.

Thank you for the opportunity to review the traffic study and associated models. If you have any questions regarding our comments, please contact me at 314-877-0135.

Sincerely,

Jeff Baird, P.E.
Senior Traffic Studies Specialist
Southwest St. Louis County Area Traffic

Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.
www.modot.org
<p>| MO 100 WEST #Veh Involving Light Condition Road Condition TotalsKilled |
|-----------------|------------------|----------------|-----------------|
| 07. MV in Transport 01. Daylight 01. Dry | | 0/0 |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Prov Cont葛Cl | 09. Following Too | Close | 12. Not Obscured | None |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Prov Cont葛Cl | 02. None | | 17. Not Obscured | None |
| MO 100 WEST #Veh Involving Light Condition Road Condition TotalsKilled |
|-----------------|------------------|----------------|-----------------|
| 07. MV in Transport 02. Dark with Street Lig 01. Dry | | 1/0 |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| MO 100 EAST #Veh Involving Light Condition Road Condition TotalsKilled |
|-----------------|------------------|----------------|-----------------|
| 07. MV in Transport 01. Daylight 01. Dry | | 0/0 |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Prov Cont葛Cl | 21. | | 12. Not Obscured | None |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Prov Cont葛Cl | 22. None | | 12. Not Obscured | None |
| MO 340 WEST #Veh Involving Light Condition Road Condition TotalsKilled |
|-----------------|------------------|----------------|-----------------|
| 07. MV in Transport 02. Dark with Street Lig 01. Dry | | 0/0 |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Prov Cont葛Cl | 09. Following Too | Close | 12. Not Obscured | None |
| | Veh Actions | | Vision Obsc | Traffic Cntl |
| | Prov Cont葛Cl | 22. None | | 10. Not Obscured | None |</p>
<table>
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<tr>
<th>Date</th>
<th>Location</th>
<th>#Veh Involving</th>
<th>Light Condition</th>
<th>Road Condition</th>
<th>#Inj/Killed</th>
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<td>17-030517</td>
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<td>MO 110</td>
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<td>Daylight</td>
<td>Dry</td>
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<td>05/09/2017</td>
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<td>No. 100</td>
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<td>Involving</td>
<td>Light Condition</td>
<td>Road Condition</td>
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</tr>
<tr>
<td>CST</td>
<td>OAK HILLER</td>
<td>2</td>
<td>07. MV In Transport</td>
<td>Daylight</td>
<td>Dry</td>
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<td>05/18/2017</td>
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<tr>
<td>CST</td>
<td>OAK HILLER</td>
<td>2</td>
<td>07. MV In Transport</td>
<td>Daylight</td>
<td>Dry</td>
</tr>
<tr>
<td>17-00057</td>
<td>05/18/2017</td>
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</tr>
<tr>
<td>CST</td>
<td>MAR EL COURT</td>
<td>2</td>
<td>07. MV In Transport</td>
<td>Daylight</td>
<td>Dry</td>
</tr>
<tr>
<td>17-00058</td>
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<td>RENKE RD</td>
<td>2</td>
<td>07. MV In Transport</td>
<td>Daylight</td>
<td>Dry</td>
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<td>17-00058</td>
<td>05/23/2017</td>
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<td>CLARKSON RD</td>
<td>2</td>
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<td>Daylight</td>
<td>Dry</td>
</tr>
<tr>
<td>17-00057</td>
<td>05/18/2017</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>CST</td>
<td>CLARKSON RD</td>
<td>2</td>
<td>07. MV In Transport</td>
<td>Daylight</td>
<td>Dry</td>
</tr>
<tr>
<td>17-00056</td>
<td>09/25/2017</td>
<td></td>
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</tbody>
</table>

**Legend:**
- **Veh Actions:**
  - 01. Going Straight
  - 05. Making Left Turn
  - 06. Making Right Turn
  - 09. Stopping/Standing
  - 34. Collision Inv MV in Transport

- **Light Condition:**
  - Daylight
  - Dark

- **Road Condition:**
  - Slight
  - Dry

- **Other:**
  - Natural
  - Obstructed
  - Traffic Ctrl
  - Other

- **Ht/Killed:**
  - 0/0
  - 1/0
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<thead>
<tr>
<th>MO 340</th>
<th>WEST</th>
<th>#Veh</th>
<th>Involving</th>
<th>Light Condition</th>
<th>Road Condition</th>
<th>#Injured/Killed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>17-000751</td>
<td>MARSH AVE</td>
<td>2</td>
<td>07, MV in Transport</td>
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<table>
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<th>EAST</th>
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<th>Light Condition</th>
<th>Road Condition</th>
<th>#Injured/Killed</th>
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</tr>
<tr>
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<td>07, MV in Transport</td>
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</tbody>
</table>

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<th>#Veh</th>
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<th>Light Condition</th>
<th>Road Condition</th>
<th>#Injured/Killed</th>
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</thead>
<tbody>
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<td>2</td>
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<table>
<thead>
<tr>
<th>MO 510</th>
<th>WEST</th>
<th>#Veh</th>
<th>Involving</th>
<th>Light Condition</th>
<th>Road Condition</th>
<th>#Injured/Killed</th>
</tr>
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<th>Road Condition</th>
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### Results of MO 100 EAST

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<tbody>
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<td>22. None</td>
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<tr>
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### Results of MO 109 EAST

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<td>34. Collision Inv. MV in Transport</td>
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<td></td>
<td>34. Collision Inv. MV in Transport</td>
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</tr>
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<tr>
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<td>Distraught/Inattentive</td>
<td></td>
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</tr>
<tr>
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<td>07. Yield Sign</td>
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### CST CLARKSON CR

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### CST MO 100 WEST

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<td>Light Condition</td>
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<td>#Inj/Killed</td>
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</tbody>
</table>
A Report Prepared for

Greg Sofio
Anvil Development LLC
1776 Montano Rd NW
Albuquerque, NM 87107

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Whole Body Care/Single-Family Residence
15627 Manchester Rd. and 16 Mar El Ct.
Ellisville, MO 63011

Prepared by

Herlacher Angleton Associates
7626 Briarwood Lane
Barnhart, MO 63012

August 12, 2017
7.0 EVALUATION

7.1 Findings

This Phase I Environmental Site Assessment has been performed in conformance with the scope and limitations of ASTM Practice E 1527-13. This assessment has identified the following:

- A review of publicly available, practically reviewable documentation, interviews with knowledgeable individuals, and visual site reconnaissance, did not identify recognized environmental conditions for the subject site.
7.2 Opinions and Recommendations

Based on the observations made during the site inspection and the documentation reviewed to determine historic usage, no recognized environmental conditions were identified associated with the subject site.

Based on the findings of this ESA, HAA provides the following recommendations:

- This report, and its Attachments and or Appendices, should be read in their entirety to fully understand the environmental condition for the subject site.

- Prior to renovation/demolition of any of the building materials, an inspection should be conducted by a Missouri licensed asbestos inspector and lead inspector.

7.3 Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527 of 15627 Manchester Rd. and 16 Mar El Ct. Any exceptions to, or deletions from, this practice are described in Sections 2.4 and 7.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.

7.4 Data Gaps/Deviations from Standard

HAA has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-13 on Whole Body Care/Single-Family Residence, St. Louis County Locator Numbers 23T640495 and 23T640451.