



**VILLAGE OF BARTLETT
PLAN COMMISSION
AGENDA**

**BARTLETT MUNICIPAL CENTER
228 S. MAIN STREET
March 14, 2019
7:00 P.M.**

- I. Roll Call
- II. Approval of the February 14, 2019 meeting minutes
- III. **(#18-24) Stearns and Munger**
Preliminary/Final Plat of Resubdivision,
Rezoning from the OR (Office Research) and SR-5 (Suburban Residence)
Zoning Districts to I-2 EDA (General Industry Economic Development Area)
Zoning District,
Site Plan Review for Lots 1 and 2,
Special Use Permit to fill two (2) wetlands
PUBLIC HEARING
- IV. **(#19-04) Streets of Bartlett**
Third Site Plan/PUD Amendment
Special Use Permits:
 - a) Package liquor sales,
 - b) Serving alcohol, including wine tastings,
 - c) Recreation and amusement establishments,
 - d) Live entertainment,
 - e) Banquet hall facility,
 - f) Outdoor seating, and
 - g) Pet daycare (kennel)**PUBLIC HEARING**
- V. Old Business/New Business
- VI. Adjournment



Village of Bartlett
Plan Commission Meeting Minutes
February 14, 2019

J. Lemberg called the meeting to order at 7:00 pm.

Roll Call

Present: J. Lemberg, J. Miaso, J. Allen, M. Hopkins, A. Hopkins, D. Negele and D. Gunsteen
Absent: T. Ridenour, J. Kallas
Also Present: A. Zubko, Village Planner

Approval of Minutes

A motion was made to approve the minutes of the December 13, 2018 meeting.

Motioned by: A. Hopkins
Seconded by J. Miaso

Roll Call

Ayes: J. Lemberg, J. Miaso, J. Allen, M. Hopkins and A. Hopkins
Abstain: D. Negele, D. Gunsteen
Nays: None
The motion carried.

J. Lemberg introduced the newest Committee member, **Dan Gunsteen**.

D. Gunsteen stated he served for a year and half on the EDC Board. He was glad to be on the Plan Commission since he has a background in development and construction. Bartlett has seen a lot of growth in the last several years and believes he will bring a lot to this Board in both his knowledge in construction and development. **D. Gunsteen** stated he has sat on both sides of these meetings and he knows what the petitioner is looking for, and now what the Village is looking for. All successful businesses have to have a little give and take when they approach the Boards. He stated he was very excited to be here and thanked Mayor Wallace for this appointment.



Village of Bartlett
Plan Commission Meeting Minutes
February 14, 2019

(#18-22) Moureau's Crest View Addition to Bartlett

Preliminary/Final Plat of Subdivision of Lot 72

Petitioner: Ahmed Motiwala

A. Zubko stated this property is located at the northwest corner of Chase Avenue & North Avenue. The property is zoned SR-4 which is Suburban Residence District. The Petitioner is requesting a Preliminary/Final Plat of Resubdivision for Lot 72 of the Moureau's Crest View Addition to Bartlett. The 13,878 square foot (0.318 acre) vacant parcel would be resubdivided to create two single family lots.

Lot 1 consisting of 6,100 square feet and Lot 2 consisting of 7,700 square feet would both meet the minimum lot standards for the SR-4 Zoning District; including the 60 ft. minimum lot width and the 6,000 sq. ft. minimum lot size requirements. Lot 1 would have access off of E. North Avenue and Lot 2 would have access off North Chase Avenue.

The Preliminary/Final Plat of Resubdivision includes public utility and drainage easements along all property lines in accordance with the Subdivision Ordinance.

Since the subject property is less than 3 acres, no detention is required for this subdivision. As required in the Subdivision Ordinance, the Petitioner will plant parkway trees along the existing rights-of-way spaced not less than forty feet (40') nor more than sixty feet (60') apart. This will be installed once the homes are actually built.

There are existing concrete sidewalks along North Chase Avenue and E. North Avenue that are currently deteriorating. As part of the subdivision requirements, these sidewalks will be removed and replaced by the petitioner.

The Petitioner is also requesting two variations:

- a) A 4 foot reduction from the required 45 foot rear yard on Lot 1; and
- b) A 9 foot reduction from the required 45 foot rear yard on Lot 2.

The Variations will be discussed by the Zoning Board of Appeals at their meeting on March 7, 2019.

The Engineering Plans are currently being reviewed.

New addresses will be assigned to each of the lots if the subdivision is approved.

The Staff recommends approval of the petitioner's request subject to the following conditions:

Staff approval of the Engineering Plans;

A public improvements completion agreement (PICA) must be submitted and approved by the Village Board; and

Building permits shall be required for all construction activities.



**Village of Bartlett
Plan Commission Meeting Minutes
February 14, 2019**

J. Lemberg asked the Petitioner if there was anything he wanted to add to **A. Zubko's** comments. **Mr. Motiwala** stated no.

J. Lemberg asked **A. Zubko** about the detention and storm water comments in the packet that states to "meet the DuPage County Stormwater Ordinance regulations". **J. Lemberg** stated that this property is in Cook County. **A. Zubko** replied yes, all of Bartlett as a whole, follows the DuPage County Stormwater Ordinance regulations, no matter what county you are in. This is so the whole Village follows the same regulations. **J. Lemberg** asked if Bartlett doesn't like Cook County Codes. **A. Zubko** stated she didn't believe Cook County has any codes.

J. Lemberg asked if anyone on the Commission had any other comments or questions. **A. Hopkins** asked for some clarification regarding the house that is already built on the corner of Marion, if they wanted to build a fence in their back yard, wouldn't they need a variance because it's a corner lot. **A. Zubko** stated they would still need to meet the setback regulations, so it could only be 25 feet off of North Ave. The only issue would be if they wanted a four foot fence closer to North Avenue.

J. Lemberg asked if anyone on the Commission had any other comments or questions. **J. Allen** stated the minimum size lot is 6000 sq. ft., this looks like they will be very close to their neighbor on Chase. **A. Zubko** stated that property owner actually owned this lot. **J. Miaso** asked **Mr. Motiwala** the proposed value of the homes being built. **Mr. Motiwala** stated the house value will be around \$300,000. **D. Negele** asked if the homes will be single or two story houses with basements. **Mr. Motiwala** stated without basements.

J. Lemberg then asked for a motion to approve the Petitioner's request for the Preliminary/Final Plat of Subdivision of Lot 72, subject to the conditions.

Motioned by: J. Miaso
Seconded by: D. Negele

Roll Call

Ayes: J. Allen, D. Negele, M. Hopkins, A. Hopkins, J. Miaso, J. Lemberg and D. Gunsteen
Nays: None

The motion carried.



**Village of Bartlett
Plan Commission Meeting Minutes
February 14, 2019**

Old Business/ New Business

All members of the Plan Commission welcomed **Dan Gunsteen** to the Board.

A. Zubko stated there will be a meeting in March with two items to discuss.

J. Lemberg then asked for a motion to adjourn.

Motioned by: D. Negele

Seconded by: J. Miaso

All in favor.

The meeting was adjourned at 7:11P.M.

COMMUNITY DEVELOPMENT MEMORANDUM

19-25

DATE: March 8, 2019
TO: The Chairman and Members of the Plan Commission
FROM: Kristy Stone, Assistant Planner *KJ*
RE: **(#18-24) Stearns and Munger Subdivision**

PETITIONER

Aaron Martell on behalf of Logistics Property Company

SUBJECT SITE

Northeast corner of Stearns and Munger Roads

REQUESTS

Preliminary/Final Plat of Subdivision,

Rezoning from the OR (Office Research) and SR-5 (Suburban Residence) Zoning Districts to I-2 EDA (General Industry Economic Development Area) Zoning District,

Site Plan Review for Lots 1 and 2,

Special Use Permit to fill two (2) wetlands

SURROUNDING LAND USES

| | <u>Land Use</u> | <u>Comprehensive Plan</u> | <u>Zoning</u> |
|---------------------|-----------------------------|--------------------------------------|----------------------|
| Subject Site | Vacant | Office/Business Park | OR & SR-5 |
| North | Industrial | Mixed Use Business Park | I-2 EDA |
| South | Open Space | Open Space | ER-2 & R-3* |
| East | Residential & Open Space | Suburban Residential & Open Space | SR-2 PUD |
| West | Industrial | Mixed Use Business Park | I-2 EDA |

**Unincorporated DuPage County*

ZONING HISTORY

Through the Staff's research and as shown on the Village's Annexation Map, this parcel was annexed into the Village in 1966 by Ordinance 1966-13 and was automatically zoned R-1 Single Family upon annexation. Ordinance 67-18 rezoned the entire property to the M-Manufacturing Zoning District. During the comprehensive rezoning of the Village in

1978, the property was rezoned to the OR Office Research and SR-5 Suburban Residence (Multi-Family) Zoning District.

DISCUSSION

1. The Petitioner is requesting a **Preliminary/Final Plat of Subdivision** to subdivide the 27.8 acre site at the northeast corner of Stearns and Munger Road into three lots. Lot 1 (11.8 acres) and Lot 2 (11.7 acres) would each include a 207,000 square foot warehouse building with Lot 3 (4.3 acres) proposed for detention.
2. The Petitioner is requesting to **rezone** the property from the OR (Office Research) and SR-5 (Suburban Residential) Zoning Districts to the I-2 EDA (General Industry Economic Development Area) Zoning District. This rezoning request is consistent with the Future Land Use Map and the West Bartlett Road Corridor Plan which designates these parcels as Mixed Use Business Park.
3. The Petitioner is also requesting a **Site Plan Review** for Lots 1 and 2. The proposed 207,000 square foot warehouse buildings, located on each lot, would be oriented towards Stearns Road, with two (2) office areas (4,900 sq. ft. and 4,617 sq. ft.) proposed within each building.
4. The proposed buildings would be painted gray with blue accents and constructed with pre-cast concrete wall panels. The maximum building height would be 41' 2", meeting the Zoning Code requirement of 45'. The buildings will be mirror images of each other.
5. The Site Plans depict passenger vehicular parking along the south and west property lines for Lot 1 and the south and east property lines for Lot 2. Loading docks for both lots would be located along the north property line. Two (2) drive in doors and 28 exterior loading docks are shown for each of the proposed buildings.
6. Two curb cuts are proposed along Stearns Road and one curb cut is proposed on Munger Road that would provide access to the sites. The eastern curb cut on Stearns Road would be a right-in/right-out for passenger vehicles only. The western curb cut on Stearns Road will provide full access for both passenger vehicles and trucks and the curb cut on Munger Road will be a right-in, right-out and left-out for both passenger vehicles and trucks. Both Munger and Stearns Roads are under the jurisdiction of the DuPage County Highway Department. At this time, Staff has not received comments from DuPage County. No curb cuts are proposed on Lynnfield Lane. The proposed curb cut on Munger Road is approximately 460 feet north of the Stearns Road intersection. The full access curb cut on Stearns Rd is approximately 760 feet east of Munger Rd. The right-

in/right out curb cut on Stearns Road is approximately 280 feet west of Lynnfield Lane and 660 feet east of the proposed full access point.

7. Retaining walls are proposed along the north property line. These walls would have a maximum height of eight (8) feet. The properties to the north of this site are lower in elevation and have an approximately 10-foot high berm between the foundation of the existing buildings to the property line shared with this site.
8. Cross-access easements are shown on the Plat of Subdivision to allow trucks to access both sites from the Munger Road and the western Stearns Road curb cuts as well as to allow all vehicles access between the sites.
9. The Site Plan for Lot 1 identifies a total of 222 parking spaces, including seven (7) handicapped accessible spaces. The Zoning Ordinance requires 234 parking spaces. The petitioner is requesting a Variation to reduce the required number of parking spaces for Lot 1 from 234 to 222 (12 spaces).

(The Variation request was discussed by the Zoning Board of Appeals at their meeting on March 7, 2019 and was recommended for approval.)

10. The Site Plan for Lot 2 identifies a total of 246 parking spaces, including seven (7) handicapped accessible spaces which exceeds the Zoning Ordinance requirement of 234 parking spaces. Turn-around spaces are provided for the easternmost parking lot.
11. The total amount of parking (468 spaces) provided on the two sites meets the Zoning Ordinance requirement of 468 spaces. A shared parking agreement will be recorded between Lots 1 and 2.
12. The Petitioner is also requesting a **Special Use Permit** to fill a 0.02-acre wetland and a 0.05-acre wetland on the site. Both wetlands are considered isolated and are currently being reviewed by our Wetland Consultant and DuPage County.
13. A modification from the Subdivision Ordinance is also being requested to waive the requirement of installing sidewalks along Munger Road and Lynnfield Lane. However, the petitioner has agreed to install an off-street 10' wide bike path in the Stearns Road right-of-way that would connect to the existing bike path segment at the Munger Road intersection to the west and the existing sidewalk east of this property.
14. Lot 3 would consist of a native vegetated wetland bottom detention basin. The Stormwater Management Report and Engineering Plans are currently being reviewed by the Village Engineer and Stormwater Consultant.
15. The revised Traffic Impact Analysis was submitted on February 4, 2019. The proposed roadway improvements include opening the existing median on

Munger Road to allow left turn movements out of the site, prohibiting left turns onto Munger Road during weekday peak hours and adding an eastbound left turn lane at the western full access point on Stearns Road. The Village's Traffic Engineer reviewed the plans and the documentation provided adequately addressed any comments pertaining to traffic, parking and on-site circulation.

16. The Landscape, Photometric and Engineering Plans are currently under Staff Review.

RECOMMENDATION

1. The Staff recommends **approval** of the Petitioner's requests subject to the following conditions and Findings of Fact:
 - A. Building permits shall be required for all construction activities;
 - B. Staff approval of the Landscape and Photometric Plans;
 - C. Village Engineer approval of the Engineering and Stormwater Plans;
 - D. A Public Improvements Completion Agreement (PICA) must be submitted and approved by the Village Board;
 - E. If landscaping cannot be installed at the time of construction, a landscape estimate shall be submitted to Community Development for review and approval by the Village Arborist and a bond posted in the approved amount for its future installation;
 - F. Landscaping must be installed within one year of the issuance of a building permit;
 - G. A shared parking agreement shall be submitted for review and approval. This agreement shall be recorded;
 - H. DuPage County Highway Department approval of all curbcuts, roadway improvements including striping on Stearns Rd and restricted movements on Munger Rd;
 - I. Approval by DuPage County relative to the wetlands;
 - J. Signage shall be reviews and approved separately by the Community Development Department in accordance with the Sign Ordinance;
 - K. Findings of Fact (Site Plan):
 - i. That the proposed industrial buildings are permitted uses in the I-2 EDA Zoning District;
 - ii. That the proposed buildings, off-street parking, access, lighting, landscaping, and drainage is compatible with adjacent land uses;
 - iii. That the vehicular ingress and egress to and from the site and circulation within the site provides for safe, efficient and convenient movement of traffic not only within the site but on adjacent roadways as well;
 - iv. That the site plan provides for the safe movement of pedestrians within the site;
 - v. That there is a sufficient mixture of grass trees and shrubs within the interior and perimeter (including public right-of-way) of the site so that the proposed development will be in harmony with adjacent

- land uses. Any part of the site plan area not used for buildings, structures, parking or access ways shall be landscaped with a mixture of grass, trees and shrubs; (All landscape improvements shall be in compliance with Chapter 10-11A, Landscape Requirements.)
- vi. That all outdoor storage areas are screened and are in accordance with standards specified by this Ordinance.
- L. Findings of Fact (Special Use Permit-wetlands)
- i. That the granting of the Special Use is in harmony with the general purpose and intent of this Ordinance, and will not be injurious to the neighborhood, detrimental to the public welfare, or in conflict with the Village's Comprehensive Plan and Official Map for development;
 - ii. That the granting of the Special Use will not:
 - a. Diminish the value of land and building in its neighborhood;
 - b. Increase the potential for flood damages to adjacent property;
 - c. Incur additional public expenses for flood protection, rescue or relief;
 - d. Increase the hazard from other dangers to said property
 - e. Otherwise impair the public health, safety, comfort or general welfare of the inhabitants of the Village, nor will it otherwise create a nuisance.
 - iii. The Special Use shall meet any additional criteria outlined in Ordinance 88-7, the Village of Bartlett Floodplain and Wetland Ordinance.

Background information is attached for your review and consideration.

kms/attachments

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1 N. Wacker
Suite 1925
Chicago, IL 60606

December 21, 2018

Village of Bartlett President
Village of Bartlett Board of Trustees
228 S. Main Street
Bartlett, IL 60103

Dear Village of Bartlett President and Village of Bartlett Board of Trustees:

Logistics Property Company has entered into a contract to purchase the property located on the 27.87 acres at the northeast corner of Munger and Stearns Road (commonly referred to as the Cronin Parcel). We are requesting the property be rezoned from OR (Office/Research District) and SR-5 (Suburban Residence – Multiple Family – Low Density) to I-2 EDA (General Industry Economic Development Area District).

The proposed development consists of two (2) 207,000 square foot industrial/logistics facilities along with surface parking lots. We request that you approve the development application as submitted for the proposed development.

Please feel free to reach out to us with any questions you have regarding the development application.

Sincerely,

Logistics Property Company, LLC

A handwritten signature in blue ink that reads "Aaron Martell". The signature is written in a cursive, flowing style.

Aaron Martell
Executive Vice President



VILLAGE OF BARTLETT DEVELOPMENT APPLICATION

For Office Use Only
Case # **#2018-24**
**RECEIVED
COMMUNITY DEVELOPMENT
DEC 21 2018
VILLAGE OF
BARTLETT**

PROJECT NAME Stearns and Munger

PETITIONER INFORMATION (PRIMARY CONTACT)

Name: Logistics Property Company

Street Address: One North Wacker Drive, Suite 1925

City, State: Chicago, IL

Zip Code: 60606

Email Address: [REDACTED]

Phone Number: [REDACTED]

Preferred Method to be contacted: Email

PROPERTY OWNER INFORMATION

Name: Jana Cronin/Bank Trust #239

Street Address: 516 Renn Ct.

City, State: Wheaton, IL.

Zip Code: 60184

Phone Number: [REDACTED]

OWNER'S SIGNATURE: See attached Letter **Date:** _____

(OWNER'S SIGNATURE IS REQUIRED or A LETTER AUTHORIZING THE PETITION SUBMITTAL.)

ACTION REQUESTED (Please check all that apply)

- Annexion
 - PUD (preliminary)
 - PUD (final)
 - Subdivision (preliminary)
 - Subdivision (final)
 - Site Plan (please describe use: commercial, industrial, square footage):
Two 207,000 SF office/warehouse buildings with truck docks and parking.
 - Unified Business Center Sign Plan
 - Other (please describe) _____
- Text Amendment
 - Rezoning **OR** _____ to I-2 EDA
 - Special Use for: wetland
 - Variation: reduce parking

SIGN PLAN REQUIRED? No

(Note: A Unified Business Center Sign Plan is required for four or more individual offices or businesses sharing a common building entrance or private parking lot.)

PROPERTY INFORMATION

Common Address/General Location of Property: NEC of Stearns Rd. and Munger Rd.

Property Index Number ("Tax PIN"/"Parcel ID"): _____

Zoning: Existing: OR
(Refer to Official Zoning Map)

Land Use: Existing: Vacant

Proposed: I-2 EDA

Proposed: Mixed Use Business

Comprehensive Plan Designation for this Property: Mixed use Business Park
(Refer to Future Land Use Map)

Acreage: 27.87

For PUD's and Subdivisions:

No. of Lots/Units: _____

Minimum Lot: Area _____ Width _____ Depth _____

Average Lot: Area _____ Width _____ Depth _____

APPLICANT'S EXPERTS (If applicable, including name, address, phone and email)

Attorney _____

Engineer V3 Companies, Ltd.
7325 Janes Ave. Woodridge, IL 60517
(630) 724-9200

Other Harris Architects, Inc. - Kasey Kluxdal
4801 Emerson Ave. Suite 210 Palatine, IL 60067

FINDINGS OF FACT FOR SITE PLANS

Both the Plan Commission and Village Board must decide if the requested Site Plan meets the standards established by the Village of Bartlett Zoning Ordinance.

The Plan Commission shall make findings based upon evidence presented on the following standards: **(Please respond to each of these standards in writing below as it relates to your case. It is important that you write legibly or type your responses as this application will be included with the staff report for the Plan Commission and Village Board to review.)**

1. The proposed use is a permitted use in the district in which the property is located.

Yes, the proposed warehouse/office buildings are a permitted use in the district in which the property is located as shown on the future land use map.

2. The proposed arrangement of buildings, off-street parking, access, lighting, landscaping, and drainage is compatible with adjacent land uses.

The applicant will provide high quality buildings, with attractive architecture and landscaping. The accesses, off-street parking, lighting, landscaping, and site drainage have been designed to meet all applicable codes.

3. The vehicular ingress and egress to and from the site and circulation within the site provides for safe, efficient and convenient movement of traffic not only within the site but on adjacent roadways as well.

The ingress and egress to and from the site will provide for the safe, efficient, and convenient movement of traffic.

4. The site plan provides for the safe movement of pedestrians within the site.

The site plan provides for the safe movement of pedestrians within the site consistent with the adjacent industrial properties within the Brewster Creek Business Park. Pedestrian movement within the site is separated from truck traffic.

5. There is sufficient mixture of grass, trees and shrubs within the interior and perimeter (including public right-of-way) of the site so that the proposed development will be in harmony with adjacent land uses and will provide a pleasing appearance to the public. Any part of the site plan area not used for buildings, structures, parking or accessways shall be landscaped with a mixture of grass, trees and shrubs. (All landscape improvements shall be in compliance with Chapter 10-11A, Landscape Requirements)

The landscape plan is in compliance with "Chapter 10-11A, Landscape Requirements", and is consistent with the adjacent industrial properties within the Brewster Creek Business Park. The pond will be a native vegetated wetland bottom basin.

6. All outdoor storage areas are screened and are in accordance with standards specified by this Ordinance.

All outdoor storage areas are screened to conform to the Ordinance.

FINDINGS OF FACT FOR SPECIAL USES

Both the Plan Commission and Village Board must decide if the requested Special Use meets the standards established by the Village of Bartlett Zoning Ordinance.

The Plan Commission shall make findings based upon evidence presented on the following standards: **(Please respond to each of these standards in writing below as it relates to your case. It is important that you write legibly or type your responses as this application will be included with the staff report for the Plan Commission and Village Board to review.)**

1. That the proposed use at that particular location requested is necessary or desirable to provide a service or a facility which is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.

The special use is related to the filling of the wetland. The wetland area is being permitted by DuPage County in accordance with the ordinance. The proposed warehouse/office buildings are a use consistent with the surrounding area and the adjacent Brewster Creek Business Park.

2. That such use will not under the circumstances of the particular case be detrimental to the health, safety, morals, or general welfare of persons residing or working in the vicinity or be injurious to property value or improvement in the vicinity.

The proposed use will not be detrimental as the reason for the special use is in relation to the wetland. The wetland area is being permitted by DuPage County in accordance with the ordinance.

3. That the special use shall conform to the regulations and conditions specified in this Title for such use and with the stipulation and conditions made a part of the authorization granted by the Village Board of Trustees.

The special use for filling the wetland will conform to all regulations and conditions.

FINDINGS OF FACT FOR VARIATIONS

Both the Zoning Board of Appeals and the Village Board must decide if the requested variation is in harmony with the general purpose and intent of the Zoning Ordinance and if there is a practical difficulty or hardship in carrying out the strict letter of the regulations of the Zoning Ordinance.

The Zoning Board of Appeals shall make findings based upon evidence presented on the following standards: **(Please respond to each of these standards in writing below as it relates to your case. It is important that you write legibly or type your responses as this application will be included with the staff report for the ZBA and Village Board to review.)**

1. That the particular physical surroundings, shape or topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out.

The site has approximately 10' of fall from the Munger entrance to the Stearns entrance. This creates grading challenges for the site based upon the large warehouse building use. However additional parking has been provided on lot 2 to allow for the entire site to meet the requirement.

2. That conditions upon which the petition for a variation is based are unique to the property for which the variation is sought and are not applicable, generally, to other property within the same zoning classifications.

Additional parking has been provided on lot 2 to allow the entire site to meet the parking requirements.

3. That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

We have chosen to build all the stalls in an effort to meet code instead of land banking the additional stalls on Lot 2. A parking agreement will be prepared to ensure both lots have sufficient parking.

4. That the alleged difficulty or hardship is caused by the provisions of this Title and has not been created by any person presently having an interest in the property.

The parking requirements for the I-2 EDA zoning district set forth by the provisions of this Title are the cause of the alleged difficulty.

5. That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhoods in which the property is located.

The granting of the requested parking variation will not be detrimental to the public welfare nor will it be injurious to other property or improvements in neighboring area. The overall site meets the parking requirements and a parking agreement will be in place to ensure enough parking is available.

6. That the proposed variation will not impair an adequate supply of light and air to adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety, or substantially diminish or impair property values within the adjacent neighborhood.

The proposed parking variation will have no negative impacts on any of the above listed items.

7. That the granting of the variance requested will not confer on the applicant any special privilege that is denied by the provisions of this Title to other lands, structures or buildings in the same district.

The granting of the proposed parking variance will not confer the application any special privilege that is denied by the provisions of this Title to other lands, structures, or buildings in the same district.

ACKNOWLEDGEMENT

I understand that by signing this form, that the property in question may be visited by village staff and Board/Commission members throughout the petition process and that the petitioner listed above will be the primary contact for all correspondence issued by the village.

I certify that the information and exhibits submitted are true and correct to the best of my knowledge and that I am to file this application and act on behalf of the above signatures.

Any late, incomplete or non-conforming application submittal will not be processed until ALL materials and fees have been submitted.

SIGNATURE OF PETITIONER: Caron Martell

PRINT NAME: Aaron Martell

DATE: 2/14/19

REIMBURSEMENT OF CONSULTANT FEES AGREEMENT

The undersigned hereby acknowledges his/her obligation to reimburse the Village of Bartlett for all necessary and reasonable expenses incurred by the Village for review and processing of the application. Further, the undersigned acknowledges that he/she understands that these expenses will be billed on an ongoing basis as they are incurred and will be due within thirty days. All reviews of the petition will be discontinued if the expenses have not been paid within that period. Such expenses may include, but are not limited to: attorney's fees, engineer fees, public advertising expenses, and recording fees. Please complete the information below and sign.

NAME OF PERSON TO BE BILLED: Aaron Martell

ADDRESS: One North Wacker Drive st 1925
Chicago IL 60606

PHONE NUMBER: 708-667-6908

EMAIL: _____

SIGNATURE: Caron Martell

DATE: 2/14/19

PROPERTY OWNER REPRESENTATION FORM

November 13, 2018

I, the undersigned, being a beneficiary and agent for all beneficiaries of that certain Trust dated December 30, 1968 and known as Trust Number 239 (with Republic Bank of Chicago as trustee), being the owner of the property described in Exhibit "A" attached hereto and made a part hereof for all purposes, do hereby authorize Logistics Property Company, LLC, a Delaware limited liability company, to act in my behalf before the Village of Bartlett, Illinois for the purpose of considering and processing the zoning change on said property.

REPUBLIC BANK OF CHICAGO, as trustee of a trust dated December 30, 1968 and known as Trust Number 239

Jana Cronin
Jana Cronin
Beneficiary and Agent for all Beneficiaries

Street Address: 516 Renn Court
Wheaton, IL 60187

Phone Number: 630-336-8886

Subscribed and sworn to before me this 13th day of November, 2018.

James W. Reed
Notary Public

My Commission Expires: 9/20/2022



RECEIVED
COMMUNITY DEVELOPMENT
DEC 21 2018
VILLAGE OF
BARTLETT

ZONING/LOCATION MAP

PIN: 01-04-307-024

Case #18-24 - Rezoning, Prelim/Final Sub,
Site Plan, Special Use and Variation



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



PRELIMINARY / FINAL PLAT OF SUBDIVISION
OF
Stearns & Munger

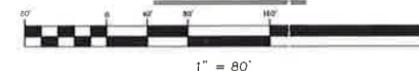
THAT PART OF THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 40 NORTH, RANGE 9,
EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

| AREA | | |
|-------|-------------------|---------------|
| LOT 1 | 514,042 SQ. FT. | 11.8008 ACRES |
| LOT 2 | 510,521 SQ. FT. | 11.7200 ACRES |
| LOT 3 | 189,567 SQ. FT. | 4.3518 ACRES |
| TOTAL | 1,214,130 SQ. FT. | 27.8726 ACRES |

Tax Parcel Number

01-04-307-024

GRAPHIC SCALE



BASIS OF BEARINGS

ASSUMED THE SOUTH LINE OF BREWSTER CREEK BUSINESS PARK UNIT 2 SUBDIVISION TO BE: N 86° 50' 00" E

RECEIVED
COMMUNITY DEVELOPMENT
FEB 04 2019
VILLAGE OF BARTLETT



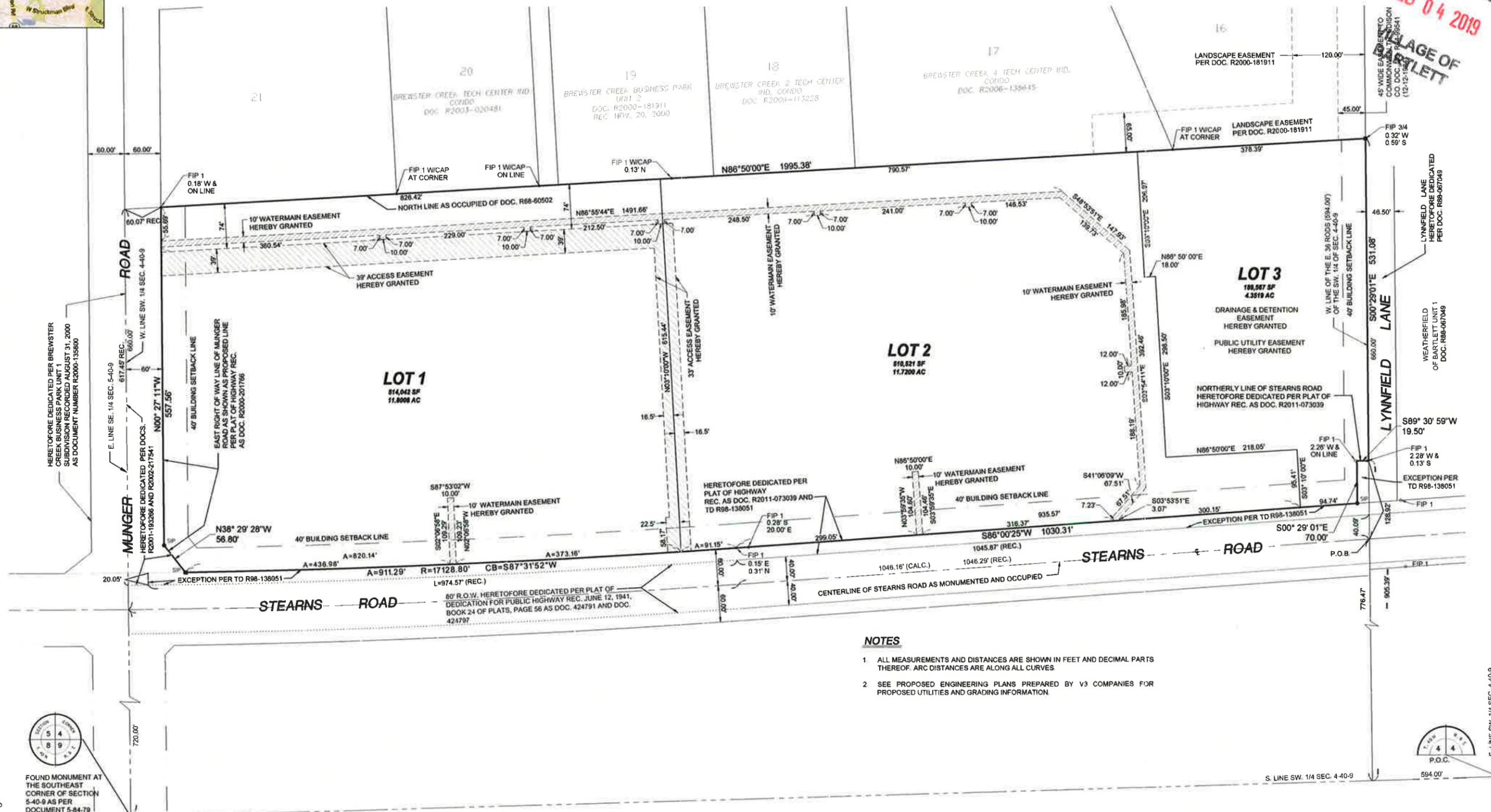
VICINITY MAP
NOT TO SCALE

OWNER/DEVELOPER

Logistics Property Company
1 N. Wacker, Suite 1925
Chicago, Illinois 60606
708.667.6966
Contact: Ben Fish

ENGINEER / SURVEYOR

V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, Illinois 60517
630.724.9200

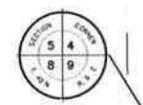


LEGEND

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- EXISTING CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE
- BUILDING SETBACK LINE
- SECTION LINE
- WATERMAIN EASEMENT HEREBY GRANTED
- ACCESS EASEMENT HEREBY GRANTED

ABBREVIATIONS

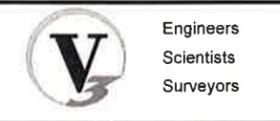
- N NORTH
- S SOUTH
- E EAST
- W WEST
- CB CHORD BEARING
- A ARC LENGTH
- R RADIUS
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- P.U.E. PUBLIC UTILITY AND DRAINAGE EASEMENT
- 2ND ORDER CLASS II, BERNSTEIN, OR APPROVED EQUAL, PERMANENT BENCHMARK



FOUND MONUMENT AT THE SOUTHEAST CORNER OF SECTION 5-40-9 AS PER DOCUMENT 5-84-79

NOTES

- ALL MEASUREMENTS AND DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF. ARC DISTANCES ARE ALONG ALL CURVES.
- SEE PROPOSED ENGINEERING PLANS PREPARED BY V3 COMPANIES FOR PROPOSED UTILITIES AND GRADING INFORMATION.



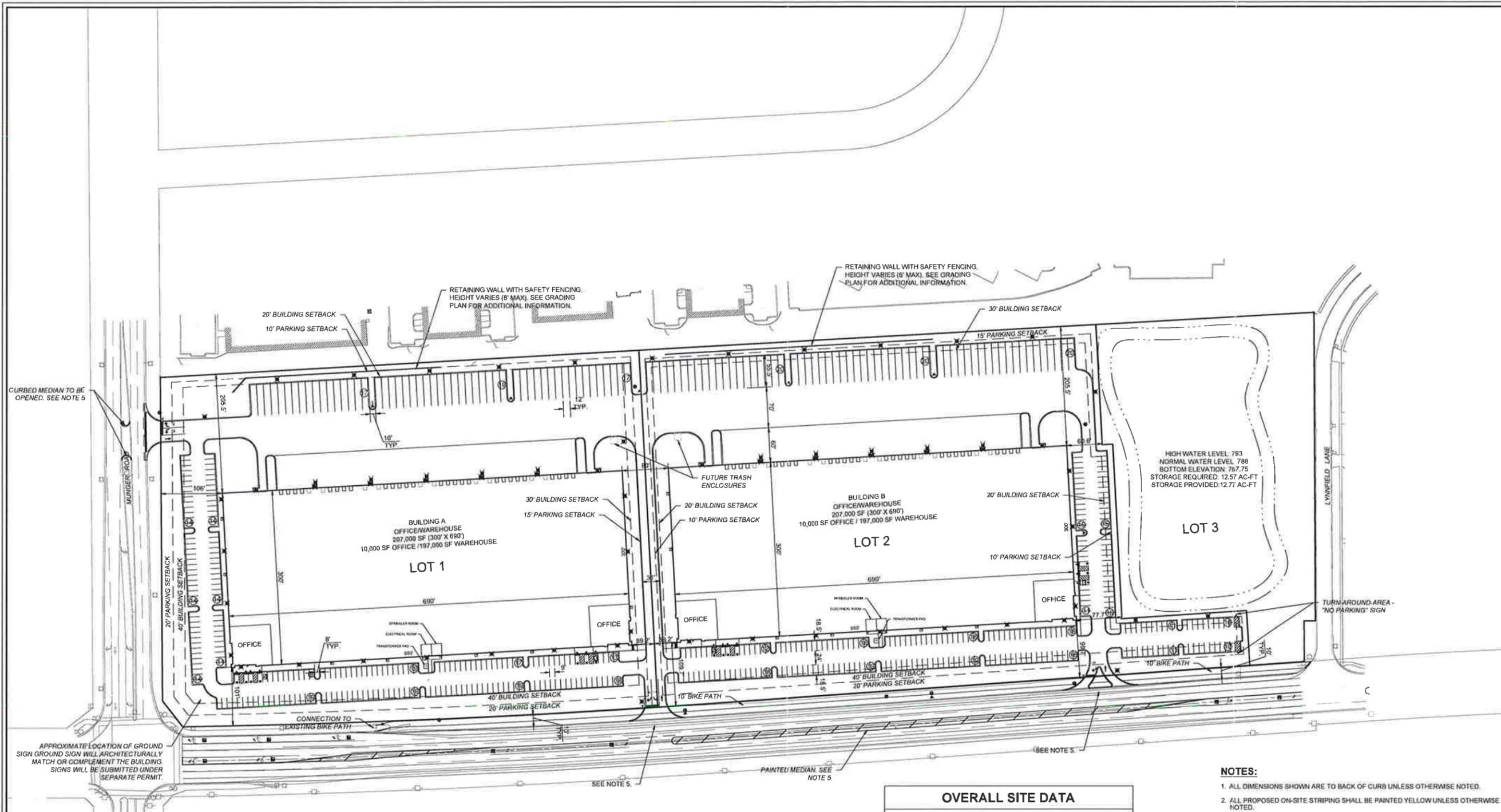
7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

PREPARED FOR:
Logistics Property Company
1 N. Wacker, Suite 1925
Chicago, Illinois 60606
708.667.6966

| NO. DATE DESCRIPTION | | | REVISIONS | | |
|----------------------|----------|----------------------------|-----------|--|--|
| 1. | 01-30-19 | REVISED PER VILLAGE REVIEW | | | |

PRELIMINARY / FINAL PLAT OF SUBDIVISION
Stearns & Munger- Bartlett, IL
DRAFTING COMPLETED: 12/18/18
FIELD WORK COMPLETED: N/A
DRAWN BY: SPK, MLP
CHECKED BY: CDB
PROJECT MANAGER: CDB
SCALE: 1" = 80'

Project No: 18205
Group No: VP04.1
SHEET NO: 1 of 2



APPROXIMATE LOCATION OF GROUND SIGN. GROUND SIGN WILL ARCHITECTURALLY MATCH OR COMPLEMENT THE BUILDING. SIGNS WILL BE SUBMITTED UNDER SEPARATE PERMIT.

| LOT 1 DATA | |
|---------------------------------|-------------------------|
| SITE AREA | |
| PARCEL LOT 1 | = 514,042 SF (11.80 AC) |
| BUILDING 'A' AREA | = 207,000 SF |
| FLOOR TO AREA RATIO | = 0.40 |
| LANDSCAPE | |
| 15% OPEN SPACE REQUIRED | = 77,101 SF |
| OPEN SPACE PROVIDED | = 108,464 SF (21%) |
| PARKING REQUIRED | |
| WAREHOUSE: 1 SPACE PER 1,000 SF | = 197 |
| OFFICE: 1 SPACE PER 275 SF | = 37 |
| TOTAL SPACES | = 234 |
| PARKING PROVIDED | |
| STANDARD SPACES | = 215 |
| ACCESSIBLE SPACES | = 7 |
| TOTAL SPACES | = 222 |
| TRAILER SPACES | = 53 |

| LOT 2 DATA | |
|---------------------------------|-------------------------|
| SITE AREA | |
| PARCEL LOT 2 | = 510,521 SF (11.72 AC) |
| BUILDING 'A' AREA | = 207,000 SF |
| FLOOR TO AREA RATIO | = 0.41 |
| LANDSCAPE | |
| 15% OPEN SPACE REQUIRED | = 76,578 SF |
| OPEN SPACE PROVIDED | = 86,957 SF (17%) |
| PARKING REQUIRED | |
| WAREHOUSE: 1 SPACE PER 1,000 SF | = 197 |
| OFFICE: 1 SPACE PER 275 SF | = 37 |
| TOTAL SPACES | = 234 |
| PARKING PROVIDED | |
| STANDARD SPACES | = 239 |
| ACCESSIBLE SPACES | = 7 |
| TOTAL SPACES | = 246 |
| TRAILER SPACES | = 60 |

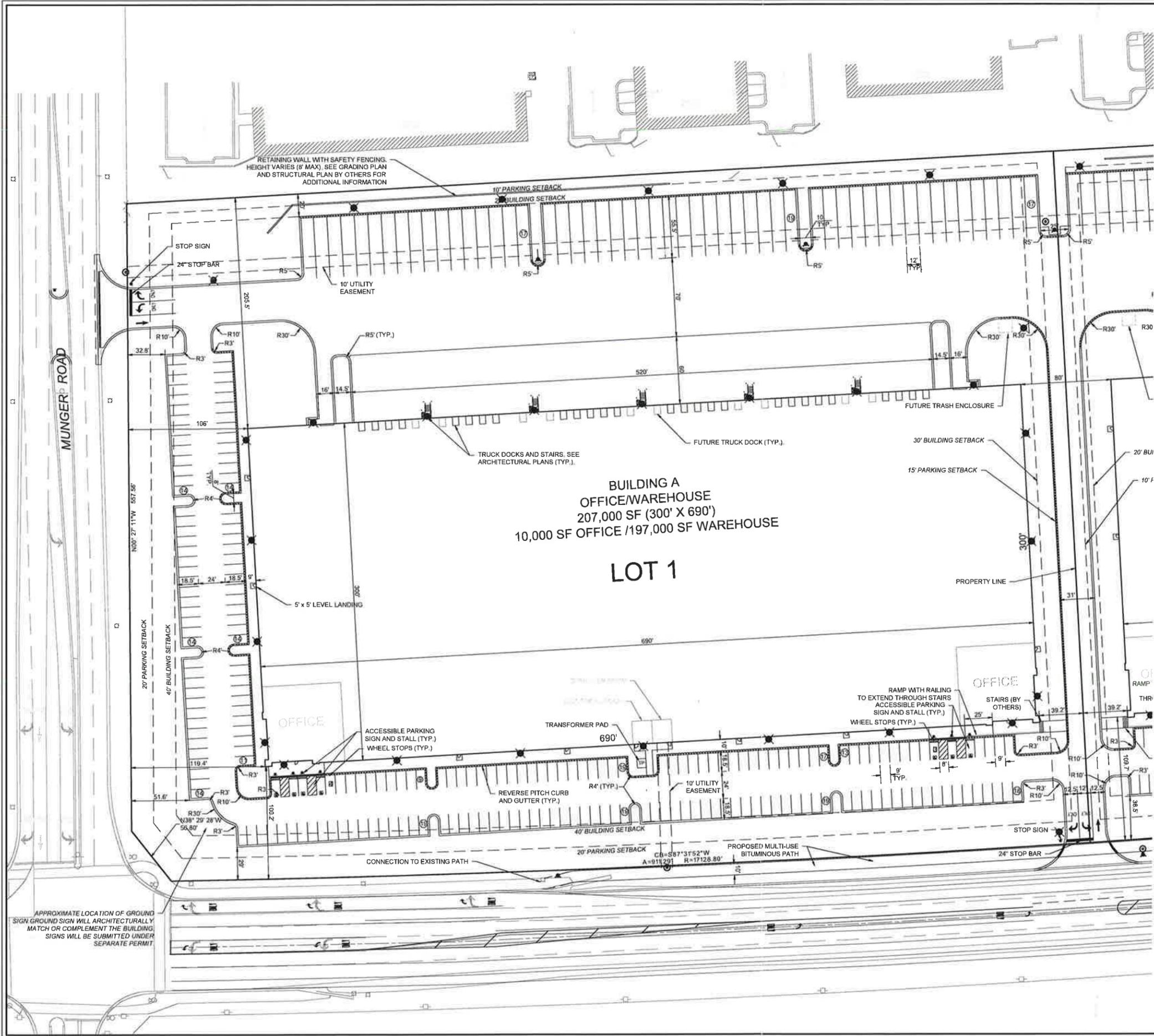
| LOT 3 DATA | |
|------------------|------------------------|
| SITE AREA | |
| PARCEL LOT 3 | = 189,567 SF (4.35 AC) |

| OVERALL SITE DATA | |
|---------------------------------|---------------------------|
| SITE AREA | |
| PARCEL LOT 1 | = 514,042 SF (11.80 AC) |
| PARCEL LOT 2 | = 510,521 SF (11.72 AC) |
| PARCEL LOT 3 | = 189,567 SF (4.35 AC) |
| TOTAL AREA | = 1,213,130 SF (27.87 AC) |
| BUILDING AREA | |
| BUILDING AREA | = 414,000 |
| FLOOR TO AREA RATIO | = 0.34 |
| LANDSCAPE | |
| 15% OPEN SPACE REQUIRED | = 182,103 SF |
| OPEN SPACE PROVIDED | = 257,280 SF (21%) |
| PARKING REQUIRED | |
| WAREHOUSE: 1 SPACE PER 1,000 SF | = 394 |
| OFFICE: 1 SPACE PER 275 SF | = 74 |
| TOTAL SPACES | = 468 |
| TOTAL PARKING PROVIDED | |
| STANDARD SPACES | = 459 |
| ACCESSIBLE SPACES | = 14 |
| TOTAL SPACES | = 468 |
| TRAILER SPACES | = 113 |

- NOTES:**
- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
 - ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED YELLOW UNLESS OTHERWISE NOTED.
 - BUILDING DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
 - ALL CURB AND GUTTER SHALL BE B5.12 UNLESS OTHERWISE NOTED.
 - SEE OFFSITE ROADWAY PLANS FOR ADDITIONAL INFORMATION ON STEARNS ROAD WIDENING AND WORK WITHIN THE R.O.W.



| OVERALL SITE PLAN | | REVISIONS | | | | | | | |
|--|--|--|-----------------|-----|------|-------------|---|----------|----------------------------|
| STEARNS AND MUNGER | | <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>07/20/19</td> <td>REVISED PER VILLAGE REVIEW</td> </tr> </tbody> </table> | | NO. | DATE | DESCRIPTION | 1 | 07/20/19 | REVISED PER VILLAGE REVIEW |
| NO. | DATE | DESCRIPTION | | | | | | | |
| 1 | 07/20/19 | REVISED PER VILLAGE REVIEW | | | | | | | |
| PROJECT NO. 18205 | ORIGINAL ISSUE DATE: DECEMBER 21, 2018 | PROJECT MANAGER: BCR | DESIGNED BY: EF | | | | | | |
| DRAWN BY: DB | | ILLINOIS | | | | | | | |
| 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com | | BARTLETT | | | | | | | |



- NOTES:**
1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
 2. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED YELLOW UNLESS OTHERWISE NOTED.
 3. BUILDING DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
 4. ALL CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
 5. SEE OFFSITE ROADWAY PLANS FOR ADDITIONAL INFORMATION ON STEARNS ROAD WIDENING AND WORK WITHIN THE R.O.W.

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| STANDARD SPACES | = 215 |
| ACCESSIBLE SPACES | = 7 |
| TOTAL SPACES | = 222 |
| TRAILER SPACES | = 53 |

| REVISIONS | | |
|-----------|------|-------------|
| NO. | DATE | DESCRIPTION |
| | | |
| | | |
| | | |

PROJECT NO. 18205
 PROJECT MANAGER: BCR
 DESIGNED BY: EF
 DRAWN BY: DB

ORIGINAL ISSUE DATE: DECEMBER 21, 2018

SITE PLAN (LOT 1)

STEARNS AND MUNGER

BARTLETT

ILLINOIS

7325 Janes Avenue
 Woodridge, IL 60517
 630.724.9200 phone
 www.v3co.com



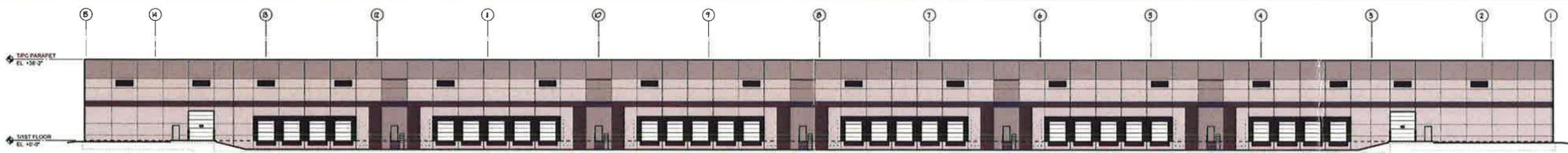
CONCEPTUAL ARCHITECTURAL RENDERING
LOOKING WEST AT EAST ELEVATION OF BUILDING "B"
02-18-2019

BUILDING B
BARTLETT, IL
STEARNS & MUNGER

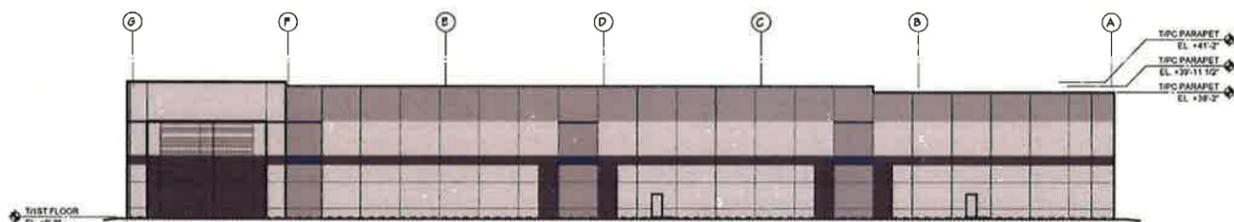


CONCEPTUAL ARCHITECTURAL RENDERING
12-21-2018

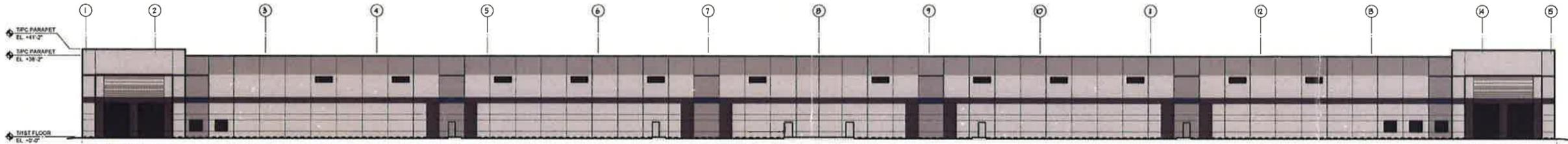
BUILDING A
BARTLETT, IL
STEARNS & MUNGER



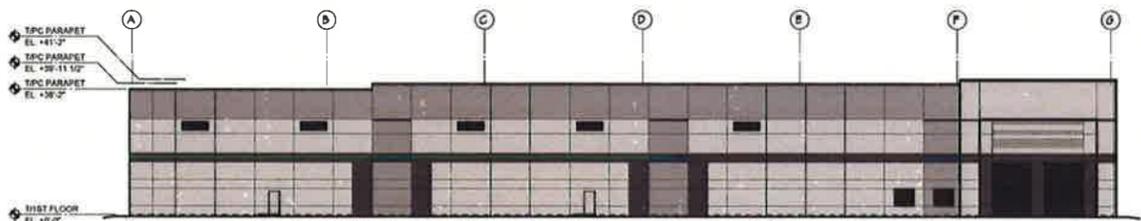
NORTH ELEVATION
SCALE: 1" = 20'-0"



EAST ELEVATION
SCALE: 1" = 20'-0"



SOUTH ELEVATION
SCALE: 1" = 20'-0"



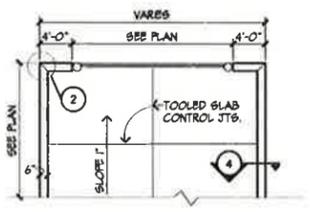
WEST ELEVATION
SCALE: 1" = 20'-0"

| COLOR AND MATERIAL LEGEND | |
|--------------------------------------|---|
| PRECAST CONCRETE WALL PANELS | |
| [Color swatch] | EXTERIOR BASE COLOR SW 7045 "FIRST STAR" |
| [Color swatch] | EXTERIOR ACCENT COLOR 1 SW 7055 "GRAY MATTERS" |
| [Color swatch] | EXTERIOR ACCENT COLOR 2 SW 7674 "PEPPERCORN" |
| [Color swatch] | EXTERIOR ACCENT COLOR 3 SW 7802 "INDIGO BATH" |
| FASCIA | |
| [Color swatch] | PAC-CLAD "CITYSCAPE" |
| CURTAIN WALL SYSTEM | |
| [Color swatch] | FRAMES - CLEAR ANODIZED ALUMINUM |
| [Color swatch] | INSUL. GLASS - GREY TINTED |
| FINISH GLASS/CLARIBOY WINDOWS | |
| [Color swatch] | FRAMES - CLEAR ANODIZED ALUMINUM |
| [Color swatch] | INSUL. GLASS - GREY TINTED |
| STEEL MET. DOOR FRAMES | |
| [Color swatch] | FRAME - PAINTED TO MATCH PRECAST DOOR |
| [Color swatch] | DOOR - PAINTED TO MATCH PRECAST |
| OVERHEAD DOORS | |
| [Color swatch] | DRIVE-IN DOORS - PREFINISHED WHITE |
| [Color swatch] | DOCK DOORS - PREFINISHED WHITE |
| PIPE BOLARDS | |
| [Color swatch] | OSHA SAFETY YELLOW |

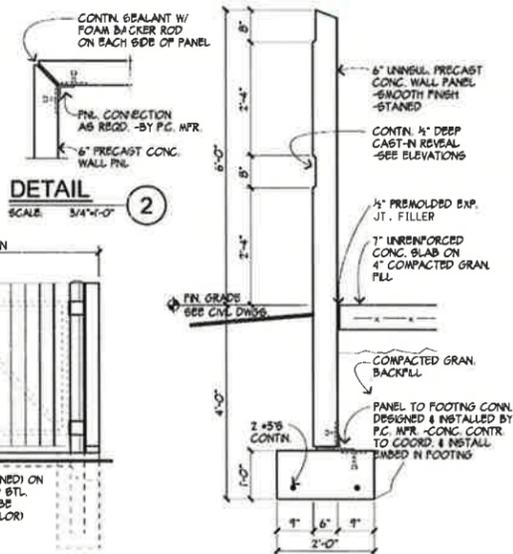
RECEIVED
COMMUNITY DEVELOPMENT
FEB 04 2019
VILLAGE OF BARTLETT

ROOF TOP UNITS:
ALL VISABLE ROOFTOP UNITS SHALL BE SCREENED IN ACCORDANCE WITH BUILDING DEPARTMENT REQUIREMENTS

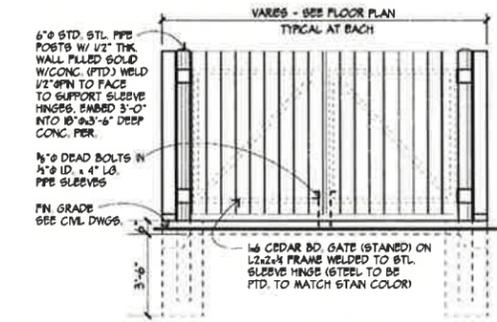
NOTE:
EXACT LOCATION OF ROOFTOP UNITS IS NOT DETERMINED AT THIS POINT - TYPICAL AT ALL LOCATIONS.



PLAN - TRASH ENCLOSURE
SCALE: 1/4" = 1'-0"



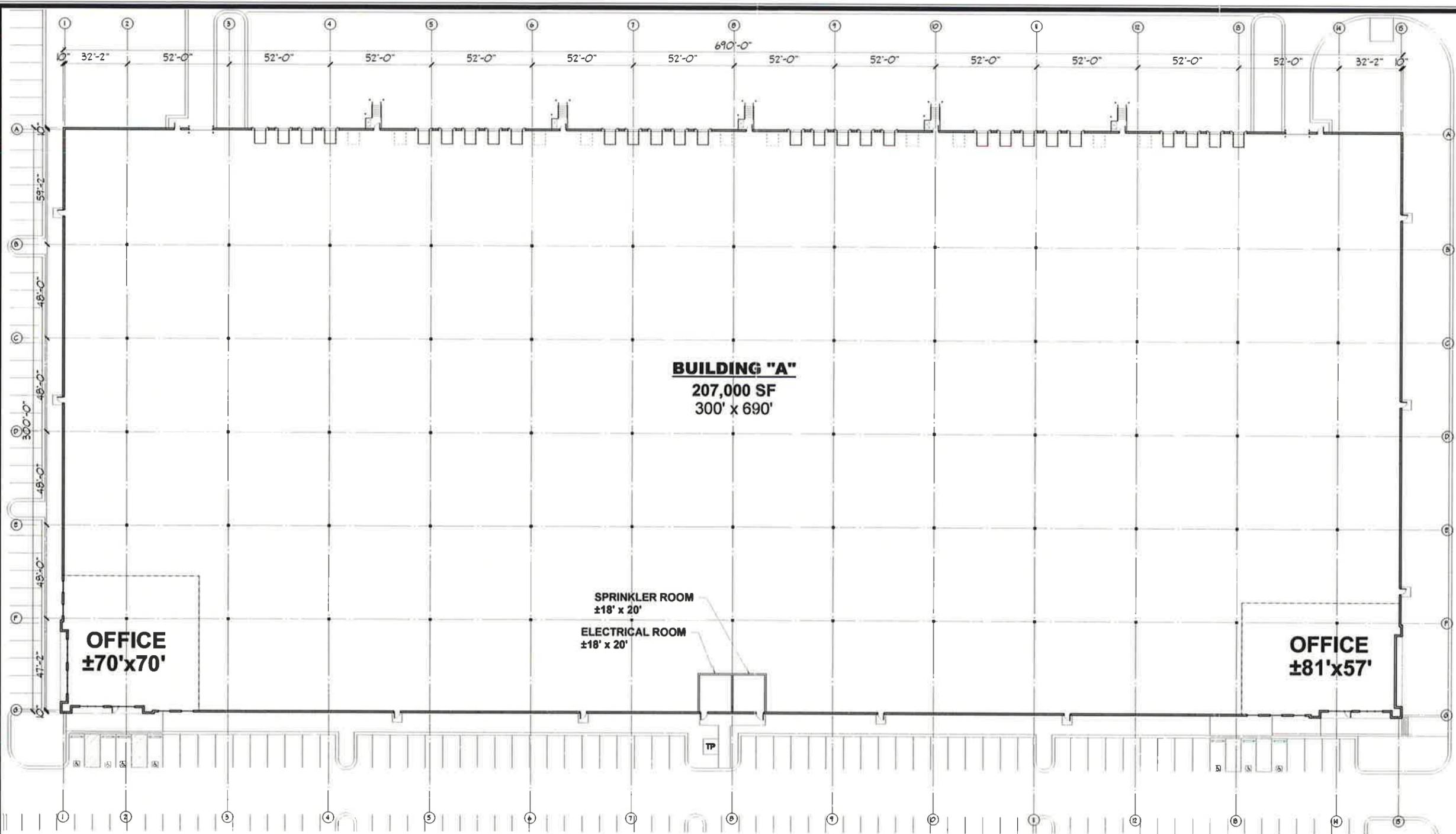
DETAIL
SCALE: 3/4" = 1'-0"



FRONT ELEVATION TRASH ENCLOSURE
SCALE: 1/2" = 1'-0"

NOTE:
ALL EXPOSED CEDAR TO BE STANED TO MATCH PRECAST. ALL OTHER TO BE PAINTED TO MATCH PRECAST.

SECTION
SCALE: 3/4" = 1'-0"



BUILDING "A"
 207,000 SF
 300' x 690'

OFFICE
 ±70'x70'

SPRINKLER ROOM
 ±18' x 20'

ELECTRICAL ROOM
 ±18' x 20'

OFFICE
 ±81'x57'

BUILDING "A"
OVERALL FLOOR PLAN
 SCALE: 1/32" = 1'-0"

RECEIVED
 COMMUNITY DEVELOPMENT
 FEB 04 2019
 VILLAGE OF
 BARTLETT

LOGISTICS
 PROPERTY
 CO

HARRIS ARCHITECTS INC.
 401 MADISON AVENUE - PLAZA THE CLAYTON BLDG. 14th FL. CHICAGO, IL 60601
 COPYRIGHT © 2018 BY HARRIS ARCHITECTS, INC.

NEW OFFICEWAREHOUSE FACILITY FOR:
STEARNS AND MUNGER BUILDING "A"
 BARTLETT, ILLINOIS

ISSUED FOR VILLAGE REVIEW
 12-21-2018
 VILLAGE COMMENTS & RESPONSES
 01-25-2019

PROJECT NO
 218288
 DRAWN BY:
 KOK
 DATABASE:
 218288.DB

SHEET NO.
A0
 1 OF 2 SHEETS

TRAFFIC IMPACT STUDY

REPORT FOR:

LOGISTICS PROPERTY COMPANY



STEARNS ROAD AND MUNGER ROAD
BARTLETT, ILLINOIS

PREPARED BY:



V3 Companies
7325 Janes Avenue
Woodridge, Illinois 60517

V3 Project No. 18205

August 20, 2018
Updated February 14, 2019

FIGURES

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APPENDICES

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| Appendix B | CMAP Correspondence |
| Appendix C | Capacity Analysis Worksheets – Existing |
| Appendix D | Capacity Analysis Worksheets – Background |
| Appendix E | Capacity Analysis Worksheets – Future with Project |
| Appendix F | DuPage County DOT Correspondence |



II. PROJECT CONDITIONS

Land Uses

A variety of land uses exist near the project site, including industrial, office, and residential uses. The surrounding land uses are illustrated in Figure 3.

Roadway System

The characteristics of the roadways in the vicinity of the site are presented below. The existing lane configuration in the study area is illustrated in Figure 4.

Stearns Road (DuPage County Route 29) is a four-lane, east-west principal arterial. The speed limit varies throughout the corridor but is posted as 45 mph in both directions along the development site. The eastbound approach to the signalized intersection with Munger Road consists of one left turn lane, one through lane, and one shared through/right turn lane. The westbound approach consists of a left turn lane, two through lanes, and one right turn lane. Stearns Road is under the jurisdiction of DuPage County DOT, but is designated as a Strategic Regional Arterial (SRA).

Munger Road falls under multiple jurisdictions. Munger Road is under DuPage County DOT jurisdiction north of Stearns Road. This portion of Munger Road is a four lane collector with a raised median and a posted speed limit of 40 mph. The southbound approach to Stearns Road consists of one left turn lane, one through lane and one right turn lane. Both the northbound and southbound approaches to Humbracht Circle/Schiferl Road consist of one left turn lane, one through lane and one shared through/right turn lane. Munger Road is under Bartlett municipal jurisdiction south of Stearns Road. This portion of Munger Road is a two lane local road with a posted speed of 35 mph. The northbound approach to Stearns Road consists of one left turn lane and one shared through/right turn lane.

Humbracht Circle/Schiferl Road is a two lane local collector that serves a number of industrial and office land uses. The name of the street changes at Munger Road, with Humbracht Circle continuing to the east and Schiferl Road continuing to the west. The westbound approach of Humbracht Circle to Munger Road consists of one left turn lane and one shared through/right turn lane. The eastbound approach of Schiferl Road to Munger Road consists of one shared right turn/through/left turn lane.

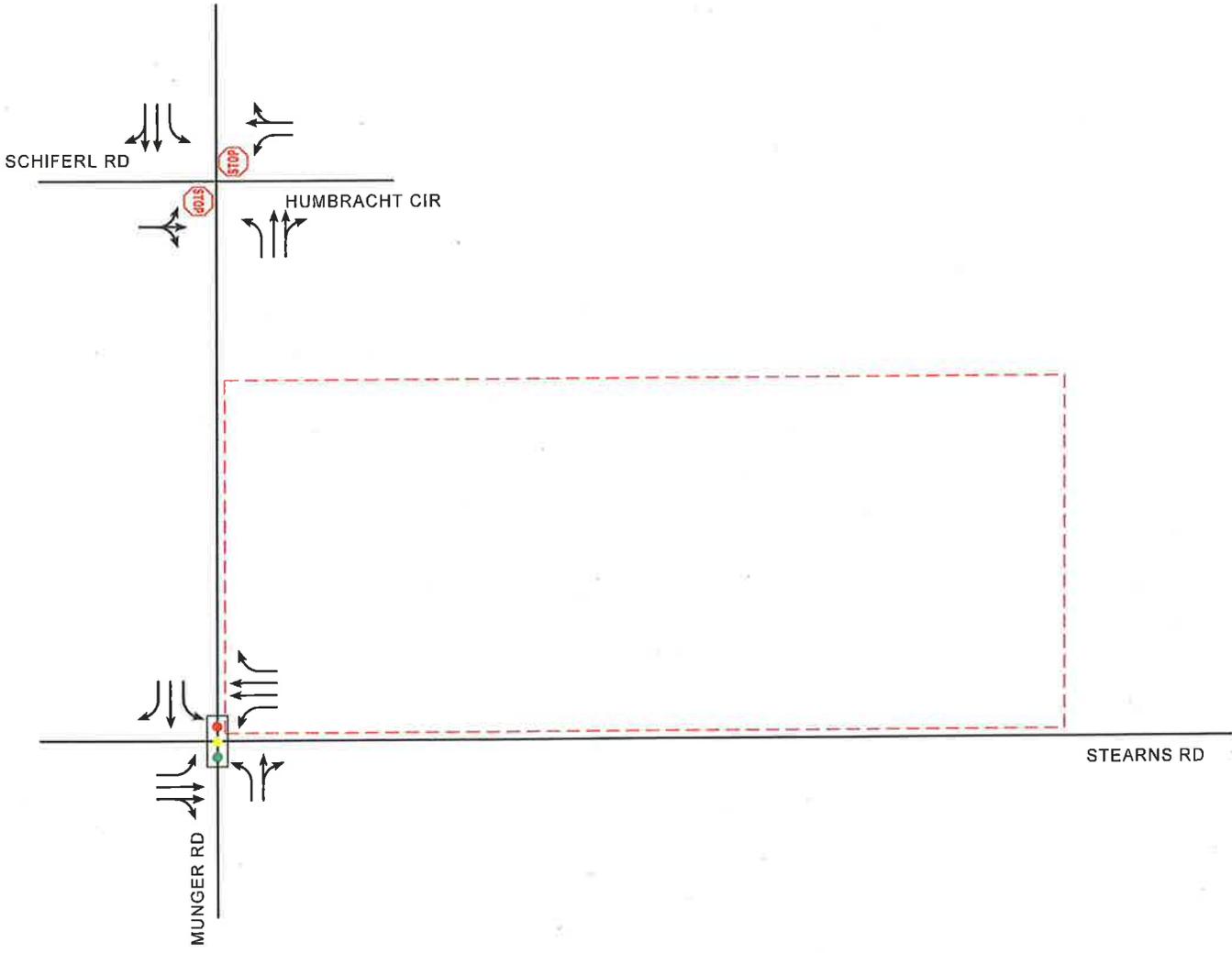
LEGEND

 - EXISTING TRAFFIC SIGNAL

 - EXISTING STOP SIGN

 - PROPOSED TRAFFIC SIGNAL

 - PROPOSED STOP SIGN



LOGISTICS PROPERTY CO

**FIGURE 4
EXISTING LANE CONFIGURATION**

BARTLETT

ILLINOIS



northbound left turn lane at Schiferl Road/Humbracht Circle and the southbound left turn lane at Stearns Road.

Stearns Road will be widened to accommodate an eastbound left turn lane at the proposed full access driveway. It is proposed that the widening is extended so that a five-lane section is carried from the intersection of Stearns and Munger Road to the existing five-lane section approaching Lynnfield Lane. This median will also provide an opportunity for the southbound left turns at Driveway 2 to be completed as a two-stage turning movement.

There are no other known roadway developments in the area that will impact this study.



III. TRAFFIC FORECASTS

Project Traffic Volumes

Trip Generation

The proposed development consists of two new warehouse/distribution buildings with a total area of 414,000 square feet. However, since final end users have not been determined at this time the analysis for this traffic impact study will assume a 440,000 square foot warehouse to maintain conservative results. Project traffic is estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. The following land use categories are used to determine project traffic:

Warehousing (150) – Warehouses are primarily devoted to the storage of materials, but they may also include office and maintenance areas.

ITE Trip Generation Manual assigns trip generation rates for each land use based on gross area. Separate generation rates and directional distributions are provided for weekday am and weekday pm periods based on the peak hour of the adjacent road network. It is also expected that a significant portion of trips generated by the site will be heavy vehicles. The ITE Trip Generation Manual, 10th Edition does not provide any guidance on typical heavy vehicle percentages. However, the ITE Trip Generation Manual, 9th Edition does cite a heavy vehicle percentage of 20 percent for this land use. Therefore, the heavy vehicle proportion is assumed to be 20 percent this study.

A summary of trip generation for 440,000 square feet of warehouse is provided in Table 1.

Table 1: Trip Generation

| Vehicle Type | AM Peak Hour | | | PM Peak Hour | | |
|-------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|
| | In | Out | Total | In | Out | Total |
| Passenger Car (80%) | 48 | 14 | 62 | 18 | 47 | 65 |
| Heavy Vehicle (20%) | 12 | 4 | 16 | 4 | 12 | 16 |
| Total Trip Generation: | 60 | 18 | 78 | 22 | 59 | 81 |

Trip Distribution and Assignment

The direction from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems. The directional distribution of new traffic



substantially lower than the historic growth rates in the area. An evaluation of historical ADT's near the study area is summarized in Table 3.

Table 3: Historical IDOT ADT Growth Rates

| Street | Year | IDOT AADT | Annual Rate from Previous Count Year | Annual Rate from First to Last Count Year |
|-----------------------------|------|-----------|--------------------------------------|---|
| Stearns Road at Munger Road | 2008 | 12300 | - | 9.0% |
| | 2012 | 16300 | 8.1% | |
| | 2016 | 21200 | 7.5% | |

The historical ADT growth on Stearns Road has been significant, with an annual 9 percent growth rate from 2008 to 2016. This high growth rate is associated with major developments within the Brewster Creek Business Park, growth in residential subdivisions in the area, widening of Stearns Road west of the development site, and the reconfiguration of the Stearns Road and Dunham Road intersection. Most significantly, the new alignment of Stearns Road, including the new bridge over the Fox River and connection to Randell Road, first opened to traffic in 2011. This major east-west connection contributed greatly to the increase in volumes on Stearns Road in the study area.

The CMAP models indicate that growth will be sustained into the future, but will slow somewhat compared to the extraordinarily high growth rates that have occurred over the last decade. The rates obtained from the CMAP projects will be used to project the future traffic conditions in the area.

The 2024 background traffic volumes are illustrated in Figure 9.

Future Traffic Volumes

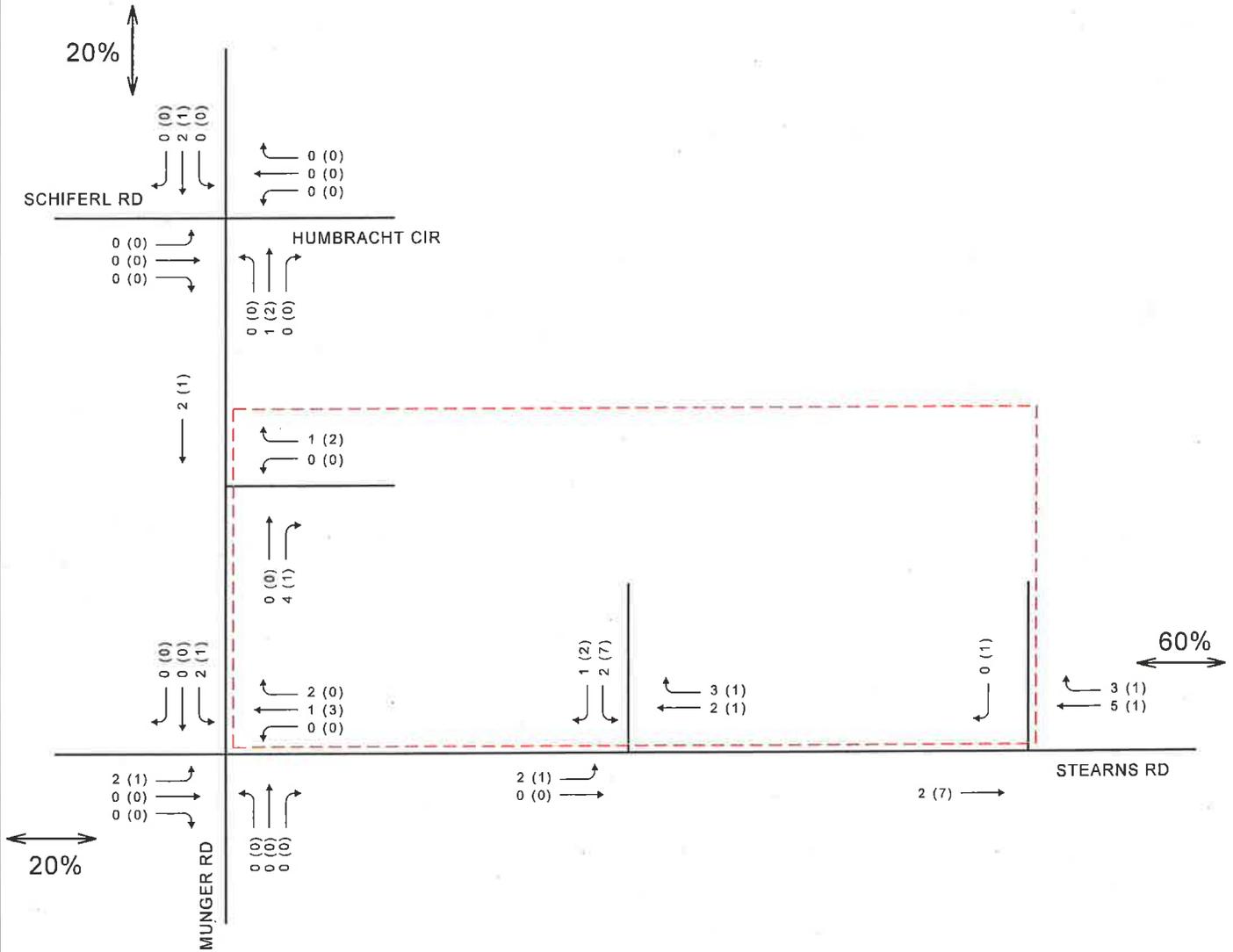
The total project traffic volumes are added to the background volumes to obtain the future with project traffic volumes for the study intersections. Future with project traffic volumes are depicted in Figure 10.



LEGEND

- AM PEAK HOUR
 (##) - PM PEAK HOUR

AM PEAK HOUR: 7:30 AM - 8:30 AM
 PM PEAK HOUR: 4:45 PM - 5:45 PM



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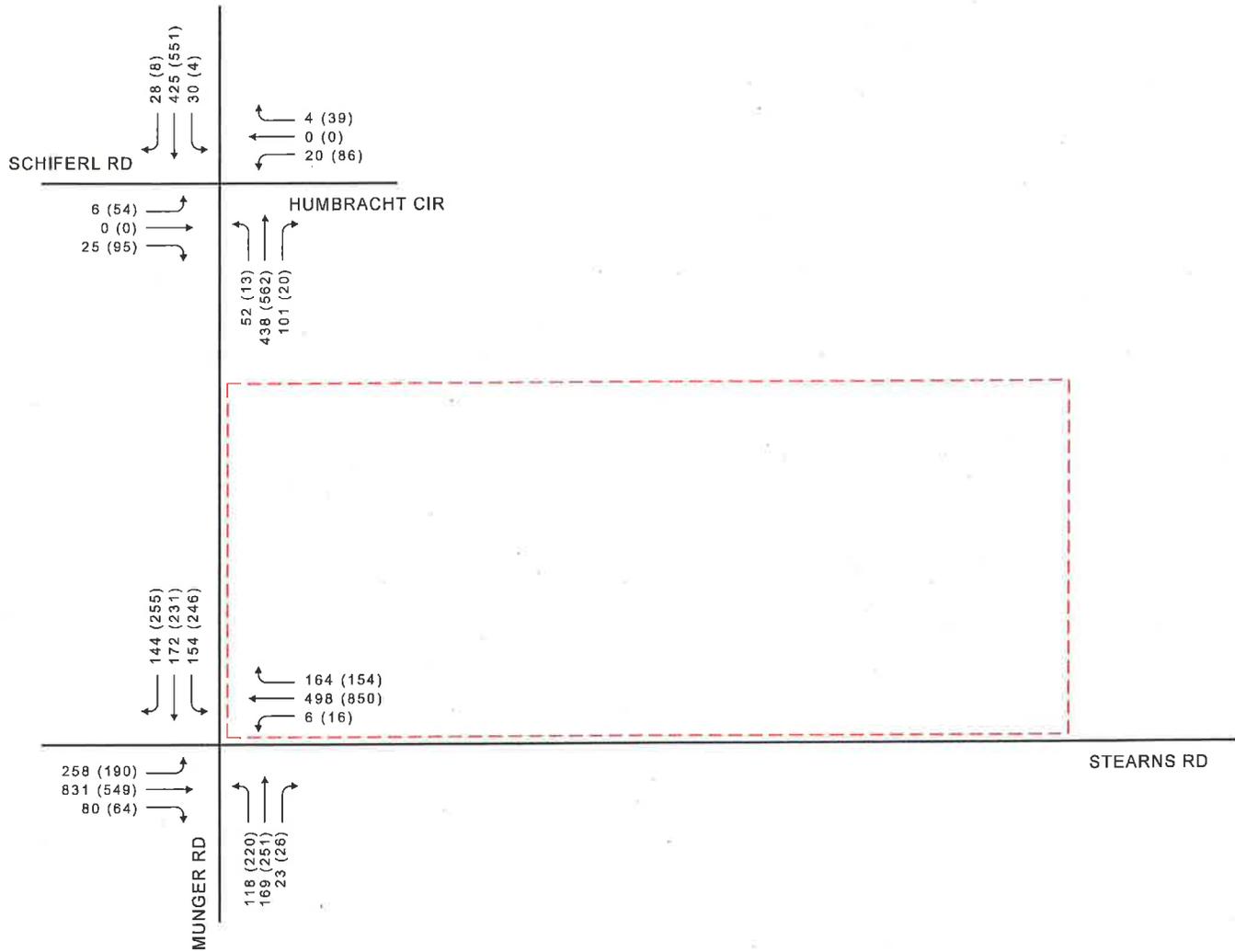
**FIGURE 7
 HEAVY VEHICLE TRIPS**



LEGEND

- AM PEAK HOUR
 (##)- PM PEAK HOUR

AM PEAK HOUR: 7:30 AM - 8:30 AM
 PM PEAK HOUR: 4:45 PM - 5:45 PM



NOTE:

BACKGROUND TRAFFIC VOLUME = EXISTING TRAFFIC VOLUME + CMAP GROWTH RATE TO 2024

LOGISTICS PROPERTY CO

**FIGURE 9
 TRAFFIC VOLUMES**



IV. TRAFFIC ANALYSIS

Auxiliary Lane Analysis

This study evaluated whether additional auxiliary lanes are warranted at any study area intersections. The warrant analysis follows the methodology detailed in IDOT's Bureau of Design and Environmental Manual (BDE). Warrants are determined based on factors such as through volume, opposing volume, and percentage of turning vehicles. Different warrants are used for left and right turn lanes, and factors such as design speed.

The right turn movements at the three proposed driveways do not meet the warrant for an auxiliary right turn lane. Few commercial driveways in the area have dedicated right turn lanes. Therefore, right turn lanes are not proposed at any of the driveways.

The left turn movements at the two proposed full access driveways do not meet the warrant for an auxiliary left turn lane. It is noted that all intersections on both Stearns Road and Munger Road include left turn lanes at intersections and commercial driveways. Therefore, left turn lanes are proposed at both full access driveways for uniformity and safety.

Capacity Analysis

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's Highway Capacity Manual (HCM), 2010 Edition. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the intersection as a whole. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 4.

Delay increases moderately on all approaches in the background scenario. The intersection remains at LOS C in both the am and pm peak hours. The southbound approach to the intersection falls to LOS D in the pm peak hour. There are no other changes in levels of service.

Again, delay increases somewhat on all approaches when project related trips are added to the roadway network. However, there are no LOS changes on any approaches or the overall intersection. Therefore, it is concluded that the development of the project site will not have a significant impact on the signalized intersection of Stearns Road and Munger Road.

Table 6: Unsignalized LOS – Munger Road and Humbracht Cir/Schiferl Rd

| Intersection / Approach | AM Peak Hour | | | | | | PM Peak Hour | | | | | |
|---|-----------------|-----|-------------------|-----|--------------------------|-----|-----------------|-----|-------------------|-----|--------------------------|-----|
| | Existing (2018) | | Background (2024) | | Future w/ Project (2024) | | Existing (2018) | | Background (2024) | | Future w/ Project (2024) | |
| | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| Munger Road and Schiferl Road/Humbracht Circle | | | | | | | | | | | | |
| NB Left | 8.9 | A | 9.0 | A | 9.0 | A | 9.7 | A | 9.8 | A | 9.8 | A |
| SB Left | 8.8 | A | 8.9 | A | 8.9 | A | 9.6 | A | 9.6 | A | 9.7 | A |
| EB L/T/R | 14.7 | B | 14.9 | B | 15.0 | C | 25.4 | D | 26.3 | D | 26.8 | D |
| WB Left | 30.6 | D | 31.3 | D | 31.8 | D | 51.9 | F | 54.7 | F | 56.9 | F |
| WB T/R | 10.2 | B | 10.3 | B | 10.3 | B | 10.8 | B | 10.9 | B | 10.9 | B |
| Munger Road and Driveway 1 | | | | | | | | | | | | |
| WB Approach | - | - | - | - | 11.1 | B | - | - | - | - | 11.1 | B |
| SB Left | - | - | - | - | - | - | - | - | - | - | - | - |
| Stearns Road and Driveway 2 | | | | | | | | | | | | |
| SB Approach | - | - | - | - | 18.5 | C | - | - | - | - | 26.3 | D |
| EB Left | - | - | - | - | 9.5 | A | - | - | - | - | 11.4 | B |
| Stearns Road and Driveway 3 | | | | | | | | | | | | |
| SB Approach | - | - | - | - | 10.7 | B | - | - | - | - | 12.9 | B |

The minor approaches to the intersection of Munger Road and Schiferl Road/Humbracht Circle operate at an adequate level of service during the am peak hour in the existing condition. However, the volumes are high on the westbound Humbracht Circle approach during the existing pm peak hour, which operates at LOS F. While these delays are not ideal, Munger Road is a major collector and Humbracht Circle is a local road serving the business park so high delays are not unusual during peak hours.



All queue lengths increase slightly in the background condition, including for the northbound left turn. The projected length of 211 feet in the background condition again exceeds the provided storage, but does not exceed the taper length. Adequate queue storage is provided on all other approaches.

All movements increase slightly with the addition of project related trips. However, the impacts are minimal, with the northbound left queue increasing by only six feet. All other queue storage lengths are adequate in the future with project scenario. Since the impacts are small on the deficient turn lane and all other storage lanes continue to be adequate, it is concluded that no queue storage mitigation related to the proposed development is necessary at the signalized intersection of Stearns Road and Munger Road.

Proposed Lane Configuration

The overall proposed lane configuration based on the auxiliary lane, capacity, and queue length analyses is illustrated in Figure 11.

The conceptual site plan currently consists of two buildings with a total area of 407,000 square feet. However, there is the potential that the development be altered to consist a single building with approximately the same total area. If this change occurs, it is recommended that Driveway 2 be modified to right in/right out access and Driveway 3 be modified to full access. This would provide direct access to the north side of the buildings for truck traffic without having to travel through the vehicle parking areas.

It is assumed that the trip distribution and assignment would be similar with Driveway 2 or Driveway 3 being the full access driveway on Stearns Road. This modification is not expected to have a significant impact to the capacity analysis or queue analysis. Therefore, it is concluded that the analysis in this report would be similar if Driveway 3 were made the full-access driveway instead of Driveway 2.



V. CONCLUSIONS

The purpose of this study was to evaluate the potential traffic impacts of a proposed warehouse development near the intersection of Stearns Road and Munger Road in Bartlett, Illinois. The conceptual site plan consists of two warehouse buildings with a total area of 414,000 square feet. However, the analysis for this traffic impact study will assume a total of 440,000 square feet of warehouse.

The site will be accessible through three proposed driveways: Driveway 1 will provide right-in/right-out/left-out driveway on Munger Road, Driveway 2 will provide full access on Stearns Road, and Driveway 3 will provide right-in/right-out access on Stearns Road. It is recommended that Driveway 1 be restricted to right-in/right-out access only during the weekday peak hours, restricting the left out movement. Signage would be installed to limit the left out movement and cameras may be installed to enforce the restriction.

The full access driveway on Stearns Road will require widening the roadway to provide an eastbound left turn lane into the site. It is proposed that the existing five lane pavement section at the Munger Road intersection be extended through Driveway 2 to accommodate the proposed eastbound left turn lane at Driveway 2. This median will also provide an opportunity for the southbound left turns at Driveway 2 to be completed as a two-stage turning movement.

Capacity analysis was conducted using HCS7 for existing, background, and future with project conditions during the weekday am and pm peak hours. Traffic was estimated to the year 2024, which is five years beyond the anticipated opening date in 2019.

Results of the capacity analysis indicate that the signalized intersection of Stearns Road and Munger Road will operate at LOS C in the existing and future scenarios. In addition, all approaches during each scenario are also projected to operate at LOS D or better. There are no anticipated delay issues at the signalized intersection.

Higher delays are experienced at several minor approaches at the unsignalized intersections. The westbound left turn approach to the intersection of Munger Road and Humbracht Circle/Schiferl Road currently operates at LOS F during the pm peak hour. Delays increase slightly for all movements in the background condition, but there are no notable changes in levels of service. The addition of project related traffic increases the left turn delay by 2.2 seconds and will continue to operate at LOS F. It is worth noting that most of the peak hour trips along Schiferl Road/Humbracht Circle will be local employees that are familiar traffic patterns in the area and will be aware of potential delays.

Since there are no notable LOS changes between the background and future with project scenarios, it is concluded that the proposed development will not require mitigation measures at the intersection of Munger Road and Schiferl Road/Humbracht Circle.



APPENDIX A
EXISTING TRAFFIC COUNTS

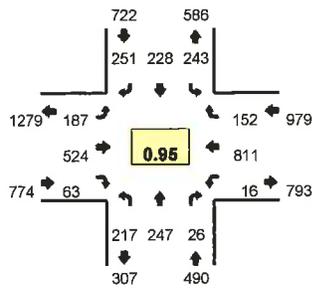


Type of peak hour being reported: Intersection Peak

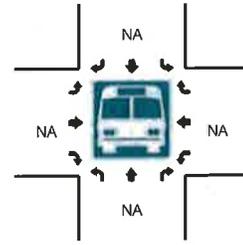
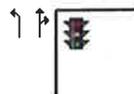
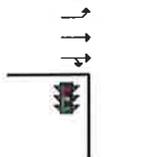
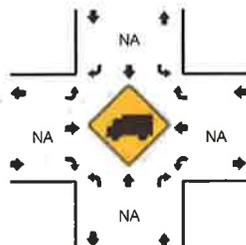
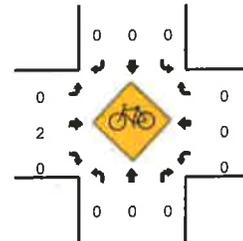
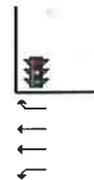
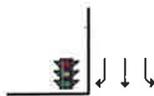
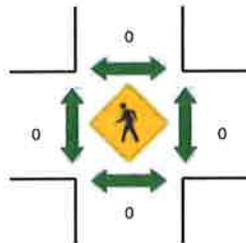
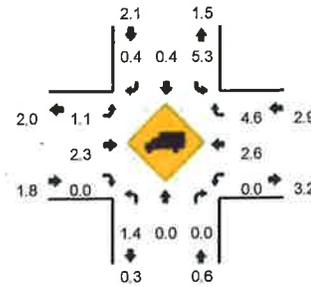
Method for determining peak hour: Total Entering Volume

LOCATION: Munger Rd -- Stearns Rd
CITY/STATE: Bartlett, IL

QC JOB #: 14749102
DATE: Wed, Jul 18 2018



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:30 PM -- 5:45 PM



| 15-Min Count Period Beginning At | Munger Rd (Northbound) | | | | Munger Rd (Southbound) | | | | Stearns Rd (Eastbound) | | | | Stearns Rd (Westbound) | | | | Total | Hourly Totals |
|----------------------------------|------------------------|------|-------|---|------------------------|------|-------|---|------------------------|------|-------|---|------------------------|------|-------|---|-------|---------------|
| | Left | Thru | Right | U | | |
| 4:00 PM | 33 | 43 | 7 | 0 | 71 | 41 | 43 | 0 | 32 | 114 | 18 | 0 | 5 | 153 | 41 | 0 | 601 | |
| 4:15 PM | 35 | 34 | 4 | 0 | 77 | 56 | 53 | 0 | 36 | 136 | 27 | 0 | 8 | 161 | 35 | 0 | 662 | |
| 4:30 PM | 37 | 46 | 4 | 0 | 46 | 44 | 54 | 0 | 32 | 137 | 21 | 0 | 5 | 213 | 27 | 0 | 666 | |
| 4:45 PM | 52 | 58 | 9 | 0 | 61 | 55 | 58 | 0 | 43 | 123 | 16 | 0 | 5 | 189 | 31 | 0 | 700 | 2629 |
| 5:00 PM | 48 | 60 | 7 | 0 | 67 | 61 | 65 | 0 | 40 | 140 | 15 | 0 | 4 | 195 | 47 | 0 | 749 | 2777 |
| 5:15 PM | 46 | 67 | 5 | 0 | 57 | 46 | 73 | 0 | 60 | 120 | 19 | 0 | 4 | 203 | 33 | 0 | 733 | 2848 |
| 5:30 PM | 71 | 62 | 5 | 0 | 58 | 66 | 55 | 0 | 44 | 141 | 13 | 0 | 3 | 224 | 41 | 0 | 783 | 2965 |
| 5:45 PM | 57 | 40 | 8 | 0 | 58 | 43 | 54 | 0 | 34 | 98 | 19 | 0 | 9 | 211 | 35 | 0 | 666 | 2931 |

| Peak 15-Min Flowrates | Northbound | | | | Southbound | | | | Eastbound | | | | Westbound | | | | Total |
|-----------------------|------------|------|-------|---|------------|------|-------|---|-----------|------|-------|---|-----------|------|-------|---|-------|
| | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | |
| All Vehicles | 284 | 248 | 20 | 0 | 232 | 264 | 220 | 0 | 176 | 564 | 52 | 0 | 12 | 896 | 164 | 0 | 3132 |
| Heavy Trucks | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 16 | 12 | 0 | 48 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicycles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Railroad | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stopped Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

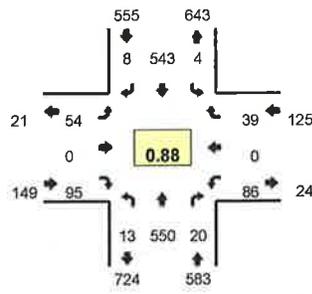
Comments:

Type of peak hour being reported: Intersection Peak

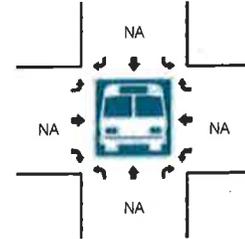
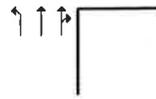
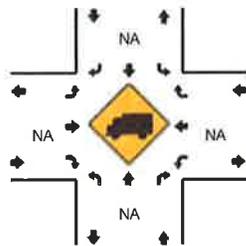
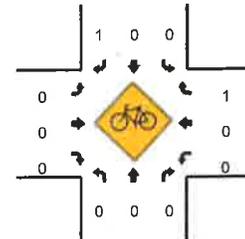
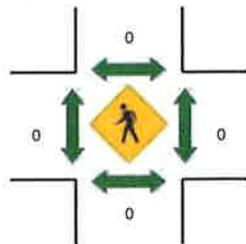
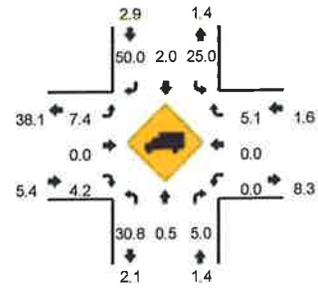
Method for determining peak hour: Total Entering Volume

LOCATION: Munger Rd -- Schiferi Rd
CITY/STATE: Bartlett, IL

QC JOB #: 14749104
DATE: Wed, Jul 18 2018



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM



| 15-Min Count Period Beginning At | Munger Rd (Northbound) | | | | Munger Rd (Southbound) | | | | Schiferi Rd (Eastbound) | | | | Schiferi Rd (Westbound) | | | | Total | Hourly Totals |
|-------------------------------------|------------------------|------|-------|---|------------------------|------|-------|---|-------------------------|------|-------|---|-------------------------|------|-------|---|-------|---------------|
| | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | | |
| 4:00 PM | 11 | 99 | 7 | 0 | 4 | 85 | 9 | 0 | 38 | 0 | 46 | 0 | 32 | 0 | 3 | 0 | 334 | |
| 4:15 PM | 6 | 92 | 3 | 0 | 2 | 116 | 4 | 0 | 31 | 0 | 38 | 0 | 19 | 0 | 7 | 0 | 318 | |
| 4:30 PM | 2 | 105 | 0 | 0 | 1 | 98 | 2 | 0 | 17 | 0 | 21 | 0 | 26 | 1 | 9 | 0 | 282 | |
| 4:45 PM | 1 | 118 | 5 | 0 | 2 | 145 | 4 | 0 | 10 | 0 | 19 | 0 | 16 | 0 | 6 | 0 | 326 | 1260 |
| 5:00 PM | 3 | 147 | 5 | 0 | 1 | 137 | 1 | 0 | 25 | 0 | 32 | 0 | 31 | 0 | 19 | 0 | 401 | 1327 |
| 5:15 PM | 2 | 147 | 8 | 0 | 0 | 130 | 2 | 0 | 5 | 0 | 13 | 0 | 26 | 0 | 3 | 0 | 336 | 1345 |
| 5:30 PM | 7 | 138 | 2 | 0 | 1 | 131 | 1 | 0 | 14 | 0 | 31 | 0 | 13 | 0 | 11 | 0 | 349 | 1412 |
| 5:45 PM | 7 | 99 | 1 | 1 | 0 | 121 | 2 | 0 | 7 | 0 | 13 | 0 | 17 | 0 | 6 | 0 | 274 | 1360 |

| Peak 15-Min Flowrates | Northbound | | | | Southbound | | | | Eastbound | | | | Westbound | | | | Total |
|------------------------|------------|------|-------|---|------------|------|-------|---|-----------|------|-------|---|-----------|------|-------|---|-------|
| | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | |
| All Vehicles | 12 | 588 | 20 | 0 | 4 | 548 | 4 | 0 | 100 | 0 | 128 | 0 | 124 | 0 | 76 | 0 | 1604 |
| Heavy Trucks | 8 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 8 | 0 | 40 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicycles | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| Railroad Stopped Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Comments:



Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

January 25, 2019

Carl Schwarzer, P.E.
Project Engineer
V3 Companies
7325 Janes Avenue
Woodridge, IL 60517

Subject: Stearns Road @ Munger Road
IDOT

Dear Mr. Schwarzer:

In response to a request made on your behalf and dated January 25, 2019, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

| ROAD SEGMENT | Current ADT | Year 2050 ADT |
|-------------------------------|-------------|---------------|
| Stearns Rd (@ Munger Rd) | 21,200 | 27,000 |
| Munger Rd north of Stearns Rd | 8,300 | 9,000 |
| Munger Rd south of Stearns Rd | 4,500 | 4,900 |

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2018 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2019_ForecastsTraffic\Bartlett\du-03-19\du-03-19.docx

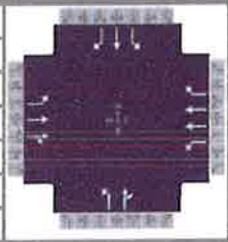
APPENDIX C

CAPACITY ANALYSIS WORKSHEETS
EXISTING



HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|----------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.81 |
| Urban Street | Logistics Property Group | Analysis Year | 2019 | Analysis Period | 1 > 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Ex AM.xus | | |
| Project Description | Existing AM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|--------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 254 | 793 | 73 | 6 | 475 | 162 | 116 | 167 | 23 | 152 | 170 | 142 |

| Signal Information | | | | Signal Timing (s) | | | | | | | | | |
|--------------------|-------|-----------------|-----|-------------------|-----|-----|------|-----|-----|------|--|--|--|
| Cycle, s | 99.0 | Reference Phase | 2 | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Green | 0.6 | 7.7 | 41.1 | 8.5 | 3.0 | 15.6 | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | |
| | | | | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | |

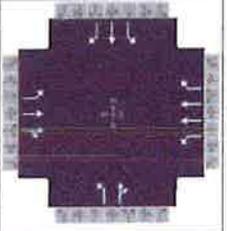
| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|------|------|------|------|------|------|------|------|
| Assigned Phase | 5 | 2 | 1 | 6 | 3 | 8 | 7 | 4 |
| Case Number | 1.1 | 4.0 | 1.1 | 3.0 | 1.1 | 4.0 | 1.1 | 3.0 |
| Phase Duration, s | 15.3 | 58.3 | 4.1 | 47.1 | 12.0 | 21.6 | 15.0 | 24.6 |
| Change Period, (Y+R _c), s | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 |
| Max Allow Headway (MAH), s | 2.9 | 5.9 | 3.0 | 5.9 | 3.0 | 3.0 | 3.0 | 3.0 |
| Queue Clearance Time (g _s), s | 11.4 | 21.5 | 2.2 | 13.6 | 8.5 | 14.5 | 11.4 | 11.6 |
| Green Extension Time (g _e), s | 0.3 | 25.7 | 0.0 | 27.5 | 0.1 | 1.1 | 0.1 | 1.1 |
| Phase Call Probability | 1.00 | 1.00 | 0.18 | 1.00 | 0.98 | 1.00 | 0.99 | 1.00 |
| Max Out Probability | 0.02 | 0.36 | 0.00 | 0.30 | 0.00 | 0.00 | 0.06 | 0.00 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|----|-------|-------|-------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate (v), veh/h | 314 | 543 | 527 | 7 | 586 | 200 | 143 | 235 | | 188 | 210 | 175 |
| Adjusted Saturation Flow Rate (s), veh/h/ln | 1781 | 1841 | 1786 | 1810 | 1755 | 1447 | 1795 | 1801 | | 1598 | 1969 | 1547 |
| Queue Service Time (g _s), s | 9.4 | 19.5 | 19.5 | 0.2 | 11.6 | 7.4 | 6.5 | 12.5 | | 9.4 | 9.6 | 8.8 |
| Cycle Queue Clearance Time (g _c), s | 9.4 | 19.5 | 19.5 | 0.2 | 11.6 | 7.4 | 6.5 | 12.5 | | 9.4 | 9.6 | 8.8 |
| Green Ratio (g/C) | 0.55 | 0.53 | 0.53 | 0.42 | 0.42 | 0.53 | 0.24 | 0.16 | | 0.29 | 0.19 | 0.31 |
| Capacity (c), veh/h | 532 | 973 | 944 | 250 | 1458 | 769 | 311 | 284 | | 291 | 370 | 475 |
| Volume-to-Capacity Ratio (X) | 0.589 | 0.557 | 0.558 | 0.030 | 0.402 | 0.260 | 0.461 | 0.825 | | 0.645 | 0.567 | 0.369 |
| Back of Queue (Q), ft/ln (95 th percentile) | 149.2 | 296.1 | 280.1 | 4.2 | 212.4 | 107.8 | 126.2 | 244.6 | | 177.1 | 203.2 | 146.6 |
| Back of Queue (Q), veh/ln (95 th percentile) | 5.9 | 11.5 | 11.2 | 0.2 | 7.9 | 3.9 | 5.0 | 9.5 | | 6.3 | 8.0 | 5.6 |
| Queue Storage Ratio (RQ) (95 th percentile) | 0.57 | 0.00 | 0.00 | 0.02 | 0.00 | 0.36 | 1.80 | 0.00 | | 0.57 | 0.00 | 0.00 |
| Uniform Delay (d ₁), s/veh | 13.4 | 15.6 | 15.6 | 17.2 | 20.3 | 12.6 | 31.2 | 40.4 | | 29.6 | 36.6 | 26.8 |
| Incremental Delay (d ₂), s/veh | 0.4 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.4 | 2.3 | | 0.9 | 0.5 | 0.2 |
| Initial Queue Delay (d ₃), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay (d), s/veh | 13.8 | 15.8 | 15.8 | 17.2 | 20.4 | 12.7 | 31.6 | 42.7 | | 30.5 | 37.1 | 27.0 |
| Level of Service (LOS) | B | B | B | B | C | B | C | D | | C | D | C |
| Approach Delay, s/veh / LOS | 15.3 | B | | 18.4 | B | | 38.5 | D | | 31.8 | C | |
| Intersection Delay, s/veh / LOS | 21.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | | WB | | | NB | | | SB | | |
|----------------------------|------|---|--|------|---|--|------|---|--|------|---|--|
| Pedestrian LOS Score / LOS | 1.89 | B | | 2.10 | B | | 2.45 | B | | 2.30 | B | |
| Bicycle LOS Score / LOS | 1.63 | B | | 1.14 | A | | 1.11 | A | | 1.43 | A | |

HCS7 Signalized Intersection Results Graphical Summary

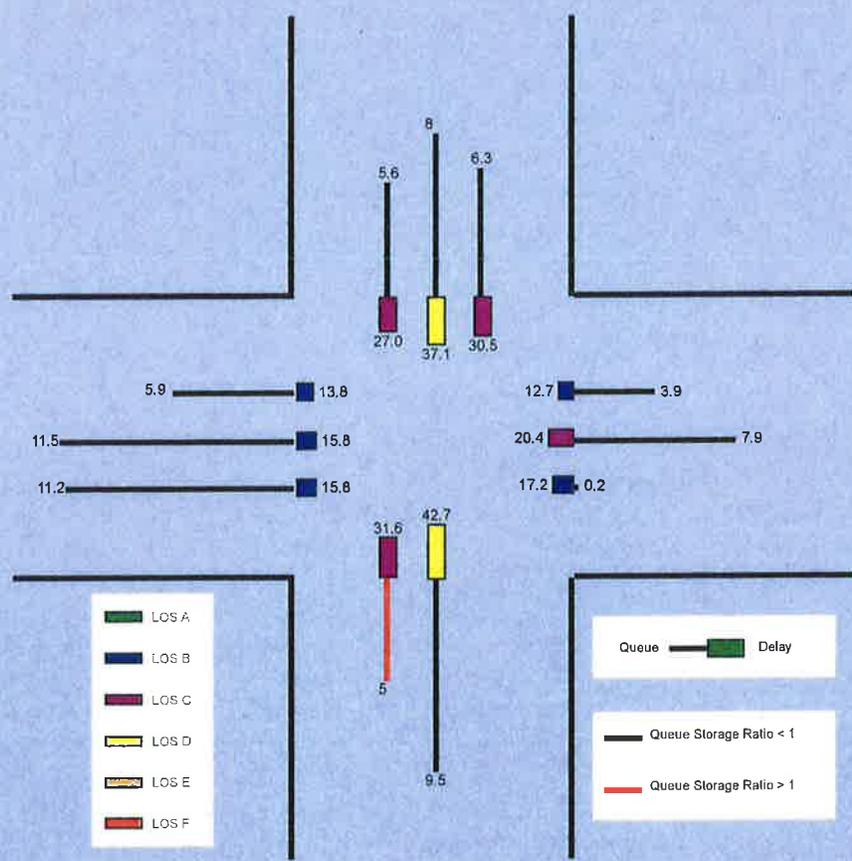
| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|----------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.81 |
| Urban Street | Logistics Property Group | Analysis Year | 2019 | Analysis Period | 1 > 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Ex AM.xus | | |
| Project Description | Existing AM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Approach Movement | | | | | | | | | | | | |
| Demand (v), veh/h | 254 | 793 | 73 | 6 | 475 | 162 | 116 | 167 | 23 | 152 | 170 | 142 |

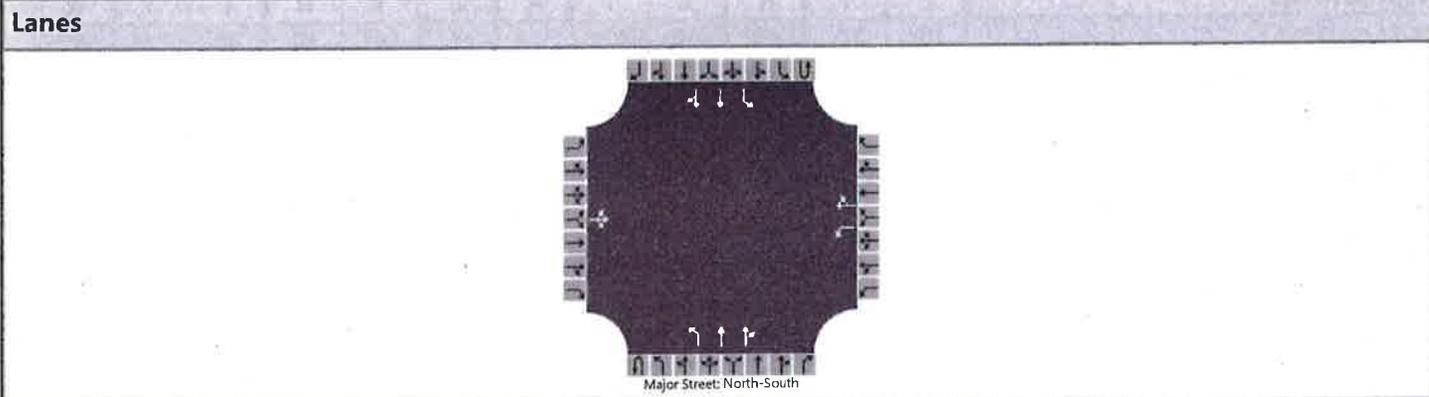
| Signal Information | | | | Signal Timing (s) | | | | | | | | Signal Phases | | | |
|--------------------|-------|-----------------|-----|-------------------|-----|-----|------|-----|-----|------|--|---------------|--|--|--|
| Cycle, s | 99.0 | Reference Phase | 2 | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | Green | 0.6 | 7.7 | 41.1 | 8.5 | 3.0 | 15.6 | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | | | |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|--|----------|-------|-------|----------|-------|-------|----------|-------|---|----------|-------|-------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Back of Queue (Q), ft/l (95 th percentile) | 149.2 | 296.1 | 280.1 | 4.2 | 212.4 | 107.8 | 126.2 | 244.6 | | 177.1 | 203.2 | 146.6 |
| Back of Queue (Q), veh/l (95 th percentile) | 5.9 | 11.5 | 11.2 | 0.2 | 7.9 | 3.9 | 5.0 | 9.5 | | 6.3 | 8.0 | 5.6 |
| Queue Storage Ratio (RQ) (95 th percentile) | 0.57 | 0.00 | 0.00 | 0.02 | 0.00 | 0.36 | 1.80 | 0.00 | | 0.57 | 0.00 | 0.00 |
| Control Delay (d), s/veh | 13.8 | 15.8 | 15.8 | 17.2 | 20.4 | 12.7 | 31.6 | 42.7 | | 30.5 | 37.1 | 27.0 |
| Level of Service (LOS) | B | B | B | B | C | B | C | D | | C | D | C |
| Approach Delay, s/veh / LOS | 15.3 B | | | 18.4 B | | | 38.5 D | | | 31.8 C | | |
| Intersection Delay, s/veh / LOS | 21.9 | | | | | | C | | | | | |



HCS7 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|-----------------------|
| Analyst | CAS | Intersection | STEARNS AND HUMBRACKT |
| Agency/Co. | V3 CO | Jurisdiction | DUDOT |
| Date Performed | 2/13/2019 | East/West Street | HUMBRACKT/SCHIFERL |
| Analysis Year | 2019 | North/South Street | MUNGER ROAD |
| Time Analyzed | Existing AM PH | Peak Hour Factor | 0.86 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 0.25 |
| Project Description | LOGISTICS PROPERTY CO | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|---|----|------------|---|----|-----|------------|---|---|----|-----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R | | |
| Movement | | | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | |
| Number of Lanes | | 0 | 1 | 0 | | 1 | 1 | 0 | | 0 | 1 | 2 | 0 | | 0 | 1 | 2 | 0 |
| Configuration | | | LTR | | | L | | TR | | L | T | TR | | L | T | TR | | |
| Volume (veh/h) | | 6 | 0 | 25 | | 20 | 0 | 4 | | 0 | 52 | 430 | 101 | | 0 | 30 | 419 | 28 |
| Percent Heavy Vehicles (%) | | 38 | 0 | 29 | | 13 | 0 | 0 | | 0 | 12 | | | | 0 | 0 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | | | |
| Right Turn Channelized | | | | | | | | | | | | | | | | | | |
| Median Type Storage | | Undivided | | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

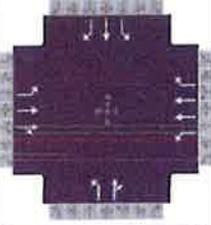
| | | | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|--|------|--|--|--|
| Base Critical Headway (sec) | | 7.5 | 6.5 | 6.9 | | 7.5 | 6.5 | 6.9 | | 4.1 | | | | | 4.1 | | | |
| Critical Headway (sec) | | 8.26 | 6.50 | 7.48 | | 7.76 | 6.50 | 6.90 | | 4.34 | | | | | 4.10 | | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | | 2.2 | | | |
| Follow-Up Headway (sec) | | 3.88 | 4.00 | 3.59 | | 3.63 | 4.00 | 3.30 | | 2.32 | | | | | 2.20 | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|--|------|--|------|--|--|--|-----|--|------|--|--|
| Flow Rate, v (veh/h) | | | 36 | | | 23 | | 5 | | 60 | | | | | | 35 | | |
| Capacity, c (veh/h) | | | 407 | | | 164 | | 693 | | 976 | | | | | | 972 | | |
| v/c Ratio | | | 0.09 | | | 0.14 | | 0.01 | | 0.06 | | | | | | 0.04 | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 0.3 | | | 0.5 | | 0.0 | | 0.2 | | | | | | 0.1 | | |
| Control Delay (s/veh) | | | 14.7 | | | 30.6 | | 10.2 | | 8.9 | | | | | | 8.8 | | |
| Level of Service (LOS) | | | B | | | D | | B | | A | | | | | | A | | |
| Approach Delay (s/veh) | | 14.7 | | | | 27.2 | | | | 0.8 | | | | 0.6 | | | | |
| Approach LOS | | B | | | | D | | | | | | | | | | | | |

HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|---------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.95 |
| Urban Street | Logistics Property Group | Analysis Year | 2019 | Analysis Period | 1> 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Ex PM.xus | | |
| Project Description | Existing PM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|--------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 187 | 524 | 63 | 16 | 811 | 152 | 217 | 247 | 26 | 243 | 228 | 251 |

| Signal Information | | | | | | | | | | | | |
|--------------------|-------|-----------------|-----|--------|-----|-----|------|------|-----|------|--|--|
| Cycle, s | 102.3 | Reference Phase | 2 | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Green | 1.1 | 3.7 | 42.2 | 12.6 | 1.6 | 18.7 | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | |
| | | | | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | |

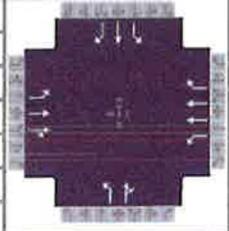
| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|------------------------------|------|------|------|------|------|------|------|------|
| Assigned Phase | 5 | 2 | 1 | 6 | 3 | 8 | 7 | 4 |
| Case Number | 1.1 | 4.0 | 1.1 | 3.0 | 1.1 | 4.0 | 1.1 | 3.0 |
| Phase Duration, s | 11.9 | 55.4 | 4.6 | 48.2 | 16.1 | 24.7 | 17.6 | 26.3 |
| Change Period, (Y+Rc), s | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 |
| Max Allow Headway (MAH), s | 2.9 | 6.0 | 3.0 | 6.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Queue Clearance Time (gs), s | 8.1 | 12.8 | 2.6 | 20.0 | 12.4 | 17.2 | 14.0 | 16.6 |
| Green Extension Time (ge), s | 0.2 | 23.2 | 0.0 | 22.2 | 0.2 | 1.4 | 0.1 | 1.4 |
| Phase Call Probability | 1.00 | 1.00 | 0.38 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Max Out Probability | 0.00 | 0.17 | 0.00 | 0.22 | 0.22 | 0.00 | 0.99 | 0.00 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|----|-------|-------|-------|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate (v), veh/h | 197 | 314 | 304 | 17 | 854 | 160 | 228 | 287 | | 256 | 240 | 264 |
| Adjusted Saturation Flow Rate (s), veh/h/ln | 1795 | 1870 | 1800 | 1810 | 1859 | 1547 | 1795 | 1868 | | 1739 | 1984 | 1598 |
| Queue Service Time (gs), s | 6.1 | 10.7 | 10.8 | 0.6 | 18.0 | 5.3 | 10.4 | 15.2 | | 12.0 | 11.3 | 14.6 |
| Cycle Queue Clearance Time (gc), s | 6.1 | 10.7 | 10.8 | 0.6 | 18.0 | 5.3 | 10.4 | 15.2 | | 12.0 | 11.3 | 14.6 |
| Green Ratio (g/C) | 0.51 | 0.48 | 0.48 | 0.42 | 0.41 | 0.55 | 0.31 | 0.18 | | 0.32 | 0.20 | 0.28 |
| Capacity (c), veh/h | 371 | 902 | 868 | 384 | 1532 | 851 | 370 | 341 | | 347 | 393 | 447 |
| Volume-to-Capacity Ratio (X) | 0.530 | 0.348 | 0.350 | 0.044 | 0.557 | 0.188 | 0.618 | 0.842 | | 0.737 | 0.610 | 0.591 |
| Back of Queue (Q), ft/ln (95 th percentile) | 102.7 | 190 | 181.3 | 9.9 | 301.2 | 77.6 | 198.5 | 285.1 | | 234.1 | 231.5 | 235.1 |
| Back of Queue (Q), veh/ln (95 th percentile) | 4.1 | 7.5 | 7.3 | 0.4 | 11.8 | 3.0 | 7.9 | 11.4 | | 9.0 | 9.2 | 9.3 |
| Queue Storage Ratio (RQ) (95 th percentile) | 0.40 | 0.00 | 0.00 | 0.06 | 0.00 | 0.26 | 2.84 | 0.00 | | 0.76 | 0.00 | 0.00 |
| Uniform Delay (d1), s/veh | 16.4 | 16.5 | 16.5 | 17.4 | 23.0 | 11.6 | 29.1 | 40.4 | | 29.1 | 37.5 | 31.8 |
| Incremental Delay (d2), s/veh | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.8 | 2.2 | | 4.9 | 0.6 | 0.5 |
| Initial Queue Delay (d3), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay (d), s/veh | 16.9 | 16.6 | 16.6 | 17.4 | 23.1 | 11.6 | 29.9 | 42.6 | | 34.0 | 38.0 | 32.3 |
| Level of Service (LOS) | B | B | B | B | C | B | C | D | | C | D | C |
| Approach Delay, s/veh / LOS | 16.7 | | B | 21.2 | | C | 37.0 | | D | 34.7 | | C |
| Intersection Delay, s/veh / LOS | 25.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|----------------------------|------|---|------|---|------|---|------|---|
| Pedestrian LOS Score / LOS | 1.90 | B | 2.10 | B | 2.45 | B | 2.30 | B |
| Bicycle LOS Score / LOS | 1.16 | A | 1.34 | A | 1.34 | A | 1.74 | B |

HCS7 Signalized Intersection Results Graphical Summary

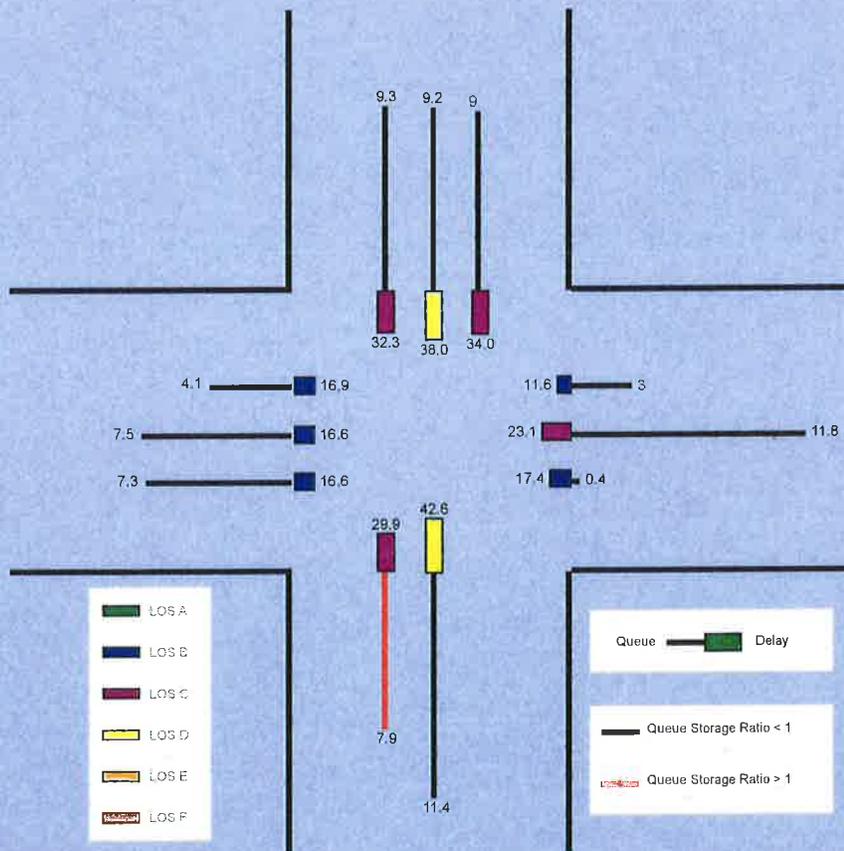
| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|----------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.95 |
| Urban Street | Logistics Property Group | Analysis Year | 2019 | Analysis Period | 1 > 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Ex PM.xus | | |
| Project Description | Existing PM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Approach Movement | | | | | | | | | | | | |
| Demand (v), veh/h | 187 | 524 | 63 | 16 | 811 | 152 | 217 | 247 | 26 | 243 | 228 | 251 |

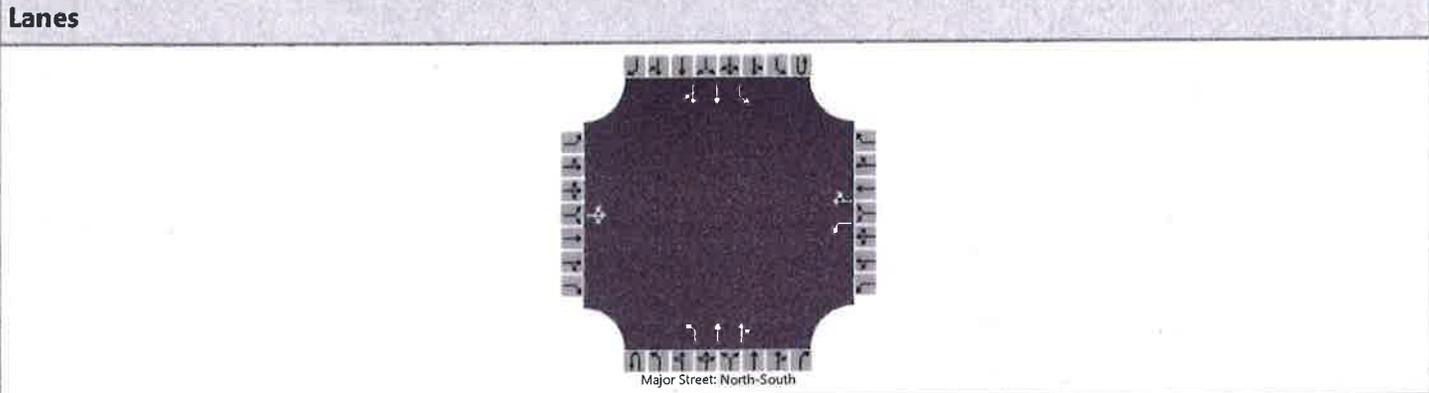
| Signal Information | | | | Signal Timing (s) | | | | | | | | | |
|--------------------|-------|-----------------|-----|-------------------|-----|-----|------|------|-----|------|--|--|--|
| Cycle, s | 102.3 | Reference Phase | 2 | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Green | 1.1 | 3.7 | 42.2 | 12.6 | 1.6 | 18.7 | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | |
| | | | | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|-------|------|-------|------|-------|------|-------|-------|---|-------|-------|-------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Approach Movement | | | | | | | | | | | | |
| Back of Queue (Q), ft/ln (95 th percentile) | 102.7 | 190 | 181.3 | 9.9 | 301.2 | 77.6 | 198.5 | 285.1 | | 234.1 | 231.5 | 235.1 |
| Back of Queue (Q), veh/ln (95 th percentile) | 4.1 | 7.5 | 7.3 | 0.4 | 11.8 | 3.0 | 7.9 | 11.4 | | 9.0 | 9.2 | 9.3 |
| Queue Storage Ratio (RQ) (95 th percentile) | 0.40 | 0.00 | 0.00 | 0.06 | 0.00 | 0.26 | 2.84 | 0.00 | | 0.76 | 0.00 | 0.00 |
| Control Delay (d), s/veh | 16.9 | 16.6 | 16.6 | 17.4 | 23.1 | 11.6 | 29.9 | 42.6 | | 34.0 | 38.0 | 32.3 |
| Level of Service (LOS) | B | B | B | B | C | B | C | D | | C | D | C |
| Approach Delay, s/veh / LOS | 16.7 | | B | 21.2 | | C | 37.0 | | D | 34.7 | | C |
| Intersection Delay, s/veh / LOS | 25.9 | | | | | | C | | | | | |



HCS7 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|-----------------------|----------------------------|-----------------------|------------------|--|--|--|
| Analyst | CAS | Intersection | STEARNS AND HUMBRACKT | | | | |
| Agency/Co. | V3 CO | Jurisdiction | DUDOT | | | | |
| Date Performed | 2/13/2019 | East/West Street | HUMBRACKT/SCHIFERL | | | | |
| Analysis Year | 2024 | North/South Street | MUNGER ROAD | | | | |
| Time Analyzed | Existing AM PH | Peak Hour Factor | 0.88 | | | | |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 0.25 | | | | |
| Project Description | LOGISTICS PROPERTY CO | | | | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|---|----|------------|----|-----|----|------------|----|-----|----|--|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R | |
| Movement | | | | | | | | | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | | | | | | | | | |
| Number of Lanes | | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | |
| Configuration | | | LTR | | | L | | TR | | L | T | TR | | L | T | TR | |
| Volume (veh/h) | | 54 | 0 | 95 | | 86 | 0 | 39 | 0 | 13 | 553 | 20 | 0 | 4 | 541 | 8 | |
| Percent Heavy Vehicles (%) | | 7 | 0 | 4 | | 0 | 0 | 5 | 0 | 31 | | | 0 | 25 | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | | |
| Right Turn Channelized | | | | | | | | | | | | | | | | | |
| Median Type Storage | | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

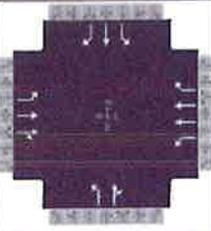
| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.5 | 6.5 | 6.9 | | 7.5 | 6.5 | 6.9 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.64 | 6.50 | 6.98 | | 7.50 | 6.50 | 7.00 | | 4.72 | | | | 4.60 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.57 | 4.00 | 3.34 | | 3.50 | 4.00 | 3.35 | | 2.51 | | | | 2.45 | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|--|------|--|------|--|--|--|------|--|--|--|
| Flow Rate, v (veh/h) | | | 169 | | | 98 | | 44 | | 15 | | | | 5 | | | |
| Capacity, c (veh/h) | | | 342 | | | 169 | | 661 | | 781 | | | | 792 | | | |
| v/c Ratio | | | 0.49 | | | 0.58 | | 0.07 | | 0.02 | | | | 0.01 | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 2.6 | | | 3.1 | | 0.2 | | 0.1 | | | | 0.0 | | | |
| Control Delay (s/veh) | | | 25.4 | | | 51.9 | | 10.8 | | 9.7 | | | | 9.6 | | | |
| Level of Service (LOS) | | | D | | | F | | B | | A | | | | A | | | |
| Approach Delay (s/veh) | | 25.4 | | | | 39.1 | | | | 0.2 | | | | 0.1 | | | |
| Approach LOS | | D | | | | E | | | | | | | | | | | |

HCS7 Signalized Intersection Input Data

| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|---------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.81 |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | Analysis Period | 1> 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Bg AM.xus | | |
| Project Description | Background AM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 258 | 831 | 80 | 6 | 498 | 164 | 118 | 169 | 23 | 154 | 172 | 144 |

| Signal Information | | | | | | | | | | | | | | | | |
|--------------------|-------|-----------------|-----|--------|-----|-----|------|-----|-----|------|--|--|--|--|--|--|
| Cycle, s | 103.8 | Reference Phase | 2 | | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Green | 0.6 | 8.2 | 44.1 | 9.0 | 3.1 | 16.4 | | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | | | | |
| | | | | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | | | | |

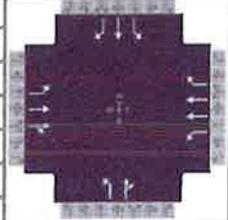
| Traffic Information | EB | | | WB | | | NB | | | SB | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 258 | 831 | 80 | 6 | 498 | 164 | 118 | 169 | 23 | 154 | 172 | 144 |
| Initial Queue (Q _b), veh/h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Base Saturation Flow Rate (s ₀), veh/h | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Parking (N _m), man/h | None | | | None | | | None | | | None | | |
| Heavy Vehicles (P _{HV}), % | 2 | 4 | | 0 | 10 | 13 | 1 | 4 | | 15 | 2 | 5 |
| Ped / Bike / RTOR, /h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Buses (N _b), buses/h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arrival Type (AT) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Upstream Filtering (I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lane Width (W), ft | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 |
| Turn Bay Length, ft | 260 | 0 | | 170 | 0 | 300 | 70 | 0 | | 310 | 0 | 0 |
| Grade (P _g), % | | 0 | | | 0 | | | 0 | | | 0 | |
| Speed Limit, mi/h | 50 | 50 | 50 | 45 | 45 | 45 | 35 | 35 | 35 | 40 | 40 | 40 |

| Phase Information | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|--|------|------|------|------|------|------|------|------|
| Maximum Green (G _{max}) or Phase Split, s | 19.0 | 71.0 | 19.0 | 71.0 | 17.0 | 38.0 | 17.0 | 38.0 |
| Yellow Change Interval (Y), s | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 |
| Red Clearance Interval (R _c), s | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 |
| Minimum Green (G _{min}), s | 3 | 15 | 3 | 15 | 3 | 8 | 3 | 8 |
| Start-Up Lost Time (I _t), s | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Extension of Effective Green (e), s | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Passage (P _T), s | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Recall Mode | Off | Min | Off | Min | Off | Off | Off | Off |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Walk (Walk), s | | 0.0 | | 0.0 | | 0.0 | | 0.0 |
| Pedestrian Clearance Time (P _C), s | | 0.0 | | 0.0 | | 0.0 | | 0.0 |

| Multimodal Information | EB | | | WB | | | NB | | | SB | | |
|---|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|
| 85th % Speed / Rest in Walk / Corner Radius | 0 | No | 25 |
| Walkway / Crosswalk Width / Length, ft | 9.0 | 12 | 0 | 9.0 | 12 | 0 | 9.0 | 12 | 0 | 9.0 | 12 | 0 |
| Street Width / Island / Curb | 0 | 0 | No |
| Width Outside / Bike Lane / Shoulder, ft | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 |
| Pedestrian Signal / Occupied Parking | No | 0.50 | |

HCS7 Signalized Intersection Intermediate Values

| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|----------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.81 |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | Analysis Period | 1 > 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Bg AM.xus | | |
| Project Description | Background AM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|--------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 258 | 831 | 80 | 6 | 498 | 164 | 118 | 169 | 23 | 154 | 172 | 144 |

| Signal Information | | | | Signal Phases | | | | | | Signal Timing | | | | | |
|--------------------|-------|-----------------|-----|---------------|-----|-----|------|-----|-----|---------------|--|--|--|--|--|
| Cycle, s | 103.8 | Reference Phase | 2 | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | Green | 0.6 | 8.2 | 44.1 | 9.0 | 3.1 | 16.4 | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | | | |

| Saturation Flow / Delay | EB | | | WB | | | NB | | | SB | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Lane Width Adjustment Factor (f_w) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Heavy Vehicles and Grade Factor (f_{HVg}) | 0.984 | 0.969 | 1.000 | 1.000 | 0.922 | 0.899 | 0.992 | 0.969 | 1.000 | 0.883 | 0.984 | 0.961 |
| Parking Activity Adjustment Factor (f_p) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Bus Blockage Adjustment Factor (f_{bb}) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Area Type Adjustment Factor (f_a) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Lane Utilization Adjustment Factor (f_{LU}) | 1.000 | 1.000 | 1.000 | 1.000 | 0.952 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Left-Turn Adjustment Factor (f_{LT}) | 0.952 | 0.000 | | 0.952 | 0.000 | | 0.952 | 0.000 | | 0.952 | 0.000 | |
| Right-Turn Adjustment Factor (f_{RT}) | | 0.969 | 0.969 | | 0.000 | 0.847 | | 0.979 | 0.979 | | 0.000 | 0.847 |
| Left-Turn Pedestrian Adjustment Factor (f_{LPB}) | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | | |
| Right-Turn Ped-Bike Adjustment Factor (f_{RPB}) | | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 |
| Work Zone Adjustment Factor (f_{wz}) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| DDI Factor (f_{DDI}) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Movement Saturation Flow Rate (s), veh/h | 1781 | 3306 | 318 | 1810 | 3511 | 1447 | 1795 | 1586 | 216 | 1598 | 1969 | 1547 |
| Proportion of Vehicles Arriving on Green (P) | 0.12 | 0.54 | 0.54 | 0.01 | 0.42 | 0.42 | 0.09 | 0.16 | 0.16 | 0.12 | 0.19 | 0.19 |
| Incremental Delay Factor (k) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | | 0.06 | 0.04 | 0.04 |

| Signal Timing / Movement Groups | EBL | EBT/R | WBL | WBT/R | NBL | NBT/R | SBL | SBT/R |
|---|------|-------|------|-------|------|-------|------|-------|
| Lost Time (t_L) | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 |
| Green Ratio (g/C) | 0.56 | 0.54 | 0.43 | 0.42 | 0.24 | 0.16 | 0.29 | 0.19 |
| Permitted Saturation Flow Rate (s_p), veh/h/ln | 808 | 0 | 509 | 0 | 1178 | 0 | 1025 | 0 |
| Shared Saturation Flow Rate (s_{sh}), veh/h/ln | | | | | | | | |
| Permitted Effective Green Time (g_p), s | 46.2 | 0.0 | 44.2 | 0.0 | 16.4 | 0.0 | 18.0 | 0.0 |
| Permitted Service Time (g_u), s | 31.5 | 0.0 | 32.2 | 0.0 | 7.4 | 0.0 | 3.2 | 0.0 |
| Permitted Queue Service Time (g_{ps}), s | 9.6 | | 0.2 | | 1.3 | | 3.2 | |
| Time to First Blockage (g_r), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Queue Service Time Before Blockage (g_{ts}), s | | | | | | | | |
| Protected Right Saturation Flow (s_R), veh/h/ln | | | | 1447 | | | | 1547 |
| Protected Right Effective Green Time (g_R), s | | | | 12.1 | | | | 12.3 |

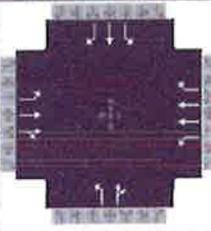
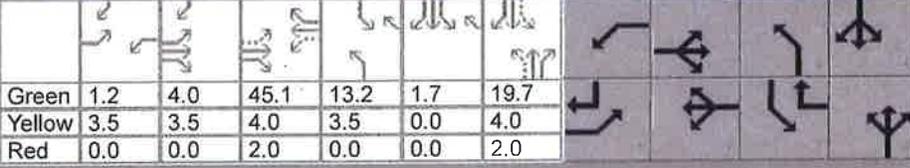
| Multimodal | EB | | | WB | | | NB | | | SB | | |
|----------------------------------|---------|-------|--|--------|-------|--|--------|-------|--|--------|-------|--|
| Pedestrian F_w / F_v | 1.198 | 0.000 | | 1.389 | 0.000 | | 1.710 | 0.000 | | 1.557 | 0.000 | |
| Pedestrian F_s / F_{delay} | 0.000 | 0.097 | | 0.000 | 0.114 | | 0.000 | 0.145 | | 0.000 | 0.142 | |
| Pedestrian M_{corner} / M_{cw} | | | | | | | | | | | | |
| Bicycle c_b / d_b | 1074.96 | 11.11 | | 849.94 | 17.17 | | 315.38 | 36.84 | | 375.53 | 34.25 | |
| Bicycle F_w / F_v | -3.64 | 1.19 | | -3.64 | 0.68 | | -3.64 | 0.63 | | -3.64 | 0.96 | |

--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

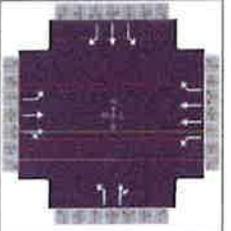
--- Comments ---

HCS7 Signalized Intersection Input Data

| General Information | | | | Intersection Information | | | |  | | | | | | | |
|---|--------------------------|-----------------|------------------------------|--|---------|------|------|---|------|------|------|------|------|--|--|
| Agency | V3 Co. | | | Duration, h | 0.25 | | | | | | | | | | |
| Analyst | CAS | Analysis Date | Feb 14, 2019 | Area Type | Other | | | | | | | | | | |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.95 | | | | | | | | | | |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | Analysis Period | 1> 7:00 | | | | | | | | | | |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Bg PM.xus | | | | | | | | | | | | |
| Project Description | Background PM | | | | | | | | | | | | | | |
| Demand Information | | | | EB | | | WB | | | NB | | | SB | | |
| Approach Movement | | L | T | R | L | T | R | L | T | R | L | T | R | | |
| Demand (v), veh/h | | 190 | 549 | 64 | 16 | 850 | 154 | 220 | 251 | 26 | 246 | 231 | 255 | | |
| Signal Information | | | |  | | | | | | | | | | | |
| Cycle, s | 107.4 | Reference Phase | 2 | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | | | | | | | | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | | | | | | | | | | | | |
| Green | 1.2 | 4.0 | 45.1 | 13.2 | 1.7 | 19.7 | | | | | | | | | |
| Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | | | | | | | |
| Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | | | | | | | |
| Traffic Information | | | | EB | | | WB | | | NB | | | SB | | |
| Approach Movement | | L | T | R | L | T | R | L | T | R | L | T | R | | |
| Demand (v), veh/h | | 190 | 549 | 64 | 16 | 850 | 154 | 220 | 251 | 26 | 246 | 231 | 255 | | |
| Initial Queue (Q _b), veh/h | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Base Saturation Flow Rate (s ₀), veh/h | | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | | |
| Parking (N _m), man/h | | None | | | None | | | None | | | None | | | | |
| Heavy Vehicles (P _{HV}), % | | 1 | 2 | | 0 | 3 | 5 | 1 | 0 | | 5 | 1 | 1 | | |
| Ped / Bike / RTOR, /h | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Buses (N _b), buses/h | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Arrival Type (AT) | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| Upstream Filtering (I) | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Lane Width (W), ft | | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | | |
| Turn Bay Length, ft | | 260 | 0 | | 170 | 0 | 300 | 70 | 0 | | 310 | 0 | 0 | | |
| Grade (P _g), % | | | 0 | | | 0 | | | 0 | | | 0 | | | |
| Speed Limit, mi/h | | 50 | 50 | 50 | 45 | 45 | 45 | 35 | 35 | 35 | 40 | 40 | 40 | | |
| Phase Information | | | | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT | | | | |
| Maximum Green (G _{max}) or Phase Split, s | | 19.0 | 71.0 | 19.0 | 71.0 | 17.0 | 38.0 | 17.0 | 38.0 | | | | | | |
| Yellow Change Interval (Y), s | | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 | | | | | | |
| Red Clearance Interval (R _c), s | | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 | | | | | | |
| Minimum Green (G _{min}), s | | 3 | 15 | 3 | 15 | 3 | 8 | 3 | 8 | | | | | | |
| Start-Up Lost Time (I _t), s | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | | | | | |
| Extension of Effective Green (e), s | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | | | | | |
| Passage (PT), s | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | | | | | |
| Recall Mode | | Off | Ped | Off | Min | Off | Off | Off | Off | | | | | | |
| Dual Entry | | No | Yes | No | Yes | No | Yes | No | Yes | | | | | | |
| Walk (Walk), s | | | 0.0 | | 0.0 | | 0.0 | | 0.0 | | | | | | |
| Pedestrian Clearance Time (PC), s | | | 0.0 | | 0.0 | | 0.0 | | 0.0 | | | | | | |
| Multimodal Information | | | | EB | | | WB | | | NB | | | SB | | |
| 85th % Speed / Rest in Walk / Corner Radius | | 0 | No | 25 | 0 | No | 25 | 0 | No | 25 | 0 | No | 25 | | |
| Walkway / Crosswalk Width / Length, ft | | 9.0 | 12 | 0 | 9.0 | 12 | 0 | 9.0 | 12 | 0 | 9.0 | 12 | 0 | | |
| Street Width / Island / Curb | | 0 | 0 | No | 0 | 0 | No | 0 | 0 | No | 0 | 0 | No | | |
| Width Outside / Bike Lane / Shoulder, ft | | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | | |
| Pedestrian Signal / Occupied Parking | | No | 0.50 | No | 0.50 | No | 0.50 | No | 0.50 | No | 0.50 | 0.50 | | | |

HCS7 Signalized Intersection Intermediate Values

| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|------------------------------|--------------------------|---------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 14, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.95 |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | Analysis Period | 1> 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger Bg PM.xus | | |
| Project Description | Background PM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Approach Movement | | | | | | | | | | | | |
| Demand (v), veh/h | 190 | 549 | 64 | 16 | 850 | 154 | 220 | 251 | 26 | 246 | 231 | 255 |

| Signal Information | | | | Signal Phases | | | | | | | | | |
|--------------------|-------|-----------------|-----|---------------|-----|-----|------|------|-----|------|--|--|--|
| Cycle, s | 107.4 | Reference Phase | 2 | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | Green | 1.2 | 4.0 | 45.1 | 13.2 | 1.7 | 19.7 | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | |

| Saturation Flow / Delay | L | T | R | L | T | R | L | T | R | L | T | R |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Width Adjustment Factor (<i>f_w</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Heavy Vehicles and Grade Factor (<i>f_{HVg}</i>) | 0.992 | 0.984 | 1.000 | 1.000 | 0.977 | 0.961 | 0.992 | 1.000 | 1.000 | 0.961 | 0.992 | 0.992 |
| Parking Activity Adjustment Factor (<i>f_p</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Bus Blockage Adjustment Factor (<i>f_{bb}</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Area Type Adjustment Factor (<i>f_a</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Lane Utilization Adjustment Factor (<i>f_{LU}</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 0.952 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Left-Turn Adjustment Factor (<i>f_{LT}</i>) | 0.952 | 0.000 | | 0.952 | 0.000 | | 0.952 | 0.000 | | 0.952 | 0.000 | |
| Right-Turn Adjustment Factor (<i>f_{RT}</i>) | | 0.963 | 0.963 | | 0.000 | 0.847 | | 0.983 | 0.983 | | 0.000 | 0.847 |
| Left-Turn Pedestrian Adjustment Factor (<i>f_{LPB}</i>) | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | | |
| Right-Turn Ped-Bike Adjustment Factor (<i>f_{RPB}</i>) | | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 |
| Work Zone Adjustment Factor (<i>f_{wz}</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| DDI Factor (<i>f_{DDI}</i>) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Movement Saturation Flow Rate (s), veh/h | 1795 | 3289 | 383 | 1810 | 3719 | 1547 | 1795 | 1693 | 175 | 1739 | 1984 | 1598 |
| Proportion of Vehicles Arriving on Green (P) | 0.08 | 0.49 | 0.49 | 0.01 | 0.42 | 0.42 | 0.12 | 0.18 | 0.18 | 0.14 | 0.20 | 0.20 |
| Incremental Delay Factor (k) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.08 | 0.04 | | 0.21 | 0.04 | 0.04 |

| Signal Timing / Movement Groups | EBL | EBT/R | WBL | WBT/R | NBL | NBT/R | SBL | SBT/R |
|---|------|-------|------|-------|------|-------|------|-------|
| Lost Time (t _L) | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 |
| Green Ratio (g/C) | 0.52 | 0.49 | 0.43 | 0.42 | 0.31 | 0.18 | 0.32 | 0.20 |
| Permitted Saturation Flow Rate (s _p), veh/h/ln | 627 | 0 | 798 | 0 | 1146 | 0 | 1062 | 0 |
| Shared Saturation Flow Rate (s _{sh}), veh/h/ln | | | | | | | | |
| Permitted Effective Green Time (g _p), s | 47.2 | 0.0 | 45.2 | 0.0 | 19.7 | 0.0 | 19.9 | 0.0 |
| Permitted Service Time (g _u), s | 25.4 | 0.0 | 39.1 | 0.0 | 7.4 | 0.0 | 3.5 | 0.0 |
| Permitted Queue Service Time (g _{ps}), s | 10.2 | | 0.1 | | 3.1 | | 3.5 | |
| Time to First Blockage (g _t), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Queue Service Time Before Blockage (g _{ts}), s | | | | | | | | |
| Protected Right Saturation Flow (s _R), veh/h/ln | | | | 1547 | | | | 1598 |
| Protected Right Effective Green Time (g _R), s | | | | 14.9 | | | | 8.7 |

| Multimodal | EB | | WB | | NB | | SB | |
|--|--------|-------|--------|-------|--------|-------|--------|-------|
| Pedestrian <i>F_w</i> / <i>F_v</i> | 1.198 | 0.000 | 1.389 | 0.000 | 1.710 | 0.000 | 1.557 | 0.000 |
| Pedestrian <i>F_s</i> / <i>F_{delay}</i> | 0.000 | 0.106 | 0.000 | 0.116 | 0.000 | 0.143 | 0.000 | 0.142 |
| Pedestrian <i>M_{corner}</i> / <i>M_{cw}</i> | | | | | | | | |
| Bicycle <i>c_b</i> / <i>d_b</i> | 980.33 | 13.96 | 840.66 | 18.04 | 366.92 | 35.80 | 397.69 | 34.46 |
| Bicycle <i>F_w</i> / <i>F_v</i> | -3.64 | 0.70 | -3.64 | 0.89 | -3.64 | 0.86 | -3.64 | 1.27 |

--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

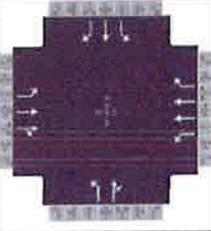
APPENDIX E

CAPACITY ANALYSIS WORKSHEETS
FUTURE WITH PROJECT



HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---------------------|--------------------------|---------------|-------------------------------|--------------------------|----------|
| Agency | V3 Co. | | | Duration, h | 0.25 |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | PHF | 0.81 |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | Analysis Period | 1 > 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger FwP AM.xus | | |
| Project Description | Future with Project AM | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 269 | 839 | 80 | 7 | 504 | 166 | 118 | 171 | 25 | 163 | 172 | 144 |

| Signal Information | | | | | | | | | | | | | |
|--------------------|-------|-----------------|-----|--------|-----|-----|------|-----|-----|------|--|--|--|
| Cycle, s | 107.4 | Reference Phase | 2 | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Green | 0.7 | 9.0 | 45.1 | 9.2 | 0.3 | 17.2 | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | | | |
| | | | | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | |

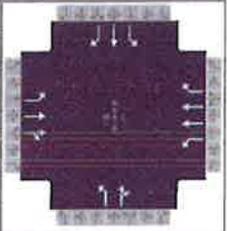
| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|--|------|------|------|------|------|------|------|------|
| Assigned Phase | 5 | 2 | 1 | 6 | 3 | 8 | 7 | 4 |
| Case Number | 1.1 | 4.0 | 1.1 | 3.0 | 1.1 | 4.0 | 1.1 | 3.0 |
| Phase Duration, s | 16.7 | 63.6 | 4.2 | 51.1 | 12.7 | 23.2 | 16.5 | 26.9 |
| Change Period, (Y+R _c), s | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 |
| Max Allow Headway (MAH), s | 2.9 | 5.9 | 3.0 | 5.9 | 3.0 | 3.0 | 3.0 | 3.0 |
| Queue Clearance Time (g _s), s | 12.8 | 24.7 | 2.3 | 15.4 | 9.2 | 16.0 | 12.9 | 12.5 |
| Green Extension Time (g _e), s | 0.3 | 26.9 | 0.0 | 29.7 | 0.1 | 1.1 | 0.1 | 1.1 |
| Phase Call Probability | 1.00 | 1.00 | 0.23 | 1.00 | 0.99 | 1.00 | 1.00 | 1.00 |
| Max Out Probability | 0.06 | 0.45 | 0.00 | 0.38 | 0.00 | 0.00 | 0.30 | 0.00 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|----|-------|-------|-------|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate (v), veh/h | 332 | 576 | 559 | 9 | 622 | 205 | 146 | 242 | | 201 | 212 | 178 |
| Adjusted Saturation Flow Rate (s), veh/h/ln | 1781 | 1841 | 1784 | 1810 | 1755 | 1447 | 1795 | 1799 | | 1598 | 1969 | 1547 |
| Queue Service Time (g _s), s | 10.8 | 22.7 | 22.7 | 0.3 | 13.4 | 8.1 | 7.2 | 14.0 | | 10.9 | 10.5 | 9.5 |
| Cycle Queue Clearance Time (g _c), s | 10.8 | 22.7 | 22.7 | 0.3 | 13.4 | 8.1 | 7.2 | 14.0 | | 10.9 | 10.5 | 9.5 |
| Green Ratio (g/C) | 0.56 | 0.54 | 0.54 | 0.43 | 0.42 | 0.54 | 0.25 | 0.16 | | 0.30 | 0.19 | 0.32 |
| Capacity (c), veh/h | 522 | 987 | 957 | 233 | 1474 | 782 | 314 | 288 | | 290 | 384 | 492 |
| Volume-to-Capacity Ratio (X) | 0.636 | 0.583 | 0.584 | 0.037 | 0.422 | 0.262 | 0.463 | 0.841 | | 0.694 | 0.553 | 0.362 |
| Back of Queue (Q), ft/ln (95 th percentile) | 179.3 | 342.2 | 323.5 | 5.4 | 241.7 | 120.9 | 141.1 | 270.6 | | 215.2 | 219.3 | 161.1 |
| Back of Queue (Q), veh/ln (95 th percentile) | 7.1 | 13.3 | 12.9 | 0.2 | 9.0 | 4.4 | 5.6 | 10.5 | | 7.7 | 8.6 | 6.2 |
| Queue Storage Ratio (RQ) (95 th percentile) | 0.69 | 0.00 | 0.00 | 0.03 | 0.00 | 0.40 | 2.02 | 0.00 | | 0.69 | 0.00 | 0.00 |
| Uniform Delay (d ₁), s/veh | 14.6 | 16.8 | 16.8 | 18.5 | 22.0 | 13.2 | 33.7 | 43.9 | | 31.7 | 39.0 | 28.3 |
| Incremental Delay (d ₂), s/veh | 0.9 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.4 | 2.6 | | 3.0 | 0.5 | 0.2 |
| Initial Queue Delay (d ₃), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay (d), s/veh | 15.5 | 17.0 | 17.0 | 18.5 | 22.1 | 13.3 | 34.1 | 46.4 | | 34.7 | 39.5 | 28.4 |
| Level of Service (LOS) | B | B | B | B | C | B | C | D | | C | D | C |
| Approach Delay, s/veh / LOS | 16.7 | | B | 19.9 | | B | 41.8 | | D | 34.5 | | C |
| Intersection Delay, s/veh / LOS | 23.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | | WB | | | NB | | | SB | | |
|----------------------------|------|--|---|------|--|---|------|--|---|------|--|---|
| Pedestrian LOS Score / LOS | 1.90 | | B | 2.10 | | B | 2.46 | | B | 2.30 | | B |
| Bicycle LOS Score / LOS | 1.70 | | B | 1.18 | | A | 1.13 | | A | 1.46 | | A |

HCS7 Signalized Intersection Results Graphical Summary

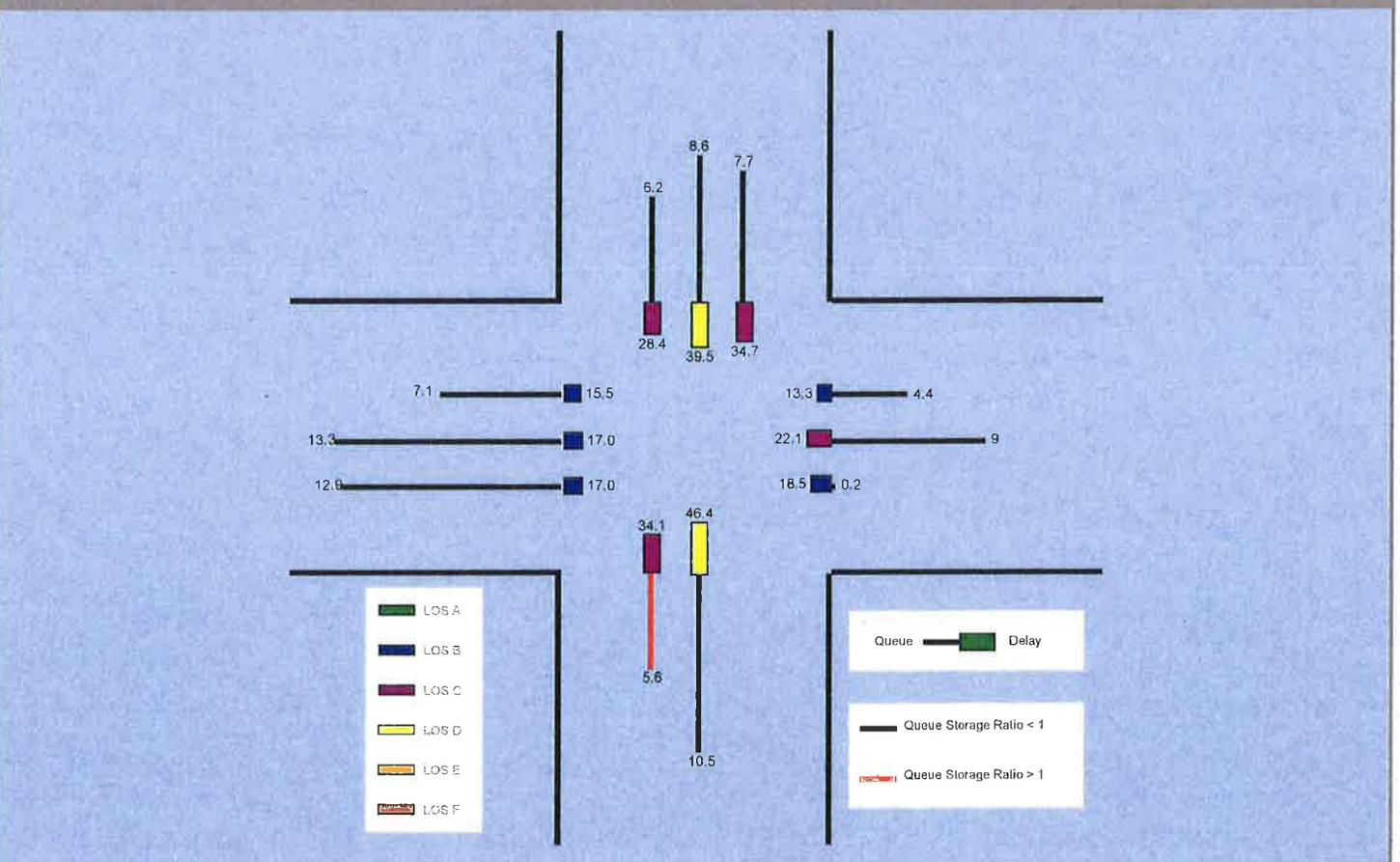
| General Information | | | | Intersection Information | | |
|---------------------|--------------------------|---------------|-------------------------------|--------------------------|-----------------|---------|
| Agency | V3 Co. | | | Duration, h | 0.25 | |
| Analyst | CAS | Analysis Date | Feb 13, 2019 | | Area Type | Other |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | | PHF | 0.81 |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | | Analysis Period | 1> 7:00 |
| Intersection | Stearns and Munger | File Name | Stearns and Munger FWP AM.xus | | | |
| Project Description | Future with Project AM | | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---------------------|-----|-----|----|----|-----|-----|-----|-----|----|-----|-----|-----|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (v), veh/h | 269 | 839 | 80 | 7 | 504 | 166 | 118 | 171 | 25 | 163 | 172 | 144 |

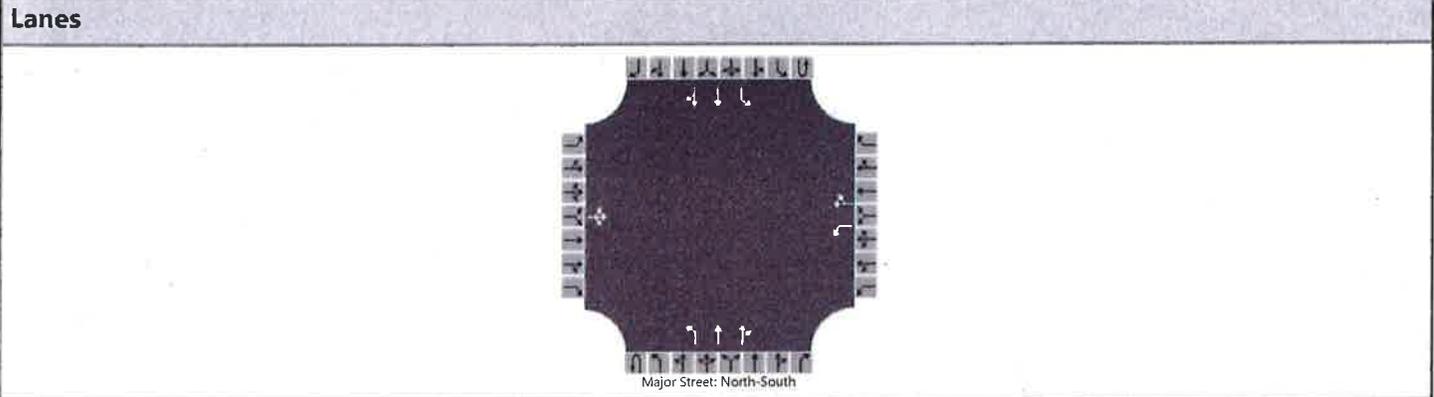
| Signal Information | | | | Signal Timing (s) | | | | | | | Signal Phases | | | | | | |
|--------------------|-------|-----------------|-----|-------------------|-----|-----|------|-----|-----|------|---------------|--|--|--|--|--|--|
| Cycle, s | 107.4 | Reference Phase | 2 | | | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | Green | 0.7 | 9.0 | 45.1 | 9.2 | 0.3 | 17.2 | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | | | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | | | | | |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|-------|-------|-------|------|-------|-------|-------|-------|---|-------|-------|-------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Back of Queue (Q), ft/ln (95 th percentile) | 179.3 | 342.2 | 323.5 | 5.4 | 241.7 | 120.9 | 141.1 | 270.6 | | 215.2 | 219.3 | 161.1 |
| Back of Queue (Q), veh/ln (95 th percentile) | 7.1 | 13.3 | 12.9 | 0.2 | 9.0 | 4.4 | 5.6 | 10.5 | | 7.7 | 8.6 | 6.2 |
| Queue Storage Ratio (RQ) (95 th percentile) | 0.69 | 0.00 | 0.00 | 0.03 | 0.00 | 0.40 | 2.02 | 0.00 | | 0.69 | 0.00 | 0.00 |
| Control Delay (d), s/veh | 15.5 | 17.0 | 17.0 | 18.5 | 22.1 | 13.3 | 34.1 | 46.4 | | 34.7 | 39.5 | 28.4 |
| Level of Service (LOS) | B | B | B | B | C | B | C | D | | C | D | C |
| Approach Delay, s/veh / LOS | 16.7 | | B | 19.9 | | B | 41.8 | | D | 34.5 | | C |
| Intersection Delay, s/veh / LOS | 23.7 | | | | | | C | | | | | |



HCS7 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|---------------------------|----------------------------|-----------------------|------------------|--|--|--|
| Analyst | CAS | Intersection | STEARNS AND HUMBRACKT | | | | |
| Agency/Co. | V3 CO | Jurisdiction | DUDOT | | | | |
| Date Performed | 2/13/2019 | East/West Street | HUMBRACKT/SCHIFERL | | | | |
| Analysis Year | 2024 | North/South Street | MUNGER ROAD | | | | |
| Time Analyzed | FUTURE WITH PROJECT AM PH | Peak Hour Factor | 0.86 | | | | |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 0.25 | | | | |
| Project Description | LOGISTICS PROPERTY CO | | | | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|---|----|------------|----|-----|-----|------------|----|-----|----|--|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R | |
| Movement | | | | | | | | | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | | | | | | | | | |
| Number of Lanes | | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | |
| Configuration | | | LTR | | | L | | TR | | L | T | TR | | L | T | TR | |
| Volume (veh/h) | | 6 | 0 | 25 | | 20 | 0 | 4 | 0 | 52 | 441 | 101 | 0 | 30 | 434 | 28 | |
| Percent Heavy Vehicles (%) | | 38 | 0 | 29 | | 13 | 0 | 0 | 0 | 12 | | | 0 | 0 | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | | |
| Right Turn Channelized | | | | | | | | | | | | | | | | | |
| Median Type Storage | | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.5 | 6.5 | 6.9 | | 7.5 | 6.5 | 6.9 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 8.26 | 6.50 | 7.48 | | 7.76 | 6.50 | 6.90 | | 4.34 | | | | 4.10 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.88 | 4.00 | 3.59 | | 3.63 | 4.00 | 3.30 | | 2.32 | | | | 2.20 | | |

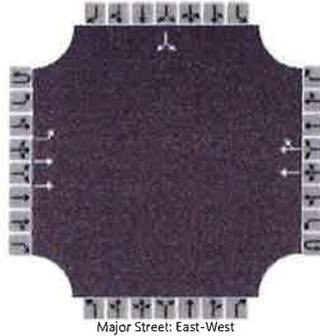
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|--|------|--|------|--|--|--|------|--|--|--|
| Flow Rate, v (veh/h) | | | 36 | | | 23 | | 5 | | 60 | | | | 35 | | | |
| Capacity, c (veh/h) | | | 395 | | | 157 | | 687 | | 961 | | | | 962 | | | |
| v/c Ratio | | | 0.09 | | | 0.15 | | 0.01 | | 0.06 | | | | 0.04 | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 0.3 | | | 0.5 | | 0.0 | | 0.2 | | | | 0.1 | | | |
| Control Delay (s/veh) | | | 15.0 | | | 31.8 | | 10.3 | | 9.0 | | | | 8.9 | | | |
| Level of Service (LOS) | | | C | | | D | | B | | A | | | | A | | | |
| Approach Delay (s/veh) | | 15.0 | | | | 28.2 | | | | 0.8 | | | | 0.5 | | | |
| Approach LOS | | C | | | | D | | | | | | | | | | | |

HCS7 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|---------------------------|----------------------------|---------------------------|------------------|--|--|--|
| Analyst | CAS | Intersection | STEARNS RD AND DRIVEWAY 2 | | | | |
| Agency/Co. | V3 | Jurisdiction | DUDOT | | | | |
| Date Performed | 2/14/2019 | East/West Street | STEARNS ROAD | | | | |
| Analysis Year | 2024 | North/South Street | DRIVEWAY 2 | | | | |
| Time Analyzed | FUTURE WITH PROJECT AM PH | Peak Hour Factor | 0.95 | | | | |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 0.25 | | | | |
| Project Description | LOGISTICS PROPERTY GROUP | | | | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|----|------|---|-----------|---|-----|----|------------|---|---|---|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 | | 0 | 0 | 0 | | 0 | 1 | 0 |
| Configuration | | L | T | | | | T | TR | | | | | | | LR | |
| Volume (veh/h) | 0 | 19 | 1008 | | | | 675 | 13 | | | | | | 8 | | 2 |
| Percent Heavy Vehicles (%) | 0 | 11 | | | | | | | | | | | | 25 | | 50 |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | | | | | 0 | | |
| Right Turn Channelized | | | | | | | | | | | | | | | | |
| Median Type Storage | | | | | Left Only | | | | | | | | 1 | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|--|--|--|--|--|--|--|--|--|--|--|------|--|------|
| Base Critical Headway (sec) | | 4.1 | | | | | | | | | | | | 7.5 | | 6.9 |
| Critical Headway (sec) | | 4.32 | | | | | | | | | | | | 7.30 | | 7.90 |
| Base Follow-Up Headway (sec) | | 2.2 | | | | | | | | | | | | 3.5 | | 3.3 |
| Follow-Up Headway (sec) | | 2.31 | | | | | | | | | | | | 3.75 | | 3.80 |

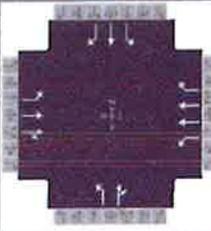
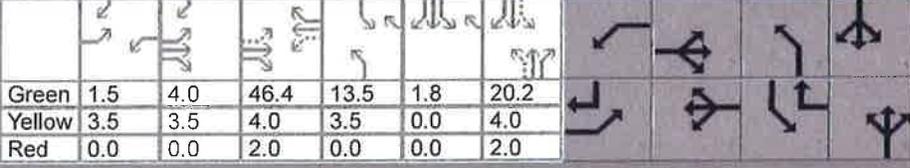
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|------|--|--|--|--|--|--|--|--|--|--|--|------|--|------|--|
| Flow Rate, v (veh/h) | | 20 | | | | | | | | | | | | | | 11 | |
| Capacity, c (veh/h) | | 817 | | | | | | | | | | | | | | 277 | |
| v/c Ratio | | 0.02 | | | | | | | | | | | | | | 0.04 | |
| 95% Queue Length, Q ₉₅ (veh) | | 0.1 | | | | | | | | | | | | | | 0.1 | |
| Control Delay (s/veh) | | 9.5 | | | | | | | | | | | | | | 18.5 | |
| Level of Service (LOS) | | A | | | | | | | | | | | | | | C | |
| Approach Delay (s/veh) | | 0.2 | | | | | | | | | | | | 18.5 | | | |
| Approach LOS | | | | | | | | | | | | | | C | | | |

HCS7 Signalized Intersection Input Data

| General Information | | | | Intersection Information | | | | | | | | | | | |
|--|--------------------------|-----------------|----------------|--------------------------|-------------------------------|-----------------|---------|------|------|------|------|------|------|------|------|
| Agency | V3 Co. | | | Duration, h | 0.25 | | | | | | | | | | |
| Analyst | CAS | Analysis Date | Feb 14, 2019 | | Area Type | Other | | | | | | | | | |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | | PHF | 0.95 | | | | | | | | | |
| Urban Street | Logistics Property Group | | Analysis Year | 2024 | | Analysis Period | 1> 7:00 | | | | | | | | |
| Intersection | Stearns and Munger | | | File Name | Stearns and Munger FwP PM.xus | | | | | | | | | | |
| Project Description | Future with Project PM | | | | | | | | | | | | | | |
| Demand Information | | | | EB | | | WB | | | NB | | | SB | | |
| Approach Movement | | | | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (<i>v</i>), veh/h | | | | 195 | 552 | 64 | 21 | 869 | 154 | 220 | 252 | 27 | 249 | 231 | 255 |
| Signal Information | | | | | | | | | | | | | | | |
| Cycle, s | 110.0 | Reference Phase | 2 | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | Green | 1.5 | 4.0 | 46.4 | 13.5 | 1.8 | 20.2 | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | | | | |
| Traffic Information | | | | EB | | | WB | | | NB | | | SB | | |
| Approach Movement | | | | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand (<i>v</i>), veh/h | | | | 195 | 552 | 64 | 21 | 869 | 154 | 220 | 252 | 27 | 249 | 231 | 255 |
| Initial Queue (<i>Q_b</i>), veh/h | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Base Saturation Flow Rate (<i>S₀</i>), veh/h | | | | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Parking (<i>N_m</i>), man/h | | | | None | | | None | | | None | | | None | | |
| Heavy Vehicles (<i>P_{HV}</i>), % | | | | 1 | 2 | | 0 | 3 | 5 | 1 | 0 | | 5 | 1 | 1 |
| Ped / Bike / RTOR, /h | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Buses (<i>N_b</i>), buses/h | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arrival Type (<i>AT</i>) | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Upstream Filtering (<i>I</i>) | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lane Width (<i>W</i>), ft | | | | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 |
| Turn Bay Length, ft | | | | 260 | 0 | | 170 | 0 | 300 | 70 | 0 | | 310 | 0 | 0 |
| Grade (<i>P_g</i>), % | | | | | 0 | | | 0 | | | 0 | | | 0 | |
| Speed Limit, mi/h | | | | 50 | 50 | 50 | 45 | 45 | 45 | 35 | 35 | 35 | 40 | 40 | 40 |
| Phase Information | | | | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT | | | | |
| Maximum Green (<i>G_{max}</i>) or Phase Split, s | | | | 19.0 | 71.0 | 19.0 | 71.0 | 17.0 | 38.0 | 17.0 | 38.0 | | | | |
| Yellow Change Interval (<i>Y</i>), s | | | | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 | | | | |
| Red Clearance Interval (<i>R_c</i>), s | | | | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 | | | | |
| Minimum Green (<i>G_{min}</i>), s | | | | 3 | 15 | 3 | 15 | 3 | 8 | 3 | 8 | | | | |
| Start-Up Lost Time (<i>l_t</i>), s | | | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Extension of Effective Green (<i>e</i>), s | | | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Passage (<i>PT</i>), s | | | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | | | |
| Recall Mode | | | | Off | Ped | Off | Min | Off | Off | Off | Off | | | | |
| Dual Entry | | | | No | Yes | No | Yes | No | Yes | No | Yes | | | | |
| Walk (<i>Walk</i>), s | | | | | 0.0 | | 0.0 | | 0.0 | | 0.0 | | | | |
| Pedestrian Clearance Time (<i>PC</i>), s | | | | | 0.0 | | 0.0 | | 0.0 | | 0.0 | | | | |
| Multimodal Information | | | | EB | | | WB | | | NB | | | SB | | |
| 85th % Speed / Rest in Walk / Corner Radius | | | | 0 | No | 25 | 0 | No | 25 | 0 | No | 25 | 0 | No | 25 |
| Walkway / Crosswalk Width / Length, ft | | | | 9.0 | 12 | 0 | 9.0 | 12 | 0 | 9.0 | 12 | 0 | 9.0 | 12 | 0 |
| Street Width / Island / Curb | | | | 0 | 0 | No | 0 | 0 | No | 0 | 0 | No | 0 | 0 | No |
| Width Outside / Bike Lane / Shoulder, ft | | | | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 | 12 | 5.0 | 2.0 |
| Pedestrian Signal / Occupied Parking | | | | No | 0.50 | No | 0.50 | No | 0.50 | No | 0.50 | No | 0.50 | No | 0.50 |

HCS7 Signalized Intersection Intermediate Values

| General Information | | | | | Intersection Information | | | | |  | | | | | | | | | | | | | | |
|---|--------------------------|-----------------|-------------------------------|--|--------------------------|----------|-------|--------|-------|---|--------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Agency | V3 Co. | | | | Duration, h | 0.25 | | | | | | | | | | | | | | | | | | |
| Analyst | CAS | Analysis Date | Feb 14, 2019 | | Area Type | Other | | | | | | | | | | | | | | | | | | |
| Jurisdiction | DUDOT | Time Period | Existing AM PH | | PHF | 0.95 | | | | | | | | | | | | | | | | | | |
| Urban Street | Logistics Property Group | Analysis Year | 2024 | | Analysis Period | 1 > 7:00 | | | | | | | | | | | | | | | | | | |
| Intersection | Stearns and Munger | File Name | Stearns and Munger FwP PM.xus | | | | | | | | | | | | | | | | | | | | | |
| Project Description | Future with Project PM | | | | | | | | | | | | | | | | | | | | | | | |
| Demand Information | | | | EB | | | WB | | | NB | | | SB | | | | | | | | | | | |
| Approach Movement | | | | L | T | R | L | T | R | L | T | R | L | T | R | | | | | | | | | |
| Demand (v), veh/h | | | | 195 | 552 | 64 | 21 | 869 | 154 | 220 | 252 | 27 | 249 | 231 | 255 | | | | | | | | | |
| Signal Information | | | |  | | | | | | | | | | | | | | | | | | | | |
| Cycle, s | 110.0 | Reference Phase | 2 | | | | | | | | | | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | End | | | | | | | | | | | | | | | | | | | | | |
| Uncoordinated | Yes | Simult. Gap E/W | On | | | | | | | | | | | | | | | | | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Green | 1.5 | 4.0 | 46.4 | 13.5 | 1.8 | 20.2 | Yellow | 3.5 | 3.5 | 4.0 | 3.5 | 0.0 | 4.0 | Red | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 |
| Saturation Flow / Delay | | | | L | T | R | L | T | R | L | T | R | L | T | R | | | | | | | | | |
| Lane Width Adjustment Factor (f_w) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | |
| Heavy Vehicles and Grade Factor (f_{HVg}) | | | | 0.992 | 0.984 | 1.000 | 1.000 | 0.977 | 0.961 | 0.992 | 1.000 | 1.000 | 0.961 | 0.992 | 0.992 | | | | | | | | | |
| Parking Activity Adjustment Factor (f_p) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | |
| Bus Blockage Adjustment Factor (f_{bb}) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | |
| Area Type Adjustment Factor (f_a) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | |
| Lane Utilization Adjustment Factor (f_{LU}) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 0.952 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | |
| Left-Turn Adjustment Factor (f_{LT}) | | | | 0.952 | 0.000 | | 0.952 | 0.000 | | 0.952 | 0.000 | | 0.952 | 0.000 | | | | | | | | | | |
| Right-Turn Adjustment Factor (f_{RT}) | | | | | 0.963 | 0.963 | | 0.000 | 0.847 | | 0.983 | 0.983 | | 0.000 | 0.847 | | | | | | | | | |
| Left-Turn Pedestrian Adjustment Factor (f_{LPb}) | | | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | | | | | | | | | | | |
| Right-Turn Ped-Bike Adjustment Factor (f_{Rpb}) | | | | | | 1.000 | | | 1.000 | | | 1.000 | | 1.000 | | | | | | | | | | |
| Work Zone Adjustment Factor (f_{wz}) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | | |
| DDI Factor (f_{DDI}) | | | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | | | | | | | | | |
| Movement Saturation Flow Rate (s), veh/h | | | | 1795 | 3291 | 381 | 1810 | 3719 | 1547 | 1795 | 1687 | 181 | 1739 | 1984 | 1598 | | | | | | | | | |
| Proportion of Vehicles Arriving on Green (P) | | | | 0.08 | 0.49 | 0.49 | 0.01 | 0.42 | 0.42 | 0.12 | 0.18 | 0.18 | 0.14 | 0.20 | 0.20 | | | | | | | | | |
| Incremental Delay Factor (k) | | | | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.08 | 0.04 | | 0.24 | 0.04 | 0.04 | | | | | | | | | |
| Signal Timing / Movement Groups | | | | EBL | EBT/R | WBL | WBT/R | NBL | NBT/R | SBL | SBT/R | | | | | | | | | | | | | |
| Lost Time (tL) | | | | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | 3.5 | 6.0 | | | | | | | | | | | | | |
| Green Ratio (g/C) | | | | 0.52 | 0.49 | 0.44 | 0.42 | 0.31 | 0.18 | 0.33 | 0.20 | | | | | | | | | | | | | |
| Permitted Saturation Flow Rate (s _p), veh/h/ln | | | | 615 | 0 | 795 | 0 | 1146 | 0 | 1060 | 0 | | | | | | | | | | | | | |
| Shared Saturation Flow Rate (s _{sh}), veh/h/ln | | | | | | | | | | | | | | | | | | | | | | | | |
| Permitted Effective Green Time (g _p), s | | | | 48.5 | 0.0 | 46.5 | 0.0 | 20.3 | 0.0 | 20.6 | 0.0 | | | | | | | | | | | | | |
| Permitted Service Time (g _u), s | | | | 25.7 | 0.0 | 40.1 | 0.0 | 7.8 | 0.0 | 3.5 | 0.0 | | | | | | | | | | | | | |
| Permitted Queue Service Time (g _{ps}), s | | | | 11.4 | | 0.2 | | 3.1 | | 3.5 | | | | | | | | | | | | | | |
| Time to First Blockage (g _t), s | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | |
| Queue Service Time Before Blockage (g _{fs}), s | | | | | | | | | | | | | | | | | | | | | | | | |
| Protected Right Saturation Flow (s _R), veh/h/ln | | | | | | | 1547 | | | | 1598 | | | | | | | | | | | | | |
| Protected Right Effective Green Time (g _R), s | | | | | | | 15.3 | | | | 9.0 | | | | | | | | | | | | | |
| Multimodal | | | | EB | | | WB | | | NB | | | SB | | | | | | | | | | | |
| Pedestrian F_w / F_v | | | | 1.198 | 0.000 | 1.389 | 0.000 | 1.710 | 0.000 | 1.557 | 0.000 | | | | | | | | | | | | | |
| Pedestrian F_s / F_{delay} | | | | 0.000 | 0.107 | 0.000 | 0.117 | 0.000 | 0.144 | 0.000 | 0.143 | | | | | | | | | | | | | |
| Pedestrian M_{corner} / M_{cw} | | | | | | | | | | | | | | | | | | | | | | | | |
| Bicycle c_b / d_b | | | | 981.68 | 14.25 | 844.64 | 18.35 | 367.95 | 36.61 | 401.03 | 35.14 | | | | | | | | | | | | | |
| Bicycle F_w / F_v | | | | -3.64 | 0.70 | -3.64 | 0.91 | -3.64 | 0.87 | -3.64 | 1.28 | | | | | | | | | | | | | |

--- Messages ---

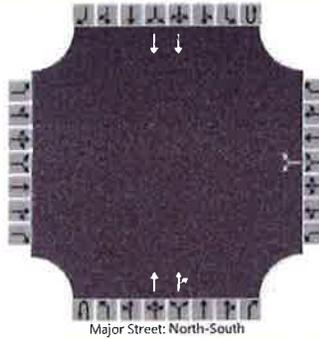
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS7 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|---------------------------|----------------------------|--------------------------|
| Analyst | CAS | Intersection | MUNGER ROAD AND DRIVEWAY |
| Agency/Co. | V3 CO | Jurisdiction | DUDOT |
| Date Performed | 2/14/2019 | East/West Street | DRIVEWAY 1 |
| Analysis Year | 2024 | North/South Street | MUNGER ROAD |
| Time Analyzed | FUTURE WITH PROJECT PM PH | Peak Hour Factor | 0.95 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 0.25 |
| Project Description | LOGISTICS PROPERTY CO | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|----|----|----|-----------|---|----|----|------------|---|-----|----|------------|---|---|-----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | 0 | 0 | 0 | | 0 | 1 | 0 | | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | | | | | | LR | | | | T | TR | | | T | |
| Volume (veh/h) | | | | | 0 | | | 9 | | | 595 | 6 | | | | 735 |
| Percent Heavy Vehicles (%) | | | | | | 0 | | 33 | | | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | 0 | | | | | | | | | |
| Right Turn Channelized | | | | | | | | | | | | | | | | |
| Median Type Storage | | | | | Undivided | | | | | | | | | | | |

Critical and Follow-up Headways

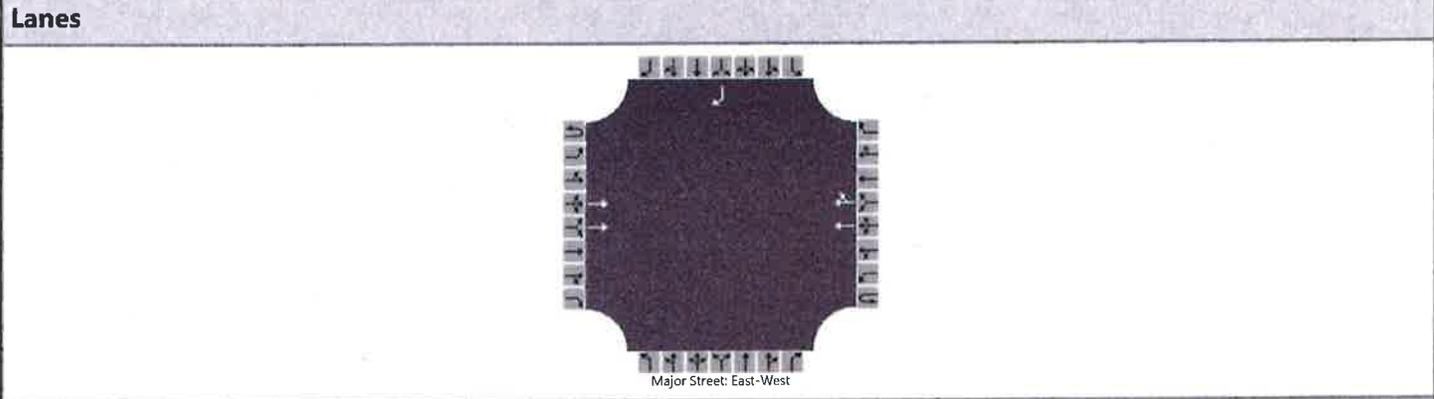
| | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|------|------|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | 7.5 | 6.9 | | | | | | | | |
| Critical Headway (sec) | | | | | 6.80 | 7.56 | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | 3.5 | 3.3 | | | | | | | | |
| Follow-Up Headway (sec) | | | | | 3.50 | 3.63 | | | | | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | |
|---|--|--|--|--|------|--|--|--|--|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | 9 | | | | | | | | |
| Capacity, c (veh/h) | | | | | 596 | | | | | | | | |
| v/c Ratio | | | | | 0.02 | | | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | 0.0 | | | | | | | | |
| Control Delay (s/veh) | | | | | 11.1 | | | | | | | | |
| Level of Service (LOS) | | | | | B | | | | | | | | |
| Approach Delay (s/veh) | | | | | 11.1 | | | | | | | | |
| Approach LOS | | | | | B | | | | | | | | |

HCS7 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|---------------------------|----------------------------|---------------------------|
| Analyst | CAS | Intersection | STEARNS RD AND DRIVEWAY 3 |
| Agency/Co. | V3 CO | Jurisdiction | DUDOT |
| Date Performed | 2/14/2019 | East/West Street | STEARNS ROAD |
| Analysis Year | 2024 | North/South Street | DRIVEWAY 3 |
| Time Analyzed | FUTURE WITH PROJECT PM PH | Peak Hour Factor | 0.95 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 0.25 |
| Project Description | LOGISTICS PROPERTY GROUP | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|-----|---|-----------|---|------|----|------------|---|---|---|------------|----|----|-----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | | 0 | 0 | 0 | | 0 | 0 | 1 |
| Configuration | | | T | | | | T | TR | | | | | | | | R |
| Volume (veh/h) | | | 847 | | | | 1025 | 4 | | | | | | | | 17 |
| Percent Heavy Vehicles (%) | | | | | | | | | | | | | | | | 6 |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | | | | | | | 0 |
| Right Turn Channelized | | | | | | | | | | | | | | | | Yes |
| Median Type Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | | 6.9 |
| Critical Headway (sec) | | | | | | | | | | | | | | | | | 7.02 |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | | 3.3 |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | | 3.36 |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|
| Flow Rate, v (veh/h) | | | | | | | | | | | | | | | | | 18 |
| Capacity, c (veh/h) | | | | | | | | | | | | | | | | | 475 |
| v/c Ratio | | | | | | | | | | | | | | | | | 0.04 |
| 95% Queue Length, Q ₉₅ (veh) | | | | | | | | | | | | | | | | | 0.1 |
| Control Delay (s/veh) | | | | | | | | | | | | | | | | | 12.9 |
| Level of Service (LOS) | | | | | | | | | | | | | | | | | B |
| Approach Delay (s/veh) | | | | | | | | | | | | | | | | | 12.9 |
| Approach LOS | | | | | | | | | | | | | | | | | B |

From: Furey, David <David.Furey@dupageco.org>
Sent: Tuesday, October 09, 2018 2:35 PM
To: Ben Fish; Tuman, Michael; Eidson, William
Cc: Aaron Martell; Bryan Rieger; Peter Reinhofer; Carl Schwarzer
Subject: RE: LPC - Stearns & Munger - Updated Traffic Study

Ben,

The County will accept the full-access on Stearns at either driveway location provided that the scenario does not result in additional "hourglassing" on Stearns Rd. Provide geometrics of the proposed roadway improvements and we will have a more complete picture.

Thank you,

David J. Furey

Highway Permits Supervisor

DuPage County Division of Transportation

421 North County Farm Road

Wheaton, Illinois 60187

Office: 630-407-6900



From: Furey, David <David.Furey@dupageco.org>
Sent: Friday, November 02, 2018 3:14 PM
To: Ben Fish
Cc: Peter Reinhofer; Bryan Rieger; Carl Schwarzer; Aaron Martell; John Gallagher; Tuman, Michael; Eidson, William
Subject: RE: LPC - Stearns - Road Widening
Attachments: Stearns Road Conceptual Widening Design.pdf

Ben,

The County is generally ok with the concept presented. There will be some minor modification to striping but this seems to address our concerns. If you wish to proceed, please submit an application for Highway Permit with 2 copies of preliminary plans for review.

Thank you,

David J. Furey

Highway Permits Supervisor

DuPage County Division of Transportation

421 North County Farm Road

Wheaton, Illinois 60187

Office: 630-407-6900



COMMUNITY DEVELOPMENT MEMORANDUM

19-24

DATE: March 8, 2019
TO: The Chairman and Members of the Plan Commission
FROM: Roberta Grill, Acting Community Development Director *RBG*
RE: **(#19-04) Streets of Bartlett**

PETITIONER

Manny Rafidia on behalf of MMAJ, LLC

SUBJECT SITE

Northwest corner of E. Devon Avenue and S. Berteau Avenue

REQUESTS

Third Site Plan/PUD Amendment

Special Use Permits:

- a) Package liquor sales,
- b) Serving alcohol, including wine tastings,
- c) Recreation and amusement establishments,
- d) Live entertainment,
- e) Banquet hall facility,
- f) Outdoor seating, and
- g) Pet daycare (kennel)

SURROUNDING LAND USES

| Subject Site | <u>Land Use</u> Commercial | <u>Comprehensive Plan</u> Commercial | <u>Zoning</u> B-3 PUD |
|---------------------|---|---|--|
| North | Multi- Family | Attached Residential | SR-6 |
| South | Single Family | Suburban Residential | SR-2 |
| East | Industrial | Industrial | I-1 |
| West | Commercial | Commercial | B-3 |

ZONING HISTORY

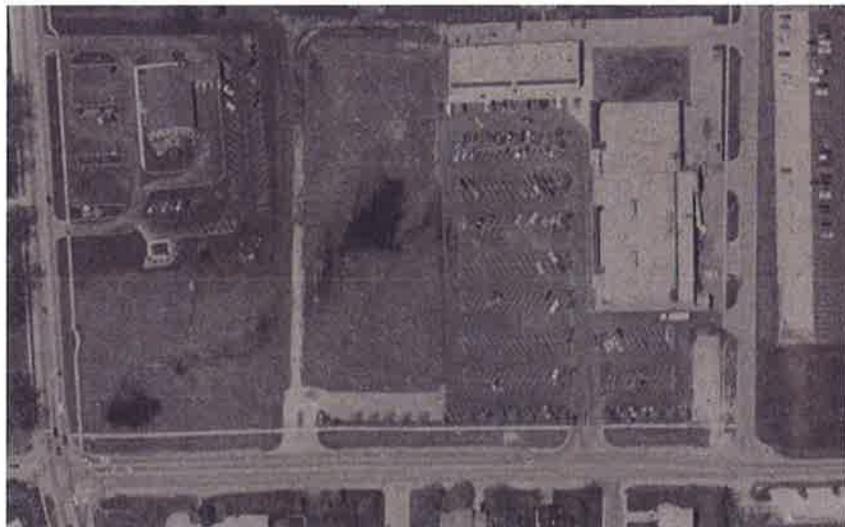
Through the Staff's research and as shown on the Village's Annexation Map, this parcel has been part of Bartlett since its incorporation in 1891 and was shown on the Village's first Zoning Map (1941) as part of the Farming District. These parcels are part of the H.O. Stone and Company's Town Addition to Bartlett which was platted and recorded in 1929. According to the 1962 Zoning Map, the property was zoned R-1 Single Family Residence, in 1971 zoned A-2 Multi-Family and in 1977 zoned SR-3 Suburban Residence. During the

comprehensive rezoning of the Village in 1978, the property was rezoned to the B-3 (Neighborhood Shopping) Zoning District.

In 1978 the grocery store was constructed.



In 1981 the original building was expanded northward and a second building was constructed to the north.



In 1988, Ordinance #1988-32 granted a Special Use Permit for a Planned Unit Development of the Bartlett Plaza Shopping Center Property (Phase 3 Addition) which included the addition of the western building and extended the northern building further west.



In 1991, Ordinance #1991-78 granted a Special Use Permit for a pet shop for the entire Bartlett Plaza Shopping Center.

In 2006, Ordinance #2006-22 was the First Site Plan/PUD Amendment to allow an outdoor play area for the Kripa Montessori School. The outdoor play area replaced what is shown on the Phase 3 Addition Site Plan as Building C.

In 2009, Ordinance #2009-63 was the Second Site Plan/PUD Amendment to expand onto the outdoor play area for the Kripa Montessori School in the same Building C footprint location.

CURRENT DISCUSSION

1. The Petitioner is proposing to renovate 31,860 square feet of the existing building in the former grocery space and create a new 22,425 square foot entertainment center oriented west, towards the parking lot and three new commercial spaces oriented south, towards E. Devon Avenue. The three new tenant spaces will include a 4,150 square foot wine and liquor store (Armanetti Wine and Spirits), a 3,900 square foot restaurant (Fire & Ice) and 1,385 square foot space for future retail. The Petitioner is requesting a **Third Site Plan/PUD Amendment** to create a conceptual commercial building pad for a possible grocer or banquet facility and to add parking in the southwest corner of the parcel where grass currently exists (previously shown as 'possible future development' on the 1988 Site Plan). The Petitioner has stated the area for the conceptual commercial building pad will not be subdivided or sold off.

2. The Petitioner proposes to modify the current shopping center name from the Bartlett Plaza Shopping Center to the Streets of Bartlett.
3. The proposed renovations include covering the existing metal roofs with a parapet wall that will incorporate varying roof lines and accent lighting on the façade to update the building elevations. The three new commercial spaces facing south will have new windows, doors, a sidewalk and an outside dining area where a brick wall currently exists.
4. In creating the conceptual commercial building pad, 159 parking spaces would be removed from the existing site. However, by transforming the existing grass area in the southwest corner of the property to parking, approximately 30 parking spaces would be added back to the total number provided. A Variation is requested to reduce the required parking spaces from 525 to 406 spaces (119 spaces). Below is a summary of the parking spaces provided on the site and those required in accordance with the Zoning Ordinance.

Parking Summary

| | Parking Required | Parking Provided |
|---|-------------------------|---------------------------|
| Existing Site | 525 | 535 spaces |
| Proposed Commercial Building Pad- Eliminating parking | | -159 spaces |
| Existing Grass Area to be paved for parking (Southwest Corner of Site) | | +30 spaces |
| | | Total = 406 spaces |

Staff has researched all the current uses in the building and proposed uses.

| Use | Required # of Parking Stalls |
|---|------------------------------|
| Office | 24 |
| Medical | 48 |
| Restaurant | 39 |
| Restaurant (carry out) | 6 |
| Retail | 106 |
| Salon | 18 |
| School | 12 |
| Future Entertainment Center- 22,425 sq. ft. | 69 |
| Future Fire & Ice Restaurant- 3,900 sq. ft. | 31 |
| Future Retail- 1,385 sq. ft. | 7 |
| Future Armanetti's-4,150 sq. ft.(retail) | 21 |
| | Total = 381 spaces |

To serve the current and future tenants 381 parking stalls are required to meet the Zoning Ordinance requirement (not including the conceptual commercial building pad); with 406 parking stalls proposed for the site. When the commercial building plans are submitted for review parking requirements would be evaluated at that time.

(The Variation request was discussed by the Zoning Board of Appeals at their meeting on March 7, 2019 and was recommended for approval.)

5. Access to the site from Main Street, E. Devon Avenue and S. Berteau Avenue would remain the same. Internal circulation would be modified slightly along the south elevation of the new commercial uses where the drive aisle would become one-way in order to accommodate a sidewalk and outdoor seating.
6. Three additional Variations are being requested for the proposed monument signs:
 - a) A 20 square foot increase from the maximum permitted 100 square foot allowable sign area for each monument sign (120 square feet),
 - b) A 2 foot increase in the maximum permitted 10' height to allow both monument signs to be 12' in height, and
 - c) A 2 foot reduction in the required 5 foot setback along E. Devon Avenue.

(Staff is working with the Petitioner to ensure the sign locations will be safe and clear visibility will be provided.)

(The Variation requests were discussed by the Zoning Board of Appeals at their meeting on March 7, 2019 and all were recommended for approval.)

7. The Petitioner is requesting the following **Special Use Permits** for the subject property in its entirety:
 - a) Package liquor sales (excluding within 100' of a school),
 - b) Serving alcohol including wine tastings (excluding within 100' of a school),
 - c) Recreation and amusement establishments,
 - d) Live entertainment,
 - e) Banquet hall facility,
 - f) Outdoor seating, and
 - g) Pet daycare (kennel)
8. The Petitioner is requesting a **Special Use Permit** for **package liquor sales** to open an Armanetti Wine and Spirits. Armanetti's will primarily sell wine (approximately 70% of the sales) and also **serve alcohol** with wine tastings taking place at this location. The area designated for beer and liquor sales is substantially smaller than the area devoted to selling wine.

9. As part of the proposed Fire and Ice Restaurant, the Petitioner is requesting a **Special Use Permit to serve alcohol**. This restaurant would have a full kitchen and include video gaming. The Petitioner also requests to have **live entertainment** in the restaurant.
10. The State Law requires video gaming establishments to be a minimum of 100 feet from any school or place of worship. There are no schools or places of worship within 100 feet of this proposed restaurant. (The Kripa Montessori School is located 200 feet north of this proposed restaurant location.)
11. The Petitioner is requesting a **Special Use Permit** for a 22,425 square foot **recreation and amusement establishment**. This establishment will be family friendly and catered toward children's activities including roller coasters, a trampoline park, jungle gym and other child friendly amusements. This area will be connected to the restaurant in order to provide food and alcohol to the adult patrons of the amusement establishment.
12. The Petitioner is requesting a **Special Use Permit** to allow **outdoor seating** for the entire shopping center in front of any of the commercial spaces, if the future tenant so chooses. A perimeter fence around the outdoor seating area will be required if alcohol is to be served outside.
13. The Petitioner is requesting **Special Use Permits** for a **banquet hall facility** and **pet daycare (kennel)**. These uses are not currently proposed but the Petitioner is requesting the Special Use Permits to have the option to attract these uses to fill any vacancies. A detailed review of these uses would be required by the Staff at building permit submittal (i.e. parking, pet elimination area, etc.)
14. As part of the redevelopment improvements for the shopping center the Petitioner proposes to replace the existing parking lot lights with the downtown light fixtures to tie this center to the existing downtown improvements.



15. A Site Plan will be required to be submitted for the commercial building pad once additional details are finalized for its development. If there are no additional special use(s) and/or variations(s) being requested this will be

reviewed as an Administrative Site Plan review and will be submitted directly as a building permit application.

16. Landscape and Photometric plans are currently being reviewed by the Staff.

RECOMMENDATION

1. The Staff recommends **approval** of the petitioner's requests subject to the following conditions and Findings of Fact:
 - A. An updated and revised Unified Business Center Sign Plan shall be submitted to the Community Development Department for review and approval;
 - B. Staff approval of the Landscape and Photometric Plans;
 - C. Village Engineer approval of the Engineering Plans;
 - D. Building permits shall be required for all construction activity that takes place on the subject property;
 - E. The Petitioner shall obtain all required liquor licenses;
 - F. Outdoor fencing shall be required and installed prior to the serving of alcohol outside. Building permits shall be required for the fencing and the placement of the outdoor seating to ensure adequate space has been provided for both patrons of the outdoor space and pedestrians accessing other tenant spaces in the center;
 - G. The parking lot shall be appropriately signed and restriped with arrows to direct traffic in the area directly south of the proposed three new commercial uses oriented towards Devon Avenue. A Do Not Enter sign shall also be placed on the property in this same area (location to be approved by the Community Development Department) to eliminate any conflict with the vehicular movements on the site;
 - H. Enclosures with gates shall be constructed for all dumpsters located on the subject property;
 - I. Signage shall be reviewed and approved separately by the Community Development Department in accordance with the Sign Ordinance;
 - J. If landscaping cannot be installed at the time of construction, a landscape estimate shall be submitted to Community Development for review and approval by the Village Arborist and a bond posted in the approved amount for its future installation;
 - K. Landscaping must be installed within one year of the issuance of a building permit;
 - L. Findings of Fact (Site Plan):
 - i. That the proposed commercial uses/buildings are permitted or special uses in the B-3 PUD Zoning District;
 - ii. That the proposed redevelopment of the commercial center and the proposed buildings, off-street parking, access, lighting, landscaping, and drainage is compatible with adjacent land uses;
 - iii. That the vehicular ingress and egress to and from the site and circulation within the site provides for safe, efficient and convenient

- movement of traffic not only within the site but on adjacent roadways as well;
- iv. That the site plan provides for the safe movement of pedestrians within the site;
 - v. That there is a sufficient mixture of grass trees and shrubs within the interior and perimeter (including public right-of-way) of the site so that the proposed development will be in harmony with adjacent land uses. Any part of the site plan area not used for buildings, structures, parking or access ways shall be landscaped with a mixture of grass, trees and shrubs; (All landscape improvements shall be in compliance with Chapter 10-11A, Landscape Requirements.)
 - vi. That all outdoor storage areas are screened and are in accordance with standards specified by this Ordinance.
- M. Findings of Fact: Special Use Permits (Package liquor sales, Serving alcohol including wine tastings, Recreation and amusement establishments, Live entertainment, Banquet hall facility, Outdoor seating, and Pet daycare (kennel))
- i. The proposed Special Uses are desirable to provide uses which are in the interest of public convenience and will contribute to the general welfare of the community;
 - ii. That the proposed Special Uses will not under the circumstances of the particular case be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity or be injurious to property value or improvement in the vicinity;
 - iii. That the special uses shall conform to the regulations and conditions specified in the Bartlett Zoning Ordinance for such use and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.
- N. Finding of Fact (Planned Unit Development)
- i. The Village's Future Land Use Plan designates this area as Commercial that has been established in the area and which conforms with general planning policies and precedents of the Village;
 - ii. The commercial uses proposed are permitted or Special Uses in the B-3 PUD Zoning District;
 - iii. The redevelopment of the shopping center and the proposed commercial uses will be designed, located and proposed to be operated and maintained so that the public health, safety and welfare will not be endangered or detrimentally affected;
 - iv. The redevelopment of the shopping center and the proposed commercial uses shall not substantially lessen or impede the suitability for uses and development of, or be injurious to the use and enjoyment of, or substantially diminish or impair the value of, or be incompatible with, other property in the immediate vicinity;
 - v. The redevelopment of the shopping center and the proposed commercial uses shall not include impact donations;

- vi. Adequate utilities and drainage shall be provided for the redevelopment of the shopping center and the proposed commercial uses;
- vii. Adequate parking and ingress and egress will be provided for the redevelopment of the shopping center and the proposed commercial uses so as to minimize traffic congestion and hazards in public streets;
- viii. Adequate buffering and landscaping shall be provided to protect uses within the development and on surrounding properties;
- ix. There is reasonable assurance that the redevelopment of the shopping center and the proposed commercial uses will continue to operate as it has and be adequately maintained.

2. Background materials are attached for your review and consideration.

rbg/attachments

x:\comdev\mem2019\024_Streets of Bartlett_pc.docx

MMAJ, LLC
PO Box 315
Itasca, IL 60143
Direct Dial: (847) 921-9200

February 11, 2019

Village of Bartlett
228 S. Main St.
Bartlett, IL 60103

Re: 114-399 Bartlett Plaza, Bartlett, IL 60103
Development Applications

Dear Village President and Board Members:

I would like to humbly ask the Village President and Board to work with me on achieving the approval for the requests outlined below in order for me to make this deal economically feasible to move forward with the purchase of the Bartlett Plaza. I am approaching the time to finalize this deal and I wanted to be able to obtain something in writing from the Village approving these requests before I finalize. I understand that there is a process that we have to go through in order to get certain special uses and certain requests and by no means am I trying to pressure the Village President or Board but it is so imperative that I am able to achieve the goal to move forward with closing this deal. My requests are as followed.

- A relief on all the permit fees for the improvements and support from the Village for Cook County to give us relief on the Property Taxes.
- Relief on tapping fees for utilities, water/sewer, electric, gas.
- Approval of two (2) new pylon signs.
- In the event we build a 20,000 square foot building on the property, I would request the future users, for either a grocer or banquet hall, be pre-zoned.
- I am requesting to change the name of the Shopping Center to "Streets of Bartlett".
- Interior building alterations.
- Landscaping upgrades.
- Special uses to include:
 - Liquor Sales
 - Wine Tasting
 - Restaurant Serving Liquor
 - Restaurant with Video Gaming
 - Entertainment Center
 - Live Entertainment
 - Banquet Hall Facility
 - Outdoor Seating
 - Pet Daycare

MMAJ, LLC
PO Box 315
Itasca, IL 60143
Direct Dial: (847) 921-9200

I would like to be able to put in the Center 1) Armanetti Wine & Spirits and 2) Food Establishment containing Woodfire Pizza, soft serve ice cream, small bar and gaming café. I have already received executed leases from these users, contingent upon Village approval. I am asking the Board to approve these uses. My intention is to work with the Village Board and the Community to make the utmost result that lead to a successful and improved Shopping Center. As I previously explained, I bring tenants from my pool of tenants that I currently have in my other shopping centers, these tenants have proven to improve the look of the shopping center and do not cause any distractions to the neighborhood and serve the needs of the community.

Your consideration is greatly appreciated and I look forward to working with the Village of Bartlett. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Manny Rafidia', with a stylized flourish at the end.

Manny Rafidia
(847) 921-9200



VILLAGE OF BARTLETT DEVELOPMENT APPLICATION

For Office Use Only
Case # 19-04
(Village Stamp)
RECEIVED
COMMUNITY DEVELOPMENT
FEB 26 2019

PROJECT NAME 114-399 BARTLETT PLAZA

PETITIONER INFORMATION (PRIMARY CONTACT)

Name: MANNY RAFIDIA

Street Address: [REDACTED]

City, State: ITASCA, IL

Zip Code: 60143

Email Address: [REDACTED]

Phone Number: [REDACTED]

Preferred Method to be contacted: Email

PROPERTY OWNER INFORMATION

Name: Bartlett Plaza Properties LLC

Street Address: [REDACTED]

City, State: Bartlett, Illinois

Zip Code: 60103

Phone Number: [REDACTED]

OWNER'S SIGNATURE: Andrew Gorski **Date:** Feb. 26, 2019

(OWNER'S SIGNATURE IS REQUIRED or A LETTER AUTHORIZING THE PETITION SUBMITTAL.)

ACTION REQUESTED (Please check all that apply)

- Annexation
 - PUD (preliminary)
 - PUD (final)
 - Subdivision (preliminary)
 - Subdivision (final)
 - Site Plan (please describe use: commercial, industrial, square footage): _____
 - Unified Business Center Sign Plan
 - Other (please describe) SITE PLAN AMENDMENT/PUD AMENDMENT
- Text Amendment
 - Rezoning See Dropdown to See Dropdown
 - Special Use for: SEE ATTACHED
 - Variation: _____

SIGN PLAN REQUIRED? Yes

(Note: A Unified Business Center Sign Plan is required for four or more individual offices or businesses sharing a common building entrance or private parking lot.)

PROPERTY INFORMATION

Common Address/General Location of Property: 114-399 BARTLETT PLAZA

Property Index Number ("Tax PIN"/"Parcel ID"): 06-35-317-042-0000 & 06-35-318-047-0000

Zoning: Existing: B-3 PUD
(Refer to Official Zoning Map)

Land Use: Existing: See Dropdown

Proposed: See Dropdown

Proposed: See Dropdown

Comprehensive Plan Designation for this Property: See Dropdown
(Refer to Future Land Use Map)

Acreage: 9.79

For PUD's and Subdivisions:

No. of Lots/Units: _____

Minimum Lot: Area _____ Width _____ Depth _____

Average Lot: Area _____ Width _____ Depth _____

APPLICANT'S EXPERTS (If applicable, including name, address, phone and email)

Attorney FIELD & GOLDBERG, LLC - JAY GOLDBERG
10 S. LASALLE ST., SUITE 2910 - CHICAGO, IL 60603
(312) 408-7271 / JGOLDBERG@FIELDANDGOLDBERG.COM

Engineer INFRALAND CONSULTING, LLC
PO BOX 503 - SPRING GROVE, IL 60081
(847) 838-8835 / MILEST@INFRALAND.COM

Other PURNELL ARCHITECTS, INC. - SHAWN PURNELL
1607 NORTH AVE. - ROUND LAKE BEACH, IL
(847) 989-2772 / stp.architecture@gmail.com

FINDINGS OF FACT FOR PLANNED UNIT DEVELOPMENTS

Both the Plan Commission and Village Board must decide if the requested Planned Unit Development meets the standards established by the Village of Bartlett Zoning Ordinance.

The Plan Commission shall make findings based upon evidence presented on the following standards: **(Please respond to each of these standards in writing below as it relates to your case. It is important that you write legibly or type your responses as this application will be included with the staff report for the Plan Commission and Village Board to review.)**

1. The proposed Planned Unit Development is desirable to provide a mix of uses which are in the interest of public convenience and will contribute to the general welfare of the community.

Yes, the main objective of the PUD Amendment is to upgrade this property to become a more desirable destination for the community to shop at a new, modern center and also attractive for tenants to come in and become a part of the uses.

2. The Planned Unit Development will not under the circumstances of the particular case be detrimental to the health, safety, morals, or general welfare of persons residing or working in the vicinity or be injurious to property value or improvement in the vicinity.

No, the uses intended are all moral and will be attractive to the local community.

3. The Planned Unit Development shall conform to the regulations and conditions specified in the Title for such use and with the stipulation and conditions made a part of the authorization granted by the Village Board of Trustees.

Yes, all intended uses shall comply with the regulations and conditions specified by the Village of Bartlett and all governmental authorities.

4. The proposed uses conform to the Comprehensive Plan and the general planning policies of the Village for this parcel.

Agree.

5. Each of the proposed uses is a permitted or special use in the district or districts in which the Planned Unit Development would be located.

Agree.

6. The Planned Unit Development is designed, located and proposed to be operated and maintained so that the public health, safety and welfare will not be endangered or detrimentally affected.

Agree, the Planned Unit Development will be designed, located, operated and maintained so the public health, safety and welfare will not be endangered or detrimentally affected.

7. It shall not substantially lessen or impede the suitability for permitted use and development of, or be injurious to the use and enjoyment of, or substantially diminish or impair the value of, or be incompatible with, other property in the immediate vicinity.

Agree.

8. Impact donations shall be paid to the Village in accordance with all applicable Village ordinances in effect at the time of approval.

9. The plans provide adequate utilities, drainage and other necessary facilities.

The plans do provide adequate utilities, drainage and other necessary facilities.

10. The plans provide adequate parking and ingress and egress and are so designed as to minimize traffic congestion and hazards in the public streets.

The plans do provide adequate parking and ingress and egress and are designed to minimize traffic congestion and hazards in the public streets.

11. The plans have adequate site area, which area may be greater than the minimum in the district in which the proposed site is located, and other buffering features to protect uses within the development and on surrounding properties.

Agree.

12. There is reasonable assurance that, if authorized, the PUD will be completed according to schedule and adequately maintained.

The PUD will be completed according to schedule and adequately maintained.

FINDINGS OF FACT FOR SPECIAL USES

Both the Plan Commission and Village Board must decide if the requested Special Use meets the standards established by the Village of Bartlett Zoning Ordinance.

The Plan Commission shall make findings based upon evidence presented on the following standards: **(Please respond to each of these standards in writing below as it relates to your case. It is important that you write legibly or type your responses as this application will be included with the staff report for the Plan Commission and Village Board to review.)**

1. That the proposed use at that particular location requested is necessary or desirable to provide a service or a facility which is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.

The proposed use(s) requested will be desirable to provide a service/facility which is in the interest of public convenience and will contribute to the general welfare of the community.

2. That such use will not under the circumstances of the particular case be detrimental to the health, safety, morals, or general welfare of persons residing or working in the vicinity or be injurious to property value or improvement in the vicinity.

The proposed use(s) requested will not be detrimental to the health, safety, morals, or general welfare of persons residing or working in the vicinity or be injurious to the property value.

3. That the special use shall conform to the regulations and conditions specified in this Title for such use and with the stipulation and conditions made a part of the authorization granted by the Village Board of Trustees.

The proposed use(s) requested shall conform to all regulations, conditions, stipulations and conditions made by the authorized parties.

ACKNOWLEDGEMENT

I understand that by signing this form, that the property in question may be visited by village staff and Board/Commission members throughout the petition process and that the petitioner listed above will be the primary contact for all correspondence issued by the village.

I certify that the information and exhibits submitted are true and correct to the best of my knowledge and that I am to file this application and act on behalf of the above signatures.

Any late, incomplete or non-conforming application submittal will not be processed until ALL materials and fees have been submitted.

SIGNATURE OF PETITIONER:  _____

PRINT NAME: MANNY RAFIDIA _____

DATE: JANUARY 31, 2019 _____

REIMBURSEMENT OF CONSULTANT FEES AGREEMENT

The undersigned hereby acknowledges his/her obligation to reimburse the Village of Bartlett for all necessary and reasonable expenses incurred by the Village for review and processing of the application. Further, the undersigned acknowledges that he/she understands that these expenses will be billed on an ongoing basis as they are incurred and will be due within thirty days. All reviews of the petition will be discontinued if the expenses have not been paid within that period. Such expenses may include, but are not limited to: attorney's fees, engineer fees, public advertising expenses, and recording fees. Please complete the information below and sign.

NAME OF PERSON TO BE BILLED: REFER TO #6 UNDER OTHER ACTION REQUEST. _____

ADDRESS: _____

PHONE NUMBER: _____

EMAIL: _____

SIGNATURE: _____

DATE: _____

ZONING/LOCATION MAP

PINS :06-35-317-042 & 06-35-318-047

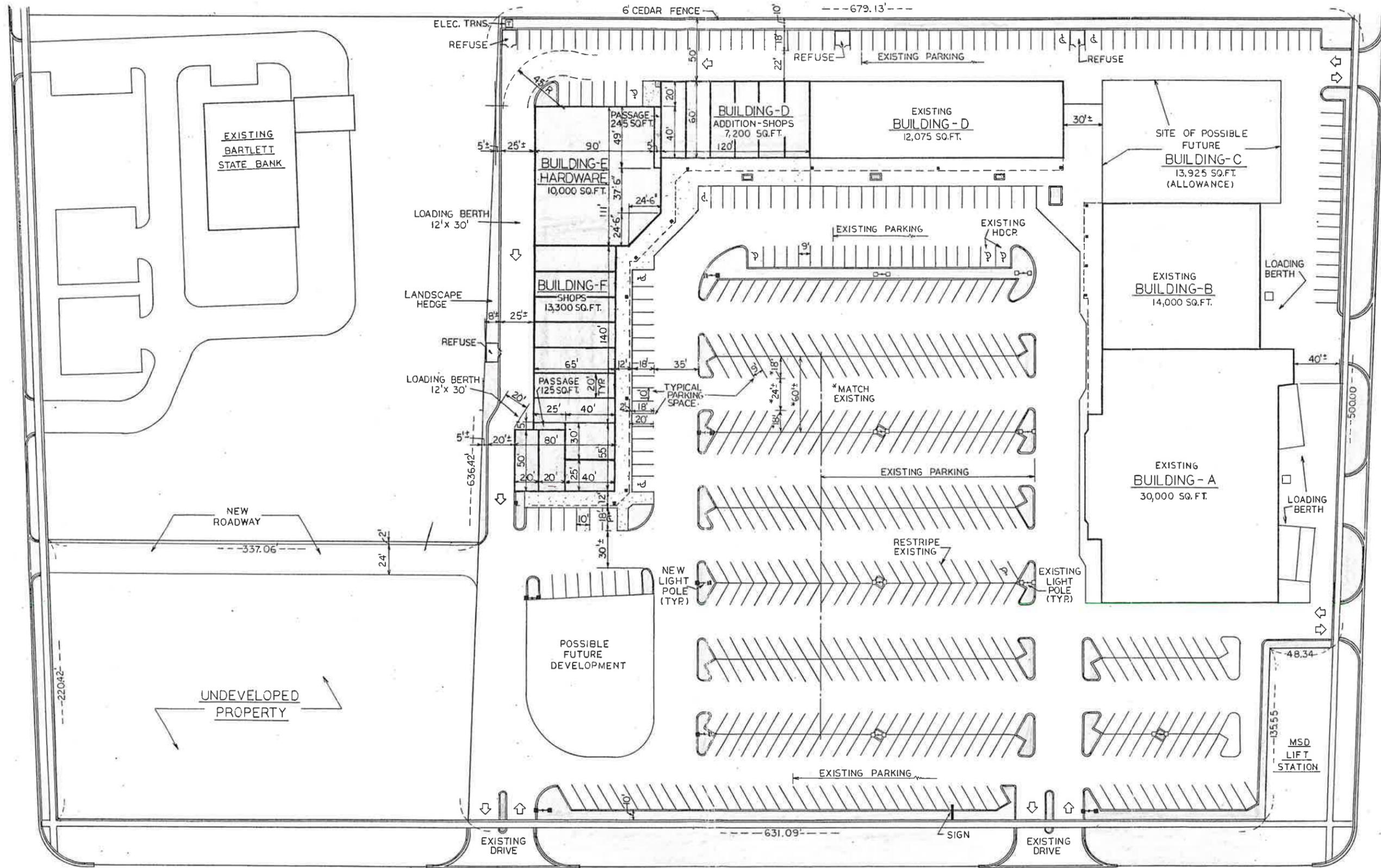
Case #19-04 - Streets of Bartlett

Site Plan/PUD Amendment, Special Uses, and Variations



MAIN STREET — BARTLETT ROAD

BERTEAU AVENUE

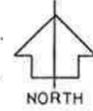
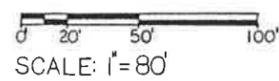


1988 SITE PLAN

PARKING — 567
 F.A.R. — .25
 ZONING — B3

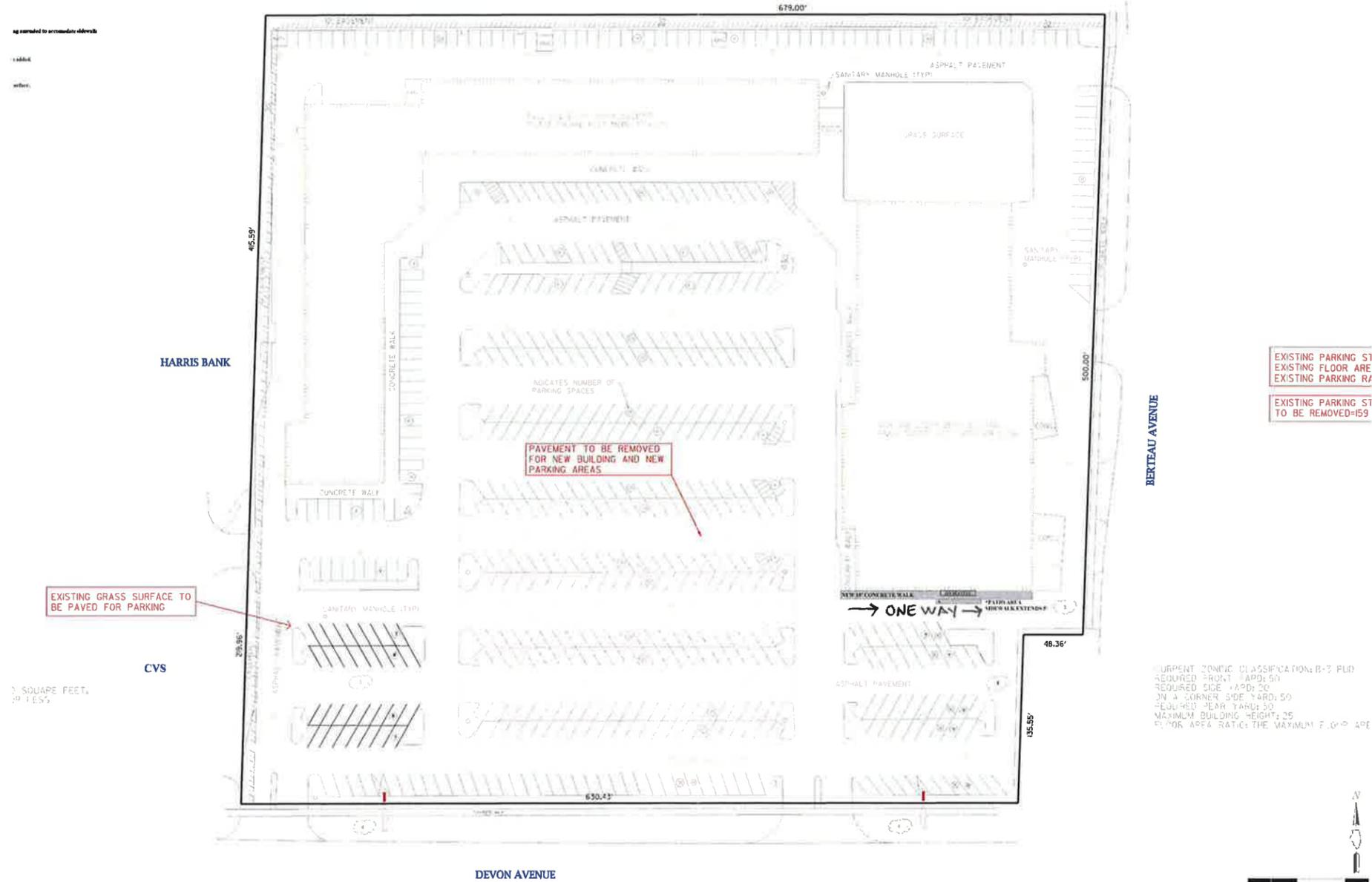
| STATISTICS (APPROX.) | |
|---|------------------------|
| LAND AREA | 424,900 SQ. FT. |
| BUILDING AREA | |
| EXISTING BUILDING-A, B, D | 56,075 SQ. FT. |
| BUILDING-C (ALLOWANCE) | 13,925 " |
| BUILDING-D (ADDITION) | 7,200 " |
| BUILDING-E | 10,000 " |
| PASSAGES | 370 " |
| BUILDING-F | 13,300 " |
| POSSIBLE ADDITIONAL BUILDING (FUTURE DEVELOPMENT) | 4,130 " |
| TOTAL | 105,000 SQ. FT. |

SITE PLAN



PHASE-3 ADDITION
 BARTLETT PLAZA SHOPPING CENTER

BARTLETT, ILLINIOS
 JAMES MILTON RAY — ASSOC., ARCHITECT
 JULY 22, 1987
 AUGUST 12, 1987



EXISTING PARKING ST
 EXISTING FLOOR ARE
 EXISTING PARKING RZ
 EXISTING PARKING ST
 TO BE REMOVED=159

CURRENT ZONIC CLASSIFICATION: B-3 PLD
 REQUIRED FRONT YARD: 50'
 REQUIRED SIDE YARD: 50'
 ON 4-CORNER SIDE YARD: 50'
 REQUIRED REAR YARD: 50'
 MAXIMUM BUILDING HEIGHT: 25'
 FLOOR AREA RATIO: THE MAXIMUM FLOOR AREA

| | | | |
|--|--|---|--------------------------------------|
| RD 314 503 County: Cook, IL 60704 Phone: 312.473.8134 Fax: 312.473.8137 Website: www.312.gov | 54 BARTLETT PLAZA - MAIN STREET BARTLETT, ILLINOIS | PROPOSED 3D EXISTING CONDITIONS AND REMOVAL PLAN | DATE: 11/15/2019 TIME: 2:23:08 PM |
|--|--|---|--------------------------------------|

3dgn 11/15/2019 2:23:08 PM

PROPOSED SITE PLAN

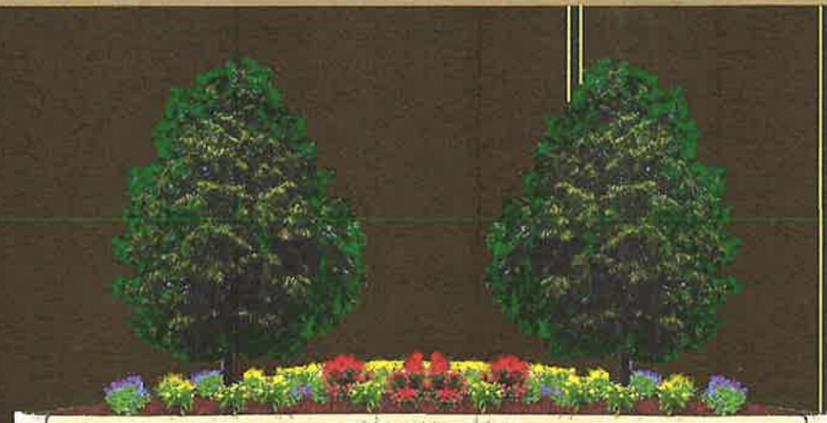
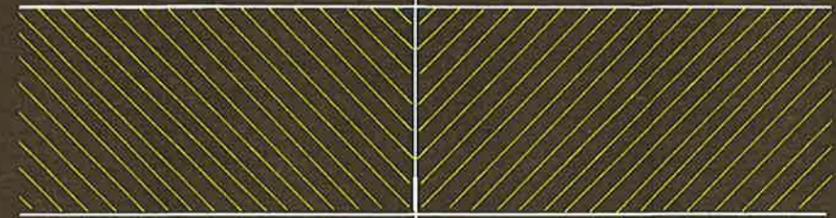
EXISTING ELEVATION





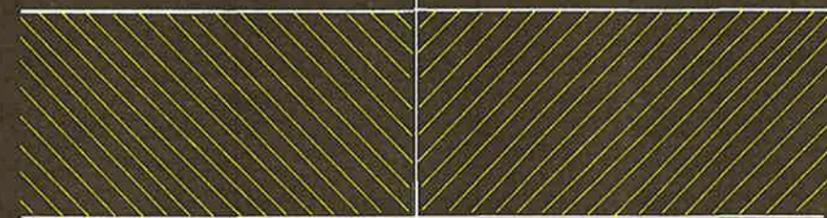
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RENDERINGS

RECEIVED
COMMUNITY DEVELOPMENT

FEB 05 2019

VILLAGE OF
PART...

STREETS OF BARTLETT

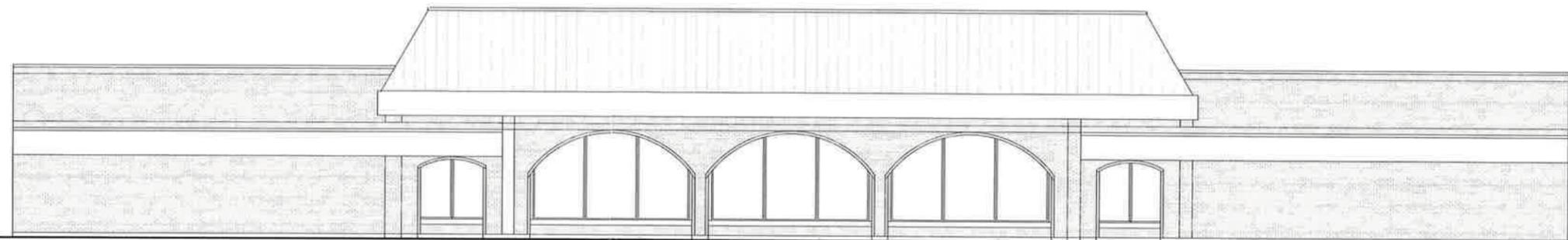
Armanetti's

Fire & Ice

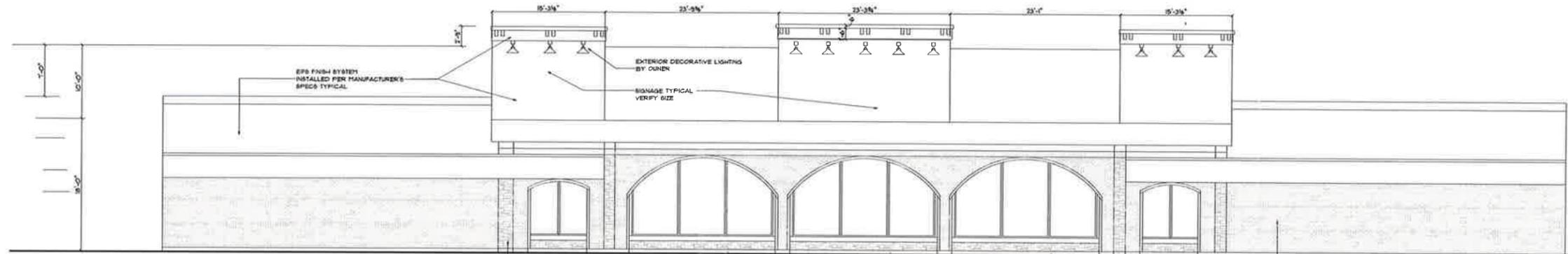
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COMMUNITY DEVELOPMENT

FEB 05 2019

VILLAGE OF
BARTLETT



EXISTING WEST ELEVATION
SCALE 1/8" = 1'-0"



PROPOSED WEST ELEVATION
SCALE 1/8" = 1'-0"

SPECIFICATIONS

DIVISION 1 GENERAL REQUIREMENTS

1. PRIOR TO THE BID AND START OF ANY WORK THE CONTRACTOR(S) SHALL VERIFY ALL GRADES, LINES, LEVELS, EXISTING CONDITIONS, AND DIMENSIONS INDICATED ON THE DRAWINGS. ANY DISCREPANCY SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY BEFORE COMMENCING WITH ANY WORK.
2. ALL WORK SHALL CONFORM WITH THE LATEST EDITION OF ALL APPLICABLE NATIONAL AND/OR MUNICIPAL BUILDING CODES AND ORDINANCES. THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL REQUIRED PERMITS AND UTILITY SERVICE CHARGES.
3. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF ANY EXCAVATION.
4. SUB CONTRACTORS SHALL LEAVE SITE NEAT & FREE OF DEBRIS AT THE END OF EACH WORK DAY.
5. PLANS AND SPECIFICATIONS: IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS TO PROVIDE FOR A COMPLETE INSTALLATION. EVERYTHING NECESSARY FOR THE COMPLETION AND SUCCESSFUL OPERATION OF THE WORK, WHETHER OR NOT HEREIN EXPLICITLY SPECIFIED OR INDICATED, SHALL BE FURNISHED AND INSTALLED AS IF SO SPECIFIED OR INDICATED. ALL MATERIALS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
6. THE DRAWINGS ARE DIAGNOSTIC ONLY AND NOT INTENDED TO SHOW EXACT LOCATIONS UNLESS OTHERWISE NOTED. DO NOT SCALE DRAWINGS. CONTRACTORS SHALL VERIFY ALL EXISTING FIELD CONDITIONS, DIMENSIONS, AND LENGTHS PRIOR TO THE START OF ANY WORK AND SHALL ADJUST THEIR EQUIPMENT AND RIGGING LOCATIONS TO AVOID CONFLICTS WITH OTHER CONSTRUCTION OR EQUIPMENT.
7. ALL SUB CONTRACTORS ARE RESPONSIBLE FOR THE COORDINATION OF THEIR WORK WITH ALL OTHER AFFECTED TRADES.
8. NO CONSTRUCTION ADMINISTRATION IS PROVIDED BY THE ARCHITECT.
9. THE ARCHITECT IS NOT RESPONSIBLE FOR THE METHOD OF CONSTRUCTION AND/OR ERROR AND OMISSION WITHIN THE METHODS OF CONSTRUCTION.
10. GENERAL CONTRACTOR SHALL SUPPLY DUMPSTER AND SANITARY FACILITY FOR JOB PERSONNEL AT ALL TIMES.
11. GENERAL CONTRACTOR IS TO MAINTAIN AND CLEAN STREETS IMMEDIATELY THROUGHOUT CONSTRUCTION.
12. DO NOT START WORK IF THE SUB SURFACES ARE DEFECTIVE. THE CORRECTMENT OF SUB CONTRACTOR'S WORK SHALL CONSTITUTE ACCEPTANCE OF SUB-SURFACE.
13. EACH SUB-CONTRACTOR SHALL OBTAIN AND PROVIDE NECESSARY BONDS, PERMITS AND INSURANCES AS REQUIRED BY THE MUNICIPALITY, COUNTY, STATE OR OTHER AGENCIES HAVING JURISDICTION.
14. CURRENT SOURCE CERTIFICATES (E. GENERAL LIABILITY, WORKMEN'S COMPENSATION, ETC.) MUST BE SUBMITTED TO THE BUILDER BEFORE PROCEEDING WITH ANY WORK.

15. OVER THESE PLANS AND SPECIFICATIONS IF THERE BE A CONFLICT, THE SUB CONTRACTOR SHALL NOT CHARGE EXTRA FOR REVISIONS NECESSARY TO MEET CODE REQUIREMENTS FOR HIS WORK EVEN IF THE ITEMS WERE NOT CALLED OUT ON THESE PLANS.
16. ALL WORK SHALL BE PERFORMED IN GOOD WORKMANLIKE MANNER. EACH SUB-CONTRACTOR SHALL WARRANT THEIR WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF OCCUPANCY PERMIT FROM DEFECTS AND WORKMANSHIP AND REPAIR ANY DEFECTS AT THEIR OWN COST.
17. THE APPROVED SET OF PRINTS, ALONG WITH THE COORDINATING PLAN REVIEW MUST BE KEPT ON-SITE DURING THE COURSE OF CONSTRUCTION. THESE PRINTS MUST BE MADE AVAILABLE TO ALL REPRESENTATIVES OF THE BUILDING DEPARTMENT UPON REQUEST.

DIVISION 2 EXISTING CONDITIONS

1. FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS OF ALL UTILITIES.

DIVISION 5 METALS

1. THE DESIGN FABRICATION & ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE "AMERICAN INSTITUTE OF STEEL CONSTRUCTION" LATEST EDITION FOR A-36 STEEL. STEEL SHALL BE SHOP COATED.
2. REINFORCING BARS SHALL BE ASTM GRADE 40 WITH SPLICES TO BE LAPPED 1/2 MIN.

DIVISION 6 WOOD, PLASTICS, AND COMPOSITES

1. ALL JOINTS, BRACKET ENDS, AND TIPS OF STRUCTURAL TREATED WOOD SHALL BE KILN DRIED, LUMBER NO. 2, 3 OR 4 MINIMUM.
2. ALL WOOD IN CONTACT WITH CONCRETE, CONCRETE BLOCK, OR EARTH SHALL BE WEATHER AND INSECT TREATED.

DIVISION 7 THERMAL AND MOISTURE PROTECTION

1. PROVIDE FLASHING AND FLASHSTOPPING AT ALL PIPE, CONDUIT, DUCT OPENINGS, OR OTHER PENETRATIONS. PROVIDE FLASHSTOPPING AT ALL FINISH PARTITIONS AND OUTSIDE SHED WALLS AT THE LEVEL OF EACH FLOOR OR CEILING AND AT ROOF JUNCTIONS. PROVIDE ADDITIONAL FLASHSTOPPING AS REQUIRED FOR LOCAL CODES.
2. ALL FLASHINGS AND SHEET METAL WORK SHALL CONFORM TO THE RECOMMENDATIONS OF THE LATEST BRAMA REFERENCE MANUAL FOR INSTALLATION AND SHAPES.
3. ROOFERS SHALL INSTALL BABY TIE UNDER TYVEK WRAP.
4. REFER TO TYVEK MANUAL AND INSTALL AIR BARRIER IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PROVIDE AIR BARRIER WRAP AND BELL HEAD AND JAMB FLASHING AS MANUFACTURED BY TYVEK.
5. PROVIDE SOLED ATTENUATION BLANKETS AT ALL WASTE LINES IN FLOOR AND WALL CAVITIES. PROVIDE ROOF GROUND FULL ROOF OR GROUND GLASS FIBER GLEEVES NORMALLY 3" LONG AND 1/2" THICK BETWEEN UNINSULATED PIPES AND HANGERS. THERE SHOULD BE NO DIRECT CONTACT BETWEEN THE FLASHING AND STUDS OR DOWELS.

DIVISION 9 FINISHES

1. ALL INTERIOR WALLS AT SET LOCATIONS SHALL BE DRYWALL ON EQUAL.
2. PROVIDE CONCRETE BACKER BOARD AT ALL AREAS TO RECEIVE TILE FINISH AND INSTALL GREEN BOARD AT SET WALLS FOR PAINT.
3. ALL CERAMIC AND QUARRY TILE TO BE INSTALLED IN THINSET OVER CONCRETE BACKER BOARD.
4. ALL GYPSUM BOARD SURFACES AND PAINTED WOODWORK TO RECEIVE ONE (1) PRIME AND TWO (2) FINISH OIL BASED LATEX PAINT COATS. ALL INTERIOR DOOR TRIM TO BE BLACK PINE. DOORS TO BE PAINTED (REALD), ALL 8 1/2" SIDES. VERIFY FINISH WITH OWNER. PAINT FINISH: WALLS - EGGSHELL, CEILING - FLAT, DOORS & TRIM - BEAR. MATERIALS: PRATT AND LAMBERT OR APPROVED EQUAL. VERIFY FINISHES IN FIELD WITH OWNER. STAINED WOODWORK TO RECEIVE ONE (1) COAT STAIN AND TWO (2) COATS VARNISH WITH STEEL WOOLING BETWEEN COATS.
5. ALL COLORS, FINISHES, AND MATERIAL SELECTIONS TO BE MADE AND APPROVED BY OWNER.
6. ALL INTERIOR WALL FINISH TO BE 1/2" GYPSUM BOARD.

NOTE: THE FOLLOWING CODES SHALL BE IN EFFECT WITH BARTLETT AMENDMENTS

International Building Code, 2012 Edition (with amendments)

International Mechanical Code, 2012 Edition (with amendments).

International Fuel Gas Code, 2012 Edition (with amendments).

International Energy Conservation Code, 2015 Edition

State of Illinois Amendments

International Fire Code, 2012 Edition (with amendments).

National Electrical Code, 2011 Edition (with amendments).

Illinois Plumbing Code, 2014

Illinois Accessibility Code, Latest Edition

NO CHANGE IN USE OR INTENSITY IS PROPOSED.

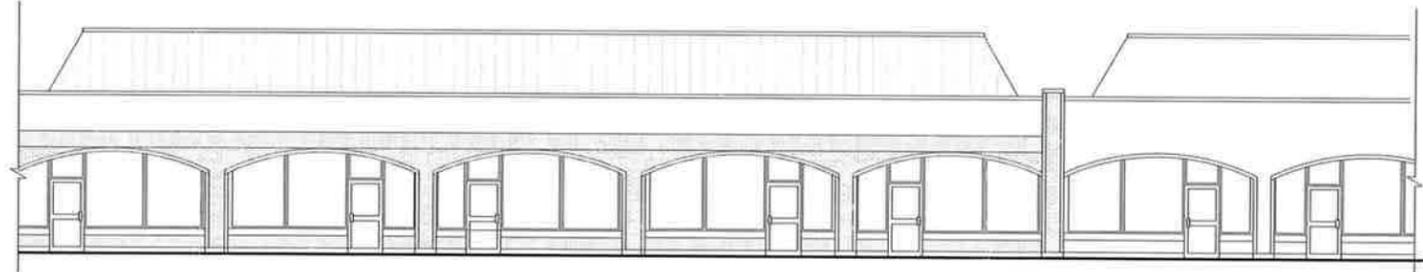
NO CHANGE IN AREA OR PARKING CONFIGURATION IS PROPOSED.

ALL INTERIOR FINISHES SHALL HAVE FLAME SPREAD RATING INDICATED AND SUBMITTED TO FIRE DEPARTMENT BY OWNER.

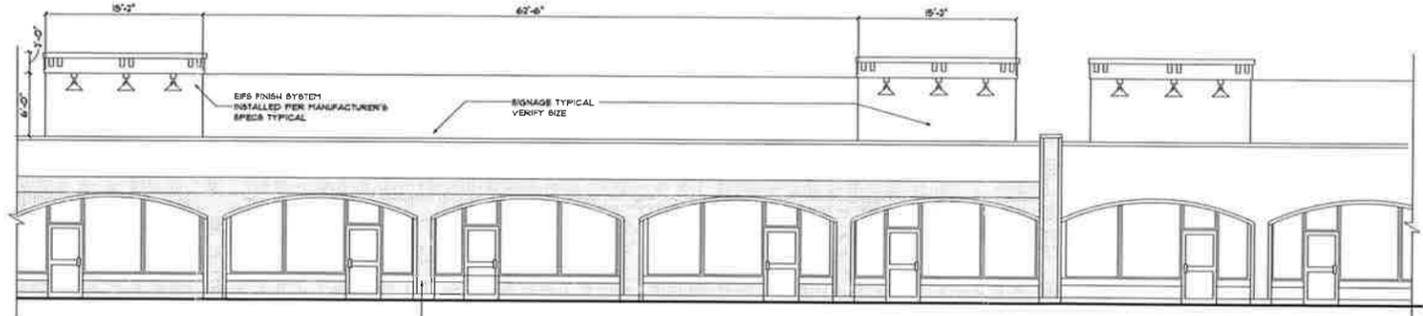
INSTALL BLEEVES FOR LOW VOLTAGE WIRING SYSTEM PER ORD. NO. 2003-16 LOW VOLTAGE SECTION 125 FIRE ALARM SECTION 160 COMMUNICATION SECTION 800

SIGN CIRCUITS MUST HAVE A GREEN GROUNDING CONDUCTOR INSTALLED PER UL 48 & 261 THE MINIMUM SIZE CONDUCTOR FOR COMMERCIAL BRANCH CIRCUIT WIRING MUST BE #12 ALUMINUM

INSTALL A GREEN GROUNDING CONDUCTOR IN ALL FLEX



EXISTING SOUTH ELEVATION
SCALE 1/8" = 1'-0"



PROPOSED SOUTH ELEVATION
SCALE 1/8" = 1'-0"

I hereby certify these plans have been prepared under my direct supervision and control and to the best of my knowledge and belief complies with the building codes of Bartlett, IL

RECEIVED
COMMUNITY DEVELOPMENT

FEB 05 2019

VILLAGE OF
BARTLETT

Shawn Purnell Architect

IL Lic. # 001-019645 Expires 11-30-18

SIGNED 10-10-2018



PYLON SIGN



Neon Art Sign

4752 N. Avers Chicago Il 60625

www.neonartchicago.com

neonartchicago@gmail.com

773-588-5883(B) 847-508-9907 (C)

VILLAGE OF
BARTLETT

FEB 05 2019

RECEIVED
COMMUNITY DEVELOPMENT