| EXHIBIT C – "PRELIMINARY STORMWATER ANALYSIS" |
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PROJECT SITE:

YORKTOWN COMMONS AT YORKTOWN CENTER VILLAGE OF LOMBARD, DUPAGE COUNTY, ILLINOIS

PREPARED FOR:

ROSANOVA & WHITAKER, LTD.
30 W. JEFFERSON AVENUE, SUITE 200
NAPERVILLE, IL 60540

PREPARED BY:

V3 COMPANIES, LTD. 7325 JANES AVENUE WOODRIDGE, ILLINOIS 60517 630.724.9200

OCTOBER 19, 2015



Preliminary Stormwater Analysis Yorktown Commons October 19, 2015

I. Introduction

This report was prepared to document the storm water management criteria and impacts for each parcel of the Yorktown Mall Redevelopment, while also providing a comprehensive analysis of the entire redevelopment area. The study includes: analysis of the existing site conditions; review of information that was gathered from the Village; Village and County storm water detention requirements; Village and County's BMP requirements, and; discussion of offsite drainage conveyance through the undeveloped parcel.

II. Existing Conditions

The Yorktown Commons Redevelopment is located within the existing Yorktown Center Development and is currently comprised of an existing development on Parcel 1, an undeveloped lot on Parcel 2, and an existing development on Parcels 3 & 4. See attached Yorktown Commons Exhibit.

The Parcel 1 is currently undeveloped. There is a ditch that conveys stormwater from Grace Street to a storm sewer that runs under the Target parking lot. The ditch, as currently configured, bisects the property. Offsite storm water from the 27.5 acres of residential development to the west is released into the ditch from a 30" storm sewer. The ditch outlets from the east side of the property into a 36" storm sewer and is then routed to the wetlands north of the Target building.

The Parcels 2 & 3 include the old Bamboo Room building and parking lot as well as the parking lots north and northwest of JCPenney. As shown on the atlas maps, existing underground infrastructure is in place throughout this parcel and detention is currently provided within the pond between the Westin and the Theatre.

The Parcel 4 is currently the site of the Carson's Furniture Store as well as several additional inline retail and restaurant tenants. The site is currently 95% impervious and, as shown on the attached utility atlas map, has a full array of existing underground infrastructure. Storm water from this site currently drains to the detention basin located between the Westin and the Theatre properties.

III. Information Provided by Village

The Village of Lombard provided the following information which has been incorporated into this analysis.

- Utility Atlases
- Storm Water Reports for the Target and Westin Developments
- Engineering Plans and Record Drawings for the Target Development

Letter from Village to AMC Theaters documenting that the high water level of the
detention basin between the Westin and the AMC Theater was raised as part of the
Westin development. This created a condition where a small area of the AMC
parking lot now ponds during the peak 100-year storms. This letter leads us to agree
with the Village's conclusion that there is no additional detention capacity in this pond
for us to utilize.

IV. Storm Water Detention Requirements

The Lombard Flood Control Ordinance and the DuPage County Countywide Stormwater & Flood Plain Ordinance are the governing ordinances for detention requirements pertaining to this development. Per Section 151.55 of the Lombard Flood Control Ordinance "All new development that increases the total impervious area, "TIA", of the development property by more than 5,000 square feet after July 1, 2012 shall require surface water runoff of the limits of said lot to be limited by detention or retention to the maximum of 0.10 cfs per acre of land..."

The approach to storm water detention discussed with the Village at a meeting on July 10th is to treat each parcel separately. This will be possible for Parcels 1 & 4 as they have already been subdivided as individual lots. Parcels 2 & 3 will require a new Subdivision of the two existing parcels that will be impacted by this development. As such, the Development Area for Parcels 2 & 3, for the purposes of the storm water detention requirements, will be the area of the two existing lots potentially impacted by the new subdivision. It is our understanding that the parcels defined throughout this report (Parcels 1 thru 4) will be developed separately (by separate developers) in the future.

As mentioned above and outlined in the attached letter, as part of the Westin development the capacity of the detention pand between the Westin and the AMC Theater was increased by raising the high water level (HWL) of the pond. While increasing the HWL provided the added storage volume needed for the Westin, it created a condition where areas of the AMC parking lot and a significant portion the drive aisle behind the theatre are at elevations below the 100-year storm. During 100-year storm events these areas see anywhere from 2 to 9 inches of ponding. These details lead us to agree with the Village's conclusion that there is no additional detention capacity within this pond for us to utilize should our proposed improvements trigger the detention requirements outlined below.

Parcel 1

As the 6 acre Parcel 1 is currently undeveloped, any proposed project is expected to trigger both the BMP and Detention requirements outlined above. Based on the Village's and County's detention requirements we have calculated that the proposed development will require approximately 2.75 ac-ft of detention. This calculation assumes a curve number (CN) of 92, which is consistent with an apartment or townhome development. An at-grade detention basin with a depth of 5' would require approximately 0.60 acres designated for detention. If this can be accommodated by the site plan, the basin could be designed and planted as a native vegetated wetland bottom basin. This should address all detention and BMP requirements.

The alternative to at-grade detention would be to provide storage in an underground system. A variety of systems are available to accomplish underground detention storage, including: incorporating storage into a chamber that is part of the building; providing storage in underground pipes; and providing storage in a vault system. Providing the full 2.75 ac-ft of detention underground using a StormTrap vault system would cost between \$720,000 and \$900,000. This cost depends on a variety of factors including the depth of the system and does not include the cost for hauling off the earthwork spoils generated by the underground detention. The underground system would have a footprint of 25,000 sf to 30,000 sf. An underground detention system does not meet the BMP requirements.

The detention facility for this parcel will have a restricted release of approximately 0.60 cfs. The restricted release, plus the unrestricted flow from upstream areas will be conveyed to the existing 36" storm sewer that is located at the east end of the existing ditch.

Parcel 2 & 3

As discussed at the July 10th meeting with the Village, it is our understanding that Parcels 2&3 is the only portion of the property to be subdivided as part of the planned development. Since this portion of the property is to be subdivided we understand that the impervious area of these lots prior to February 15, 1992 (date of Stormwater Ordinance adoption) must be compared to the current impervious area. The two lots to be subdivided are actually owned by separate entities (JCP & YTC) and are shown on the attached exhibits labelled "1988 & 2015 Yorktown Center Aerial Exhibit". When comparing 1988 aerial photography to the 2015 aerial photography it is apparent that some development has occurred on the two lots in question. However, there has been no appreciable increase in impervious area since February 15, 1992. For this reason we have defined a 'Development Area' so that we can measure the net change in the impervious area as a result of the proposed development.

On the attached "Pervious/Impervious Area – Parcels 2&3 Development Area Exhibit" we have drawn a conservative "Development Site" boundary for the purposes of determining an impervious area baseline. The exhibit shows that the Development Area is 17.26 acres (752,036 sf) with 687,087 sf of impervious area and 64,949 sf of pervious area. The impervious area that the proposed site plan must stay below to avoid triggering the detention requirements is 692,086 sf. If that number is exceeded, approximately 7.7 ac-ft of detention will be required. This volume would require approximately 1.7 to 2.1 acres of land (or equivalent underground area) to be provided for detention.

While Parcels 2&3 have a greater percentage of pervious area (9%) compared to Parcel 4, we believe a site plan can be developed to fit within the above parameters so that detention for this parcel will not be required. If the primary development area begins to approach the threshold, the large parking fields to the northwest and northeast of JC Penney offer opportunities to add some strategic landscape islands to avoid triggering detention requirements.

Parcels 4

The 9.64 acre Parcel 4 is currently developed and, per the attached "Pervious/Impervious Area – Parcel 4 Exhibit", has 400,528 sf of impervious area and 19,478 sf of pervious area. The existing site is 95% impervious, a number that will likely be reduced by any proposed site plan. If the proposed plan stays below 405,528 sf, storm water detention will not be required for this parcel. If the impervious area of this parcel exceeds that number, approximately 4.8 ac-ft of detention would be required. This volume would require approximately 1.0 to 1.3 acres of land (or equivalent underground area) to be provided for detention.

Based on current Village Code requirements for setbacks and landscaping, we feel that it is unlikely that the final site plan would increase the impervious area of this parcel by 5,000 sf, triggering the detention requirements.

V. BMP Requirements

The Lombard Flood Control Ordinance and the DuPage County Countywide Stormwater & Flood Plain Ordinance are the governing ordinances for BMP requirements. Per Section 15-63 of the DuPage County Countywide Stormwater & Flood Plain Ordinance, Post Construction Best Management Practices (PC BMPs) are required for all projects where the Net New Impervious Area is equal to or exceeds 2,500 square feet.

The approach to storm water BMPs discussed with the Village at the meeting on July 10th is to treat each parcel separately. This will be possible for Parcels 1 & 4 as they have already been subdivided as individual lots. Parcels 2 & 3 will require a new Subdivision of the existing two parcels that will be impacted. As such the Development Area for Parcels 2 & 3, for the purposes of the storm water BMP requirements, will be the area of the two existing lots impacted by the new subdivision.

Parcel 1

As the */-6 acre Parcel 1 is currently undeveloped, any proposed project will trigger the BMP requirements outlined above. If a proposed at-grade detention facility is designed as a native vegetated wetland bottom basin, all BMP requirements will be satisfied. If a wetland bottom detention basin is not used, BMPs such as vegetated filter strips, bioswales, and/or pervious pavers would need to be incorporated into the site plan to meet the BMP requirements. These at grade BMPs would have a detention volume component that would allow us to reduce the detention volume required to be stored underground. An additional option would be the use of a mechanical BMP system. For a site of this size a mechanical BMP system would likely cost between \$15,000 and \$20,000 and would require ongoing maintenance.

Parcel 2 & 3

As discussed at the July 10th meeting with the Village, it is our understanding that Parcels 2&3 is the only portion of the property to be subdivided as part of the planned development. Since this portion of the property is to be subdivided we understand that the impervious area of these lots prior to February 15, 1992 (date of Stormwater Ordinance adoption) must be

compared to the current impervious area. The two lots to be subdivided are actually owned by separate entities (JCP & YTC) and are shown on the attached exhibits labelled "1988 & 2015 Yorktown Center Aerial Exhibit". When comparing 1988 aerial photography to the 2015 aerial photography it is apparent that some development has occurred on the two lots in question. However, there has been no appreciable increase in impervious area since February 15, 1992. For this reason we have defined a 'Development Area' so that we can measure the net change in the impervious area as a result of the proposed development.

On the attached "Pervious/Impervious Area – Parcels 2 & 3 Development Area Exhibit" we have drawn a conservative "Development Area" boundary for the purposes of determining an impervious area baseline. Per the exhibit the Development Area is 17.26 acres with 687,087 sf of impervious area and 64,949 sf of pervious area. The impervious area that the proposed site plan must stay below to avoid triggering the BMP requirements is 689,586 sf. If this impervious area is exceeded BMP's such as vegetated filter strips, bioswales, and/or pervious pavers will be required. At-grade BMP's such as these would provide some storm water detention capacity which would reduce the volume required to be stored underground. An additional option would be the use of a mechanical BMP system. For a site of this size two mechanical BMP units would likely be required at a likely cost between \$30,000 and \$40,000 and would require ongoing maintenance.

While Parcels 2&3 have a much greater percentage of pervious area compared to the northwest parcel, we believe a site plan that will fit within the above parameters to avoid triggering the BMP requirements is very achievable. If the primary development area begins to approach the threshold, the large parking fields to the northwest and northeast of JCPenney offer opportunities to add some strategic landscape islands to avoid triggering the BMP requirements.

Parcels 4

The 9.64 acre Parcel 4 is currently developed and per the attached "Pervious/Impervious Area –Parcel 1 Exhibit" has 400,528 sf of impervious area and 19,478 sf of pervious area. The existing site is 95% impervious, a number that would most likely be reduced by any proposed site plan. The impervious area that the proposed site plan must stay below to avoid triggering the BMP requirements is 403,027 sf. If this impervious area is exceeded BMP's such as vegetated filter strips, bioswales, and/or pervious pavers will be required. Atgrade BMP's such as these would provide some storm water detention capacity which would reduce the volume required to be stored underground. An additional option would be the use of a mechanical BMP system. A mechanical BMP could be installed in a manhole/structure downstream of the detention facility to comply with the BMP requirements. For a site of this size a mechanical BMP system would likely cost between \$17,500 and \$25,000 and would require ongoing maintenance.

Based on current Village Code requirements for setbacks and landscaping, we feel it is highly unlikely that a proposed site plan would increase the impervious area of this parcel triggering the BMP requirements.

VI. Offsite Drainage Conveyance

Illinois Drainage Law states that private landowners have certain rights to improve the drainage on their land as follows:

- 1. They can widen, deepen, and clean natural depressions that carry their surface water.
- 2. They can straighten out channels on their own property and accelerate the movements of surface water so long as they do not change the natural point of entry on lower land or unreasonable increase the flow onto servient tenements.
- 3. They can drain ponds or standing water in the direction of their overflow.
- 4. Expedite the flow of surface waters through natural lines of drainage by either open or closed drains into a water-course or stream.

The drainage law referenced above applies to all parcels on the Yorktown Center site. Generally speaking, piped storm water that flows to development parcels will continue to be piped. In this area storm sewers are generally designed to convey the 10-year storm event. Greater storm events must also be safely conveyed through the property, but those waters can flow overland.across pavement and landscape areas.

The undeveloped Parcel 1 is impacted the most due to the ditches that convey significant volumes of water through the middle of the site. The information provided by the Village shows that there are four residential developments on the west side of Grace Street that are tributary to the 30" pipe that outlets to the upstream end of the ditch that bisects Parcel 1. The total area of these developments is 27 acres. The Village research shows that two of the properties provided detention with a restricted release, while the other two properties appear to have an unrestricted release to the ditch. Based on our calculations the piped offsite flow from the west for the 10-year storm event is 35 cfs. As part of the proposed plan this flow will be piped through or around Parcel 1, likely in a 36" pipe. In addition the 2.75 acre Yorktown Condos development immediately to the north of the property has a piped release to the site through a 10" pipe. We would propose to pipe this flow along the northeast property line to the existing outlet. See the attached Offsite Drainage Area Exhibit.

To gain an understanding of the drainage route for the overland overflow from the properties to the west the DuPage County 2' Contour Map was reviewed. It was determined that while nearly 27 acres west of Grace Street are tributary to Parcel 1 via the storm sewer system, only 14.8 acres are tributary via overland overflow. As part of the proposed plan the site shall be designed to safely convey this offsite flow overland through or around the property while ensuring that it ultimately drains to the same location as currently designed. Based on our preliminary calculations we believe that this offsite overflow can be safely conveyed through either a parking lot or a vegetated swale. It is important that the site plan accounts for the location where the overflow enters and exits the site to provide a parking lot configuration or swale location that allows for this conveyance through the site. See the Offsite Overland Overflow Exhibit.

EX

YORKTOWN COMMONS AT YORKTOWN CENTER LOCATION MAP

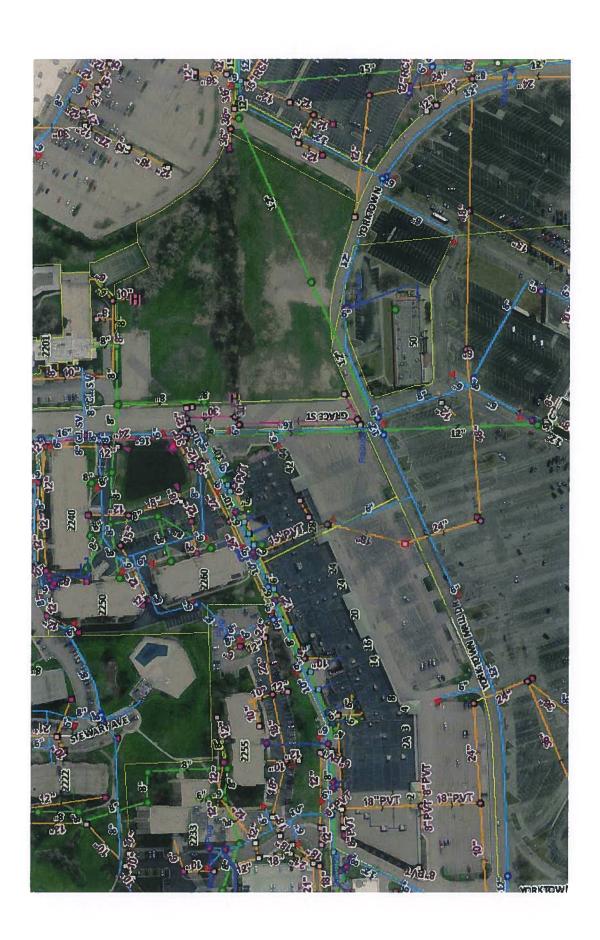
YORKTOWN COMMONS REDEVELOPMENT

OBGRAL SBLE DATE. 0

V3 Companies 7 3 2 5 Janes Avenue Wooffidge, II, 605 17 630, 7 2 4, 92 00 phone 630, 724, 92 02 fax www.v3co.oom











Village President William J. Mueller

Trustees Tyler L. Williams, Dist. 1 Richard J. Tross, Dist. 2 Karen S. Koenig, Dist. 3 Steven D. Sebby, Dist. 4 Kenneth M. Florey, Dist. 5 Rick Soderstrom, Dist. 6

Village Manager William T. Lichter

"Our shared Vision for Lombard is a community of excellence exemplified by its government working together with residents and business to create a distinctive sense of spirit and an outstanding quality of life."

"The Mission of the Village of Lombard is to provide superior and responsive governmental services to the people of Lombard."

VILLAGE OF LOMBARD

255 E. Wilson Ave. **Lombard, Illinois 60148** 630/620-5700 FAX: 630/620-8222 TDD: 630/620-5812 www.villageoflombard.org

Ms. Diane Schulte Senior Vice President of Real Estate AMC Theaters 920 Main Street Kansas City, MO 64105

RE: Yorktown AMC Land Lease

Dear Ms. Schulte,

I am writing to you on behalf of the Village of Lombard. The Village has created the Lombard Public Facility Corporation for the purpose of building a hotel and conference center at the north end of the detention pond adjacent to AMC Yorktown. The Village's 500-room hotel will be operated by Westin Hotel and it will have a 17,000 square foot Gibson's Restaurant. The hotel/conference center will have 50,000 square feet of meeting space and 15,000 square feet of pre-function space.

The purpose of my letter is to express the Village's desire to raise the existing detention pond weir as a means to create additional detention capacity in the detention pond. By raising the weir, the Village would be able to satisfy the detention requirements for our development. However, raising the weir would impact six areas at the perimeter of your parking lot. These areas would have ponding occurring in them during severe storm events. I am enclosing a map identifying these areas.

At the peak 100-year (1% annual probability) storm event's elevation of 730.7 feet, eight inches of ponding would occur in the southeast corner of the lot. Six inches of ponding would occur at the main drive aisle just north of the right-in, right-out entrance. There would be nine inches of ponding at the south end and seven inches at the north end of the drive aisle behind the theater, and up to five inches to the north of the theater. Twelve parking spaces would be impacted. The ponding in these areas would recede within seven hours after the rainfall ceases. I am also enclosing a hydrograph representing this data.

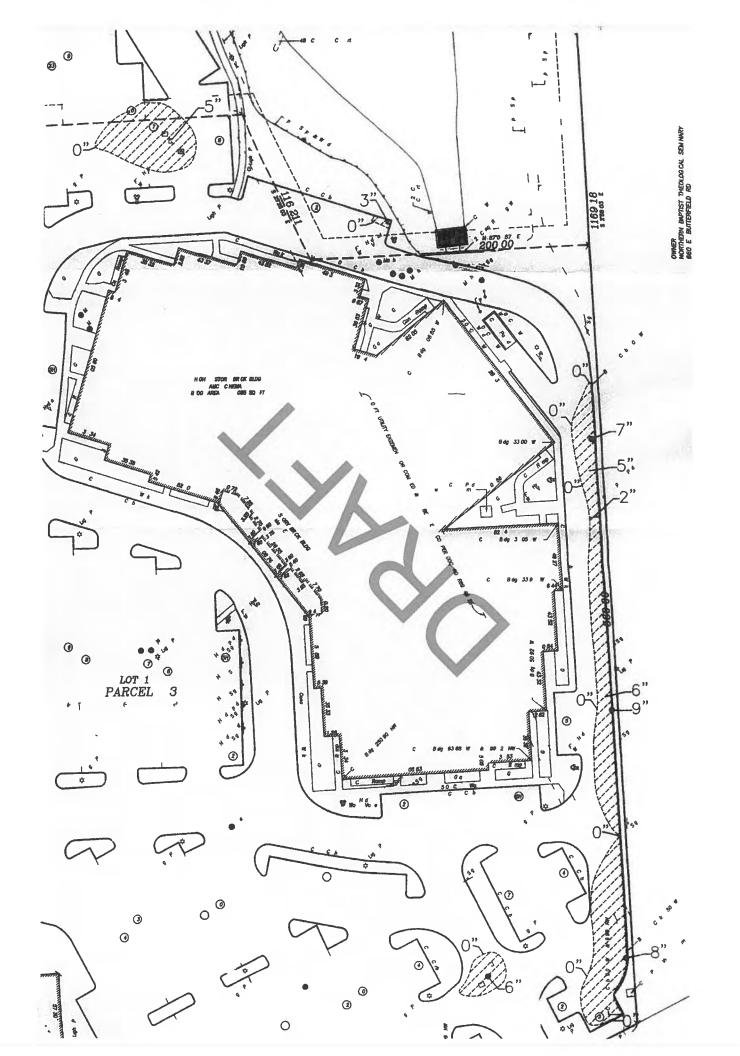
I would greatly appreciate it if you would contact me at your first opportunity so that we might discuss this matter. Please be advised that I am willing to travel to your offices to review this matter and provide you and others with a presentation of our project. Your theater will benefit greatly from the Village's hotel/conference center by bringing additional visitors to the area who will be seeking entertainment venues. Also, it is very likely that there will exist the desire to rent some of your theaters for meeting room space for larger conference events.

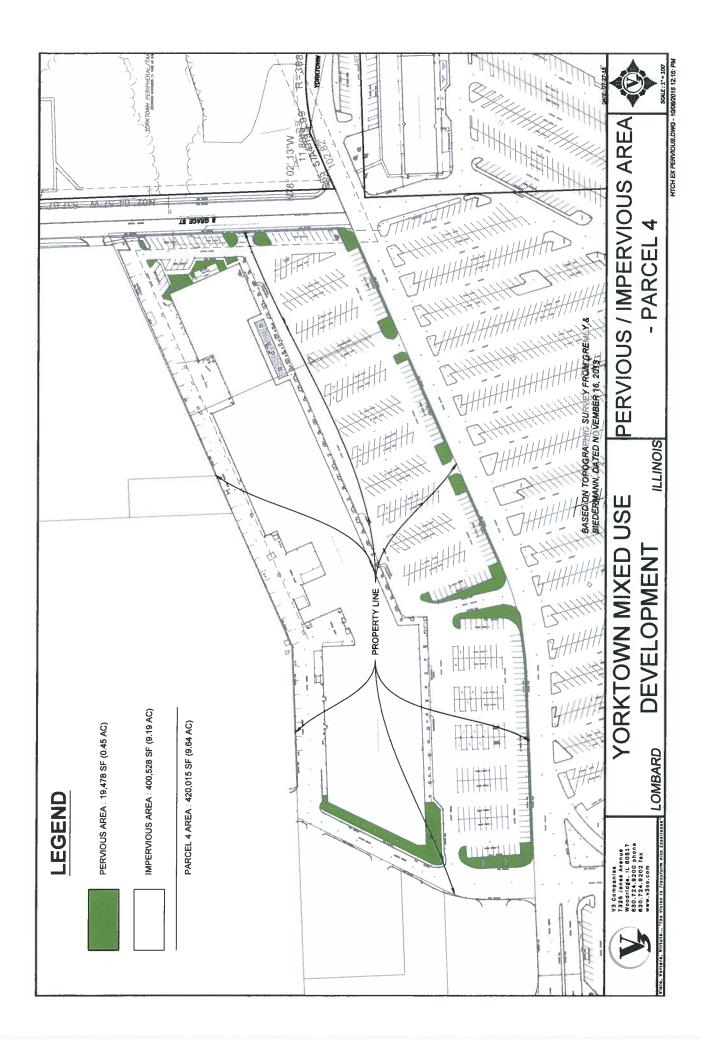
I look forward to hearing from you so that we may expedite an agreement to facilitate this issue. Please contact me at 630-620-5756.

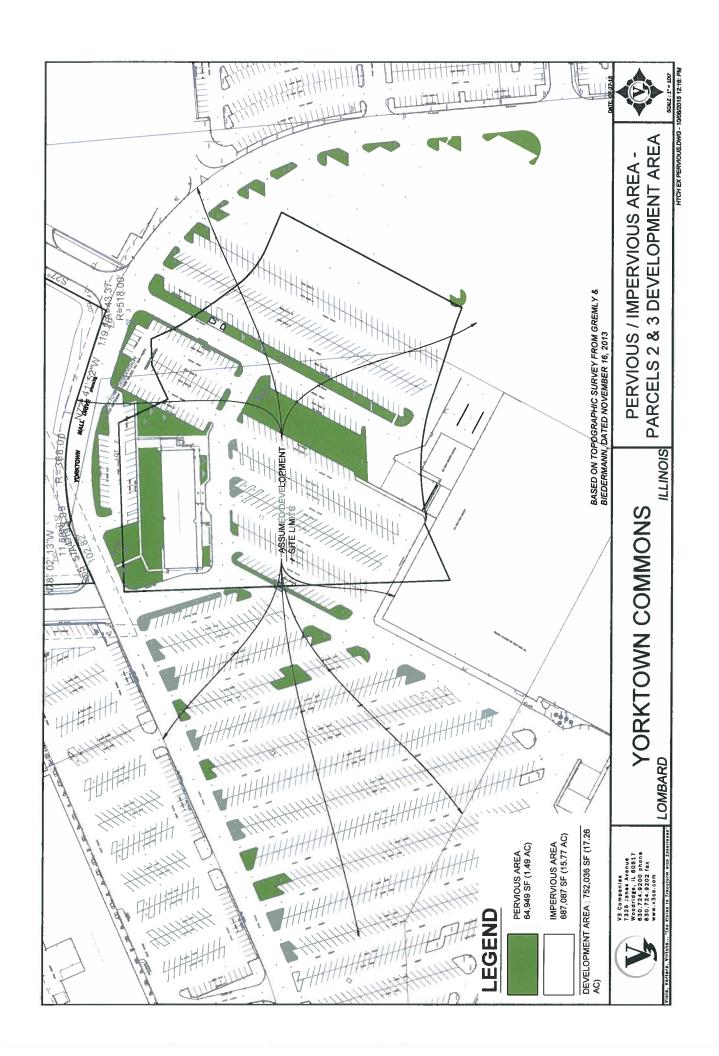
Sincerely,

David A. Hulseberg, AICP

Director of Community Development











| <u>[</u> | EXHIBIT D – "WETLAN | ND DELINEATION AND | ASSESSMENT REPOR | Γ" |
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PROJECT SITE:

YORKTOWN MIXED USE DEVELOPMENT LOMBARD, DUPAGE COUNTY, ILLINOIS

PREPARED FOR:

CONTINUUM PARTNERS, LLC 1400 16TH STREET, SUITE 320 DENVER, COLORADO 80202

PREPARED BY:

V3 COMPANIES 7325 JANES AVENUE WOODRIDGE, ILLINOIS 60517 630.724.9200

AUGUST 12, 2015

We hereby certify that this Wetland Delineation and Assessment Report has been prepared by V3 Companies for use by Continuum Partners, LLC, their affiliates, lenders, and assignees.

Project Staff:

Alicia Metzger Soil Scientist

George R. Milner Senior Ecologist

Approved by:

Scott J. Brejcha

Wetland Consulting Group Leader

Environment & Natural Resources Division

Thomas E. Slowinski

Vice President, Wetlands and Ecology Environment & Natural Resources Division

Thanes E. Slowinshi

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EXECUTIVE SUMMARY

The approximately 5.88-acre subject property was investigated by V3 Companies (V3) on July 15, 2015 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or DuPage County jurisdiction.

Delineation Summary.

No wetland areas, Waters of DuPage, or Waters of the U.S. were delineated on the subject property. One area (Area 1) was identified in the southern and eastern portion of the subject property and consists of two constructed drainage ditches excavated in upland soils that did not satisfy the criteria to qualify as wetland, Waters of the U.S., or Waters of DuPage. The identified incised ditches appear to have been excavated sometime between 1962 and 1974, as shown on historical aerial imagery (Appendix VI). A previous wetland delineation report conducted in 1995 for the adjacent Target property and concurrence from the DuPage County Department of Economic Development and Planning and USACE for that delineation show that these areas did not qualify as wetland, Waters of DuPage, or Waters of the U.S. and were considered non-regulatory ditches (Appendix VI). A summary of the data points and identified areas is provided in Table 1.

| Table 1. Data Point Summary Tabl | I able I. | Data | OILL | Quillilliai y | I abic |
|----------------------------------|-----------|------|------|---------------|--------|
|----------------------------------|-----------|------|------|---------------|--------|

| Area | Data Point | Hydrophytic Vegetation? | Hydric Soils? | Wetland Hydrology? | Wetland (Y/N) | | |
|------|------------|-------------------------|---------------|-----------------------|----------------|--|--|
| | X01 | N | N | Υ | | | |
| 4 | X04 | Y | N | Υ |] _N | | |
| - 1 | X06 | N | N | Υ | 14 | | |
| | X07 | Y | N | Υ | | | |
| | X02 | Y | N | N | N | | |
| 2 | X05 | N | N | N |] | | |
| 3 | X03 | Y | N | N | N | | |

In V3's professional opinion, Area 1 consists of two constructed drainage ditches excavated in upland soils and does not qualify as wetland, Waters of DuPage, or Waters of the U.S. No other wetlands, Waters of DuPage, or Waters of the U.S. were identified within 100-feet of the subject property per the DuPage County Ordinance. The non-regulatory excavated drainage ditches were field verified by Ms. Jen Boyer of the DuPage County Stormwater Management (SWM) on July 28, 2015 and Ms. Stasi Brown of the USACE on August 4, 2015.

Regulatory Summary.

Pursuant to Section 404 of the Clean Water Act, the U. S. Army Corps of Engineers (USACE) has jurisdiction over the placement of fill or dredged material in all jurisdictional waters of the United States, including wetlands. The property does not contain any wetlands or waters of the US. Therefore, a Section 404 permit from the USACE is not required for the development of the property

Pursuant to the 2013 *DuPage County Countywide Stormwater and Flood Plain Ordinance* (Ordinance), any development that affects a special management area (i.e., floodplain, wetland, wetland buffer, or waterway buffer) requires a stormwater management review and certification by DuPage County. The property does not contain any special management areas and does not require DuPage County certification. Information concerning applicable regulatory requirements is provided in **Appendix III**.

INTRODUCTION AND BACKGROUND

The approximately 5.88-acre subject property was investigated by V3 Companies (V3) on July 15, 2015 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or DuPage County jurisdiction. Any identified wetland boundaries are marked in the field using pink wire flags labeled "Wetland Delineation" and numbered consecutively from beginning to end. This report summarizes the results of the field investigation and provides technical documentation for all investigated areas. The non-regulatory excavated drainage ditches were field verified by Ms. Jen Boyer of the DuPage County Stormwater Management (SWM) on July 28, 2015 and Ms. Stasi Brown of the USACE on August 4, 2015.

The subject property is located north of Yorktown Convenience Center, south of E. 22nd Street east of Grace Street, and west of Yorktown Shopping Center, in Lombard DuPage County, Illinois (Section 29, T39N, R11E; 41.843460 °N, -88.005060°W; Wheaton quadrangle, Figure 1).

No wetland areas are mapped on the subject property on the National Wetlands Inventory (NWI) map (Figure 2).

No wetland areas are mapped on the subject property on the DuPage County Advanced Identification of Wetlands (ADID) map (Figure 3).

The USGS Hydrologic Atlas (Figure 4) does not show the presence of any streams or creeks on the subject property.

The 12-Digit Hydrologic Unit Code (HUC) Map (Figure 5) shows that the subject property lies within the Lower Salt Creek sub watershed (Hydrologic Unit 071200040404), which is associated with the larger Des Plaines River watershed.

The FEMA Flood Insurance Rate Map (FIRM) (Figure 6) does not identify any areas on the subject property that are within a flood zone.

The DuPage County Regulatory Flood Map (RFM) (Figure 7) does not identify any areas on the subject property that are within a flood zone.

Three soil series were mapped within the subject property by the Natural Resources Conservation Service (USDA, NRCS 2014; Figure 8). These soils include Ashkum silty clay loam (232A), Orthents, loamy, undulating (802B), Orthents, clayey, undulating (805B). Ashkum silty clay loam is listed as a hydric soil in DuPage County, Illinois.

Figure 9, a DigitalGlobe aerial photograph (2014) shows the location of all sampling points and the locations of the identified areas as collected via a handheld GPS unit.

WETLAND DELINEATION METHODS

Wetland delineations are conducted following the methods given in the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region.* Under the delineation procedures in this manual, an area must exhibit characteristic hydrophytic vegetation, hydric soils, and wetland hydrology to be considered a wetland. If field investigation determines that any of the three parameters are not satisfied, the area usually does not qualify as wetland. Moreover, drainage ditches excavated in dry land are generally not considered jurisdictional waters of the United States by the Corps of Engineers (preamble to 33 CFR Parts 320 through 330, *Federal Register* Vol. 56, No. 219, 41217).

As part of a delineation report, data forms and technical information are required by the U.S. Army Corps of Engineers to document the three parameters for any area determined to be wetland. Data forms for wetlands identified at the subject property are provided in **Appendix I**. The vegetation data calculated on the data forms reflects the changes made to the National Wetland Plant List as of June 1, 2012. Representative photographs of delineated wetlands are provided in **Appendix II**. A brief description of the field methods used and a description of the three wetland parameters are provided in **Appendix IV**.

Plant species lists are compiled for each area identified, focusing on the plant communities within each identified wetland area. This accumulated floristic data is analyzed using the Floristic Quality Assessment (FQA) methodology, which is an assessment technique that was developed for a rapid quality evaluation of vegetation in a defined area. Technical names in the FQA and this report follow the nomenclature of *The National Wetland Plant List: 2014 Update of Wetland Ratings* (Lichvar et. al., 2014). A detailed explanation of the Floristic Quality Assessment method is provided in **Appendix IV**.

As part of the wetland delineation assessment, Illinois Department of Natural Resources (IDNR) and US Fish and Wildlife Service (USFSW) threatened and endangered species evaluations were conducted (**Appendix V**).

The IDNR confirmed that the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. A copy of the termination letter from the IDNR is included in **Appendix V**.

The USFWS Section 7 consultation did not find species or critical habitat present on the subject property. A copy of the USFWS Section 7 consultation is included in **Appendix V**.

RESULTS OF THE FIELD INVESTIGATION

NON-JURISDICTIONAL AREAS

Area 1 - Constructed Drainage Ditches

Data Points X01, X04, X06, and X07

Area 1 was identified in the southern and eastern portion of the subject property and consists of two constructed drainage ditches excavated in upland soils that did not satisfy the criteria to qualify as wetland, Waters of the U.S., or Waters of DuPage. The ditches appear to have been excavated sometime between 1962 and 1974, as shown on historical aerial imagery (**Appendix VI**). A previous wetland delineation report conducted in 1995 for the adjacent Target property and concurrence from the DuPage County Department of Economic Development and Planning and USACE for that delineation show that these areas did not qualify as wetland, Waters of the U.S., or Waters of DuPage and were considered non-regulatory ditches (**Appendix VI**).

Summary:

Constructed Drainage Ditches

Jurisdiction: N/A Quality: N/A

Vegetated Buffer Required: N/A

Vegetation:

- > There was no vegetation present at Data Point X01, so the soils criterion is not satisfied.
- ➤ The dominant plant species at Data Point X04 was eastern cottonwood (*Populus deltoides*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.
- > There was no vegetation present at Data Point X06, so the soils criterion is not satisfied.
- ➤ The dominant plant species at Data Point X07 are eastern cottonwood (*Populus deltoides*) and common buckthorn (*Rhamnus cathartica*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

The floristic quality data and plant species inventory for Area 1 are provided below.

| Conservatism-Based Me | etrics | Additional Metrics | | | |
|----------------------------|--------|---------------------------|------|--|--|
| Mean C (native species) | 2.00 | Species Richness (all) | 3 | | |
| Mean C (all species) | 1.33 | Species Richness (native) | 2 | | |
| Mean C (native trees) | 2.00 | % Non-native | 33% | | |
| Mean C (native shrubs) | 0.00 | Wet Indicator (all) | 0.00 | | |
| Mean C (native herbaceous) | n/a | Wet Indicator (native) | 0.00 | | |
| FQAI (native species) | 2.83 | % hydrophyte (Midwest) | 100% | | |
| FQAI (all species) | 2.31 | % native perennial | 67% | | |
| Adjusted FQAI | 16.33 | % native annual | 0% | | |
| % C value 0 | 33% | % annual | 0% | | |
| % C Value 1-3 | 67% | % perennial | 100% | | |
| % C value 4-6 | 0% | | | | |
| % C value 7-10 | 0% | | | | |

| Species Acronym | Species Name (NWPL/ Mohlenbrock) | Synonym | Common Name | C Value | Midwest WET Indicator | WET Indicator (numeric) | Habit | Duration | Nativity |
|--------------------|--|-----------------------|------------------------|---------|-----------------------------|-------------------------------|-------|-----------|-----------|
| popdel | Populus deltoides | Populus deltoides | Eastern Cottonwood | 2 | FAC | О | Tree | Perennial | Native |
| rhacat | Rhamnus cathartica | RHAMNUS CATHARTICA | European Buckthorn | 0 | FAC | 0 | Shrub | Perennial | Adventive |
| rhurad | Toxicodendron radicans | Rhus radicans | Eastern Poison- Ivy | 2 | FAC | 0 | Vine | Perennial | Native |

Soils:

- > The soil profile at Data Point X01 consisted of gravel, so the soils criterion is not satisfied.
- > The soil profile at Data Point X04 consisted of 0-12 inches of very dark grayish brown (10YR 3/2) silty clay loam. Hydric soil indicators were not observed, so the soils criterion is not satisfied.
- > The soil profile at Data Point X06 consisted of gravel, so the soils criterion is not satisfied.
- The soil profile at Data Point X07 consisted of 0-10 inches of mixed fill consisting of very dark grayish brown (10YR 3/2) silty clay loam. Below that, to a depth of 18 inches below the surface, the soil profile consisted of mixed fill containing 50% very dark grayish brown (10YR 3/2) and 50% brown (10YR 5/4) silty clay loam. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology:

- > The area at Data Point X01 was inundated to a depth of 3 inches, so the hydrology criterion is satisfied.
- > The area at Data Point X04 was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.
- > The area at Data Point X06 was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.
- > The presence of two secondary wetland hydrology indicators, B10, Drainage Patterns, and D2, Geomorphic Position, at Data Point X07 satisfies the hydrology criterion.

Conclusion: Data Points X01 and X06 do not satisfy the vegetation and soils criterion and Data Points X04 and X07 do not satisfy the soils criterion; therefore Area 1 does not qualify as wetland. In V3's professional opinion, Area 1 does not qualify as a regulatory waterway because it was excavated in upland soils for stormwater conveyance purposes and was previously concurred upon by EDP and USACE to be not regulatory.

ADDITIONAL AREAS INVESTIGATED

Area 2 – Upland

Data Points X02 and X05

Area 2 consists of the upland areas adjacent to Area 1.

Vegetation:

- ➤ The dominant plant species at Data Point X02 is common buckthorn (*Rhamnus cathartica*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.
- ➤ The dominant plant species at Data Point X05 are chokecherry (*Prunus virginiana*) and common buckthorn (*Rhamnus cathartica*). Only 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils:

- ➤ The soil profile at Data Point X02 consisted of 0-10 inches of brown (10YR 4/3) gravelly silty clay loam. Hydric soil indicators were not observed, so the soils criterion is not satisfied.
- ➤ The soil profile at Data Point X05 consisted of 0-15 inches of very dark grayish brown (10YR 3/2) silty clay loam. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology:

- ➤ Neither primary nor secondary wetland hydrology indicators were observed at Data Point X02, so the hydrology criterion is not satisfied.
- ➤ Neither primary nor secondary wetland hydrology indicators were observed at Data Point X05, so the hydrology criterion is not satisfied.

Conclusion: Data Point X02 does not satisfy the soils and hydrology criteria and Data Point X05 did not satisfy the three criteria; therefore Area 2 does not qualify as wetland.

Area 3 - Upland

Data Point X03

Area 3 consists of an upland area located north of Area 1.

Vegetation: The dominant plant species at Data Point X03 are redtop (Agrostis gigantea), common plantain (Plantago major), white clover (Trifolium repens), and sidewalk knotweed (Polygonum aviculare). 75% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil profile at Data Point X03 consisted of 0-6 inches of very dark grayish brown (10YR 3/2) silty clay loam underlain by 6 inches, to a depth of 12 inches below the surface, of brown (2.5Y 4/4) silty clay loam. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

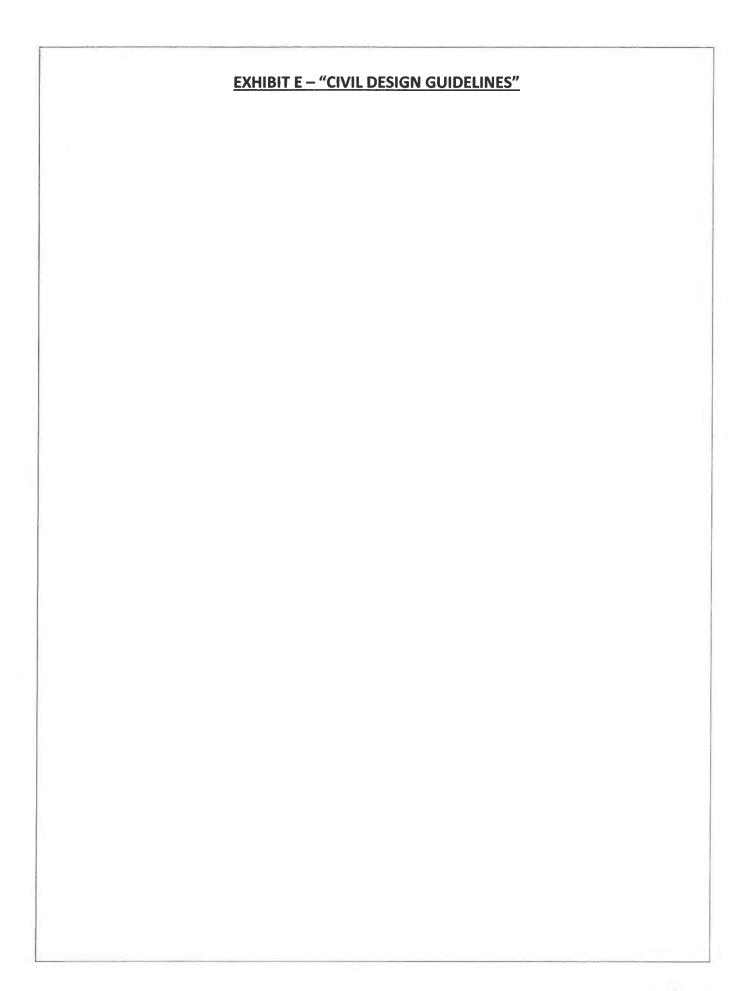
Conclusion: Area 3 fails to satisfy the soils and hydrology criterion and does not qualify as wetland.

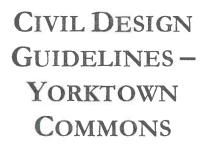
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PROJECT SITE:

YORKTOWN COMMONS AT YORKTOWN CENTER VILLAGE OF LOMBARD, DUPAGE COUNTY, ILLINOIS

PREPARED FOR:

ROSANOVA & WHITAKER, LTD. 30 W. JEFFERSON AVENUE, SUITE 200 NAPERVILLE, IL 60540

PREPARED BY:

V3 COMPANIES, LTD. 7325 JANES AVENUE WOODRIDGE, ILLINOIS 60517 630.724.9200

OCTOBER 19, 2015

Yorktown Commons

Civil Design Guidelines October 19, 2015

Project Overview

The intent of this project is to provide four mixed-use development-ready parcels (see Yorktown Commons Location Map) with approved Civil Design Guidelines as outlined in this report. The project will include the demolition of the existing buildings on Parcels 2 and 4; the demolition of existing parking lots and other site improvements on all four parcels, and; improvements to the common areas adjacent to the four parcels.

Common area improvements will include landscaping and lighting along Grace Street, the Yorktown Center Ring Road and into the north end of the Yorktown Center property. Pedestrian and bicycle improvements will provide connectivity between the four parcels, the mall, and the existing properties that surround the redevelopment area.

This report will serve as the Civil Design Guidelines for future residential and mixed-use developments that will ultimately be proposed on each of the parcels.

Parcel 1

Demolition

- The parking lot located at the northwest corner of the property will be removed. This will
 require some coordination with the Yorktown Condominiums to the north as the curb cut
 for this parking lot is on their property.
- There is an existing 10" storm sewer that outlets onto Parcel 1 near the north property line. This pipe will be removed and this flow will be required to be re-routed around or through the site.
- A segment of the 30" storm sewer outlet that is located near the existing ditch will be removed.
- The 12" sanitary sewer that cuts through the site from southwest to northeast will be removed and re-routed around the perimeter of the property as shown on the attached Demolition Plan Parcel 1.
- The property in general, especially along the ditch, will require clearing and grubbing in advance of earthwork activities.
- The existing curb and gutter around the property is intended to be maintained and repaired only as required.
- There are four light poles along Grace Street to be removed.

Layout & Paving

- Roadway and paving design and construction shall comply with Chapter 500 of the Village of Lombard Specifications Manual, the "Illinois Department of Transportation (IDOT) "Standard Specifications for Road and Bridge Construction", and the "Supplemental Specifications and Recurring Special Provisions", latest editions and updates (IDOT).
- Recycled asphalt shall be allowed so long as it is in conformance with IDOT Specifications.
- Site access is to be from Grace Street, the Yorktown Center Ring Road, and the entrance drive to Target. Access points are to be approved by the Village and Yorktown Center.

- Sidewalk will be installed along the Yorktown Center Ring Road and the driveway along the southeast property line. Sidewalks will comply with the Illinois Accessibility Code.
- Asphaltic pavement sections for driveways and parking lots shall consist of 4" of HMA over 8" of aggregate base.
- Concrete pavement sections for driveways shall consist of 7^{1/2}" of Portland Cement Concrete Pavement over 4" of aggregate base.
- Parking requirements are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.
- Site geometrics and density are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.

Sanitary Sewer

- Sanitary Sewer shall be in accordance with the "Illinois Recommended Standards for Sewage Works" as published by the IEPA, the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the latest edition of the Village of Lombard Municipal Code.
- The 12" sanitary sewer that currently cuts through this parcel will be re-routed as shown
 on the attached Improvement Plan Parcel 1. Future sanitary services or extensions for
 any proposed buildings on the property should ultimately tie into this new 12" sewer.

Water Main

- Water Main shall be in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois" as well as the latest edition of the Village of Lombard Municipal Code.
- Fire protection shall be in accordance with the National Fire Prevention Code as well as the latest edition of the Village of Lombard Municipal Code.
- Existing 12" water mains run along the south side of the ring road and the east side of the roadway connection between this parcel and the Westin property. An existing 16" water main runs along the west side of Grace Street.
- A new water main loop shall be provided for this property. The new loop shall connect to the 12" water main along the west side of Grace Street, run through the property and connect to the 12" water main within the parkway in front of the Westin property as depicted on the attached Improvement Plan – Parcel 1.

Stormwater

- The stormwater management approach has been detailed in the attached Preliminary Stormwater Analysis Yorktown Commons Redevelopment.
- Storm sewer shall be designed to convey the flow resulting from the 10-year storm event.
- 100-year storm events shall be conveyed through the property in accordance with the DuPage Countywide Stormwater Ordinance.
- Based on the Village's and County's requirements a proposed development on this
 parcel will require approximately 2.75 ac-ft of detention assuming a curve number (CN)
 of 92, which is consistent with an apartment or townhome development.
- An at-grade detention basin with a depth of 5' would require approximately 0.60 acres designated for detention.
- Alternatively, an underground detention system could be utilized. Such a system would likely have a footprint of 25,000 sf to 30,000 sf.
- The site/detention facility will have an allowable release rate of approximately 0.60 cfs, which will be conveyed to the existing 36" storm sewer that currently serves as the outlet for the existing ditch.

- A development creating 2,500 sf or greater of net new impervious area will require Best Management Practices (BMP's) in accordance with the DuPage Countywide Stormwater Ordinance. An appropriately designed at-grade native vegetated wetland bottom basin would satisfy all BMP requirements. If underground detention is provided, other BMPs such as vegetated filter strips, bioswales, and/or pervious pavers would need to be incorporated into the site plan to meet the BMP requirements. An additional option would be the use of a mechanical BMP system.
- Based on calculations the piped offsite flow from the west for the 10-year storm event is 35 cfs. As part of the proposed plan this flow will be piped through or around Parcel 2, likely in a 36" pipe. In addition the 2.75 acre Yorktown Condos development immediately to the north of the property has a piped release to the site through a 10" pipe. This flow should be routed along the northeast property line to the existing outlet.
- It was determined that while nearly 27 acres west of Grace Street are tributary to Parcel 2 via the storm sewer system, only 14.8 acres are tributary via overland overflow. This tributary area results in a 100-year flow of approximately 84 cfs. As part of the proposed plan the site shall be designed to safely convey this offsite flow overland through or around the property.

Lighting

- Lighting shall meet Village of Lombard and Yorktown Center requirements.
- Lighting electric design shall comply with the National Electric Code.

Private Utilities

- AT&T provides cable, telephone, and data to the project area. Ryan Kennelly (630-573-5681) should be contacted to initiate coordination with AT&T.
- COMCAST is a local broadband provider for the area. Contact Denise Corbin (847-789-0638) with installation/coordination questions.
- ComEd is the local electric provider. Call the New Business hotline to initiate project coordination.
- NICOR is the local natural gas provider. Contact Daniel McEvilly (New Business Coordinator 815-272-9251) to initiate project coordination.

Parcel 2

Demolition

- The existing approximately 10,500 sf building will be demolished.
- Curb and gutter removal will be required as needed to accommodate the proposed site plan.
- The storm sewer, sanitary sewer, and water main service connections to the building will be removed and properly capped. See attached Demolition Plan Parcel 2.
- Tree removals will be required.
- The parking lots will be removed as needed and properly disposed of.
- 3 light poles and foundations will require removal.

Layout & Paving

- Roadway and paving design and construction shall comply with Chapter 500 of the Village of Lombard Specifications Manual, the "Illinois Department of Transportation (IDOT) "Standard Specifications for Road and Bridge Construction", and the "Supplemental Specifications and Recurring Special Provisions", latest editions and updates (IDOT).
- Recycled asphalt shall be allowed so long as it is in conformance with IDOT Specifications.

- Access to any proposed parking lot on this property shall be provided off of the existing drive along the south property line of the parcel and/or the Yorktown Center Ring Road or from the Yorktown Center parking lot. Access points are to be approved by the Village of Lombard and Yorktown Center.
- Sidewalk will be installed along the Yorktown Ring Road and the Grace Street extension south of the Ring Road. Sidewalks will comply with the Illinois Accessibility Code.
- Asphaltic pavements sections for driveways and parking lots shall consist of 4" of HMA over 8" of aggregate base.
- Concrete pavement sections for driveways shall consist of 7^{1/2}" of Portland Cement Concrete Pavement over 4" of aggregate base.
- Parking requirements are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.
- Site geometrics and density are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.

Water

- Water Main shall be in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois" as well as the latest edition of the Village of Lombard Municipal Code.
- Fire protection shall be in accordance with the National Fire Prevention Code as well as the latest edition of the Village of Lombard Municipal Code.
- There is a 12" water main along the south side of the Ring Road (north of the property) and an 8" water main just west of the property. Water and/or fire service taps for any proposed development shall be made off of the 12" main to the north.
- The existing fire hydrant at the southeast corner of the property is to remain as will the
 hydrant just west of the property. Additional fire hydrants are not likely to be required for
 this property.

Sanitary

- Sanitary Sewer shall be in accordance with the "Illinois Recommended Standards for Sewage Works" as published by the IEPA, the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the latest edition of the Village of Lombard Municipal Code.
- The 12" sanitary sewer main to the north provides capacity for this property. The sanitary service serving the existing building on this property should be inspected for possible re-use, otherwise a new connection to the 20' deep 12" main will be required.

Stormwater

- The stormwater management approach has been detailed in the attached Preliminary Stormwater Analysis Yorktown Commons Redevelopment.
- Storm sewer shall be designed to convey the flow resulting from the 10-year storm event.
- The proposed development will result in a reduced runoff rate from this property.
 Therefore it is understood that the existing 48" storm sewer to which this property is tributary (south of the property) has adequate capacity to convey the 10-year storm event from this site.
- A development increasing the total impervious area by greater than 5,000 sf will require stormwater detention in accordance with Chapter 151 of the Village of Lombard Code of Ordinances and with the DuPage Countywide Stormwater Ordinance.
- A development creating 2,500 sf or greater of net new impervious area will require Best Management Practices (BMP's) in accordance with the DuPage Countywide Stormwater Ordinance. BMPs such as vegetated filter strips, bioswales, and/or pervious pavers

would need to be incorporated into the site plan to meet the BMP requirements. An additional option would be the use of a mechanical BMP system.

Lighting

- Lighting shall meet Village of Lombard and Yorktown Center requirements.
- Lighting electric design shall comply with the National Electric Code.

Private Utilities

- AT&T provides cable, telephone, and data to the project area. Ryan Kennelly (630-573-5681) should be contacted to initiate coordination with AT&T.
- COMCAST is a local broadband provider for the area. Contact Denise Corbin (847-789-0638) with installation/coordination questions.
- ComEd is the local electric provider. Call the New Business hotline to initiate project coordination.
- NICOR is the local natural gas provider. Contact Daniel McEvilly (New Business Coordinator 815-272-9251) to initiate project coordination.

Parcel 3

Demolition

- Curb and gutter removal will be required as needed to accommodate the proposed site plan.
- The parking lots will be removed as needed and properly disposed of.
- Tree removals will be required.
- Approximately 175 If of 12" sanitary sewer at a depth of approximately 25 feet will be required to be removed and routed around the proposed building. See attached Demolition Plan - Parcel 3.

Layout & Paving

- Roadway and paving design and construction shall comply with Chapter 500 of the Village of Lombard Specifications Manual, the "Illinois Department of Transportation (IDOT) "Standard Specifications for Road and Bridge Construction", and the "Supplemental Specifications and Recurring Special Provisions", latest editions and updates (IDOT).
- Recycled asphalt shall be allowed so long as it is in conformance with IDOT Specifications.
- Access to any proposed parking lot on this property shall be provided from the existing Yorktown Center parking lot drive aisles. Access points are to be approved by the Village of Lombard and Yorktown Center.
- Sidewalk will be installed along the Yorktown Ring Road and the Grace Street extension south of the Ring Road. Sidewalks will comply with the Illinois Accessibility Code.
- Asphaltic pavements sections for driveways and parking lots shall consist of 4" of HMA over 8" of aggregate base.
- Concrete pavement sections for driveways shall consist of 7^{1/2}" of Portland Cement Concrete Pavement over 4" of aggregate base.
- Parking requirements are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.
- Site geometrics and density are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.

Water

- Water Main shall be in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois" as well as the latest edition of the Village of Lombard Municipal Code.
- Fire protection shall be in accordance with the National Fire Prevention Code as well as the latest edition of the Village of Lombard Municipal Code.
- There is a 12" water main along the south side of the Ring Road (north of the property) and an 8" water main just east of the property. Water and/or fire service taps for any proposed development shall be made off of the 12" main to the north.
- The existing fire hydrant at the northeast corner of the property is to remain. Additional fire hydrants are not likely to be required for this property.

Sanitary

- Sanitary Sewer shall be in accordance with the "Illinois Recommended Standards for Sewage Works" as published by the IEPA, the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the latest edition of the Village of Lombard Municipal Code.
- The re-routing of the existing 12" sanitary sewer to the perimeter of the property will require approximately 210 If of 12" sanitary sewer at depths between 20'-25' to be installed.
 3 additional manholes will be required. See attached Improvement Plan Parcel 3.

Storm Water

- The stormwater management approach has been detailed in the attached Preliminary Stormwater Analysis Yorktown Commons Redevelopment.
- Storm sewer shall be designed to convey the flow resulting from the 10-year storm event.
- The proposed development will result in a reduced runoff rate from this property. Therefore it is understood that the existing 48" storm sewer to which this property is tributary (south of the property) has adequate capacity to convey the 10-year storm event from this site.
- A development increasing the total impervious area by greater than 5,000 sf will require stormwater detention in accordance with Chapter 151 of the Village of Lombard Code of Ordinances and with the DuPage Countywide Stormwater Ordinance.
- A development creating 2,500 sf or greater of net new impervious area will require Best Management Practices (BMP's) in accordance with the DuPage Countywide Stormwater Ordinance. BMPs such as vegetated filter strips, bioswales, and/or pervious pavers would need to be incorporated into the site plan to meet the BMP requirements. An additional option would be the use of a mechanical BMP system.

Lighting

- Lighting shall meet Village of Lombard and Yorktown Center requirements.
- Lighting electric design shall comply with the National Electric Code.

Private Utilities

- AT&T provides cable, telephone, and data to the project area. Ryan Kennelly (630-573-5681) should be contacted to initiate coordination with AT&T.
- COMCAST is a local broadband provider for the area. Contact Denise Corbin (847-789-0638) with installation/coordination questions.
- ComEd is the local electric provider. Call the New Business hotline to initiate project coordination.

• NICOR is the local natural gas provider. Contact Daniel McEvilly (New Business Coordinator 815-272-9251) to initiate project coordination.

Parcel 4

Demolition

- The existing building will be demolished from the demising wall of the Carson's Furniture Gallery to the east (approximately 76,300 sf) as shown on the attached Demolition Plan
 Parcel 4.
- Curb and gutter removal will be required as needed to accommodate the proposed site plan.
- Tree removals will be required.
- The parking lots and sidewalks will be removed as needed and properly disposed of.
- 4 light poles and foundations will require removal.
- The existing monument sign at the southeast corner of the property will be removed.
- 3 grease traps at the rear of the existing building will be removed.
- Approximately 1,100 feet of sanitary sewer main and services and 5 manholes will likely require removal from the rear of the building.
- Approximately 1,900 If of water main and water services will be removed.
- The 10" watermain near the north property line has two water main connections and multiple service connections that run to the neighboring property to the north. These connections will be required to be reconnected to the proposed watermain.
- There are 2 fire hydrants to be removed.
- Approximately 1,000 lf of storm sewer and 5 manholes will be removed.

Layout & Paving

- Roadway and paving design and construction shall comply with Chapter 500 of the Village of Lombard Specifications Manual, the "Illinois Department of Transportation (IDOT) "Standard Specifications for Road and Bridge Construction", and the "Supplemental Specifications and Recurring Special Provisions", latest editions and updates (IDOT).
- Recycled asphalt shall be allowed so long as it is in conformance with IDOT Specifications.
- Access is to be allowed from Grace Street and the Yorktown Center Ring Road. Access points are to be approved by the Village of Lombard and Yorktown Center.
- Sidewalk will be installed along the Yorktown Ring Road and Grace Street. Sidewalks will comply with the Illinois Accessibility Code.
- Asphaltic pavement sections for driveways and parking lots shall consist of 4" of HMA over 8" of aggregate base. Asphaltic pavement sections for a proposed residential roadway shall consist of 4" of HMA over 12" of aggregate base.
- Concrete pavement sections for driveways shall consist of 7^{1/2}" of Portland Cement Concrete Pavement over 4" of aggregate base.
- Parking requirements are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.
- Site geometrics and density are to be in accordance with the Planned Development Design Guidelines for Yorktown Commons.

Water

 Water Main shall be in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois" as well as the latest edition of the Village of Lombard Municipal Code.

- Fire protection shall be in accordance with the National Fire Prevention Code as well as the latest edition of the Village of Lombard Municipal Code.
- There is a 16" watermain along the east property line and an existing 12" watermain on the south side of the Ring Road to remain in place.
- The 10" watermain near the north property line to be removed will be replaced and reconnected to the existing 16" water main along the east property line. There are two water main connections and multiple service connections, off this existing 10" main, that run to the neighboring property to the north. These connections will be required to be reconnected to the proposed watermain.

Sanitary

- Sanitary Sewer shall be in accordance with the "Illinois Recommended Standards for Sewage Works" as published by the IEPA, the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the latest edition of the Village of Lombard Municipal Code.
- The existing 12" sanitary sewer running south along the east property line is intended to remain.
- The 8" and 10" sanitary mains being removed along the north side of the property will be
 required to be re-installed as the Carson's building to remain and the property to the
 west are tributary to this sewer system. See attached Improvement Plan Parcel 4.

Storm Water

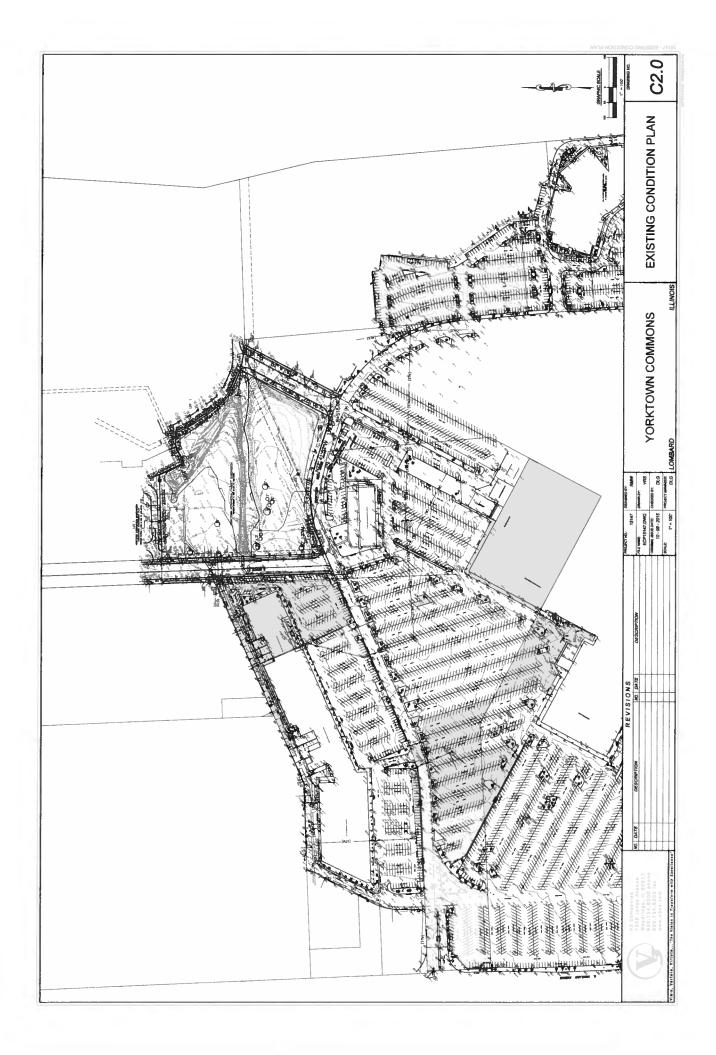
- The stormwater management approach has been detailed in the attached Preliminary Stormwater Analysis Yorktown Commons Redevelopment.
- Storm sewer shall be designed to convey the flow resulting from the 10-year storm event.
- The proposed development will result in a reduced runoff rate from this property. Therefore it is understood that the existing 24" storm sewer to which this property is tributary (near the south property line) has adequate capacity to convey the 10-year storm event from this site.
- Should a proposed development increase the total impervious area by greater than 5,000 sf approximately 4.8 ac-ft of detention will be required.
- A development creating 2,500 sf or greater of net new impervious area will require Best Management Practices (BMP's) in accordance with the DuPage Countywide Stormwater Ordinance. BMPs such as vegetated filter strips, bioswales, and/or pervious pavers would need to be incorporated into the site plan to meet the BMP requirements. An additional option would be the use of a mechanical BMP system.

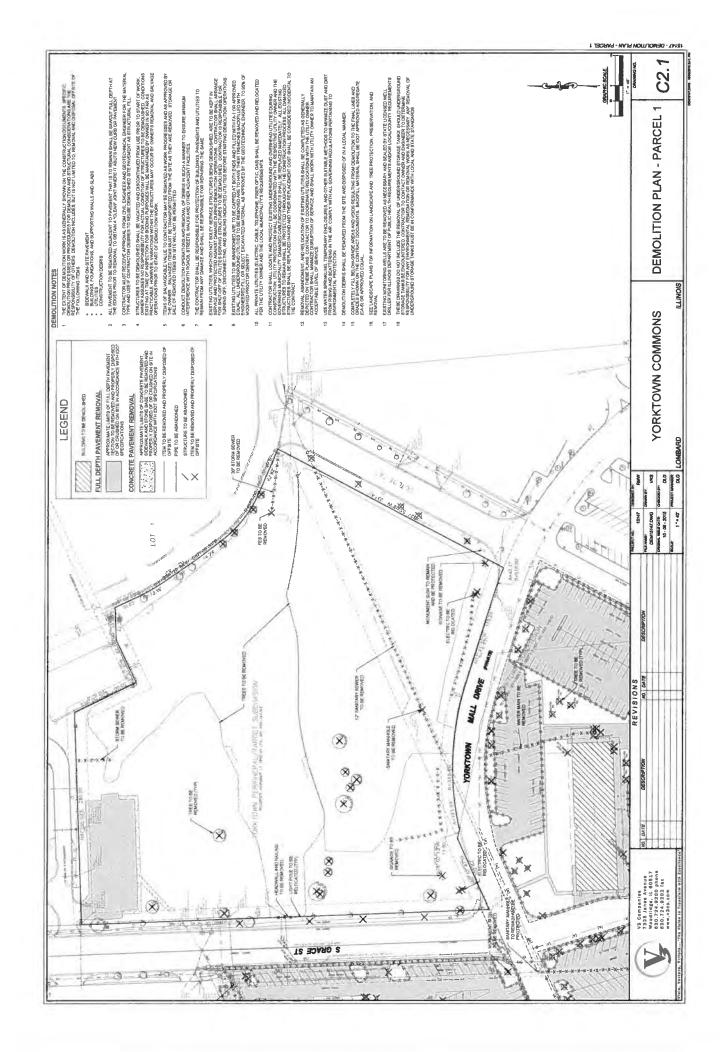
Lighting

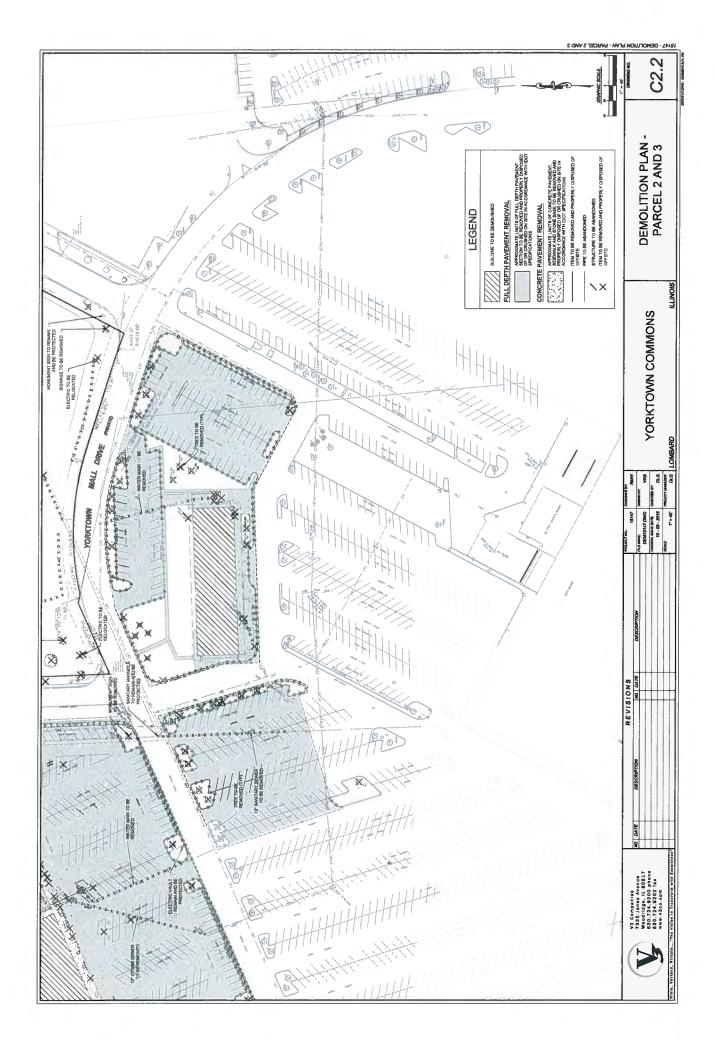
- Lighting shall meet Village of Lombard and Yorktown Center requirements.
- Lighting electric design shall comply with the National Electric Code.

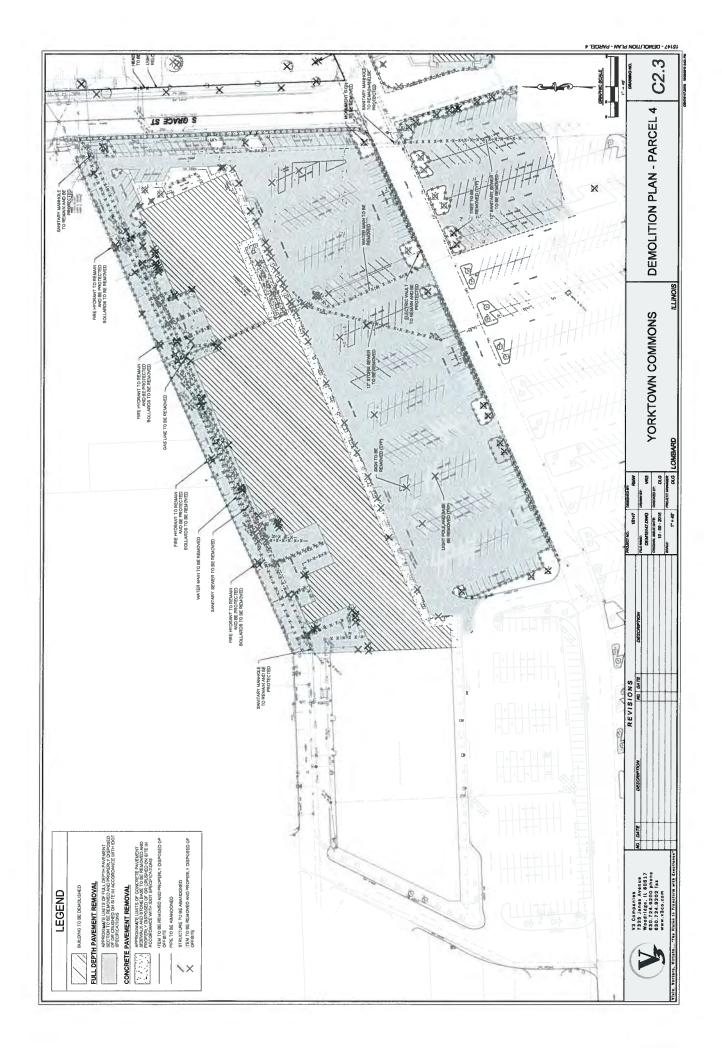
Private Utilities

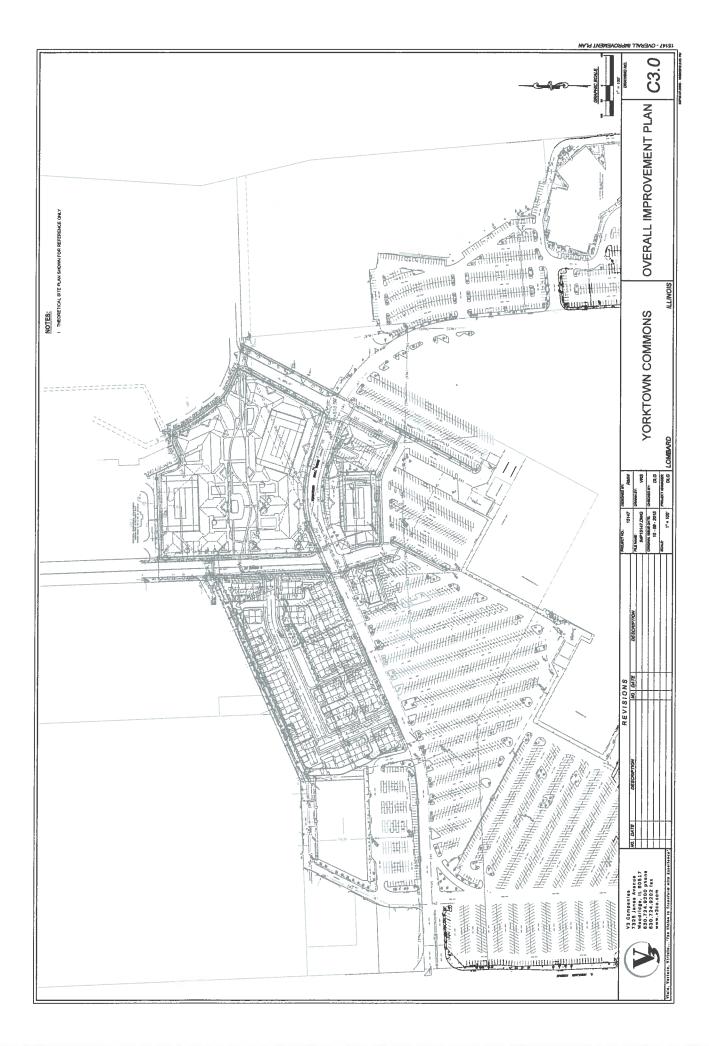
- AT&T provides cable, telephone, and data to the project area. Ryan Kennelly (630-573-5681) should be contacted to initiate coordination with AT&T.
- COMCAST is a local broadband provider for the area. Contact Denise Corbin (847-789-0638) with installation/coordination questions.
- ComEd is the local electric provider. Call the New Business hotline to initiate project coordination.
- NICOR is the local natural gas provider. Contact Daniel McEvilly (New Business Coordinator 815-272-9251) to initiate project coordination.

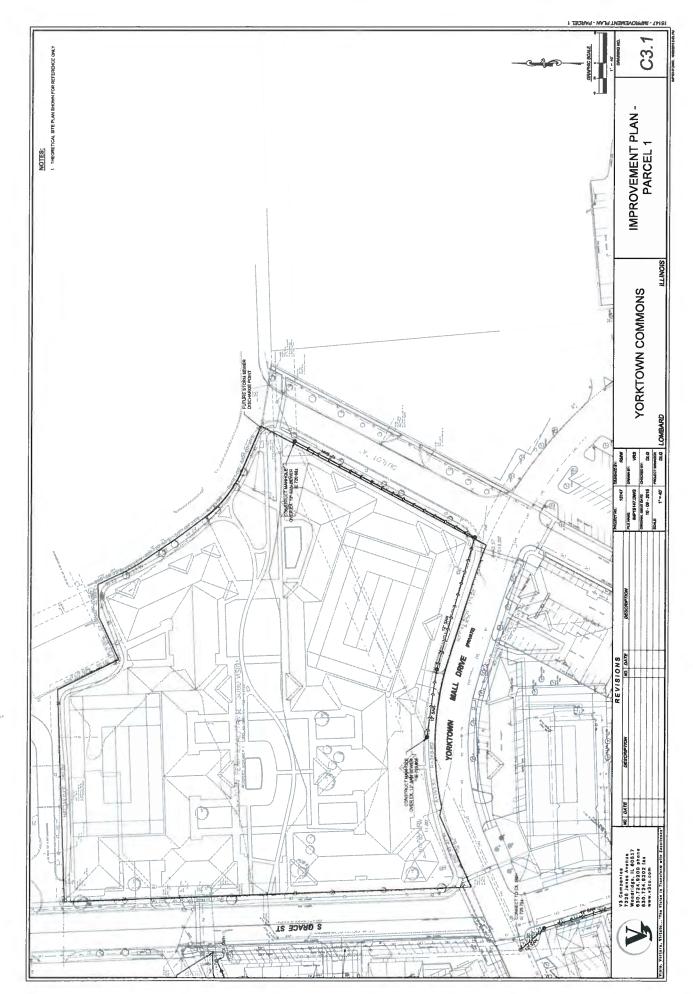


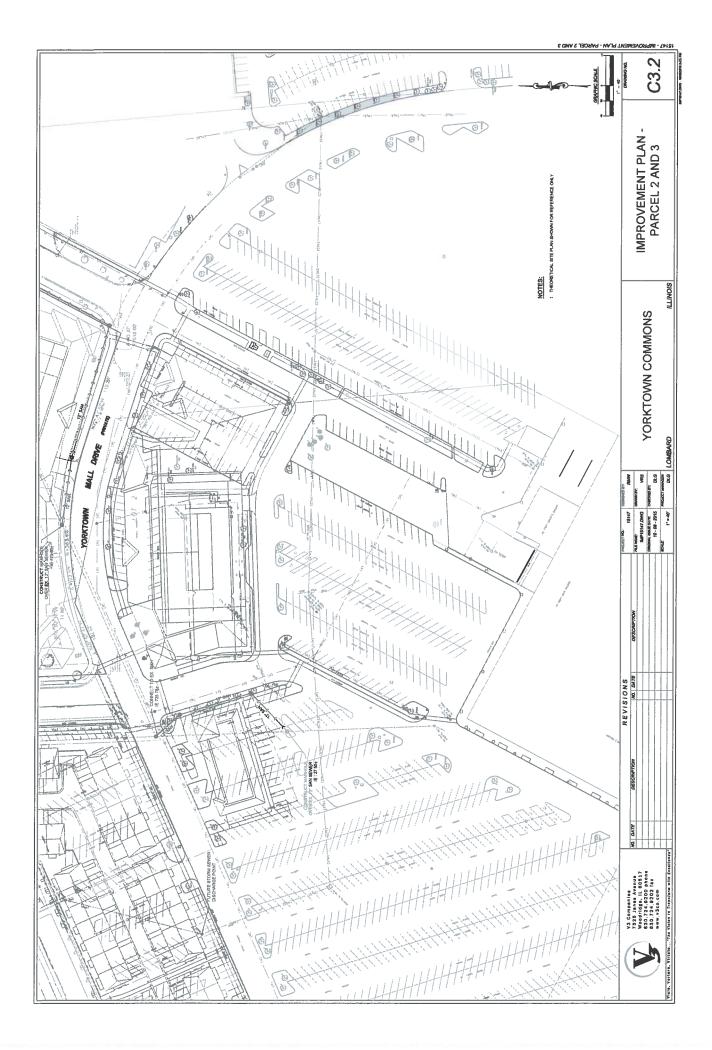


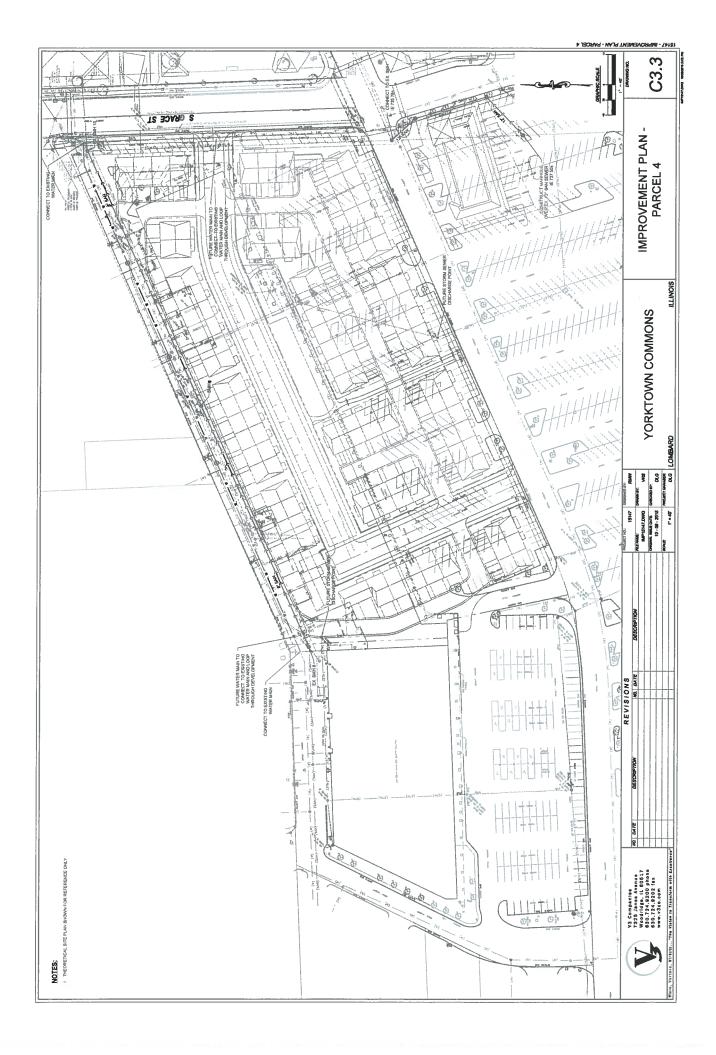












| <u>E</u> | XHIBIT F – YORKTOWN COMMONS ZONING COMPARISON | |
|----------|---|--|
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| | PC 15-27: YORKTOV | VN COMMONS ZONING COI | MPARISON | | | |
|--|---|--|--|--|--|--|
| Key | More permissive than the underlying zoning, but roughly equivalent to the existing PDs. | More permissive than the underlying zoning, but stricter than the existing PDs. | More permissive than both of the existing PDs. | | | |
| | Underlying Zoning (B3 Community Shopping District) | Existing Yorktown Center PD | Proposed Yorktown Commons PD | | | |
| Uses | use within a "B" classified zoning distri uses, but also a significant amount of o | xisting Yorktown Shopping Center PD al ict and the B3 Community Shopping Dist conditional uses. The proposed Yorktow gards to commercial uses, but does allow ential permitted. | trict has a broad array of permitted on Commons PD is more limiting than | | | |
| Min. Lot Area | 20,000 square feet | No specific minimum lot area defined. | Variation requested, although at this time none of the four proposed parcels are smaller than 20,000 square feet. Future resubdivisions that would reduce lot areas to less than 20,000 square feet are possible. Variation requested, although at this time none of the four proposed parcels are less than 100 feet wide. Future resubdivisions that would reduce lot widths to less than 100 feet wide are possible. | | | |
| Min. Lot Width | 100 feet | No specific minimum lot width defined. | | | | |
| Min. Front Yard Setback | 30 feet | | In lieu of traditional building setback requirements, the Design Guidelines utilize "build-to-lines" which establish a more pedestrian-oriented streetwa | | | |
| Min. Corner Side Yard Setback | 30 feet | In lieu of all other building setback requirements of the Zoning Ordinance, the PD requires a setback | where buildings are closer to each other and their entrances are closer to sidewalks. The proposed build-to- | | | |
| Min. Int. Side Yard Setback | 10 feet | of 25 feet from the outer perimeter of the tract. There are no specific setbacks within the interior of the PD. | lines range from 6 feet for townhomes to up to 30 feet from the property line for commercial or mixe use buildings. Furthermore a | | | |
| Min. Rear Yard Setback | 30 feet | | "frontage occupancy" standard requires a certain percentage of each structure to be built along a build-to-line. | | | |
| Max. Building Height | 2 stories or 30 feet, whichever is less. | Four office building shall be permitted to a max. height of 870 feet above sea level and all other buildings may be constructed to a max. height of 830 feet above sea level (This translates to four buildings of up to approximately 105-120 feet in height allowed and the remaining buildings are to be 65 feet to 80 feet or less in height). | 6 stories or 100 feet, whichever is less | | | |

| | Underlying Zoning (B3 Community Shopping District) | Existing Yorktown Center PD | Proposed Yorktown Commons PD |
|--------------------------|--|---|---|
| Min. Open Space | 10% | The PD allows for up to 30% of the site to be occupied for building purposes provided the remaining area shall remain as open spaces, which may be utilized for parking, loading berths, signs, traffic lanes and pedestrian walkways and landscaping. (This technically allows for the open space, as currently defined by the Zoning Ordinance, to be 0%) | 12.5% (Includes some hardscape uses such as courtyards, squares, pedestrian paths. Usable open space provided on a roof or a podium may also be counted. The primary difference between the existing PDs and the proposal is that the existing PDs allowed for parking, traffic lanes, etc. to be counted as open space, while the proposed PD allows for uses with impervious surface as open spaces, and thus can also be 0% open space as currenty defined by the Zoning Ordinance, but such spaces must be of a type that is a pedestrian amenity). |
| Restrictions o | 1. All business establishments shall be retail or service establishments dealing directly with consumers. All goods produced on the premises shall be sold at retail on the premises where produced; and 2. All business activities, servicing, processing and storage, except for offstreet parking or loading, shall be conducted within completely enclosed buildings; except that outside display and sales, outside service areas, and drive-through/drive-in services may be allowed as conditional uses pursuant to subsection 155.103 (F) of this Chapter. | N/A | Variation requested. (The proposed PD allows for outdoor dining by right and further language is requested by staff to clarify that drive-throughs are conditional uses as opposed to permitted within the existing PDs. Outside storage will still not be permitted). |
| isitic iildir tbac | 40 feet where a rear yard or interior side yard lot in the B3 district abuts a lot in the CR or a residence district | The PD waived all screening requirements provided in the Zoning | Variation requested. |
| sitic dsca ards | 30 feet where a rear yard or interior side yard lot in the B3 district abuts a lot in the CR or a residence district | Ordinance | Variation requested. |
| Off-Street Parking | Freestanding Stores and Neighborhood and Community Centers (up to 200,000 square feet) must provide 4 spaces per 1,000 square feet of gross floor area; and Regional Shopping Centers (more than 200,000 square feet) must provide 5 spaces per 1,000 square feet) | In lieu of all other off-street parking regulations the PD requires a minimum of 7,500 parking spaces. | Variation requested to reduce the 7,500 required spaces for Yorktown Shopping Center PD and Yorktown Peripheral PD to 6,800 spaces. |

| | Lomk | Lombard Multi-Family Residential Developments | pment | S | | | |
|---------------------------|------------------------------|---|------------|-------------------------------|------------|--------------|---------|
| Case No. or Year Built | Name | Address | Zoning | Height | # of Units | Size (Acres) | DU/Acre |
| | | Yorktown Apartments (1967 Approval) | | | | | |
| 1998 | Liberty Square Condos | 2240-60 S. Grace St. | RSPD | 4 stories | 112 | 4.42 | 25.34 |
| 22 | | 2233, -39, and -55 S. Highland Ave. | RSPD | 5-15 stories | 374 | 7.13 | 52.45 |
| 1972. SPA 14-03 | Yorktown Apartments | 2233 S. Highland Ave. | RSPD | 15 stories | 236 | | _ |
| | | 2239 S. Highland Ave. | RSPD | 7 stories | 78 | | |
| | | 2255 S. Highland Ave. | RSPD | 5 stories | 09 | | |
| 1972 | Yorktown Apartments | 2200-10 S. Grace St. | RSPD | 6 stories | 106 | 3.54 | 29.94 |
| 1969 | Yorktown Green Condos | 2201-22 S. Highland Ave. | RSPD | 6 stories | 264 | 12.21 | 21.62 |
| | | | | Totals | 928 | 27.30 | 31.36 |
| | | Max. All | lowed by C | Max. Allowed by Ord. No. 1323 | 1722 | 27.30 | 63.08 |
| | | | | Unit Surplus | 998 | : | |
| | | Max. Yor | rktown Coi | Max. Yorktown Commons Units | 970 | 15.00 | 64.67 |
| | | Other Multi-Family Development | | | | | |
| 1967 | Unnamed | 145 S. Main St | BSPD | 3 stories | 16 | 0.59 | 27.12 |
| 1968 | Crescent Arms Apartments | 442-44 W. Crescent Blvd. | R4 | 3 stories | 24 | 1.15 | 20.87 |
| 1968 | Westmore Apartments | 1021-69 S. Westmore-Meyers Rd | R4 | 2 stories | 230 | 11.48 | 20.03 |
| 1969 | International Village | 1300 S. Finley Rd. | RSPD | 3 stories | 671 | 40.24 | 16.67 |
| 1969 | Lombard Tower Condos | 33 N. Main St. | R6 | 11 stories | 120 | 1.47 | 81.63 |
| 1972 | Crescent Bend Condos | 410 W. Crescent Blvd. | R4 | 3 stories | 18 | 0.65 | 27.69 |
| 1973 | Pointe West (Harmony) Apts. | 1301-31 S. Finley Rd | RSPD | 4 stories | 336 | 12.89 | 26.07 |
| 1975 | Cove Landing | 2001-15 S. Finley Rd. | RSPD | 8 stories | 294 | 11.20 | 26.25 |
| 1975 | Village Apartments | 49 N. Park Ave | R6 | 7 stories | 48 | 0.54 | 88.89 |
| 1976 | Yorktown Condos | 2201 S. Grace St. | R5PD | 6 stories | 09 | 2.70 | 22.22 |
| 1979 | Park Manor Condos | 43 N. Park Ave. | R6 | 3 stories | 22 | 0.46 | 47.83 |
| 1987 | Clover Creek Apartments | 810-90 W. Foxworth Blvd. | R5PD | 4 stories | 504 | 30.46 | 16.55 |
| 1988 | Covington Apartments | 2101-87 S. Finley Rd. | RSPD | 2 stories | 257 | 13.43 | 19.14 |
| 1990 | Park Avenue Condos | 150 W. St. Charles Road | R6PD | 8 stories | 279 | 6.58 | 42.40 |
| 1990 | Townhomes of Lombard Condos | 42-48 N. Park Ave. & 43-49 N. Orchard Terr. | R6PD | 2-7 stories | 64 | 3.05 | 20.98 |
| 1971 | Burnwood Apartments | 2-10 Woodland Ct. | R5 | 3 stories | 09 | 3.33 | 18.02 |
| PC 96-26, SPA 04-09 | St. Regis / Yorkbrook Condos | 2000-30 St. Regis Dr. | R4PD | 6 stories | 210 | 10.50 | 20.00 |
| 1998 | Lincoln Terrace Condos | 212 W. St. Charles Rd. | R6 | 4 stories | 48 | 1.41 | 34.04 |
| 2000 | Lombard Station Condos | 31 E. Grove St. | R6PD | 7 stories | 41 | 1.05 | 39.05 |
| 2001 | Fountain Square Condos | 845-75 E. 22nd St. | R4PD | 5 stories | 270 | 12.46 | 21.67 |

| Case No. or Year Built | Name | Address | Zoning | Height | # of Units | # of Units Size (Acres) DU/Acre | DU/Acre |
|---------------------------|--------------------------------|--|--------|-----------|------------|---------------------------------|---------|
| | | Other Multi-Family Development (cont.) | | | | | |
| 2001 | Parkview Point Condos | 123 W. St. Charles Rd. | BSPD | 4 stories | 24 | 0.55 | 43.64 |
| 2003 | Park West Condos | 105 W. St. Charles Rd. | BSPD | 4 stories | 6 | 0.11 | 81.82 |
| 2003 | City View Apartments | 2720 S. Highland Ave. | B3PD | 5 stories | 403 | 5.00 | 80.60 |
| PC 03-09 | Lincoln Place Condos | 1 S. Lincoln Ave. | BSPD | 4 stories | 39 | 1.03 | 37.86 |
| PC 03-25 | Main Street Place | 229 S. Main St. | BSAPD | 3 stories | 10 | 0.61 | 16.39 |
| PC 04-10 | Oakview Estates Condos | 400-540 E. St. Charles Rd. | R4PD | 5 stories | 80 | 2.21 | 36.20 |
| PC 05-43 | Prairie Path Villas | 300 S. Main St. | BSAPD | 3 stories | 36 | 1.04 | 34.62 |
| PC 06-02 | Hidden Valley Condos | 1400-12 and 1500-20 S. Fairfield Ave. | R4PD | 3 stories | 69 | 4.60 | 15.00 |
| PC 15-04 | Unnamed - Highlands of Lombard | 2740 S. Highland Ave. | B3PD | 5 stories | 181 | 2.98 | 60.74 |

| EXHIBIT H – "TRAFFIC STUDY" |
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October 2015

Yorktown Commons

Traffic Study



Prepared for: Rosanova & Whitaker, Ltd.

Eriksson Engineering Associates, Ltd.

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1- INTRODUCTION

This report summarizes Eriksson Engineering Associates' (EEA) traffic analysis for a proposed mixed-use residential development, Yorktown Commons, in Lombard, Illinois. The proposed site consists of approximately 15 acres located around the intersection of Grace Street and the Yorktown Center Ring Road. Parcel 1 is located east of Grace Street and north of the Yorktown Ring Road on vacant land. Parcel 2 is the site of the former Bamboo Room restaurant and its adjacent parking. Parcel 3 will be created in the existing JC Penney parking lot. The Shops of Yorktown will be redeveloped as Parcel 4.

Yorktown Commons will be a multi-family development with the flexibility to develop a mixture of townhomes, condominiums, or apartments along with ancillary retail and restaurant space. For the traffic study, a conservative analysis was completed based on 970 apartments and 28,000 square feet of retail and restaurant space.

The purpose of this study was to identify the transportation system serving the proposed development, to determine the development's transportation characteristics, and to evaluate the impact of the development on area roadways.

EEA's evaluation of the transportation network included an analysis of the pedestrian, bicycle, public transportation, and vehicular network around the site. Data was collected of the existing volumes along with traffic control devices, sidewalks, bike routes, and traffic lanes. Projections of future traffic volumes were made for the proposed land-use plan and other near-by developments. Capacity analyses were conducted and recommendations developed for the transportation needs to accommodate the development.

Summary of Recommendations

Based on the traffic study results, the following conclusions were developed:

- The proposed development of Yorktown Commons and its associated traffic volumes can be accommodated by the area road network.
- The internal intersection of the Yorktown Ring Road at the North Entrance/McDonalds should be modified to correct existing deficiencies by providing better striping and signage to guide drivers.
- With the modifications approved for the Butterfield Entrance to Yorktown Center that are under construction and the proposed improvements for the Sam's Club project, the total projected traffic volumes will work well at the intersection of Fairfield Avenue/Yorktown Center and Butterfield road
- It is recommended that each parcel provide sidewalks along their frontage with Grace Street, the ring road, and the access routes to JC Penney, Target, or the Westin.
- It is recommended that the Grace Street be modified by converting the existing curb travel lanes into a bike lane (5 feet) and on-street parking (7 feet).

Yorktown Commons October 19, 2015

2- EXISTING TRANSPORTATION NETWORK

Site Location and Area Land-Use

Yorktown Center is a regional shopping center located is the southern section of Lombard, Illinois at the junction of Highland Avenue and Butterfield Road (northeast quadrant). It is north of the Reagan Memorial Tollway (I-88) accessible via interchanges at Highland Avenue, Midwest Road, and Illinois Route 83. The Veterans Memorial Tollway (I-355) is located one mile to the west with an interchange with Butterfield Road. Access to Yorktown Center is provided by one access point on Butterfield Road, three access drives on Highland Avenue, and three access routes to 22^{nd} Street. Figure 1 illustrates the location of Yorktown Center and the regional road network.

The site of the proposed master plan development is located at the intersection of Grace Street and the Yorktown Ring Road. It consists of four parcels. Parcel 1 is vacant land on the northeast corner of the intersection. Parcel 2 is to the southeast with the vacant Bamboo Room lounge and parking. Parcel 3 is located in the parking lot to the southwest. Parcel 4 contains the Shops of Yorktown retail center, without the Carson Pierre Scott Furniture store, and its parking in the northwest corner.

Land uses around the site consist of the residential apartments and condominiums, Target, and a hotel to the north. Yorktown Center's main retail building and parking is to the south. The Westin Hotel is to the east. The Carson Pierre Scott Furniture store is located to the west. **Figure 2** illustrates the project's location and adjacent roadways.

Roadway Characteristics

A description of the area roadways providing access to the site is provided below:

<u>Butterfield Road (IL 56)</u> is a six-lane Strategic Regional Arterial (SRA) in front of Yorktown Center with a signalized intersection at Fairfield Avenue/Yorktown Center. Butterfield Road provides three through lanes and a right-turn lane in each direction. Dual left-turn lanes are provided on westbound Butterfield Road for turns into the center and a single left-turn lane westbound for turns onto Fairfield Avenue. Butterfield Road has a speed limit of 45 mph and is under the jurisdiction of the Illinois Department of Transportation (IDOT).

<u>Highland Avenue</u> is a north-south arterial roadway that extends along the west side of Yorktown Mall from south of I-88 to Roosevelt Road. It has a grade separated interchange with Butterfield Road and signalized intersections at the three Yorktown access drives and with 22nd Street. There are two lanes in each direction with a center left-turn lane and a right-turn lane at Yorktown's northern entrance. It has a 35 mph speed limit and is under the jurisdiction of the Village of Lombard.

<u>22nd Street</u> is an east-west arterial roadway with two travel lanes in each direction and a center left-turn median. At its signalized intersection with Grace Street and Northlake Road, it has separate left-turn lanes and an eastbound right-turn lane. It has a 40 mph speed limit and is under the jurisdiction of the Village of Lombard.

<u>Grace Street</u> is a local four-lane undivided collector road that serves existing residential/hotel developments and provides a connection to Yorktown Center from 22nd Street. It is under the jurisdiction of the Village of Lombard.

Eriksson Engineering Associates, Ltd.

<u>Fairfield Avenue</u> extends south of Butterfield Road into a business park between Butterfield Road and the tollway (I-88). At Butterfield Road, it has dual-left turn lanes and a shared thru-right-turn lane. Fairfield Avenue is under the jurisdiction of the Village of Lombard.

<u>Yorktown Ring Road</u> is a three-lane private road that directs internal traffic around the Yorktown Center perimeter. It has one lane in each direction and a center left-turn lane. It has all-way-stop-intersections at the Target/Westin access road and Grace Street. At the north entrance, the ring road has a three way stop intersection with the inbound traffic from Highland Avenue entering without stopping.

<u>Majestic Drive</u> is a two-lane residential road extending west of Highland Avenue opposite the north signalized access drive for Yorktown Center. It has a 30 mph speed limit and is under the jurisdiction of the Village of Lombard.

<u>Northlake Road</u> is a two-lane north-south road that extends north of 22^{nd} Street serving existing commercial properties. It is aligned with Grace Street at its signalized intersection with 22^{nd} Street. As it approaches 22^{nd} Street it widens out to allow a lane for left-turns. It has a 25 mph speed limit and is under the jurisdiction of the Village of Lombard.

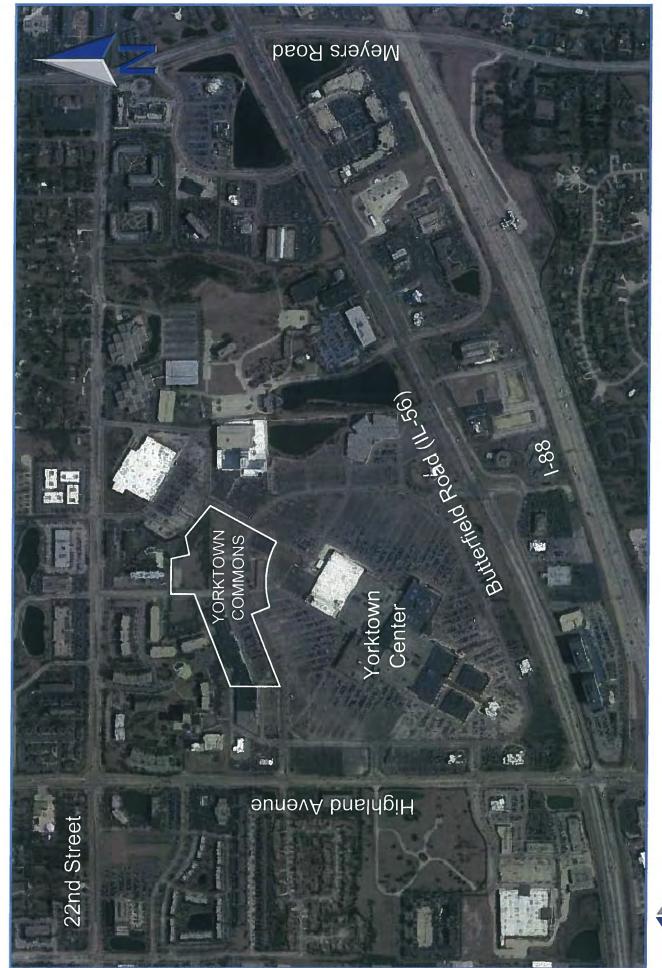
Figure 3 illustrates the existing roadway geometrics and traffic control.

Pedestrian and Bicycle Facilities

The development parcels were originally designed as part of an auto-centric retail development in the late 1960's with no pedestrian/bike amenities other than a sidewalk in front of the retail buildings. Sidewalks are located along the public street system, except for the east side of Highland Avenue. A side walk was provided along the Westin Hotel frontage with Target when it was constructed.

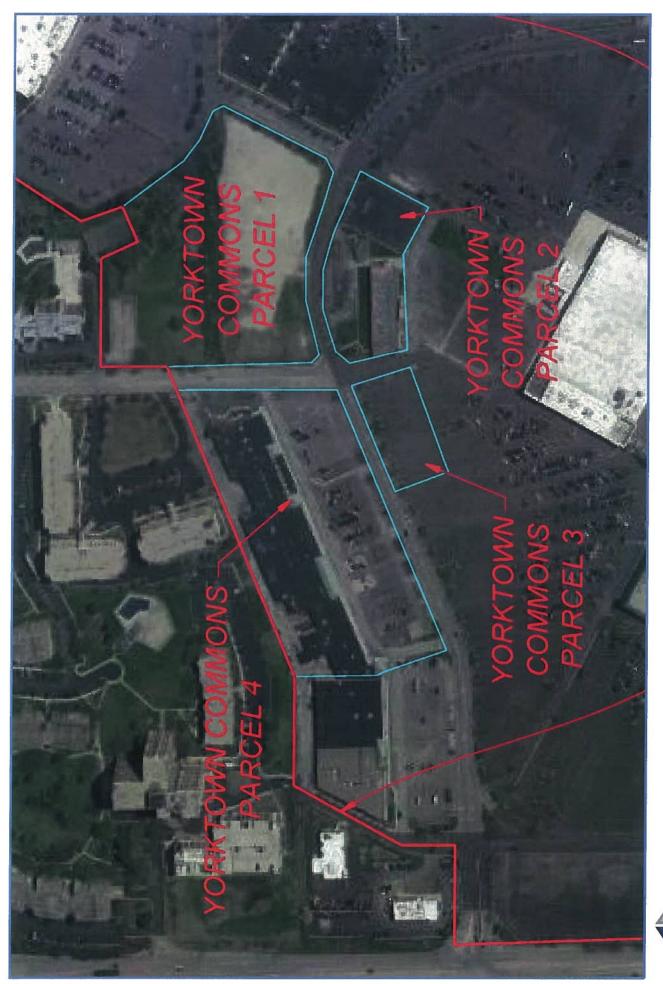
The Lilac Bikeway is a bike route designated by the Village of Lombard to connect activity centers within the village. Yorktown Center is the southern terminus of that route. It runs along 22nd Street to the west to south on Grace Street. 22nd Street is also designated as a bikeway near the site. **Figure 4** illustrates the existing pedestrian and bike facilities.

Yorktown Commons October 19, 2015



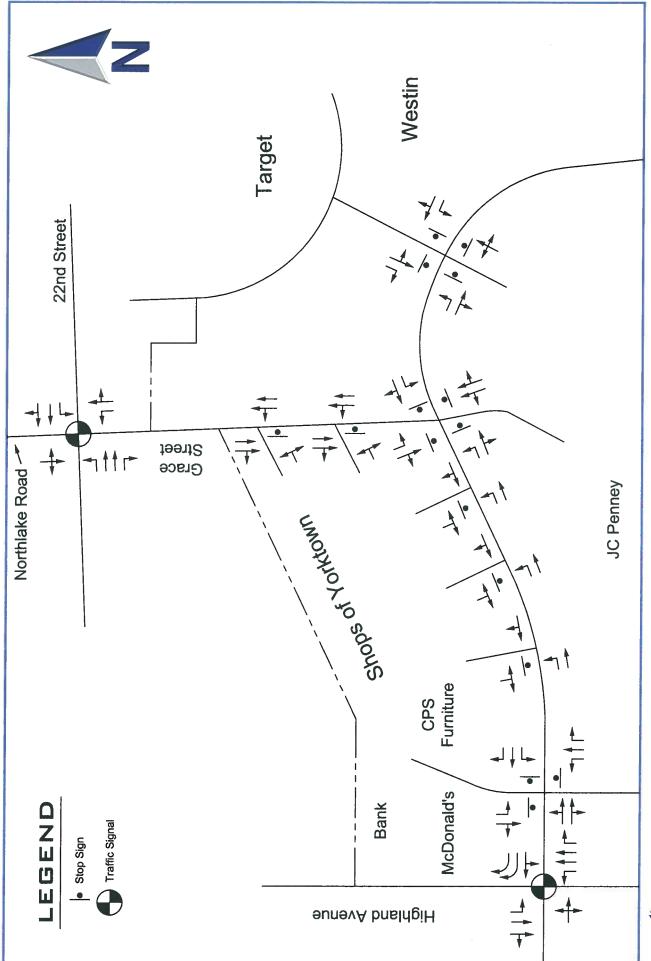






Yorktown Commons Site Location and Roadways

ERIKSSON ENGINEERING ASSOCIATES, LTD.







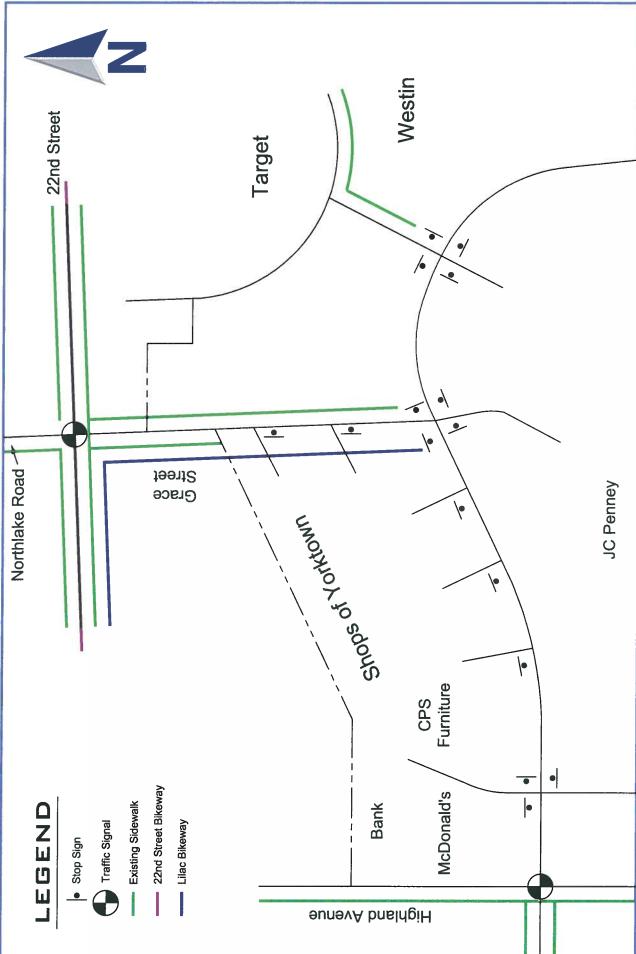


Figure 4

Eriksson Engineering Associates, Ltd.

Public Transportation

Public transportation at the site is provided by five PACE bus routes. Yorktown Center has a PACE transfer center located in the parking lot north of the JC Penney store just to the east of the development site. The five bus routes near the site are shown on **Figure 5** and are summarized below:

Route 313 - St. Charles Road

Provides daily service between the CTA Green Line Austin Station in Chicago and Branding/Finley in Downers Grove. Serves the CTA Green Line Austin Station, West Suburban Hospital, Oak Park River Forest High School, Westlake Hospital, Metra UP-West Line Melrose Park Station, Eastgate Center and Yorktown Center.

Route 322 - Cermak Road - 22nd Street

Provides daily service between the CTA Pink Line 54th/Cermak Station in Cicero and Yorktown Center in Lombard. Serves the CTA Pink Line 54th/Cermak Station, Morton West High School, North Riverside Park Mall, Broadview Village Square Shopping Center, Immaculate Heart of Mary High School, St. Joseph High School, Oakbrook Center and Yorktown Center.

Route 674 - Southwest Lombard

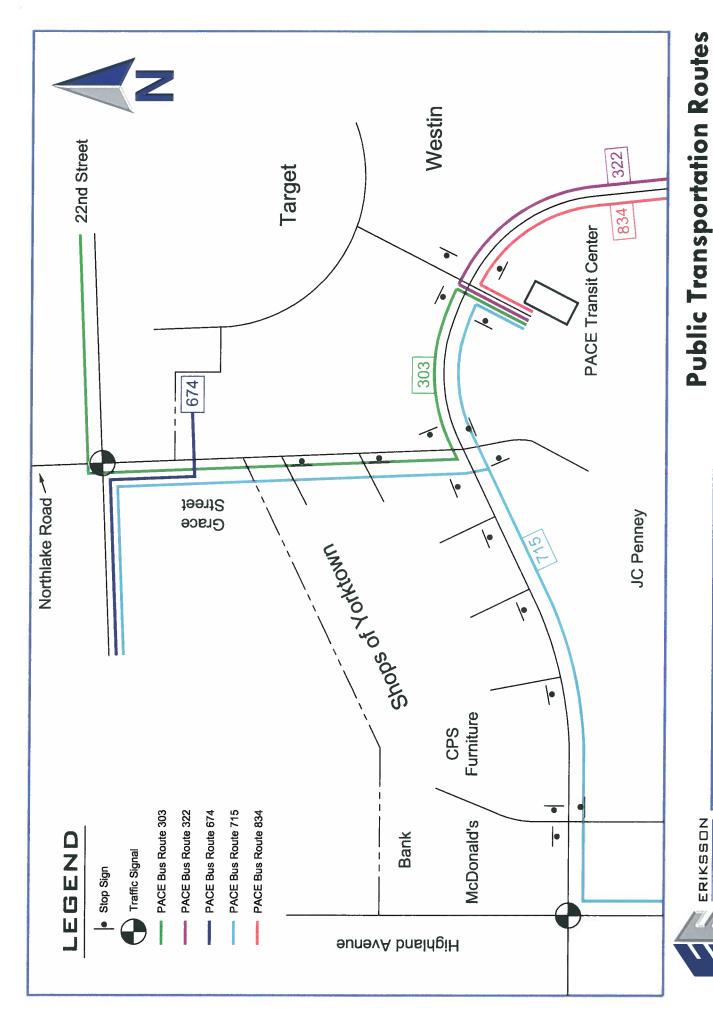
Provides weekday rush hour service between southwestern Lombard and the Metra UP - West Line Lombard Station. Serves the Yorktown Condominiums, The Covington, Cove Landing, Clover Creek, Point West, International Village, Royal Glen, the Glen Ellyn Apartment Homes and the Metra UP - West Line Lombard Station.

Route 715 - Central DuPage

Provides weekday service between the Addison Walmart and Brookhaven Plaza in Darien. Certain weekday rush hour trips serve Argonne National Laboratory. Serves the Addison Walmart, DeVry, Universal Technical Institute, Glen Oaks Hospital, the Metra UP - West Line Glen Ellyn Station, College of DuPage, Finley Square, Yorktown Center, Midwestern University, the Metra BNSF Line Westmont Station, Brookhaven Plaza and Argonne National Laboratory (certain weekday rush hour trips only).

Route 834 - Joliet-Downers Grove

Provides weekday and Saturday service from the Joliet central business district and Metra Station to Finley/Branding. Serves Lewis University, Good Samaritan Hospital, Romeoville, Lockport, Bolingbrook, Will County Courthouse, Yorktown Shopping Center and Downers Grove. Certain trips connect with Metra-BNSF service in Downers Grove.





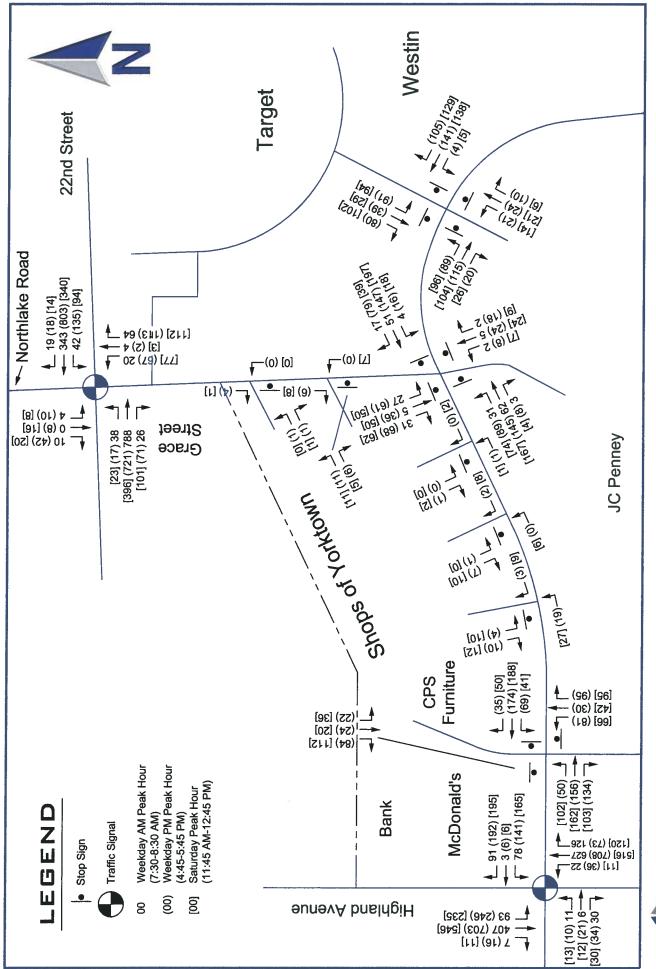
Eriksson Engineering Associates, Ltd.

Existing Vehicular Volumes

Weekday morning (7:00 to 9:00 AM), evening (4:00 to 6:00 PM), and Saturday (11:00 AM to 1:00 PM) manual counts of vehicles were conducted at the following study area intersections:

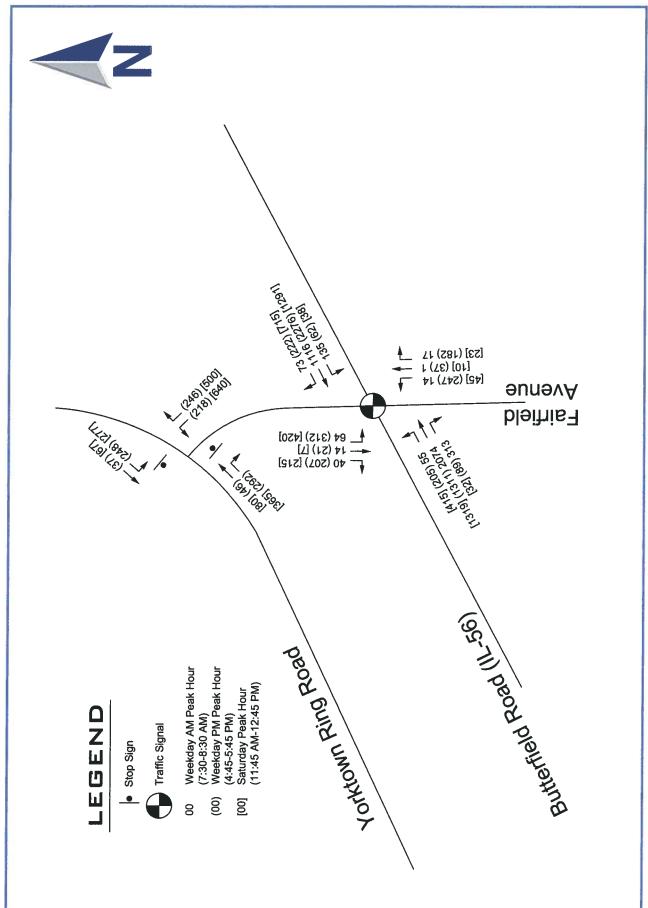
- Highland Avenue and North Yorktown Center Driveway
- 22nd Street at Grace Street/Northlake Road
- Yorktown Center Ring Road at:
 - McDonalds Access
 - Shops of Yorktown Driveways
 - Grace Street/JC Penney Access Road
 - Target/Westin/JC Penney Access Roads
- Grace Street at Shops of Yorktown Driveways

Additional counts were obtained for Butterfield Road at Fairfield Avenue/Yorktown Center from the previous Yorktown and the Sam's Club traffic studies. These counts showed the peak-hours of traffic occurring from 7:30 to 8:30 AM and 4:45 to 5:45 PM on a weekday and 11:45AM to 12:45 PM on a Saturday. Figures 6A and 6B summarizes the existing traffic volumes with copies of the counts in the Appendix.











Existing Traffic Volumes Butterfield Entrance

3- DEVELOPMENT CHARACTERISTICS

Land-Use Plan

The Yorktown Center Masterplan calls for a mixed-use development with a combination of multi-family residential and commercial uses. Parcels 1, 2, and 4 will consist of residential units with a retail component. Parcel 3 would have a stand-alone restaurant building.

The residential development could be a mixture of several multi-family types including townhomes, row homes, condominiums, apartments, or senior housing. As each parcel is developed, detailed site plans with unit types will be presented. With this range of housing types and associated densities, the traffic volumes generated could vary significantly. To be conservative, a land-plan with multi-story apartments was used to generate the highest total volume of site traffic. For Parcel 3, a restaurant would generate the highest volume of traffic compared to a retail use.

Table 1 summarizes the land-use plan assumed for this traffic study.

Table 1
Yorktown Commons Master Plan

| Parcel | Land-Use | Size |
|--------|------------|----------------|
| One | Retail | 5,000 sq. ft. |
| One | Apartments | 400 units |
| Two | Retail | 5,000 sq. ft. |
| | Apartments | 170 units |
| Three | Restaurant | 8,000 sq. ft. |
| F | Retail | 10,000 sq. ft. |
| Four | Apartments | 400 units |

Site Access

Access to each parcel will be developed as detailed engineering site plans are presented.

Trip Generation Rates

Traffic estimates were made for the site using data provided by the Institute of Transportation Engineer's <u>Trip Generation</u> 9th Ed. manual which contains trip generation surveys of the proposed landuses. <u>Trip Generation</u> serves as the most widely accepted reference guide for establishing vehicle trip generation. The rate of vehicle trip generation was applied to the proposed development with the results are shown in **Table 2**. These trip generation rates conservatively assume the no use of public transportation by residents or employees and any interactive trips between uses on-site.

Table 2
Site Traffic Volumes Estimates

| Parcel | Use | Size | ITE | Morr | ning Wed | kday | Eve | ning We | ekday | Satu | rday Pe | ak |
|---------------|------------|--------------------|-----|------|----------|-------|-----|---------|-------|------|---------|-------|
| rarcei | Use | Size | FUC | In | Out | Total | In | Out | Total | In | Out | Total |
| One | Retail | 5,000 sq. ft. | 820 | 3 | 2 | 5 | 9 | 10 | 19 | 14 | 10 | 24 |
| One | Apartments | 400 units | 220 | 40 | 160 | 200 | 154 | 83 | 237 | 92 | 92 | 184 |
| ~ | Retail | 5,000 sq. ft. | 820 | 3 | 2 | 5 | 9 | 10 | 19 | 14 | 10 | 24 |
| Two | Apartments | 1 <i>7</i> 0 units | 220 | 17 | 70 | 87 | 72 | 39 | 111 | 44 | 44 | 88 |
| Three | Restaurant | 8,000 sq. ft. | 931 | 4 | 2 | 6 | 40 | 20 | 60 | 51 | 35 | 86 |
| Four | Retail | 10,000 sq. ft. | 820 | 6 | 4 | 10 | 18 | 19 | 37 | 28 | 20 | 48 |
| FOUR | Apartments | 400 units | 220 | 40 | 160 | 200 | 154 | 83 | 237 | 92 | 92 | 184 |
| Total Traffic | | | | 113 | 400 | 513 | 456 | 264 | 720 | 335 | 303 | 638 |

Comparison to Prior Uses

A trip generation comparison was made between the currently approve uses on the parcels and the proposed land-plan. The Shops of Yorktown contains 70,430 square feet of retail space and the Bamboo Room has 10,539 square feet of space. The Bamboo Room has been vacant for a number of years and the Shops of Yorktown are only partially occupied. **Table 3** summarizes the trip generation estimates based on the ITE trip generation data.

Table 3
Trip Volume Estimates for Existing Uses

| Building | Use | Size | ITE | Mori | ning Wee | kday | | ning Wee | | | rday P | eak |
|----------|---------------------------------------|--------|-----|------|----------|-------|------|----------|-------|-----|--------|-------|
| bollding | Ose | Size | LUC | In | Out | Total | In | Out | Total | In | Out | Total |
| Shops | Retail | 70,430 | 820 | 42 | 26 | 68 | 125 | 136 | 261 | 177 | 163 | 340 |
| Bamboo | Restaurant | 10,539 | 931 | 6 | 3 | 9 | 53 | 26 | 79 | 68 | 47 | 115 |
| Subtotal | | 48 | 29 | 77 | 178 | 162 | 340 | 245 | 210 | 455 | | |
| Differe | Difference in Traffic from Prior Uses | | | +65 | +371 | +436 | +278 | +102 | +380 | +90 | +93 | +183 |

As expected, the proposed plan will generate more traffic in the morning peak-hour when most retail and restaurant uses are not very active at Yorktown Center. In the evening peak-hour, more inbound traffic is generated than under the previous uses. Saturday traffic only sees a marginal increase when the residential plan replaces the existing retail/restaurant uses.

Directional Distribution

The directional distribution of traffic approaching and departing the site was estimated based on the general travel patterns through the study area derived from the peak hour traffic volumes. The trip distribution for the site is shown on **Table 4** and **Figure 7**.

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Table 4
Directional Distribution

| Direction | Distribution |
|---------------------------------|--------------|
| North on Highland Avenue | 20% |
| South on Highland Avenue | 20% |
| East on 22 nd Street | 20% |
| West on 22 nd Street | 20% |
| East on Butterfield Road | 10% |
| West on Butterfield Road | 10% |
| Total | 100% |

Site Traffic Assignment

Based on trip generation and directional distribution estimates, the site generated traffic was assigned to the proposed access drives and area roadways. **Figure 8** illustrates the traffic assignment for the Yorktown Center traffic volumes based on the distribution analysis. Since this is a master plan, specific site plans and access drives have not been determined for each development parcel. The traffic assignments made an assumption of the future driveway locations.

Other Development Traffic

Three other developments and their site traffic volumes were included in the projections of future traffic volumes in the study area. These developments are:

- Sam' Club at the southeast corner of Butterfield Road and Fairfield Avenue (135,016 sq. ft.)
- Yorktown Apartments expansion on Highland Avenue north of Yorktown Center (76 units)
- City View at the Highlands apartments north of The Dump store (183 units)

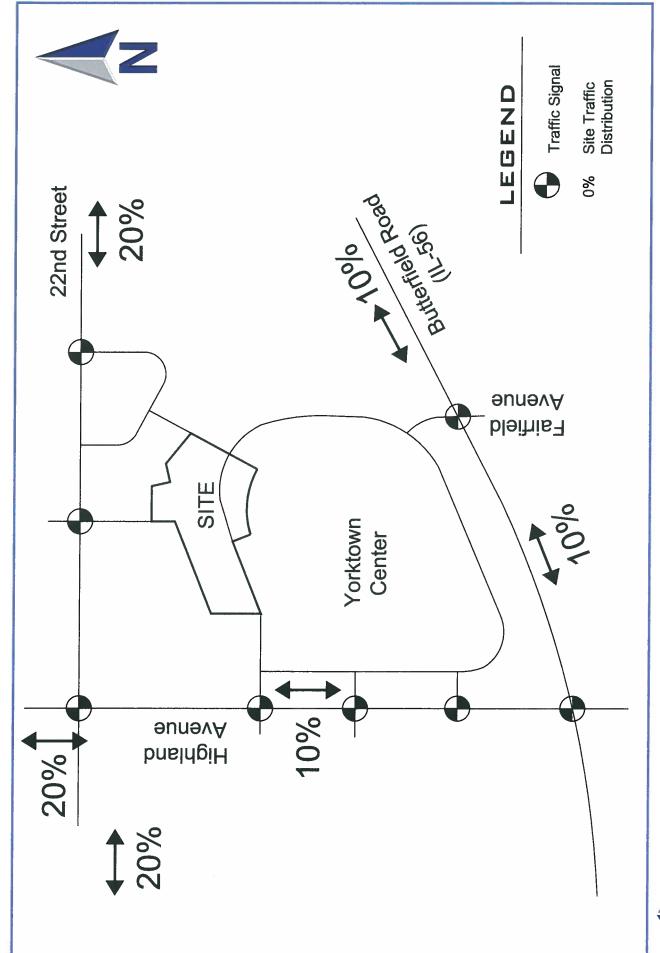
The Village of Lombard provided the Sam's Club Traffic Study by KLOA, Inc. and apartment traffic estimates were made by EEA. The site traffic from each project was then assigned to the road system and included in the total traffic volumes.

Total Projected Traffic Volumes

The future volume projections represent the Year 2021 traffic conditions, which projects traffic beyond the construction of the development. The total volumes included the following:

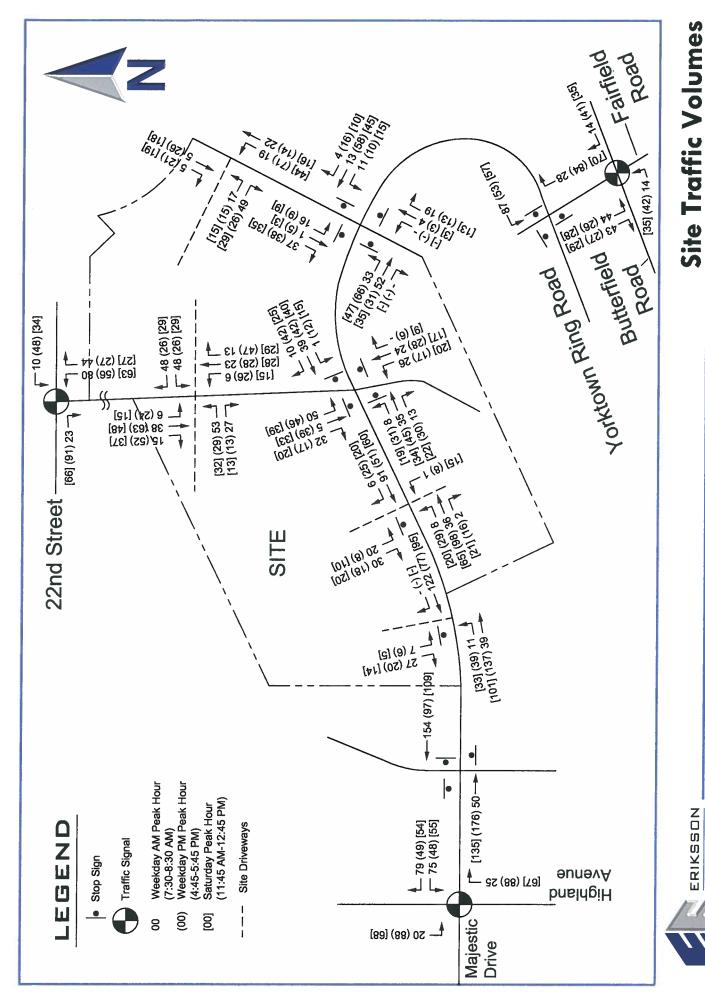
- Existing peak hour traffic volumes from the 2015 counts.
- Estimated site-generated traffic for the complete build out of the three near-by developments
- Regional growth in traffic volumes on the surrounding roadway system.
- The Yorktown Commons development site traffic volumes.

Regional growth represents an increase in existing traffic volumes due to ambient growth not attributable to any one particular new development. A regional growth rate of 0.6 percent per year was applied to the existing traffic volumes based on the 2040 Chicago Metropolitan Agency for Planning (CMAP) population and employment projections. The Year 2021 total traffic projections are shown in **Figure 9**.





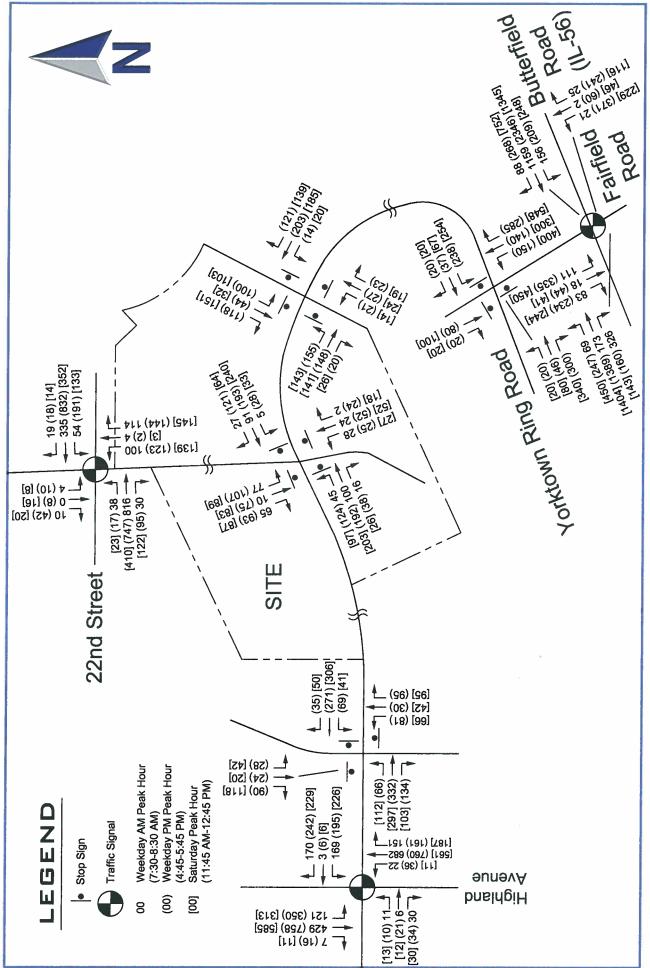






Total Traffic Volumes

2021





ERIKSSON ENGINEERING ASSOCIATES, LTD.

4- ANALYSES

In order to determine the impact of the proposed development on the study area intersections and the access drives, intersection capacity analyses were conducted with the proposed and nearby developments included. An intersection's ability to accommodate traffic flow is based on the average control delay experienced by vehicles passing through the intersection. The intersection and individual traffic movements are assigned a level of service (LOS), ranging from A to F based on the control delay created by a traffic signal or stop sign. Control delay consists of the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS A has the best traffic flow and least delay. LOS E represents saturated or at capacity conditions. LOS F experiences oversaturated conditions and extensive delays. The <u>Highway Capacity Manual</u> definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are shown in **Table 5**.

Table 5
Level of Service Criteria for Intersections

| Level of | Description | Control Delay (seconds/vehicle) | | | |
|----------|--|------------------------------------|------------|--|--|
| Service | | Signals | Stop Signs | | |
| Α | Minimal delay and few stops | <10 | <10 | | |
| В | Low delay with more stops | >10-20 | >10-15 | | |
| С | Light congestion | >20-35 | >15-25 | | |
| D | Congestion is more noticeable with longer delays | >35-55 | >25-35 | | |
| E | High delays and number of stops | >55-80 | >35-50 | | |
| F | Unacceptable delays and over capacity | >80 | >50 | | |

Source: Highway Capacity Manual 2010

Capacity analyses were conducted for each intersection area using the SYNCHRO computer program to determine the existing and future operations of the access system. These analyses were performed for the weekday and Saturday peak-hours. Copies of the capacity analysis summaries are included in the **Appendix**.

22nd Street at Grace Street/Northlake Road

This intersection is a signalized intersection that works well today and will continue to do so in the future with the projected traffic volumes (See **Table 6**) with minimal delays. No additional improvements are proposed.

Table 6
22nd Street at Grace Street/Northlake Road
Intersection Level of Service and Total Delay

| | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|----------------------|--------------|--------|--------------|--------|--------------------|--------|
| Approach | 2015 | 2021 | 2015 | 2021 | 2015 | 2026 |
| Eastbound | A-8.1 | A-9.9 | B-10.5 | B-11.2 | A-8.8 | A-9.1 |
| Westbound | A-6.7 | A-8.1 | A-8.5 | A-8.7 | A-8.4 | A-8.5 |
| Northbound | B-18.2 | C-25.0 | C-21.5 | C-26.7 | B-19.8 | C-24.5 |
| Southbound | C-30.2 | C-30.1 | C-26.9 | C-26.9 | C-31.3 | C-31.3 |
| Overall Intersection | A-8.6 | B-11.6 | B-11.0 | B-12.3 | B-11.2 | B-12.8 |

Yorktown Ring Road at the Grace Street/JC Penney Access Road

This intersection is an All-Way-Stop-Controlled intersection that works well today and with the total traffic volumes (See **Table 7**). It is recommended that the two-lane northbound approach should be restriped to a separate left-turn lane and shared thru/right-turn lane. Crosswalks and sidewalks should be provided at this intersection as each quadrant is developed.

Table 7
Yorktown Ring Road at Grace Street/JC Penney Access
Intersection Level of Service and Total Delay

| Approach | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hou | |
|----------------------|--------------|-------|--------------|--------|-------------------|--------|
| | 2015 | 2021 | 2015 | 2021 | 2015 | 2026 |
| Eastbound | A-8.1 | A-9.1 | B-10.4 | B-14.9 | B-10.3 | B-13.4 |
| Westbound | A-7.8 | A-9.1 | B-11.4 | C-20.5 | B-11.4 | C-16.9 |
| Northbound | A-7.8 | A-8.8 | A-9.2 | B-11.8 | A-9.2 | B-11.2 |
| Southbound | A-7.8 | A-8.9 | A-10.0 | B-13.6 | B-9.9 | B-12.5 |
| Overall Intersection | A-7.9 | A-9.0 | B-10.6 | C-16.1 | B-10.5 | B-14.1 |

Yorktown Ring Road at the JC Penney/Target/Westin Access Roads

This intersection is an All-Way-Stop-Controlled intersection that works well today and will continue to do so in the future (See **Table 8**) with minimal delays. No roadway improvements are required as part of the master plan development. Crosswalks and sidewalks should be provided at this intersection.

Table 8
Yorktown Ring Road at JC Penney/Target/Westin Access
Intersection Level of Service and Total Delay

| | PM Pec | ak Hour | Saturday Peak Hou | | |
|----------------------|--------|---------|-------------------|----------------|--|
| Approach | 2015 | 2021 | 2015 | 2026 | |
| Eastbound | B-10.2 | B-12.3 | B-10.0 | B-11.7 | |
| Westbound | B-12.0 | C-17.3 | B-11.9 | C-1 <i>5.7</i> | |
| Northbound | B-10.1 | B-11.5 | A-9.9 | B-10.9 | |
| Southbound | B-10.4 | B-12.0 | B-10.2 | B-11.5 | |
| Overall Intersection | B-10.9 | B-13.9 | B-10.7 | B-13.0 | |

Highland Avenue at North Yorktown Entrance and Majestic Drive

This intersection is a signalized intersection serving as the north entrance of Yorktown Center. Based on the capacity analyses (See **Table 9**) and total traffic volumes, no additional improvements are required.

Table 9
Highland Avenue at North Yorktown Entrance and Majestic Drive
Intersection Level of Service and Total Delay

| Approach | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hou | |
|----------------------|--------------|--------|--------------|--------|-------------------|--------|
| | 2015 | 2021 | 2015 | 2021 | 2015 | 2026 |
| Eastbound | C-22.7 | B-15.9 | C-20.6 | B-17.8 | C-23.5 | C-20.7 |
| Westbound | C-30.5 | C-29.6 | C-24.7 | C-23.0 | C-25.3 | C-25.3 |
| Northbound | A-7.0 | B-12.8 | B-14.9 | C-22.0 | B-13.2 | B-16.6 |
| Southbound | A-5.8 | B-10.4 | B-11.7 | B-18.4 | B-11.2 | B-14.6 |
| Overall Intersection | A-9.8 | B-15.3 | B-15.2 | B-20.5 | B-15.0 | B-17.8 |

Butterfield Road at Yorktown Center/Fairfield Avenue

This intersection is a signalized intersection serving Yorktown Center to the north and the proposed Sam's Club project to the south. As part of the Sam's Club project, the intersection will be improved by restriping the westbound left-turn lane to dual left-turns and adding a northbound right-turn lane. Previous studies of the Yorktown Center entrance have identified problems that are being corrected with the current construction at the internal intersection just north of this intersection. Overall, the intersection level of service is good under existing and projected traffic conditions as shown in **Table 10**.

Table 10
Highland Avenue at Yorktown Ring Road and Majestic Drive
Intersection Level of Service and Total Delay

| Approach | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|----------------------|--------------|--------|--------------|--------|--------------------|--------|
| | 2015 | 2021 | 2015 | 2021 | 2015 | 2026 |
| Eastbound | B-16.9 | B-12.0 | C-25.9 | C-30.6 | C-25.5 | C-30.3 |
| Westbound | B-15.8 | B-16.4 | C-30.1 | D-38.3 | B-18.5 | C-27.5 |
| Northbound | D-44.6 | C-31.4 | E-56.4 | E-58.2 | D-47.2 | E-57.0 |
| Southbound | D-42.1 | D-38.8 | D-54.0 | D-55.0 | D-48.8 | E-61.6 |
| Overall Intersection | B-17.5 | B-17.7 | C-33.7 | D-40.0 | C-26.0 | D-35.2 |

Yorktown Butterfield Access at the Ring Road

This internal intersection is a three legged intersection connecting the Butterfield Road traffic to the Yorktown ring Road. The ring road traffic is under stop sign control. It has a number of traffic issues that have been documented in previous reports and will be corrected with the improvements under construction (See **Table 11**). No additional roadway improvements are required as part of the master plan development.

Table 11
Yorktown Butterfield Entrance at the internal Ring Road
Intersection Level of Service and Total Delay

| Series Afficial Control Control | PM P | eak Hour | Saturday | y Peak Hour |
|---------------------------------|--------------------------|----------------------------------|--------------------------|----------------------------------|
| Approach | 2015 Existing Geometrics | 2021 Proposed Improvements | 2015 Existing Geometrics | 2021 Proposed Improvements |
| Overall Intersection | B-19.7 | B-12.6 | F-59.4 | D-34.4 |

Yorktown Ring Road at the North Yorktown/ McDonald's Access Road

This intersection is a four legged intersection with a three stop way that stops the northbound, westbound, and southbound legs. The eastbound leg has inbound free flow traffic from Highland Avenue. The southbound traffic has two lanes striped as a shared thru/right-turn lane and a separate left-turn lane. Westbound and northbound traffic has separate right-turn, thru, and left-turn lanes (three lanes). Eastbound traffic is striped as a shared thru/left-turn lane and a separate right-turn lane.

Observations during the evening and Saturday peak-hours at the intersection revealed the following:

- Overall, the intersection worked well from a capacity viewpoint with minimal congestion.
- Driver confusion was regularly observed regarding which vehicle has the right-of-way.
- Two thirds of the southbound traffic turns right toward Highland Avenue.
- The signage indicating that oncoming traffic does not stop (westbound) was partially obscured by vegetation.

Yorktown Commons October 19, 2015

Eriksson Engineering Associates, Ltd.

- Inbound traffic turning left to McDonald's came to a stop even though they have the right-ofway. As a result, the inbound thru traffic uses the lane striped as a right-turn lane as a thru lane to bypass the left-turns.
- Approximately 50% of the northbound right-turn traffic used the northbound thru lane to turn right instead of the separate right-turn lane that is provided. Approaching the intersection, the existing striping/signage does not indicate a separate right-turn lane.
- Westbound thru traffic uses the left-turn lane to enter the left-turn lane at the Highland Avenue traffic signal.

Based on these observations and capacity analyses (see **Table 12**), the following improvements are recommended.

- Install larger signage on the three stop approaches indicating inbound traffic from Highland Avenue has the right-of-way.
- Stripe the inbound leg from Highland Avenue with a left-turn lane and a shared thru/right-turn lane.
- Stripe the southbound approach as a separate right-turn lane to accommodate the high-right-turn volume and a shared thru/left-turn lane.
- Stripe the northbound leg with additional advanced striping/signage to indicate that the northbound right-turn lane is available.

Table 12
Yorktown Ring Road at North Yorktown Entrance/McDonald's Access
Intersection Level of Service and Total Delay

| THE WILLIAM | PM Peak Hour | | Saturday | Peak Hour |
|----------------------|--------------|-------|----------|-----------|
| Approach | 2015 | 2021 | 2015 | 2026 |
| Overall Intersection | A-4.1 | A-5.9 | A-5.0 | A-11.3 |

Pedestrian Connections

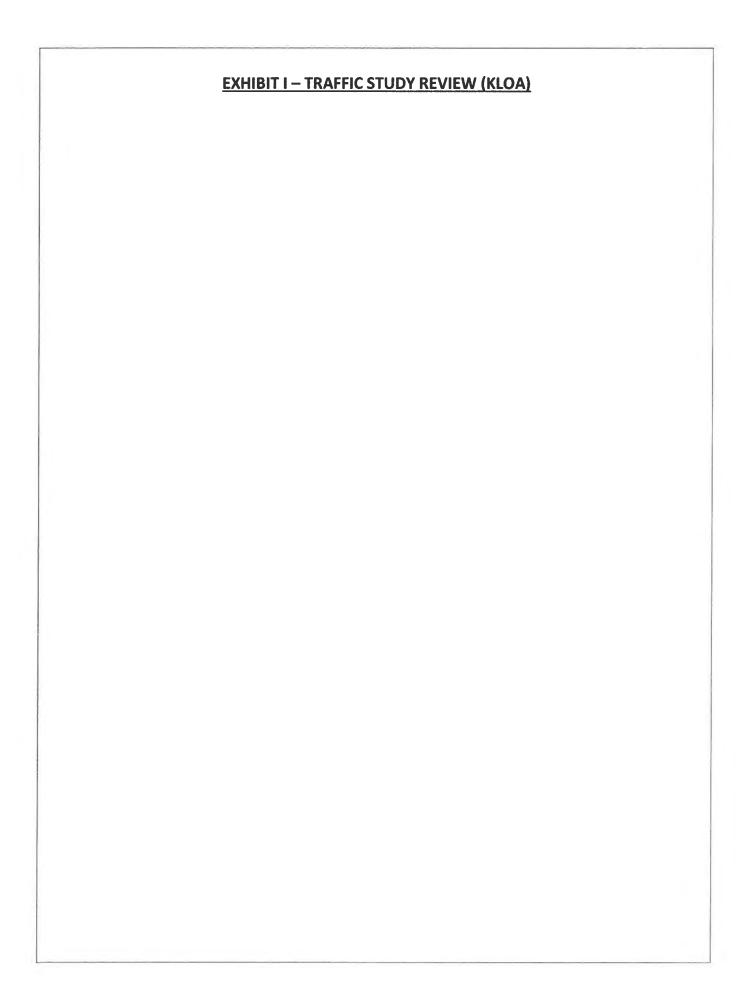
It is recommended that each parcel provide sidewalks along their frontage with Grace Street, the ring road, and the access routes to JC Penney, Target, or the Westin.

Bike Routes on Grace Street

As noted previously, the Lilac Bikeway follows Grace Street to its southern terminus at Yorktown Center. Currently, it does not have a designated on-street or off-street bike lane. Grace Street is a four lane road with two travel lanes in each direction. The existing and projected traffic volumes do not warrant four lanes. One travel lane in each direction would be adequate.

As part of the Yorktown Commons project, it is proposed that the cross-section would be modified by converting the curb travel lane in each direction into a bike lane (5 feet) and on-street parking (7 feet). Near the intersections at Grace Street and at the Ring Road, on-street parking will not be permitted to maintain the existing left-turn lanes.

Yorktown Commons October 19, 2015







MEMORANDUM TO: William Heniff

Village of Lombard

FROM: Javier Millan

Senior Consultant

DATE: November 16, 2015

SUBJECT: Yorktown Commons Traffic Study Review

Lombard, Illinois

This memorandum summarizes the results of a review conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) of the traffic study for the proposed Yorktown Commons mixed use development prepared by Eriksson Engineering Associates, Ltd.

Background

The proposed Yorktown Commons development will consist of approximately 15 acres of land located around the intersection of Grace Street and the Yorktown Center ring road. As proposed, various types of residential land uses together with ancillary retail and restaurant space would be developed. The development would have access via all of the existing access drives serving the Yorktown Center.

Traffic Impact Study Review

The traffic study was conducted following all industry guidelines set forth by the Institute of Transportation Engineers (ITE) and it analyzed a conservative scenario as it relates to trip generation by assuming the development of 970 apartment units and 28,000 square feet of retail and restaurant space. Based on a review of the traffic study and the results of the capacity analyses we offer the following:

 The capacity analyses indicate that the studied intersections have sufficient reserve capacity to accommodate the projected traffic volumes and continue operating at acceptable levels of service.

- We concur with the recommended striping and signing modifications at the intersection
 of the Yorktown Center ring road and the north-south access drive immediately east of
 Highland Avenue. However, we would like to see a preliminary striping plan for our
 review.
- We concur with the recommendations to provide sidewalks along the frontage of each parcel on Grace Street and the Yorktown Center ring road

Conclusion

Based on our review, it is our opinion that the proposed Yorktown Commons development can be accommodated by the Yorktown Center's internal roadway and the external intersections. However, as plans for each parcel are developed, the Village should review them individually as it relates to accessibility, site circulation and compliance with Village Code.

| EXHIBIT J – N: ALTA / ACSM LAND TITLE AND TOPOGRAPHIC SURVEY – PARCELS 1 THROUGH 4 | |
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