VILLAGE OF DOWNERS GROVE
PLAN COMMISSION

VILLAGE HALL COUNCIL CHAMBERS
801 BURLINGTON AVENUE

July 11, 2016
7:00 p.m.

AGENDA

1. **Call to Order**

    a. **Pledge of Allegiance**

2. **Roll Call**

3. **Approval of Minutes** – June 27, 2016

4. **Public Hearings**

    a. **15-PLC-0008** of a Planned Unit Development, a Rezoning from B-3, General Services and Highway Business to B-3/PUD, Special Use and Right-of-Way Vacation of the Alley to redevelop a fueling station and car-wash. The property is currently zoned B-3, General Services and Highway Business. . The property is located on Ogden Avenue between Seeley and Oakwood Avenue, commonly known as 1401 - 1445 Ogden Avenue, Downers Grove, IL (PINs 09-06-405-001, -007, -008, -009, -010, -026). Michael Green, Petitioner and Delta Sonic Car Wash Systems, Inc., Owner.

    b. **16-PLC-0029** A petition seeking approval for the Right-of-Way Vacation of an Alley. The adjacent properties are zoned R-4, Residential Detached House 4. The subject property is located on the north side of Franklin Street and runs north-south between the properties at 708 & 712 Franklin Street, 170 feet west of Stanley Avenue and 170 feet east of Prospect Avenue, Downers Grove, IL (09-08-204-022, -023). George Arnold, Petitioner and K-7 Builders, Inc., Owner.

    c. **16-PLC-0009** of a Planned Unit Development, a Rezoning from B-3, General Services and Highway Business to B-3/PUD, General Services and Highway Business/PUD and a Special Use to construct an automobile dealership. The property is currently zoned B-3, General Services and Highway Business. The property is located on Ogden Avenue at the T-intersection of Lacey Road and Ogden Avenue, commonly known as 1815

Ogden Avenue, Downers Grove, IL (PINs 09-06-304-013 & -014). Brad Webb, Petitioner and ALDI Inc., Owner.

5. **Adjournment**

THIS TENTATIVE REGULAR AGENDA MAY BE SUBJECT TO CHANGE

DRAFT

VILLAGE OF DOWNERS GROVE
PLAN COMMISSION MEETING
PUBLIC HEARING

JUNE 27, 2016, 7:00 P.M.

Chairman Rickard called the June 27, 2016 meeting of the Downers Grove Plan Commission to order at 7:00 p.m. and led the Plan Commissioners and public in the recital of the Pledge of Allegiance.

ROLL CALL:

PRESENT: Chairman Rickard, Mr. Cozzo, Mr. Cronin, Ms. Gassen, Ms. Johnson, Mrs. Rabatah, Mr. Thoman

ABSENT: Ms. Hogstrom, Mr. Quirk; ex-officios Mr. Livorsi, Ms. Lupesco, Mr. Menninga

STAFF: Community Development Director Stan Popovich

VISITORS: Mary Ann Badke, 5408 Carpenter Downers Grove; Robert Wayman, 5516 Dugard, Downers Grove; Jamie Calandriello, 5401 Carpenter, Downers Grove; Kim McNulty, 4810 Stonewall Ave., Downers Grove; Kathy Nybo, 5253 Blodgett, Downers Grove; Rich Kulovany, 6825 Camden Rd., Downers Grove; Joe Grossman, 5603 Middaugh, Downers Grove

APPROVAL OF MINUTES

JUNE 6, 2016 MINUTES –MOTION BY MR. THOMAN, SECONDED MS. GASSEN, TO APPROVE THE MINUTES. MOTION CARRIED BY VOICE VOTE OF 6-0-1. (MR. CRONIN ABSTAINS.)

PUBLIC HEARINGS:

Chairman Rickard explained the protocol for the public hearings and swore in those individuals that would be speaking on the petitions below.

FILE 16-PLC-0023: A petition seeking approval of a Special Use to allow an office use to provide more than 4.5 parking spaces per 1,000 square feet of floor area and a Rezoning from M-1, Light Manufacturing to O-R-M, Office-Research-Manufacturing. The property is located on the northwest corner of Warrenville and Finley Road, commonly known as 2200 Warrenville Road (PINs 08-01-400-004, and -006). Adam Stokes, Agent of Nicolson Porter & List, Inc. and Arbor Vista LLC, Petitioners; Arbor Vista LLC, Owner.

Per staff's memorandum to the commission, the petitioner is requesting to continue the public hearing to August 1, 2016. Staff recommended continuing the hearing.

WITH RESPECT TO FILE 16-PLC-0023, MR. THOMAN MADE A MOTION THAT THE PLAN COMMISSION CONTINUE THE PUBLIC HEARING TO THE AUGUST 1, 2016 PLAN COMMISSION MEETING.

SECONDED BY MS. JOHNSON.

MOTION CARRIED UNANIMOUSLY BY VOICE VOTE OF 7-0.

FILE 16-PLC-0019: The purpose of the request is to consider an update to the Downtown Focus Area Plan for the draft updated Downers Grove Comprehensive Plan, which, if adopted will become the official plan for the Village as required by Section 1.12 of the Municipal Code. Village of Downers Grove, Petitioner.

Community Development Director Stan Popovich summarized that the Village is updating it's Comprehensive Plan through the Comprehensive Planning Ad Hoc Committee which has been working on it since April 2016. Before the commissioners was the downtown focus area plan update. Staff was seeking commissioner input tonight as to whether the Downtown Focus Area Plan was meeting the village's vision and goal of what the downtown should look like.

Per Mr. Popovich, four items were being updated: 1) policy recommendations; 2) catalyst sites, 3) creation of some downtown sub-areas, and 4) a development concept which had been added to the plan. Key points to the four items were reviewed in detail as well as a comparison of the village's current land use map as compared to a new land use map depicting three sub-areas. Per Director Popovich, the newly-created development concept plan depicted potential in-fill sites.

Directing the commission's attention to some key questions that staff prepared, Director Popovich asked that the commissioners discuss among themselves the key questions. He did add that he received an email from a resident who expressed concern about the bulk of the buildings, some guidance on architecture for new developments, and the greenery around the downtown area.

Dialog opened up with a question from Mr. Cozzo regarding the clarification of why three properties facing Maple and Main were considered part of the "Edge" and not the "Core," wherein Director Popovich explained that the idea was to "step down" into the transition areas since the properties were closer to the residential neighborhoods and were shorter in height.

Ms. Gassen inquired what the bulk requirements would be for the downtown Edge, wherein Director Popovich could not answer due to those requirements not being discussed at the ad hoc committee level; however, he explained that the intent was to have the taller buildings in the Core area with a maximum of 70 feet, then stepping down the buildings toward the Edge/residential areas, with a maximum height of 35 feet in the residential areas. The Transitional area height maximum was currently at 60 feet. Dir. Popovich explained what the next steps were as far as the development regulations for the downtown.

As to extending the Edge sub-area on Main Street north to Franklin Avenue, Director Popovich surmised that the thinking was that the area was mostly Downtown Business with many of the homes on the east being old and commercially used, while on the west side of Main Street, smaller

commercial office spaces existed. It was an opportunity to have some additional density there. Also, he said St. Joseph's was located immediately to the north.

Chairman Rickard inquired whether there was discussion about the southern end of the Downtown Core area, near the West Suburban Bank. He believed what was designated was fine and said he would not want to extend the core area beyond the boundaries that were depicted.

Chairman Rickard opened up the meeting to public comment.

Mr. J. Robert Wayman, 5516 Dugard Drive, as an engineer, stated that if the zoning in the downtown area allows the building at Main and Maple then the rest of the downtown area was subject to that type of building. He voiced concern whether the village or residents would want all of the downtown area to look like that. He cautioned the village on its decision, stating that once the village made that determination in its comprehensive plan, a developer could go to court demanding that type of building and the village would have no grounds to stand on to reject such request. Additionally, he expressed concern about the lack of stormwater retention in the "red" area as well as increased traffic and parking issues.

Mr. Rich Kulovany, 6825 Camden Road, stated he did not understand the process of how the zoning was going to be changed, what responsibility the Plan Commission would have, or the ad hoc committee. His sense from attending the ad hoc committee meetings was that the committee did not want a 70-foot tall canyon in the downtown area. He noted the taller buildings don't blend in with the historic buildings. Furthermore, he said he understood that the direction was to have the high density, larger height properties at the periphery of downtown and the smaller, more approachable properties where the retail would exist. Mr. Kulovany further asked staff about the timing of the new zoning ordinance, whether the Downtown Business would be handled as a stand-alone basis or combined together only with a full recommendation and new comprehensive plan and a full review of zoning. If the village was not going to do anything about downtown zoning, it would not prevent the canyon scenario until 2017, then, he stated, it was showing the village that "you're not listening."

Mr. Kulovany stated he was confused as to the reporting process from the Plan Commission to the ad hoc committee. Lastly, he supported the idea of changing the setbacks and having a few extra feet for outdoor restaurant space.

Director Popovich proceeded to respond to Mr. Kulovany's concerns on how the two committees would report to each other in further detail. Mr. Popovich noted the Comprehensive Plan Update and Downtown Zoning Regulations were both High Priority Action Items set by the Village Council. The schedule is to complete the downtown focus area plan, have the Plan Commission review and comment on the downtown focus area plan and then provide it to Council for their review and to receive their direction. At that time, the ad hoc committee would start to work on developing downtown zoning regulations. The downtown zoning regulations are anticipated to be back before the Plan Commission in the fall with Council review in late fall. The entire Comprehensive Plan update would be back before the Plan Commission in the fall with Council review in late fall / early winter. The plan is to have both items completed by the end of 2016.

He explained that if the commissioners had changes to the map or text changes, to provide those changes to him, and they would be forwarded to the village council.

Mr. Joe Grossman, 5603 Middaugh, inquired what the timing was for the changes to the comprehensive plan, wherein Director Popovich explained it was within the next six months -- by December 31, 2016. Mr. Grossman asked if there were traffic studies done that discuss what would happen if additional 70 ft. high buildings were constructed in the downtown area. The chairman, in turn, explained how each developer provides its own traffic study.

Mr. Grossman spoke about the redevelopment of the Chicago Avenue Corridor in Evanston and invited the commissioners/public to see what 70-feet tall buildings look like at the corner of Chicago Avenue and Main Street, which he believed changed the character of the area.

Ms. Kathy Nybo, 5253 Blodgett, expressed concern about the height of buildings, noting the village called itself a village and if new tall buildings were constructed the village would have to change to a "city." She wished there was more "variety." She also believed that if more residential units were being constructed in the heart of downtown, it would take away from the retail that is needed. She asked whether there was some sort of option that could be offered to developers to better blend in with the "feel" of the downtown. She voiced concern that the buildings would be too close for access by emergency vehicles. Lastly, she questioned whether the village could require developers to be more responsible with regard to protection of trees and tree replacement.

Ms. Maryanne Badke, 5408 Carpenter Street, asked the commissioners to think about how such large buildings would affect the parking in the downtown, what type of feel did the commissioners want for the downtown area, and what was their vision? She appreciated the green space, however.

Ms. Jamie Calandriello, 5401 Carpenter, shared similar concerns as stated above. She asked that future plans keep the "home town" feeling the village had. She liked the idea of having a center zone in the downtown where the area was further protected from some of the larger developments yet maintained some of the historical significance, the green space, and the meeting places.

Mr. Rich Kulovany, 6825 Camden, stated there were two items addressed at the ad hoc committee level that were not included in staff's report tonight: the issue of parking at the library, and the introduction of inns and/or bed & breakfasts in the Transition area. In speaking with the mayor and some other individuals, Mr. Kulovany stated they thought those were good ideas since historic preservation was being discussed recently. He said the village could become a destination due to the historic homes and people could stay downtown.

Asked if bed and breakfasts (B&Bs) were going to be excluded in the Transitional area, since they were of a lesser intense use, Director Popovich explained that it could be something discussed when the downtown regulations are reviewed and then determined whether B&Bs can be located in the Transition or the Edge area. To date, he did not see anything specific to B&Bs being listed.

Chairman Rickard agreed that if 70 ft. developments started being added to Main Street it would become dramatically different and probably not desirable. However, while he did not have an issue with the 70 feet in the location being discussed, he did have an issue with a building being constructed right on the property line and the tall developments "pushing Main Street." He preferred some consistency in height on Main Street, such as a 3-story height limit or a height max of 45 feet, so it could provide a stair-stepping effect when traveling down Main Street.

Mr. Thoman referenced the comments he made at prior meetings and, again, stated he did not see the village as an urban area but instead a suburban area. He recalled discussions with staff, the Plan Commission, and council, to push the taller buildings out of downtown, citing current examples. He encouraged commissioners to stand at Curtiss and Main and measure the latest proposal, commenting that it would be twice as tall as the water tower. Stepping back a building, he also believed, was a very good concept. Mr. Thoman urged the Comprehensive Plan Ad hoc Committee to revise the plan's text from a "square foot per dwelling" zoning requirement to a "floor area ratio" requirement. Mr. Thoman provided some of the research he did on other suburbs and believed this was what the residents were looking for. Lastly, he suggested that the Ad hoc committee insert into the comprehensive plan stronger language that ties into the consistent look and feel of the existing four-street area of the downtown – possibly creating another sub-area category for downtown Main Street -- which would include Curtiss Street and thereby creating the small downtown that everyone wants to maintain while providing staff with a comprehensive plan for developers when they come to develop in the downtown area.

Conversation was raised by Mrs. Rabatah on the difficulty of putting into language "the look and feel" that was expressed by the residents because it was subjective. The chairman believed it had to do more with the design standards versus the bulk standards.

Director Popovich shared his concerns about adding a fourth sub-area along Main Street. The chairman also suggested keeping the three zones but shrink the Core and lower the height and bulk requirements but expand the Edge to pick up the Core that was being lost. Director Popovich then shared of some challenges he saw and reviewed them on the overhead for commissioners.

Mr. Cozzo shared his idea of limiting buildings to three-stories in height from Grove Street to Burlington Avenue on both sides of Main Street since two tall buildings already existed. Details of his idea followed. Mr. Thoman also supported Mr. Cozzo's ideas, citing Naperville's downtown. Ms. Gassen concurred that the central part of downtown should be protected and the village should take the necessary steps to preserve what the village had left in its downtown, through zoning.

Mr. Bob Wayman, 5516 Duran Drive, referred to a vacant lot located at Curtiss and Washington, across from the post office, and asked what was planned for the lot. Per Director Popovich, a four-story, 48-unit apartment building was planned for the lot at 904-910 Curtiss with parking in a garage.

Ms. Mary Ann Badke, 5408 Carpenter, thanked Mr. Thoman and Ms. Gassen for their comments about limiting the size of the buildings and having some form of guidelines.

Mr. Bill Grossman, 5603 Middaugh, also concurred with the above comments about having guidelines and defining another core area for the downtown. He cited how that was accomplished by the Village of Hinsdale. He hoped the commission would consider going as far south as Maple Avenue and as far north to just beyond the railroad tracks.

Hearing no further comments, the public comment portion was closed.

Director Popovich indicated he was not looking for details from the commissioners at this point, but, instead, a general direction to give to the village council. As to considering a new "nucleus" area, as discussed above, he then asked if the uses defined in the Downtown Core could be applied

to the nucleus area, wherein commissioners commented that the uses for the new area could be the same as the existing Core but the difference would be in the bulk. The mixed uses already existed and as long as they were meeting the goals of preserving the look and feel of the area, it worked.

Per Ms. Gassen's question on addressing traffic and parking, Director Popovich explained that the intent of the recommendation listed in the document was for the village to review traffic and parking after the recently approved developments were constructed. Ms. Gassen suggested implementing more short-time (15 minute) parking spaces.

Mr. Cozzo inquired of staff if there was any discussion of building another parking deck over an existing surface parking lot, wherein Director Popovich indicated there was potential talk about a location north of the library as well as south of 4929 Forest, and the potential for a reconfiguration of the parking spaces just north of the library lot.

Director Popovich then asked the commissioners for their input as to street design in general. Specifically, he asked whether it was appropriate for the Edge to have more of a Main Street feel, i.e., islands of trees or landscaping or should it have a residential street feel where the parking, grassy area, and sidewalk lead up to a building? Discussion flowed back and forth but comments made were that if anything helped in the Transition into the next area, was fine but with consistent sections of greenspace, thereby giving businesses some flexibility if they wanted to expand outside seating etc.

No comments followed regarding the catalyst sites nor the Downtown policy recommendations.

Director Popovich then asked the commissioners to define what the new core area would entail. Suggestions included Main Street from Maple Avenue to the railroad tracks, and then on Curtiss Avenue from Forest to Washington. (Director Popovich then referenced how that new core would look on the overhead.) Mr. Thoman believed this addressed many of the concerns heard from prior meetings and it maintained the illusion of the small town downtown. Mr. Cozzo shared some of his concerns about the boundary lines, but others ensured him that further dialog would continue and the boundaries would be fine-tuned.

The commission reached consensus to create a fourth zone with different bulk standards but include a floor area ratio requirement as opposed to square footage per dwelling unit requirement.

WITH RESPECT TO FILE 16-PLC-0019, MR. THOMAN MADE A MOTION THAT STAFF REPORT TO THE VILLAGE COUNCIL AND TO THE COMPREHENSIVE PLAN AD HOC COMMITTEE WHAT WAS DISCUSSED ABOVE.

SECONDED BY MR. COZZO. ROLL CALL:

AYE: MR. THOMAN, MR. COZZO, MR. CRONIN, MRS. GASSEN, MRS. JOHNSON, MRS. RABATAH, CHAIRMAN RICKARD
NAY: NONE

MOTION CARRIED. VOTE: 7-0

Mr. Popovich provided a quick update for the July 11th Plan Commission meeting. He directed commissioners to pick up their copies of the Planning magazine. Lastly, he reported the next Comprehensive Plan Ad Hoc Committee meeting was scheduled for July 14, 2016 and the agenda would be posted on-line the Friday before the meeting.

THE MEETING WAS ADJOURNED AT 9:00 P.M. ON MOTION BY MS. GASSEN, SECONDED BY MRS. RABATAH. MOTION CARRIED UNANIMOUSLY BY VOICE VOTE OF 7-0.

/s/ Celeste K. Weilandt
Celeste K. Weilandt
(As transcribed by MP-3 audio)

DEPARTMENT OF COMMUNITY DEVELOPMENT
MEMO

To: Plan Commission
From: Swati Pandey, Planner
Subject: **15-PLC-0008: Planned Unit Development, Special Use & Rezoning**
1401 – 1445 Ogden Avenue
Date: July 11, 2016

The petitioner has requested to continue the Planned Unit Development, Special Use and Rezoning petition. Staff is recommending that the Plan Commission grant this request and continue the public hearing to the August 1, 2016 Plan Commission meeting.

VILLAGE OF DOWNERS GROVE
REPORT FOR THE PLAN COMMISSION
JULY 11, 2016 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
16-PLC-0029 708 & 712 Franklin Street	Alley Vacation	Scott Williams Planner

REQUEST
The petitioner is requesting a vacation of a 16.5-foot wide by 125-foot deep alley immediately adjacent to and between the properties at 708 & 712 Franklin Street.

NOTICE
The application has been filed in conformance with applicable procedural and public notice requirements.

GENERAL INFORMATION

OWNER: Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515

APPLICANTS: George J. Arnold, Esq.
9501 W. 144th Place
Suite 205
Orland Park, IL 60462

Mark Allan and B.W. Winters
712 Franklin St.
Downers Grove, IL 60515

PROPERTY INFORMATION

EXISTING ZONING: R-4, Residential Detached House 4 (adjacent properties)
EXISTING LAND USE: Unimproved Right-of-Way
PROPERTY SIZE: 2,062.5 square feet
PINS: 09-08-204-023; 022 (adjacent properties)

SURROUNDING ZONING AND LAND USES

	ZONING	FUTURE LAND USE
NORTH:	R-4, Residential Detached House 4	Single Family Residential
SOUTH:	R-4, Residential Detached House 4	Single Family Residential
EAST:	R-4, Residential Detached House 4	Single-Family Residential
WEST:	R-4, Residential Detached House 4	Single Family Residential

ANALYSIS

SUBMITTALS

This report is based on the following documents, which are on file with the Department of Community Development:

1. Application/Petition for Public Hearing
2. Location Map
3. Public Hearing
4. Alley Plat of Survey
5. Plat of Easement/Vacation

PROJECT DESCRIPTION

The applicant is requesting that the Village vacate the 16.5-foot wide by 125-foot long alley adjacent to 708 and 712 Franklin Street. The resulting vacation would be split between the two abutting properties and provide more flexibility for future site development on both lots.

Most of the alley which runs from Franklin Street north to Prairie Avenue is unimproved and is not used for through traffic. The alley includes overhead wires and a driveway leading to a detached garage on 708 Franklin Street.

Per the Village's Right-of-Way Vacation Policy (Resolution #2003-58), staff contacted the utility companies, outside public agencies and other village departments to determine if any rights to the public right-of-way should be retained. Comcast has aerial copper and/or fiber cable on utility poles within the alley. The utility providers and the Village do not have an objection to the vacation of the right-of-way as long as a public drainage, utility and access easement is retained along the entire width and length of the alley. The easement will provide adequate space for any future utility needs.

As such, the easement will restrict any construction within the vacated right-of-way except for a driveway or fence. The petitioner has been informed of this requirement and submitted a plat of easement as part of their application.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

According to the Future Land Use Plan, the neighboring properties and all surrounding properties are designated as Single Family Residential. The vacation of this alley would not alter the future uses of the surrounding properties, and the village will retain a permanent easement.

The Residential Area Plan notes that the village should continue to ensure that quality housing stock remains a staple of the community, and modernization of the existing housing stock is one way to achieve this. The vacation of the alley will provide more flexibility for future development. Staff finds the proposed vacation is consistent with the Comprehensive Plan.

COMPLIANCE WITH ZONING ORDINANCE

The surrounding properties are zoned R-4, Residential Detached House 4. The portion of the alley being vacated will be divided between the two adjacent properties (708 and 712 Franklin Street) and zoned R-4, Residential Detached House 4.

	Lot Width		Lot Depth		Lot Area	
Property	Current	Proposed	Current	Proposed	Current	Proposed
708 Franklin St.	50 feet	58.25 feet	125 feet	125 feet	6,250 sq. ft.	7, 281.25 sq. ft.
712 Franklin St.	50 feet	58.25 feet	125 feet	125 feet	6,250 sq. ft.	7, 281.25 sq. ft.

At this time, the petitioner is not proposing any construction on their property. Because an easement is being placed on the entire alley, no new buildings or structures other than a driveway or fence could be constructed on the vacated alley. The proposed vacation is consistent with the Zoning Ordinance.

PUBLIC SAFETY REQUIREMENTS

The Fire Department has reviewed the plans for the vacation and noted no objections to the vacation of the right-of-way. The alley vacation will have no impact on emergency services.

NEIGHBORHOOD COMMENT

Notice was provided to all property owners 250 feet or less from the property line in addition to posting the public hearing sign and publishing the legal notice in the *Downers Grove Suburban Life*. Staff received two calls from a neighbor: one was seeking information and the other was verifying that both properties adjacent to the alley received notification.

FINDINGS OF FACT

Compliance with the Procedure to be followed in the Vacation of Streets, Alleys, and Public Rights-of-Way (Resolution #2003-58)

The Village's alley vacation policy asks the following questions when it comes to determining if an alley can be vacated. These questions and staff's findings are listed below:

1. Is there written consent of at least two property owners who abut the proposed parcel to be vacated?

    - Written consent was received for two abutting property owners. The applicant, representing the owners of 708 Franklin filed the petition. The owners of 712 Franklin have provided written consent subject to purchasing the half of the alley that abuts their property which is their right.

2. Whether the Parcel or portion thereof, is no longer necessary for public use and whether the public interest will be served by such vacation request.

    - As noted above, staff contacted the utility companies and outside public agencies to determine the extent of pubic interest. Based on their replies, staff has determined the public interests are addressed by placing a public drainage, utility and access easement over the entire vacated alley.

3. Whether the Parcel or portion thereof, should be vacated and whether public utility easements and any ingress-egress easements are to be maintained.

    - A public drainage, utility and utility access easement will be retained over the entire alley length and width. As such, the petitioners will not be able to construct any permanent structure, other than a driveway or fence, within this easement.

4. The amount and type of compensation, if any, to be required as a condition to the effectiveness of the vacation of the parcel.

    - Staff recommends that the petitioners provide the Village with compensation for the alley to be vacated. The fair market value is based on the fair market value of land as defined by Section 20.300.d.2 of the Subdivision Ordinance. When land will be encumbered with an easement, land is generally valued at one-third (1/3) of the value of the same property that does not have an easement. As such, the fair market value of the entire alley to be vacated will be discounted to reflect the blanket easement.

The table below summarizes the estimated value:

Land Value per Acre	SF of Alley to be vacated	Estimated Value	Encumbered Value	708 Franklin Street	712 Franklin Street
$ 545,000	2,062.5	$ 25,805.75	$ 8,601.92	$4,300.96	$4,300.96

Based on the land value assessment model, the petitioner (708 Franklin Street) and the owner of 712 Franklin Street would be required to pay the Village a total of $4,300.96 each.

RECOMMENDATIONS

Staff finds the proposed alley vacation is consistent with the Village's alley vacation policy (Resolution #2003-58), Comprehensive Plan, and surrounding zoning and land use classifications. Based on the findings listed above, staff recommends that the Plan Commission make a motion recommending approval of the alley right-of-way vacation associated with 16-PLC-0029 to the Village Council subject to the conditions below:

1. The vacation shall substantially conform to the staff report dated July 11, 2016.
2. Prior to final Village Council consideration, a Mylar copy of the Final Plat of Vacation shall be provided indicating a public drainage, utility and utility access easement along the entire length and width of the alley to be vacated.
3. Prior to execution of the plat, the petitioner and property owner of 712 Franklin Street shall pay the Village a total of $8,601.92 ($4,300.96 each).

Staff Report Approved By:

Stanley J. Popovich, AICP
Director of Community Development

SP:sw
-att

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0 7.5 15 Feet

708 & 712 Franklin Street Location Map

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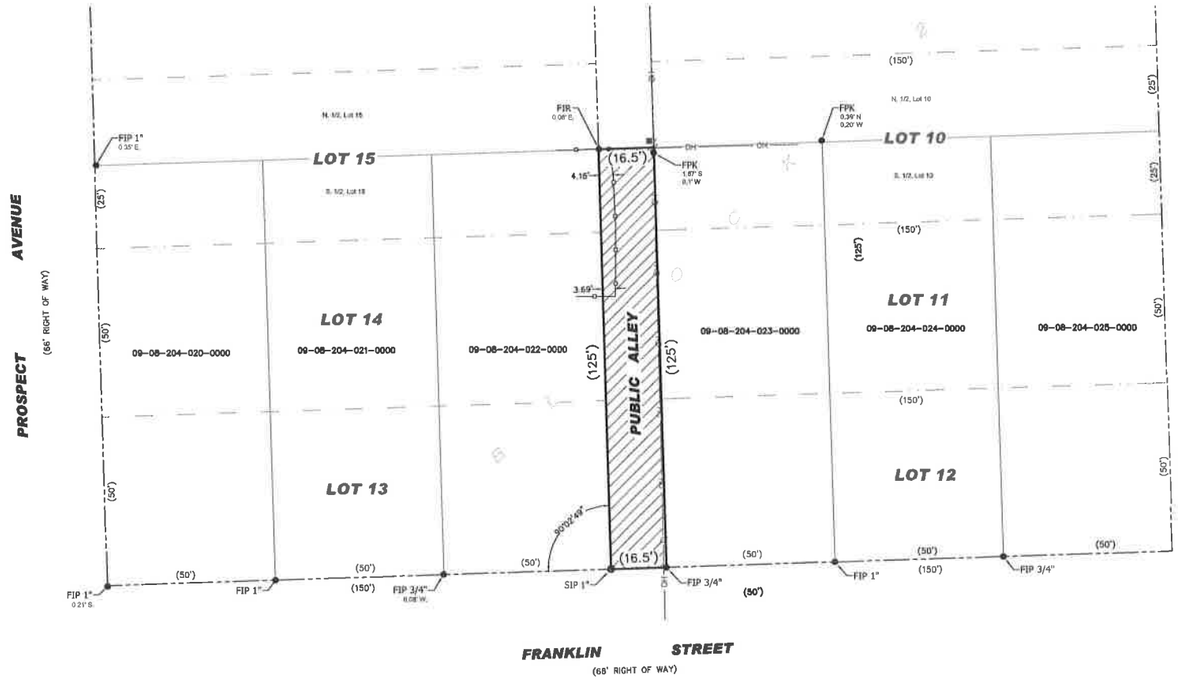
PLAT OF SURVEY

LEGAL DESCRIPTION OF PROPOSED VACATED ALLEY

THAT PART OF A PUBLIC ALLEY LYING WEST OF AND ADJOINING THE SOUTH HALF LOT 10 AND ALL OF LOTS 11 AND 12, AND LYING EAST OF AND ADJOINING ALL OF LOTS 13 AND 14 AND THE SOUTH HALF OF LOT 15, AND LYING NORTH OF THE NORTH RIGHT OF WAY OF FRANKLIN STREET AND SOUTH OF THE NORTH LINES OF ADJOINING THE SOUTH HALF LOT 10 AND ALL OF LOTS 11 AND 12, AND ADJOINING ALL OF LOTS 13 AND 14 AND THE SOUTH HALF OF LOT 15, ALL IN OF BLOCK 2 OF STANLEY'S ADDITION TO TOWN OF DOWNERS GROVE, IN THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 19, 1883 AS DOCUMENT NUMBER 31767, IN DUPAGE COUNTY, ILLINOIS.



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

SITE DATA

AREA: (2,062.5) SQUARE FEET
OR (0.047) ACRES

LEGEND

- ANCHOR
- B-BOX
- BASKETBALL HOOP
- BENCHMARK
- CLOSED LID MANHOLE
- FUEL TANK LID
- HYDRANT
- WATER SERVICE STAMP
- LIGHT STANDARD
- GROUND FLOOD LIGHT
- MAILBOX
- MONITORING WELL
- PARKING METER
- POST INDICATOR VALVE
- FLAGPOLE
- POWER POLE
- POST
- SANITARY CLEANOUT
- SIGN
- SPRINKLER HEAD
- SPRINKLER CONTROL VALVE
- WATER VALVE
- WELL HEAD
- WETLAND MARKER
- HANDHOLD
- ELECTRICAL JUNCTION BOX
- ELECTRIC MANHOLE
- ELECTRIC VAULT
- ELECTRIC SERVICE OUTLET BOX
- TRAFFIC CONTROL BOX
- TRAFFIC CONTROL VAULT
- TRANSFORMER PAD
- CATCH BASIN
- FLARED END SECTION
- HEADWALL
- OPEN LID MANHOLE
- STORM INLET
- BUBBLER
- GAS VALVE
- CABLE TV PEDESTAL
- ELECTRIC PEDESTAL
- TELEPHONE PEDESTAL
- TEL., ELEC., CABLE PEDESTALS
- ELECTRIC METER
- GAS METER
- GAS VALVE VAULT
- TELEPHONE MANHOLE
- PAINTED ELECTRIC MARKER
- PAINTED GAS MARKER
- PAINTED TELEPHONE MARKER
- PAINTED WATERMAIN MARKER
- FIBER OPTIC MARKER
- PAINTED SANITARY MARKER
- PAINTED STORM MARKER
- PIPELINE MARKER
- SURVEY TRAVERSE POINT
- FOUND DISK IN CONCRETE
- FOUND ROW MARKER
- FRS FOUND RAILROAD SPIKE
- FIR FOUND IRON ROD
- FPK FOUND PK NAIL
- FIP FOUND IRON PIPE
- FIB FOUND IRON BAR
- FBM FOUND BRASS MONUMENT
- SMN SET MAG NAIL
- SIP SET IRON PIPE
- DECIDUOUS TREE W/ TRUNK SIZE
- CONIFEROUS TREE W/ TRUNK SIZE
- CONIFEROUS TREE
- TRAFFIC LIGHT POLE
- TRAFFIC SIGNAL MAST ARM
- SECTION CORNER

LINE TYPES

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- ADJACENT LOT LINE
- CENTERLINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER-QUARTER SECTION LINE
- WIRE FENCE
- CHAINLINK FENCE
- WOOD OR WROUGHT IRON FENCE
- GUARDRAIL
- OH — OVERHEAD WIRES
- CATV — UNDERGROUND CABLE TV
- E — UNDERGROUND ELECTRIC
- FO — UNDERGROUND FIBER OPTIC
- T — UNDERGROUND TELEPHONE
- G — GAS MAIN
- W&M — WATER MAIN
- SANITARY SEWER
- STORM SEWER
- EDGE OF WATER
- BARRIER CURB
- DEPRESSED CURB
- CURB & GUTTER
- DEPRESSED CURB & GUTTER
- CONTOUR LINE
- RAILROAD TRACKS

ABBREVIATIONS

*##.##	EXIST. SPOT ELEVATION
A	ASPHALT
B	BRICK
B/W	BOTTOM OF WALL
B.L.	BRICK LEDGE
C	CONCRETE
CMP	CORRUGATED METAL PIPE
DEP	DEPRESSED CURB
DS	DOWNSPOUT
D.E.	DRAINAGE EASEMENT
DIP	DUCTILE IRON PIPE
E/P	EDGE OF PAVEMENT
EXIST.	EXISTING
F.F.	FINISHED FLOOR
FES	FLARED END SECTION
FL	FLOW LINE
H.C.	HANDICAP PARKING
INV	INVERT
MH	MANHOLE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
P.U.E.	PUBLIC UTILITY EASEMENT
RCP	REINFORCED CONCRETE PIPE
SAN	SANITARY SEWER
STD	STORM DRAIN
SD	SUMP DISCHARGE
TC	TOP OF CURB
T/F	TOP OF FOUNDATION
T/P	TOP OF PIPE
T/W	TOP OF WALL
U.E.	UTILITY EASEMENT
VCP	VITRIFIED CLAY PIPE
YIN	YARD INLET
N	NORTH
S	SOUTH
E	EAST
W	WEST
FBM	FOUND BRASS MONUMENT
FIP	FOUND IRON PIPE
FPK	FOUND PK NAIL
FRS	FOUND RR SPIKE
SIP	SET IRON PIPE
SPK	SET PK NAIL
(##.##)	RECORD/DEED
##.##	MEASURED

HATCHING

- ASPHALT SURFACE
- BRICK SURFACE
- BUILDING LIMITS
- CONCRETE SURFACE
- UNPAVED SURFACE
- WATER
- WETLANDS/MARSH AREA
- WOOD DECK
- ADA ACCESSIBLE RAMP

GENERAL NOTES

COMPARE THIS PLAT, LEGAL DESCRIPTION AND ALL SURVEY POINTS AND MONUMENTS BEFORE ANY CONSTRUCTION, AND IMMEDIATELY REPORT ANY DISCREPANCIES TO SURVEYOR.

DO NOT SCALE DIMENSIONS FROM THIS PLAT.

THE LOCATION OF THE PROPERTY LINES SHOWN ON THE FACE OF THIS PLAT ARE BASED UPON THE DESCRIPTION AND INFORMATION FURNISHED BY THE CLIENT. THE PARCEL WHICH IS DEFINED MAY NOT REFLECT ACTUAL OWNERSHIP, BUT REFLECTS WHAT WAS SURVEYED. FOR OWNERSHIP, CONSULT YOUR TITLE COMPANY.

A CURRENT TITLE COMMITMENT WAS NOT PROVIDED FOR SURVEYORS USE AT THE TIME OF PREPARATION OF THIS SURVEY.

MANHOLES, INLETS AND OTHER UTILITY RIMS OR GRATES SHOWN HEREON ARE FROM FIELD LOCATION OF SUCH, AND ONLY REPRESENT SUCH UTILITY IMPROVEMENTS WHICH ARE VISIBLE FROM ABOVE GROUND AT TIME OF SURVEY, THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE. THE LABELING OF THESE MANHOLES (SANITARY, WATER, ETC.) IS BASED SOLELY ON THE "STAMPED" MARKINGS OF THE RIM. NO UNDERGROUND OBSERVATIONS HAVE BEEN MADE TO VERIFY THE ACTUAL USE OR EXISTENCE OF UNDERGROUND UTILITIES.

NO UNDERGROUND UTILITIES, OR DRAIN TILES, IF ANY EXIST, SHOWN HEREON.

THIS SURVEY MAY NOT REFLECT ALL UTILITIES OR IMPROVEMENTS IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING OR ARE COVERED BY SUCH ITEMS AS DUMPSTERS, TRAILERS, CARS, DIRT, PAVING OR SNOW. AT THE TIME OF THIS SURVEY, SNOW DID NOT COVER THE SITE. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.

OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEMENT REGARDING THE ACTUAL PRESENCE OR ABSENCE OF ANY SERVICE.

CALL J.U.L.I.E. AT 1-800-892-0123 FOR FIELD LOCATION OF UNDERGROUND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION.

PUBLIC AND/OR PRIVATE RECORDS HAVE NOT BEEN SEARCHED TO PROVIDE ADDITIONAL INFORMATION. OVERHEAD WIRES AND POLES (IF ANY EXIST) ARE SHOWN HEREON, HOWEVER THEIR FUNCTION AND DIMENSIONS HAVE NOT BEEN SHOWN.

UNLESS OTHERWISE NOTED, ALL EASEMENT AND SETBACK LINES SHOWN HEREON ARE PER PARK ROAD ADDITION TO LaGRANGE, DOCUMENT #2259043.

UTILITY NOTE

VISIBLE UTILITIES LOCATED WITHIN THE PUBLIC ALLEY ARE POWER POLES, OVERHEAD WIRES AND AN ELECTRIC PEDESTAL.

STATE OF ILLINOIS)
) SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, STEVEN J. LAUB, AN ILLINOIS LICENSED PROFESSIONAL LAND SURVEYOR DO HEREBY CERTIFY THAT I HAVE SURVEYED THE PROPERTY DESCRIBED IN THE CAPTION TO THE PLAT HEREON DRAWN, AND THE SAID PLAT IS A TRUE AND CORRECT REPRESENTATION THEREOF.

ALL DIMENSIONS SHOWN ARE IN FEET AND DECIMAL PARTS THEREOF AND ARE CORRECTED TO A TEMPERATURE OF 68 DEGREES FAHRENHEIT.

PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS 035-003160 STEVEN J LAUB MOKENA, IL

DATE : MAY 27, 2016

STEVEN J. LAUB
ILLINOIS LICENSED PROFESSIONAL LAND SURVEYOR NO. 35-3160
MY CURRENT LICENSE RENEWS NOV. 30, 2016

DESIGNTEK SURVEYING, LLC
PROFESSIONAL LAND SURVEYORS & CONSULTANTS
IL Prof. Lic. No.: 184 - 004329
License renews: April 30, 2017

9930 W. 190th Street, Suite L
Mokena, Illinois 60448
708-326-4961 volce
708-326-4962 fax

PREPARED FOR:
Jamie Corso
Email: Annico15811@comcast.net

REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

PLAT OF VACATION / PLAT OF EASEMENT

PUBLIC ALLEY ADJOINING 708 FRANKLIN AVE., DOWNERS GROVE, IL

DRAFTING COMPLETED:	05/27/2016	DRAWN BY:	LWD	PROJECT MANAGER:	SJL
FIELD WORK COMPLETED:	05/17/2016	CHECKED BY:	SJL	SCALE:	1" = 20'

SHEET NO. 1 of 1

Project No: 16-05001

L:\Surveys\Drawings Projects\2016-Projects\16-05001\dwg\16-05001 Plat of Surveying Plat Date: 5/6/2016 8:12 AM By: steve

PLAT OF VACATION
&
PLAT OF EASEMENT

LEGAL DESCRIPTION OF VACATED ALLEY

THAT PART OF A PUBLIC ALLEY LYING WEST OF AND ADJOINING THE SOUTH HALF LOT 10 AND ALL OF LOTS 11 AND 12, AND LYING EAST OF AND ADJOINING ALL OF LOTS 13 AND 14 AND THE SOUTH HALF OF LOT 15, AND LYING NORTH OF THE NORTH RIGHT OF WAY OF FRANKLIN STREET AND SOUTH OF THE NORTH LINES OF ADJOINING THE SOUTH HALF LOT 10 AND ALL OF LOTS 11 AND 12, AND ADJOINING ALL OF LOTS 13 AND 14 AND THE SOUTH HALF OF LOT 15, ALL IN OF BLOCK 2 OF STANLEY'S ADDITION TO TOWN OF DOWNERS GROVE, IN THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 19, 1883 AS DOCUMENT NUMBER 31767, IN DUPAGE COUNTY, ILLINOIS.

N

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

SITE DATA

AREA: (2,062.5) SQUARE FEET
OR (0.047) ACRES

LINE TYPES

- VACATED ALLEY & P.U.E.
- EXISTING RIGHT-OF-WAY LINE
- ADJACENT LOT LINE
- RECORD LOT LINE
- OH — OVERHEAD WIRES

ABBREVIATIONS

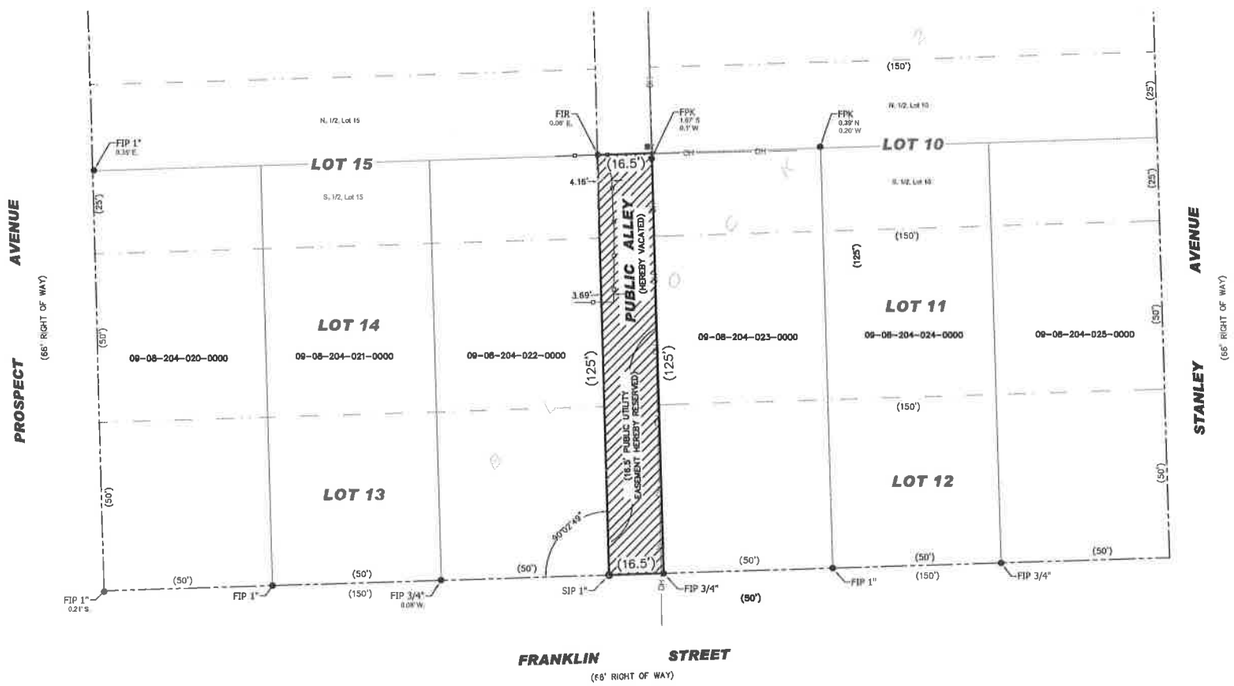
P.U.E.	PUBLIC UTILITY EASEMENT
U.E.	UTILITY EASEMENT
N	NORTH
S	SOUTH
E	EAST
W	WEST
FIP	FOUND IRON PIPE
FPK	FOUND PK NAIL
(##.##')	RECORD/DEED
##.##'	MEASURED

HATCHING

LIMITS OF VACATED ALLEY

LEGEND

- FIR FOUND IRON ROD
- FPK FOUND PK NAIL
- FIP FOUND IRON PIPE



PUBLIC RIGHT-OF-WAY VACATION EXISTING – EASEMENT PROVISIONS

AN EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF DOWNERS GROVE, COUNTY OF DUPAGE, AND TO UTILITY COMPANIES OPERATING UNDER FRANCHISE FROM THE SAID VILLAGE INCLUDING, BUT NOT LIMITED TO AT&T, COMMONWEALTH EDISON COMPANY, COMCAST, THE DOWNERS GROVE SANITARY DISTRICT AND THEIR RESPECTIVE SUCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, OVER ALL AREAS MARKED "PUBLIC UTILITIES EASEMENT RESERVATION" ON THE PLAT OF VACATION OF THE VACATED STREET RIGHT-OF-WAY AS DESCRIBED HEREIN FOR THE PERPETUAL RIGHT, PRIVILEGE AND AUTHORITY TO CONSTRUCT, RECONSTRUCT, REPAIR, INSPECT, MAINTAIN, AND OPERATE VARIOUS UTILITY TRANSMISSION AND DISTRIBUTION SYSTEMS AND COMMUNITY ANTENNA TELEVISION SYSTEMS AND ALL NECESSARY APPLIANCES AND OTHER STRUCTURES AND APPURTENANCES AS MAY BE DEEMED NECESSARY BY SAID VILLAGE AND FOR ANY AND ALL MUNICIPAL PURPOSES, OVER, UPON, ALONG, UNDER AND THROUGH SAID INDICATED EASEMENTS, TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE PROPERTY TO DO ANY OF THE ABOVE WORK. THE RIGHT IS ALSO GRANTED TO CUT DOWN, TRIM OR REMOVE ANY TREES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE OPERATION OF THE UTILITIES. NO PERMANENT BUILDINGS OR STRUCTURES SHALL BE PLACED ON SAID EASEMENTS, BUT SAME MAY BE USED FOR GARDENS, SHRUBS, LANDSCAPING, DRIVEWAYS, FENCES ("IMPROVEMENTS") AND OTHER PURPOSES THAT DO NOT THEN OR LATER INTERFERE WITH THE AFORESAID USES AND RIGHTS. ANY INSTALLATIONS OF IMPROVEMENTS PLACED IN THE EASEMENT SHALL BE AT THE PROPERTY OWNER'S SOLE EXPENSE AND THE VILLAGE SHALL NOT BE RESPONSIBLE FOR REPAIRING, MAINTAINING OR REPLACING ANY IMPROVEMENTS. THE PROPERTY OWNERS SHALL INDEMNIFY AND HOLD HARMLESS THE VILLAGE, ITS AGENTS, OFFICERS AND EMPLOYEES AGAINST ALL INJURIES, DEATHS, LOSSES, DAMAGES, CLAIMS, SUITS, JUDGMENTS, COSTS AND EXPENSES WHICH MAY ARISE DIRECTLY OR INDIRECTLY FROM THE INSTALLATION OF ANY AND IMPROVEMENTS IN THE EASEMENT AREA. THE VILLAGE SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY DAMAGE INCURRED TO THE IMPROVEMENTS DURING OR AS A RESULT OF ANY REPAIR, MAINTENANCE, OPERATION, USE OR INSTALLATION OF EQUIPMENT OR FACILITIES WITHIN THE EASEMENT AREA. ALL INSTALLATIONS OF IMPROVEMENTS SHALL BE SUBJECT TO THE ORDINANCES OF THE VILLAGE OF DOWNERS GROVE. EASEMENTS ARE HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF DOWNERS GROVE AND OTHER GOVERNMENTAL AUTHORITIES HAVING JURISDICTION OF THE LAND OVER THE ENTIRE EASEMENT AREA FOR INGRESS, EGRESS AND THE PERFORMANCE OF ANY AND ALL MUNICIPAL AND OTHER GOVERNMENTAL SERVICES.

VILLAGE COUNCIL CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE }

APPROVED THIS _____ DAY OF _____, A.D., 20____
BY THE COUNCIL OF THE VILLAGE OF DOWNERS GROVE.

_____
MAYOR

_____
VILLAGE CLERK

DUPAGE COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE }

THIS INSTRUMENT _____ WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF DUPAGE COUNTY, ILLINOIS,
ON THE _____ DAY OF _____, A.D., 20____,
AT _____ O'CLOCK __M. AND WAS RECORDED IN BOOK_____ OF PLATS
ON PAGE _____.

_____
RECORDER OF DEEDS

STATE OF ILLINOIS } SS
COUNTY OF WILL }

PROFESSIONAL LAND SURVEYOR
STEVEN J. LAUB
STATE OF ILLINOIS
035-003160
MOKENA, IL

WE, DESIGNTEK SURVEYING, LLC, HEREBY STATE THAT WE HAVE SURVEYED THE PROPERTY AND THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION THEREOF OF THE SAME, FOR THE PURPOSE OF ROADWAY/ALLEY VACATION.

DATE : MAY 25, 2016

STEVEN J. LAUB
ILLINOIS LICENSED PROFESSIONAL LAND SURVEYOR NO. 35-3160
MY CURRENT LICENSE RENEWS NOV. 30, 2016

DESIGNTEK SURVEYING, LLC
PROFESSIONAL LAND SURVEYING & CONSULTANTS
IL Prof. Lic. No.: 184 – 004529
License renews: April 30, 2017

9930 W. 190th Street, Suite L
Mokena, Illinois 60448
708-326-4961 volce
708-326-4962 fax

PREPARED FOR:
Jamie Corso

Email: Annlco15811@comcast.net

REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

PLAT OF VACATION / PLAT OF EASEMENT

PUBLIC ALLEY ADJOINING 708 FRANKLIN AVE., DOWNERS GROVE, IL

DRAFTING COMPLETED:	05/27/2016	DRAWN BY:	LWD	PROJECT MANAGER:	SJL
FIELD WORK COMPLETED:	05/17/2016	CHECKED BY:	SJL	SCALE:	1" = 20'

SHEET NO. 1 of 1

Project No: 16-05001

L:\Surveys\Drawings Projects\2016-Projects\16-05000 proj\16-05000 Plat of Vacation.dwg Plot Date: 5/6/2016 8:17 AM By: steve

VILLAGE OF DOWNERS GROVE
REPORT FOR THE PLAN COMMISSION
MARCH 7, 2016 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
16-PLC-0009 1815 Ogden Avenue	Planned Unit Development, Rezoning and Special Use	Stan Popovich, AICP Director of Community Development

REQUEST
The petitioner is requesting approval for a Planned Unit Development, a Rezoning from B-3, General Services and Highway Business to B-3/PUD, General Services and Highway Business/Planned Unit Development and a Special Use to construct an automobile dealership at 1815 Ogden Avenue.

NOTICE
The application has been filed in conformance with applicable procedural and public notice requirements.

GENERAL INFORMATION

OWNER: Aldi, Inc.
1200 N. Kirk Road
Batavia, IL 60510

APPLICANT: Brad Webb
Packey Webb Ford
2150 Ogden Avenue
Downers Grove, IL 60515

PROPERTY INFORMATION

EXISTING ZONING: B-3, General Services and Highway Business
EXISTING LAND USE: Vacant Land
PROPERTY SIZE: 424,710 sq ft (9.75 acres)
PINS: 09-06-304-013 and -014

SURROUNDING ZONING AND LAND USES

	ZONING	FUTURE LAND USE
NORTH:	B-3, General Services and Highway Business	Corridor Commercial
SOUTH:	R-1, Residential Detached House 1 R-3, Residential Detached House 3	Single Family Residential
EAST:	B-3, General Services and Highway Business	Corridor Commercial
WEST:	B-3, General Services and Highway Business R-2, Residential Detached House 2	Corridor Commercial Single Family Residential

ANALYSIS

SUBMITTALS

This report is based on the following documents, which are on file with the Department of Community Development:

1. Project Narrative
2. Plat of Survey
3. Architectural Plans
4. Engineering Plans
5. Landscape Plan
6. Traffic Impact Study
7. Plat of Consolidation

PROJECT DESCRIPTION

The applicant is proposing to construct a 53,759 square foot automobile dealership at 1815 Ogden Avenue. The 9.75 acre property, located on the south side of Ogden Avenue at the intersection of Lacey Road and Ogden Avenue, is zoned B-3, General Services Highway Business. An automobile dealership is an allowable Special Use in the B-3 zoning district. The petitioner is requesting a Planned Unit Development and the accompanying rezoning to address the unique components of the project.

The currently vacant site was formerly used as an automobile salvage yard and there is some environmental contamination on the site. The petitioner is working with the Illinois Environmental Protection Agency (IEPA) and will be required to perform remediation to remove the contaminated soils.

The petitioner is proposing to improve the property with a two-story dealership building centered on the site. The dealership will house a showroom, offices, service area, detail area, a car wash bay and ancillary uses including waiting areas, parts storage and break rooms. The petitioner is also requesting approval of a future stand-alone car wash building that is not part of the initial construction phase. The primary building façade will be clad with a metal panel system and metal ribbed panel siding. The side and rear facades are insulated concrete panels and metal ribbed panel siding. Immediately south of the building are two covered storage areas and a trash enclosure.

The petitioner is improving the site with two access points onto Ogden Avenue. The eastern access will be in-line with Lacey Road to the north and have full access to Ogden Avenue. The western access point will be right-in/right-out only. IDOT has reviewed the proposed curb cut locations and has approved the proposed layout and locations. The petitioner is also providing an internal driveway connection to the Star Motors dealership immediately to the east of the subject site.

The petitioner is proposing an 815 vehicle parking lot that surrounds the building. The parking lot is designed to accommodate customer parking, service parking, employee parking, new vehicle inventory and used vehicle inventory. The layout of the Ogden Avenue curb cuts and parking lot allows for all vehicle deliveries to take place on site and also allows for fire department access around the entire building.

The petitioner is proposing landscaping around the majority of the site, in conformance with the Village requirements. Landscaping is provided along the north property line adjacent to Ogden Avenue. The west property line includes planted materials and a six-foot fence. Landscaping along the south and east property line is impacted by stormwater regulations. The western 330 feet of the south property line contains only a fence due to the location of a drainage swale which is required to convey water from the west and off-site to a stormwater basin in the southeast corner of the site. The addition of landscaping in the swale would impact the amount of water that can be conveyed. Landscaping along the north 330 feet of the east property

line is provided adjacent to the parking areas. The southeast corner of the property contains native wetland plantings for the stormwater basin but does not contain landscape screening or fencing. The landscaping and fencing in this area could negatively impact how the stormwater facilities function.

The parking lot will have the required landscape islands, except in locations where underground stormwater facilities are placed which preclude the installation of trees. Parking lot and site lighting is provided around the proposed development. A photometric plan has been submitted and identifies that the proposed lighting complies with site lighting regulations.

A pedestrian connection between the building and Ogden Avenue is provided as required. The connection will tie into the new Ogden Avenue sidewalk that the petitioner is constructing.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

The Comprehensive Plan identifies the subject site as Catalyst Site #27 in the under the *Ogden Avenue West End - Key Focus Area*. Catalyst sites are specifically identified in the Comprehensive Plan as prime properties for redevelopment that will further the vision created in the Comprehensive Plan. The Comprehensive Plan notes this large catalyst site could accommodate a single-tenant user who would benefit from the site's access to I-355 and size. The Plan also notes the site is well-suited to accommodate an automobile dealership.

The key concepts in this focus area are to encourage commercial expansion, buffer nearby residential areas, provide pedestrian access, increase parking lot screening, use shared access agreements, and beautify Ogden Avenue. The proposed development meets each of these key concepts. Specifically, the development improves a vacant commercial property and creates an attractive landscape along Ogden Avenue while also screening adjacent residentially zoned properties. The development provides cross-access between this development and the recently approved Star Motors redevelopment.

The Comprehensive Plan's Future Land Use Map designates this property as Corridor Commercial. Corridor Commercial uses are defined as automobile related uses that provide services and retail opportunities to the nearby neighborhoods and the surrounding region. The Comprehensive Plan specifically mentions that the Ogden Avenue corridor continue to contain a range of these type of uses. This site is currently empty and the petitioner is proposing to improve the site with an automobile dealership. The conversion from an empty site to an active commercial site that provides services to both local and regional residents meets the goals of the Comprehensive Plan.

The proposed development is consistent with the Comprehensive Plan.

COMPLIANCE WITH ZONING ORDINANCE

The property is zoned B-3, General Services and Highway Business. The bulk requirements of the proposed development in the B-3 zoning district are summarized in the following table:

Zoning Requirements

1815 Ogden Avenue	Required	Proposed
Building North Setback (Street Yard)	75 ft from Ogden Avenue centerline	107.1 ft to tower element
Parking North Setback	50 ft from Ogden Avenue centerline	60 ft
East Setback (Side Yard)	0 ft	261.6 ft

South Setback (Rear Yard)	28 ft	107.5 ft
West Setback (Side Yard)	0 ft	259.4 ft
Floor Area Ratio	0.75 max	0.107
Building Height	60 ft max	27.7 ft
Open Space (10% / 5%)	42,392 sq ft / 20,696 sq ft	94,066 sq ft / 25,350 sq ft
Parking & Stacking Spaces	129	829 (815 spaces & 14 stacking at service entrance)
Off-Street Loading Zoning	1 space	1 space
Car Wash Stacking (future improvement)	2 spaces in / 2 spaces out	2 spaces in / 2 spaces out

The proposed development meets the provisions of a Planned Unit Development as it is a development that is consistent with the Comprehensive Plan and will help in advancing the goals and policies of the Comprehensive Plan. The development will also provide a high quality architecture, landscaping and site improvements that are compatible with the surrounding commercial area. Additionally, this development will redevelop a vacant commercial property that has been vacant for many decades.

As part of the Planned Unit Development, the petitioner is requesting additional sign area for the development. The petitioner is permitted up to 300 square feet of total signage. The petitioner is requesting a total sign package of 417 square feet. As part of the approval process, the petitioner is not proposing any monument signs but is requesting seven wall signs along the north facades. The design of the building, with a sweeping arch running north from the building separates the north façade into two planes. The end of the arch will have a 'Ford' ellipse sign on either side of the arch, acting in the manner of a monument sign. Additionally, each front facade will have a 'Packey Webb' sign along with a 'Ford' ellipse sign. The primary customer entrance feature on the northwest façade will also have a 'Ford' ellipse sign above the entry doors.

The petitioner is also seeking relief from portions of the landscape section of the Zoning Ordinance. These requests are due primarily to stormwater requirements. Installation of trees within landscape islands can not be completed in locations where underground detention is provided. Additionally, screening along the south property line in some cases consists of just a fence. This is due to the required swale along the south property line that is providing an overland flow route for the water that generally flows from west to east along the site's south property line. Additionally, there is a natural low area in the southeast corner that is going to be utilized for compensatory storage and planted with a wetland mixture. This low area extends onto adjacent properties to the east and south and a fence would inhibit how this area functions.

The applicant's proposal with the requested relief is consistent with the Village's Zoning Ordinance.

ENGINEERING/PUBLIC IMPROVEMENTS

The petitioner's proposal complies with the Village's Stormwater and Floodplain Ordinance. The petitioner is required to provide on-site stormwater detention, compensatory storage for the two existing LPDAs that are located on site, mitigate the impacts to the linear wetland and provide best management practices for the proposed development. To meet the required detention and compensatory storage requirements, the petitioner is providing one at-grade storage basin and two underground storage vaults. The naturalized at-grade basin is in the southeast corner of the property and is designed as a compensatory storage basin for

the existing southeastern LPDA that is being impacted. The new basin will accommodate the water flow that currently flows through the site from the west and drains into the existing LPDA at this location. This basin will capture off-site flow from the south and west as well. If this basin reaches its capacity, the excess water will overland flow along the east property line towards the north and exit the site via the existing stormwater system along Lacey Road. The naturalized plantings provide the required water quality best management practices.

The two underground basins within the east side parking lot work together to capture the stormwater runoff from the parking lot and building. These basins are designed to provide the compensatory storage for the northeast LPDA and to provide on-site detention. The water in the basins will release their stored water to the north via the existing stormwater system along Lacey Road. The flow of water will be limited by an outlet control structure that will restrict the amount of water that is released, which will be no more than is currently released. The released water will be treated by a mechanical water quality unit.

Based on the required environmental mitigation of the site, the wetland will be impacted. The petitioner will mitigate the impacts to the wetland off-site.

The petitioner is providing a looped water main around the building and will install three fire hydrants around the building. A new sanitary sewer service will also be provided. Per the Sanitary District, an easement will be provided along the east and south property lines for potential Sanitary District improvements in the future.

As required by the Village, the petitioner is providing a cross-access connection to the Star Motors automobile dealership to the east. The petitioner is also providing a sidewalk along Ogden Avenue which will connect to the planned Star Motors sidewalk and will extend west to Stonewall Avenue.

TRAFFIC

A traffic impact study for the proposed development was completed by the petitioner. The study examined the existing Ogden Avenue traffic conditions and the future conditions based on the proposed development. The focus of the study was on the traffic warrants for the installation of a traffic light at the intersection of Ogden Avenue and Lacey Road. Under the current development proposal, a traffic light is not proposed at this location.

The study found that the proposed dealership will have roughly 1,000 daily trips to and from the site, some of which will be from existing traffic traveling on Ogden Avenue. This will minimally impact the use of Ogden Avenue, as the average daily traffic count is roughly 36,000 vehicles. The development will not impact Ogden Avenue traffic that is passing by the site. Customers exiting the development site at the easternmost curb cut may experience delays at this intersection while customers using the westernmost right-in/right-out curb cut will experience minimal delays.

IDOT has reviewed the traffic study and concurred with the results and will permit the two curb cuts as designed. IDOT also concurs with the on-site connection between this proposed dealership and the dealership to the east.

PUBLIC SAFETY REQUIREMENTS

The Fire Prevention Division has reviewed the proposed development and determined that sufficient access to and around the site is provided for emergency vehicles. The site layout permits Fire Department apparatus the opportunity to enter and exit the site from both Ogden Avenue curb cuts. The loop around the building provides good access around the building and property as needed.

The building will be required to include a fire alarm and sprinkler system that meet the Village's code requirements. A sprinkler room is provided at the northeast corner of the building adjacent to where the fire department connection is located on the exterior. Three fire hydrants are provided around the building, including one within 100 feet of the fire department connection.

NEIGHBORHOOD COMMENT

Notice was provided to all property owners 250 feet or less from the property in addition to posting public hearing notice signs and publishing the legal notice in the *Downers Grove Suburban Life*. There have been no public comments received by Staff.

As required by the Zoning Ordinance, the petitioner held a neighborhood meeting on March 9, 2016. The public asked questions about stormwater management, site lighting, sanitary sewer service extensions, landscaping and site contamination. The applicant responded to each of these topics during the meeting and has provided a summary of the meeting that is attached. It should be noted that the plan presented at the March 9 neighborhood meeting identified a larger building which has subsequently been revised to the current proposal.

FINDINGS OF FACT

The petitioner is requesting a Planned Unit Development, Rezoning and a Special Use to construct an automobile dealership at 1815 Ogden Avenue. Staff finds that the proposal meets the standards for granting a Planned Unit Development, Rezoning and a Special Use as outlined below:

Section 28.12.040.C.6 Review and Approval Criteria

The decision to amend the zoning map to approve a PUD development plan and to establish a PUD overlay district are matters of legislative discretion that are not controlled by any single standard. In making recommendations and decisions regarding approval of planned unit developments, review and decision-making bodies must consider at least the following factors:

a. The zoning map amendment review and approval criteria of Sec. 12.030.I.
See the analysis of rezoning review and approval criteria below. This standard has been met.

b. Whether the proposed PUD development plan and map amendment would be consistent with the comprehensive plan and any other adopted plans for the subject area.
The proposed project is consistent with the Comprehensive Plan. The Plan identifies this area as Catalyst Site #27. This property is large enough to accommodate a single user and is well-suited to accommodate an automobile dealership. The proposed development is consistent with the policy recommendation that corridor commercial areas continue to function in a dual role of providing daily needs to local residents as well as providing commercial goods and services to the larger region. This site has been vacant for many decades and the redevelopment of this site will enhance the Ogden Avenue corridor and the Village as a whole. This standard has been met.

c. Whether PUD development plan complies with the PUD overlay district provisions of Sec. 4.030.
The proposed project meets several of the PUD overlay district provisions and objectives as found in Section 4.030 of the Zoning Ordinance. The PUD is consistent with and helps advance the goals of the Comprehensive Plan by developing a catalyst site in a manner identified by the plan. Additionally, the development meets other objectives of the Corridor Commercial Designation. The development also meets the PUD overlay district provisions by providing a high quality building that is compatible with other developments along Ogden Avenue while providing attractive, high-quality landscaping including the use of native wetland plantings. This standard has been met.

d. Whether the proposed development will result in public benefits that are greater than or at least equal to those that would have resulted from development under conventional zoning regulations.
The proposed development will result in a redevelopment of a long term vacant commercial site along Ogden Avenue. The Comprehensive Plan identified this site as Catalyst Site #27 and noted that it is prime for redevelopment. The proposed development meets many objectives of the Comprehensive Plan and furthers the vision of the Village to improve Ogden Avenue. The building is of high architectural quality and will enhance the aesthetics of Ogden Avenue. The public benefits include the environmental clean-up of the site, the installation of a sidewalk to Stonewall Avenue and a cross-connection to the Star Motors dealership to the east. This standard has been met.

e. Whether appropriate terms and conditions have been imposed on the approval to protect the interests of surrounding property owners and residents, existing and future residents of the PUD and the general public.
There are several conditions noted below that will protect the interests of the surrounding neighborhood and the general public. The conditions below are being requested to ensure that the proposed development satisfies all applicable codes and requirements, including compliance with the Village's stormwater ordinance. The project will advance many goals and objective laid out in the Comprehensive Plan and the conditions listed below will ensure that these goals and objectives are met. This standard has been met.

Section 12.030.I. Zoning Map Amendment Review and Approval Criteria
The decision to amend the zoning map is a matter of legislative discretion that is not controlled by any single standard. In making recommendations and decisions about zoning map amendments, review and decision-making bodies must consider at least the following factors:

1. ***The existing use and zoning of nearby property.***
The property is vacant with no use at this time. The properties to the north, east and west along Ogden Avenue are zoned B-3, General Services and Highway Business. The adjacent commercial uses include an automobile dealership, an auto-oriented business, a commercial retailer and an animal shelter. To the west and south, the zoning is residential with single family homes located on the majority of the lots. The proposed rezoning to B-3/PUD is appropriate for this site. This standard has been met.

2. ***The extent to which the particular zoning restrictions affect property values.***
The PUD overlay and the proposed project will protect the character and integrity of adjacent properties by requiring subsequent approvals for major changes, which will assist in maintaining property values. Also, the subject property is currently vacant and provides no benefits to the neighboring property values. The proposed project will improve the property with a modern, high quality building which, in turn, should raise property values. This project will include PUD overlay restrictions which will not negatively affect property values but should protect property values. This standard has been met.

3. ***The extent to which any diminution in property value is offset by an increase in the public health, safety and welfare.***
The proposed rezoning will not impact property values or the public health, safety and welfare of the community or neighborhood. The property is currently vacant land and is not providing any benefit to the neighboring property values or the public health, safety and welfare. The proposed development has the potential to increase property values while at the same time increasing the welfare of the community. This standard has been met.

4. ***The suitability of the subject property for the zoned purposes.***
   As noted in the Comprehensive Plan, this large catalyst site can accommodate a single-tenant user who would benefit from the site's access to I-355 and the size of the property. The plan notes this site is well-suited to accommodate an automobile dealership, such as the one being proposed. The subject property is suited for this type of development with a Planned Unit Development zoning classification. This standard has been met.

5. ***The length of time that the subject property has been vacant as zoned, considering the context of land development in the vicinity.***
   The property has been vacant for decades. The rezoning of the property for the PUD overlay will enhance the subject site, provide numerous benefits to the public and allow for zoning flexibility to be offered in order for several property enhancements to take place. This standard has been met.

6. ***The value to the community of the proposed use.***
   The redevelopment of this specific property has been established as a community goal in the Comprehensive Plan. Specifically this site is identified as Catalyst Site #27 which identifies this property as one of the prime development opportunities along Ogden Avenue. The rezoning to B-3/PUD will allow the applicant to create a development that will advance several other goals and objectives identified in the Comprehensive Plan. This standard has been met.

7. ***The comprehensive plan.***
   The proposed PUD overlay and the proposed project are consistent with the Comprehensive Plan. The proposal will develop Catalyst Site #27 as desired in the Comprehensive Plan. This standard has been met.

Section 28.12.050.H Approval Criteria
No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is constituent with and in substantial compliance with all Village Council policies and plans and that the applicant has presented evidence to support each of the following conclusions:

1. ***That the proposed use is expressly authorized as a Special Use in the district in which it is to be located;***
   The property is located in the B-3, General Service and Highway Business zoning district. Under Section 5.010 of the Zoning Ordinance, an automobile dealership is listed as an allowable Special Use in the B-3 zoning district. This standard has been met.

2. ***That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.***
   The proposed automobile dealership is a desirable service to the community and will contribute to the general welfare of the Village. The proposed development will develop a site that has sat vacant for decades. The development will cater to both local and regional customers as desired in the Comprehensive Plan and will meet many goals and objectives outlined in the Comprehensive Plan. This standard has been met.

3. ***That the proposed use will not, in the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.***
   The proposed automobile dealership will not be detrimental to the health, safety or general welfare of

persons residing in or working in the vicinity and will not be injurious to property values or improvements in the vicinity. The proposed development will provide the necessary stormwater management facilities to accommodate stormwater and will provide the requisite landscape screening from adjacent neighbors. The development will improve a long standing vacant parcel with a development that is consistent with the goals and objectives of the Comprehensive Plan. This standard is met.

RECOMMENDATIONS

The proposed Planned Unit Development, Rezoning and Special Use for an automobile dealership at 1815 Ogden Avenue is consistent with the Comprehensive Plan, the Zoning Ordinance and surrounding zoning and land use classifications. Based on the findings listed above, staff recommends the Plan Commission recommend the Village Council **approve** the requested Planned Unit Development, Rezoning and Special Use as requested in case 16-PLC-0009 subject to the following conditions:

1. The Planned Unit Development, Rezoning and Special Use shall substantially conform to the staff report; architectural and photometric drawings prepared by CVG Architects dated January 29, 2016 and last revised on June 28, 2016 and engineering and landscape drawings prepared by R.A. Smith National dated June 10, 2016, except as such plans may be modified to conform to the Village codes and ordinances.
2. The building shall be equipped with an automatic suppression system and an automatic and manual fire alarm system.
3. No additional wall or monument signs shall be permitted for this site that would result in an increase in overall sign area.
4. The applicant shall administratively consolidate the two lots into one lot of record prior to issuing a building permit.
5. The applicant shall provide a cross-access easement from the easternmost Ogden Avenue curb cut to the cross-access drive for the property to the east on the administrative lot consolidation.

Staff Report Approved By:

Stanley J. Popovich, AICP
Director of Community Development

-att

Feet
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1815 Ogden Avenue

charles vincent george
ARCHITECTS

~~January 29, 2016~~ **Revised June 10, 2016**

Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515

Re: Packey Webb Ford Dealership – 1815 Ogden Ave.

Attn: Department of Community Development

On behalf of our client, Packey Webb Ford, Brad Webb, enclosed please find the following documents in response to the Village staff concept meeting held December 8, 2015 for the above referenced project.

1. Petition for Plan Commission **(previously submitted)**
2. Proof of Ownership **(previously submitted)**
3. Application Fee **(previously submitted)**
4. Plat of Survey dated January 21, 2016 **(previously submitted)**
5. Project Summary
6. List and mailing labels for property owners with 250' of project property **(previously submitted)**
7. Preliminary and Final Plat of Re-subdivision with Declaration of Easements
8. Plan Sets
    a. Architectural Site Plan dated June 10, 2016
    b. Site Engineering and Landscape Plans dated June 10, 2016
    c. Floor Plans dated June 10, 2016
    d. Building Elevations dated June 10, 2016
    e. Building Sections dated June 10, 2016
    f. Sign Elevations dated June 10, 2016
9. Color Renderings dated June 10, 2016
10. Declaration of Easements (see Final Plat of Re-subdivision)
11. Traffic Study **(previously submitted)**
12. Downers Grove Sanitary District preliminary review Dated February 23, 2016
13. EcoCAT – Proof of Submittal **(previously submitted)**
14. Kane-DuPage Land Use Opinion – **(previously submitted)**

Project Narrative

The current property is located on 2 parcels covering approximately 9.79 acres that is currently unoccupied and without any structures. Current zoning classification of this property is B-3 General Services and Highway District.
The Proposed project is a new 53,759 sqft Ford Dealership with sales, service, and car wash facilities. Hours of operation are as follows; Service M-F 6:00 a.m. to 7:00 p.m. Saturday 7:30 a.m. to 4:00 p.m. Sales M-Sat. 9:00 a.m. to 9:00 p.m. Our client is requesting a change in the zoning classification to a PUD overlay district with special use approval for the new Ford Dealership sales, service and maintenance facility. As part of the PUD we are requesting approval for a 417 sqft sign package. Landscaping is comprised of almost 22% of the site with 62% along Ogden Ave. A public sidewalk will be installed connecting adjacent lots to our East and West. Access to our site is being proposed by providing a right-in/right-out driveway and a full access intersection at Lacy Rd. Having both access points allows maneuvering for semi / car carrier, refuse vehicles and emergency apparatus to safely travel throughout the site.

Traffic Signal

On January 29, 2016 a preliminary Site plan and Traffic impact study was submitted to IDOT's Bureau of Traffic for preliminary approval to construct a traffic signal at Lacey and Ogden Ave. We received preliminary approval with comments via a review memo on April 19. Packey Webb Ford will continue to work with IDOT and the Village of Downers Grove toward final approval of the traffic signal with the intent to construct in the future. The location of the traffic signal has been shown on the Architectural site plan. An Intersection Design Study (IDS) is being conducted and planned for jurisdictional review end of June.

Vehicle Service

The proposed dealership will offer two types of service utilizing thirty (30) small truck and car service bays and two (2) oversized vehicle service bays. Access to service will occur on the North side of the building through 2 overhead service doors. Car stacking is provided on the exterior and interior comprised of 3 and 4 cars each lane respectively. Four (4) service stalls and three (3) detail stations , accessible by employees only, are accessed through an overhead door on the dealerships west side. This also serves as the exit for the drive-thru, employee operated, carwash. Oversized vehicles will be serviced through individual overhead doors located on the south side of the building. Oversize Vehicles are serviced by appointment only. Therefore stacking in front of doors should not be required

Car Wash (proposed and future)

The proposed car wash is an interior drive-thru unit operated by employees only. A future carwash is planned as a separate building located near the southwest corner of the dealership. This will be a full service car wash intended for customer and dealer use only. 13 parking spaces will be removed to accommodate four (4) cars stacked at the entrance and adequate exiting. A destination sign will be proposed at the car wash entrance for easy navigation by customers. Size of the carwash will be approximately 2,500 sqft and has been accounted for in the developments storm-water analysis. Upon completion of the future stand-alone carwash, the interior carwash will be converted to a third oversized vehicle service bay.

Building Signage:

Maximum signage allowed is 300 sqft. We are seeking approval to install 417 sqft of signage.
The unique design of the building with the drive-under canopy introduces a unique challenge for signage. The drive-under canopy commonly called the "Ford Brand wall", as designed, is a 2-sided wall separating direct views from East and West-bound traffic. Views to both sides of the sign wall are not possible by passer-by traffic. Therefore, signage on each side of the sign wall is required to balance the building. Further, Ford Brand standards allows dealerships for name recognition and Ford "Ovals" above the support legs of the brand wall. Examples of these signs can be viewed on Packey Webb Fords existing facility at 2150 Ogden Ave.
Most signs along Ogden Avenue are situated at or near the minimum setback. These signs become cluttered and over-bearing for motorists. The closest sign we propose is 75'-7 ½"' from Ogden ROW with the farthest sign located 220'-7 1/2"
The building elevations attached show the signage proportionally sized and spaced along the dealerships façade. A quick calculation reveals 5% of the front building façade is dedicated to signage.

Special Use:

Section 12.050 H. Special Uses Approval Criteria. (Village Municipal Code)

No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is consistent with and in substantial compliance with all village council policies and plans and that the applicant has presented evidence to support each of the following conclusions:

1. *That the proposed use is expressly authorized as a special use in the district in which it is to be located;*
   Response: The current zoning of the property is B-3 General Services and Highway District. Vehicle sales and service facilities are considered special use per table 5.1 allowed uses
2. *That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community;*

Response: Our project is located in the West end of the Ogden corridor character area as defined in the 2011 comprehensive plan which states this area to be "firmly established as an auto-oriented corridor in terms of its traffic volume, design, development pattern, scale and land use. It further states this area should "continue to leverage its strategic location and should be reserved for uses that require and benefit from customers and employees from beyond Downers Grove." This development will also clean-up the soil contamination from previous developments. Further, this site has (2) localized poor drainage areas (LPDA's). Our development will include storm water management facilities that will result in the reduction of flood heights and flood durations in this depressed area.

3 *that the proposed use will not, in the particular case, be detrimental to the health, safety, or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.*
Response: The use being requested is specifically allowed in the underlying B-3 district. We have gone to great lengths to begin clean-up of existing environmental concerns and remedy pre-existing storm water drainage issues. Landscaping, site lighting and general design approaches have been conducted with the general welfare of the adjacent property owners in mind

Planned Unit Developments:

Section 12.040 C. 6. PUD Review and Approval Criteria (Village Municipal Code)

The decision to amend the zoning map to approve a PUD development plan and to establish a PUD overlay district are matters of legislative discretion that are not controlled by any single standard. In making recommendations and decisions regarding approval of planned unit developments, review and decision-making bodies must consider at least the following factors:

a. *The zoning map amendment review and approval criteria of Sec. 12.030I;*
Response: See below
b. *whether the proposed PUD development plan and map amendment would be consistent with the comprehensive plan and any other adopted plans for the subject area;*
Response: This project is located in the West End of the Ogden corridor character area as defined in the 2011 comprehensive plan. The design and use is consistent with the context of the comprehensive plan. See response to Special Use Approval criteria item 2) for more information.
c. *whether PUD development plan complies with the PUD overlay district provisions of Sec. 4.030;*
Response – The proposed dealership complies with the objective as noted in Section 4.030.A.2. Listed below are the objectives pertaining to this project
    a. Implementation of and consistency with the comprehensive plan and other relevant plans and policies;
    Response: The proposed dealership is consistent with the comprehensive plan as stated previously
    b. Flexibility and creativity in responding to changing social, economic and market conditions allowing greater public benefits than could be achieved using conventional zoning and development regulations;
    Response: The proposed dealership will clean-up a site deemed unusable since the early 1980's. Numerous developments in the late 1990's and 2000's have tried to create a project on the site. The PUD process has allowed the building to be designed in a manner that will enhance Ogden Avenue and its surrounding neighborhood by eliminating site contamination and reducing drainage issues.
    c. Efficient and economical provision of public facilities and services;
    Response: We are working with Downers Grove Engineering, Sanitary district and Fire prevention district to design the most efficient way to provide public facilities and Service.
    d. High-quality buildings and improvements that are compatible with surrounding areas, as determined by their arrangement, massing, form, character and landscaping;

Response: The proposed dealership is made of high quality materials including metal paneling, concrete wall systems and high performance curtain wall glazing systems. It is compatible with surrounding dealerships along Ogden in and around Downers Grove.

e. *The protection and enhancement of open space amenities and natural resource features;*
Response: Minimal requirements for landscape area is 10% of the site. Our development has more than doubled this by landscaping 22% of the Site. Although Mitigation of the Wetlands is occurring, we are buffering the wetlands to the Southeast of our development and treating the storm water before entering the adjacent waterways. All of which has not occurred in the history of this site.

f. *The incorporation of sustainable development features including green infrastructure practices in landscapes and parking area, to maximize the aesthetic and water quality benefits of best practices in storm water management;*
Response: The project follows the DuPage County Water Quality Best Management Practices technical guidance for non-residential properties greater than 1 acre. In accordance with this standard a minimum importance average of 2.5 will be provided using the following systems:
    - Vegetated swale along the South Property line
    - Manufactured Storm septor mdl STC-1200 located at the outfall of the detention system. A complete specification can be reviewed in Final engineering submittal.

g. *Attractive, high-quality landscaping, lighting, architecture and signage, including the use of native landscaping that reflects the unique character of the village and the surrounding area*
Response: Additional landscaping has been added at the property line abutting residential. Native trees, shrubs and grasses have been planned in areas throughout the development to enhance the dealership and surrounding areas. Lighting and signage has been designed to respect adjacent property owners yet provide owner security and display for the Dealership.

d. *Whether the proposed development will result in public benefits that are greater than or at least equal to those that would have resulted from development under conventional zoning regulations; and*
Response: We believe the current development proposal exceeds the requirements of conventional regulations. The additional requests being made are in proportion to the size of the building being constructed and the intensity of existing site conditions.

e. *Whether appropriate terms and conditions have been imposed on the approval to protect the interests of surrounding property owners and residents, existing and future residents of the PUD and the general public***.**
Response: This project is not a part of a larger PUD.

Rezoning Standards:

Sec. 12.030. I Zoning Map Amendments (Rezoning's)
The decision to amend the zoning map is a matter of legislative discretion that is not controlled by any single standard. In making recommendations and decisions about zoning map amendments, review and decision-making bodies must consider at least the following factors:

1 *The existing use and zoning of nearby property;*
Response: The surrounding zoning districts area as follows:
B-3 General Services and Highway District. Northeast and Northwest
R-1 Residential Detached House 1. East and Southeast corner
R-3 Residential Detached House 3 Southwest corner
R-2 Residential Detached House 2 East

2 *The extent to which the particular zoning restrictions affect property values;*
Response: The zoning restrictions limit the effectiveness of signage on the property thereby negatively effecting the value of the property for commercial development.

3 *The extent to which any diminution in property value is offset by an increase in the public health, safety and welfare*
Response: By remediating site contamination and installing infrastructure including the Stormwater detention system, this development will greatly increase the property value.

4 *The suitability of the subject property for the zoned purposes;*
Response: This property will maintain a majority of the underlying B-3 district with slight modifications for the PUD overlay. The property is well suited for this zoning change

5 *The length of time that the subject property has been vacant as zoned, considering the context of land development in the vicinity;*
Response: This property was an auto salvage yard from 1932 to 1982 and contained very little to no infrastructure. It contained a single family home with accessory buildings. The property has been vacant since 1982. The context of the surrounding land development is comprised of commercial with a majority being automotive sales and repair.

6 *The value to the community of the proposed use; and*
Response: The state of the existing property is unused. The retail and property tax dollars this development will produce will be a great value to the community

7 *The comprehensive plan.*

Response: This type of develop fits the context of the comprehensive plan.

On behalf of Packey Webb Ford we hope this satisfies all of your concerns. Please do not hesitate to contact us with further questions regarding our submittal

Packey Webb Ford
C/O Charles Vincent George Architects

Jeffrey B. Lietz
VP Commercial Architecture

Cc Brad Webb – Packey Webb Ford
John Webb – Packey Webb Ford
Greg Webb – Packey Webb Ford
Patricia Gregory - Pachter, Gregory & Raffaldini, P.C.

charles vincent george
ARCHITECTS

March 09, 2016

Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515

Re: Packey Webb Ford Dealership – 1815 Ogden Ave. Neighborhood meeting summary

Attn: Department of Community Development

On March 9, 2016, the following plans were presented at an open neighborhood meeting held at the Downers Grove Recreation center located at 4500 Belmont.

1. Ariel view of current property
2. Proposed landscape Plan
3. 3 dimensional design renderings of Packey Webb Ford dealership and site amenities

The following is a summary of questions, comments and concerns raised by the attendees

1. **How will the development affect the existing Stormwater / flooding issues?**
   Meetings have been held with the Village of Downers Grove Engineering department to fully understand and account for the current waterways, localized poor drainage areas (LPDA's) and Wetland. Additional Stormwater detention systems and a drainage swale along the south property line have been provided for in the proposed development plan resulting in a controlled outlet of storm waters thereby reducing flood heights and durations in the depressed areas.

2. **It was our understanding that a sanitary sewer would be extended to the south for future connection to properties along the dealerships South property line.**
   There has been no mention of extending sanitary to the South. Further a preliminary review has been received from the Downers Grove Sanitary district on February 23, 2016 and is available for reference.

3. **Why isn't the proposed traffic signal located at Lee in lieu of Lacy?**
   Traffic studies were prepared and submitted to IDOT for review. Traffic patterns indicated, with the addition of the senior living facility being constructed on Lacy, that potential traffic situations better warrant a signal at Lacey in lieu of Lee. Please note that on April 19, 2016 the Bureau of Traffic (BOT) offered review comments and stated they will approve a traffic signal at the proposed location pursuant to a full design / engineering review. Further planning and discussions with IDOT and the Village of Downers Grove will need to be held.

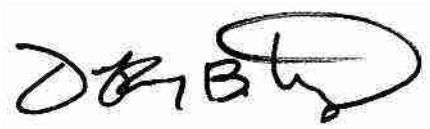
4. **How will the dealership light the parking lot? Is there a way to reduce lighting or better control at night?**
   Parking lots for dealerships are a means to display cars available for purchase. Downers Grove ordinances for commercial properties allow minimal light to trespass onto adjacent residential properties. Packey Webb Ford understands the concerns of their neighbors and will limit the lighting along the property lines and provide controls for off-hours light to be lessened in an effort to only provide security.

1245 E. DIEHL ROAD, SUITE 101 · NAPERVILLE, IL 60563 · P (630) 357-2023 · F (630) 357-2662 · cvgarchitects.com

5. I**s there any way to save some of the trees along the South property line?**
   Packey Webb Ford understands the concerns regarding tree preservation and the need for landscaping. Unfortunately, with the need to maintain Stormwater flows along the South property, a new drainage swale will need to be constructed which affects the ability to save existing trees. Further, Packey Webb Ford is providing landscaped islands, tree lines and natural wetland seeding as a betterment to existing conditions.

6. **Can you talk to us more about how you're dealing with contamination?**
   Multiple investigations have been performed on this site since the late 1990's. Current testing has been conducted following strict adherence to IEPA guidelines. At the time of this letter, the IEPA is conducting a review of our findings. Once a review has been received, the Packey Webb Ford design team will prepare a remediation action plan to safely secure the contaminated soils as per IEPA approval. In summary to our IEPA submittal, the investigations determined that the subject site does not contain any hazardous wastes. No groundwater contamination was detected above regulatory limits. No Volatile Organic Compounds were detected in the groundwater, soils and soil gas vapors at the site above Regulatory limits. The soil contamination identified at the site above regulatory limits are several PNA compounds, and the metals antimony, barium, chromium, lead, mercury and selenium. A majority of the soil contamination resides in the top 1-2 feet of soil/fill ground surfaces. Reports generated by ongoing investigations can be acquired for review at the Village of Downers Grove.
   Further, the drums on the north side of the site contain soil cuttings generated by the drilling and installation of the 5 groundwater monitoring wells. The drums and their soil contents will be Properly managed and disposed during the future site remediation work.

Packey Webb Ford
C/O Charles Vincent George Architects



Jeffrey B. Lietz
VP Commercial Architecture

Cc Brad Webb – Packey Webb Ford
John Webb – Packey Webb Ford
Greg Webb – Packey Webb Ford
Patricia Gregory - Pachter, Gregory & Raffaldini, P.C.
Thomas Mangan – Geo-Think, LLC
Robert Ponto – R.A. Smith National, Inc
Scott Leadbetter – International Contractors, Inc.

charles vincent george
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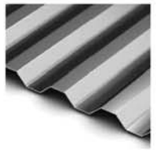
alpolilc metal panel
color - hairline aluminum



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color - slate grey

alpolic metal panel
color - mica mzg grey

sherwin williams paint
color - universal grey

sherwin williams paint
color - grimmy's grey

RENDERING 'C'

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RENDERING 'B'

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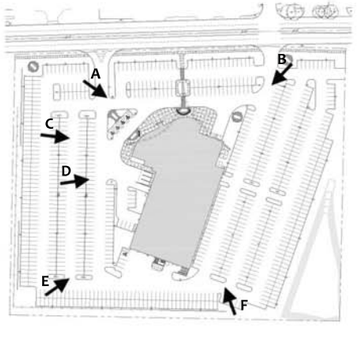

KEY PLAN

Packey Webb Ford
1815 Ogden Avenue | Downers Grove, Illinois
June 10, 2016 | project 2015-082

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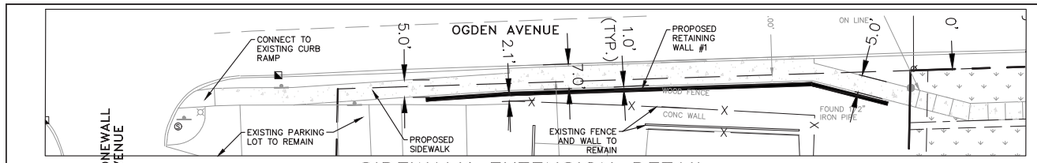
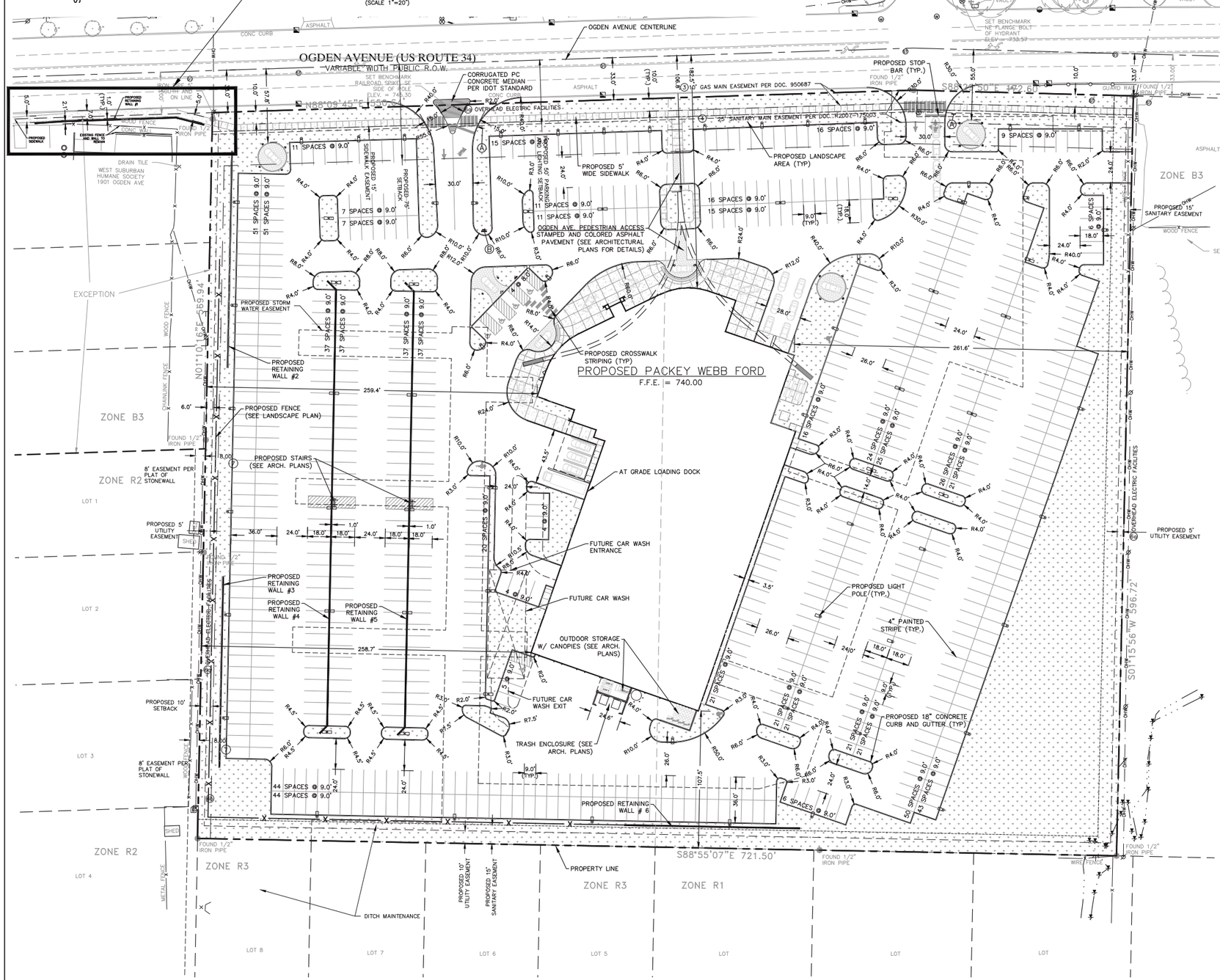


SIDEWALK EXTENSION DETAIL

(SCALE 1"=20')



SITE DATA TABLE:	
PROPOSED FLOOR AREA	45,505 SF
FLOOR AREA RATIO	10.73%
TOTAL PROPOSED LANDSCAPE AREA	94,578 SF
TOTAL PROPOSED LANDSCAPE RATIO	22.31%
PROPOSED LANDSCAPE AREA ALONG OGDEN	15,926 SF
AREA OF DISTURBANCE (ON-SITE)	423,920 SF = 9.73 AC
TOTAL LOT AREA	423,920 SF = 9.73 AC
TOTAL SITE PARKING STALLS	815 EA
TOTAL PARKING REQUIRED	120 EA
TOTAL ACCESSIBLE PARKING STALLS	5 EA
LANDSCAPE FRONTAGE ALONG OGDEN	63%
SEE ARCHITECTURAL SITE PLAN FOR MORE INFORMATION	

NOTES:

1) ACCESSIBLE PARKING STALL SIGNS SHALL BE STANDARD (NON-VAN) UNLESS OTHERWISE NOTED ON PLAN.

2) ALL ACCESSIBLE SIGNS AND POSTS SHALL BE TYPE IV. SEE DETAIL.

3) ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

4) SEE VEHICULAR ACCESS EXHIBIT FOR TRUCK MOVEMENTS.

5) PROPOSED BUILDING FOOTPRINT SHOWN WITHIN THIS PLAN SET IS FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS FOR FINAL BUILDING FOOTPRINT AND ALIGNMENT.

6) PUBLIC WORKS INSPECTION IS NEEDED FOR ALL WORK IN PUBLIC RIGHT-OF-WAYS/EASEMENTS. CONTACT XXXX XXXXXX, INSPECTION SUPERVISOR (XXX-XXX-XXXX), 72 HOURS PRIOR TO SCHEDULING WORK.

7) SEE ARCHITECTURAL PLANS FOR RETAINING WALL DESIGN AND DETAILS.

8) SEE ARCHITECTURAL PLANS FOR TRASH ENCLOSURE DETAILS.

WARNING

CALL J.U.L.I.E. TOLL FREE 800-892-0123

CALL BEFORE YOU DIG

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

R.A.SMITH NATIONAL ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A.SMITH NATIONAL

DESCRIPTION	DATE

R.A. Smith National

Beyond Surveying and Engineering

16745 W. Bluemound Road, Brookfield, WI 53005-5938
262-781-1000 Fax 262-781-8466, www.rasmithnational.com
Appleton, WI Madison, WI Naperville (Chicago), IL Irvine, CA Oakmount (Pittsburgh), PA

PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

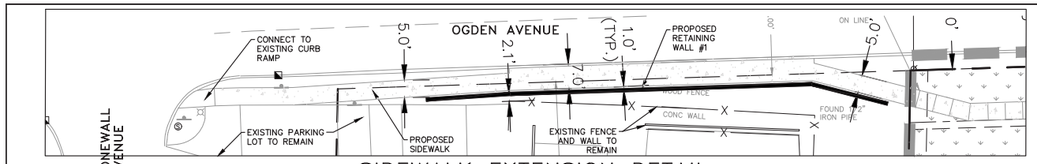
SITE PLAN

PRELIMINARY NOT FOR CONSTRUCTION

DATE: 06-10-16
SCALE: 1"=40'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: KLL
CHECKED BY: RTP

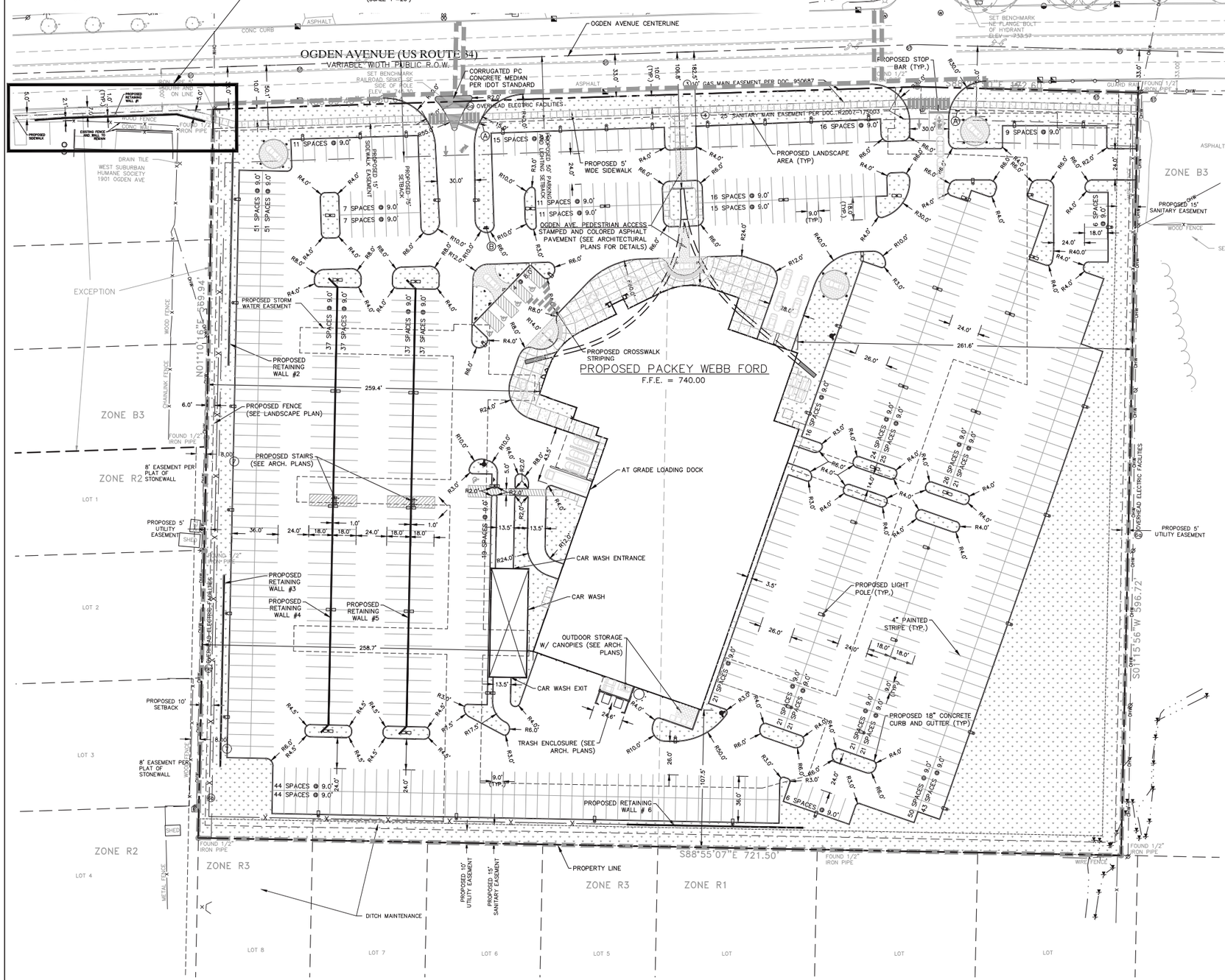
SHEET NUMBER
C200

P:\3150545\Dwg\Sheets\SP01040.dwg, Site Plan, 6/27/2016 9:26:18 AM, rtp



SIDEWALK EXTENSION DETAIL

(SCALE 1"=20')



SITE DATA TABLE:	
PROPOSED FLOOR AREA	47,671 SF
FLOOR AREA RATIO	11.25%
TOTAL PROPOSED LANDSCAPE AREA	93,905 SF
TOTAL PROPOSED LANDSCAPE RATIO	22.15%
PROPOSED LANDSCAPE AREA ALONG OGDEN	15,926 SF
AREA OF DISTURBANCE (ON-SITE)	423,920 SF = 9.73 AC
TOTAL LOT AREA	423,920 SF = 9.73 AC
TOTAL SITE PARKING STALLS	801 EA
TOTAL PARKING REQUIRED	120 EA
TOTAL ACCESSIBLE PARKING STALLS	5 EA
LANDSCAPE FRONTAGE ALONG OGDEN	63%
SEE ARCHITECTURAL SITE PLAN FOR MORE INFORMATION	

NOTES:

1) ACCESSIBLE PARKING STALL SIGNS SHALL BE STANDARD (NON-VAN) UNLESS OTHERWISE NOTED ON PLAN.

2) ALL ACCESSIBLE SIGNS AND POSTS SHALL BE TYPE IV. SEE DETAIL.

3) ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

4) SEE VEHICULAR ACCESS EXHIBIT FOR TRUCK MOVEMENTS.

5) PROPOSED BUILDING FOOTPRINT SHOWN WITHIN THIS PLAN SET IS FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS FOR FINAL BUILDING FOOTPRINT AND ALIGNMENT.

6) PUBLIC WORKS INSPECTION IS NEEDED FOR ALL WORK IN PUBLIC RIGHT-OF-WAYS/EASEMENTS. CONTACT XXXX XXXXXX, INSPECTION SUPERVISOR (XXX-XXX-XXXX), 72 HOURS PRIOR TO SCHEDULING WORK.

7) SEE ARCHITECTURAL PLANS FOR RETAINING WALL DESIGN AND DETAILS.

8) SEE ARCHITECTURAL PLANS FOR TRASH ENCLOSURE DETAILS.

WARNING

CALL J.U.L.I.E. TOLL FREE 800-892-0123

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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

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PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

CONCEPT FUTURE SITE PLAN

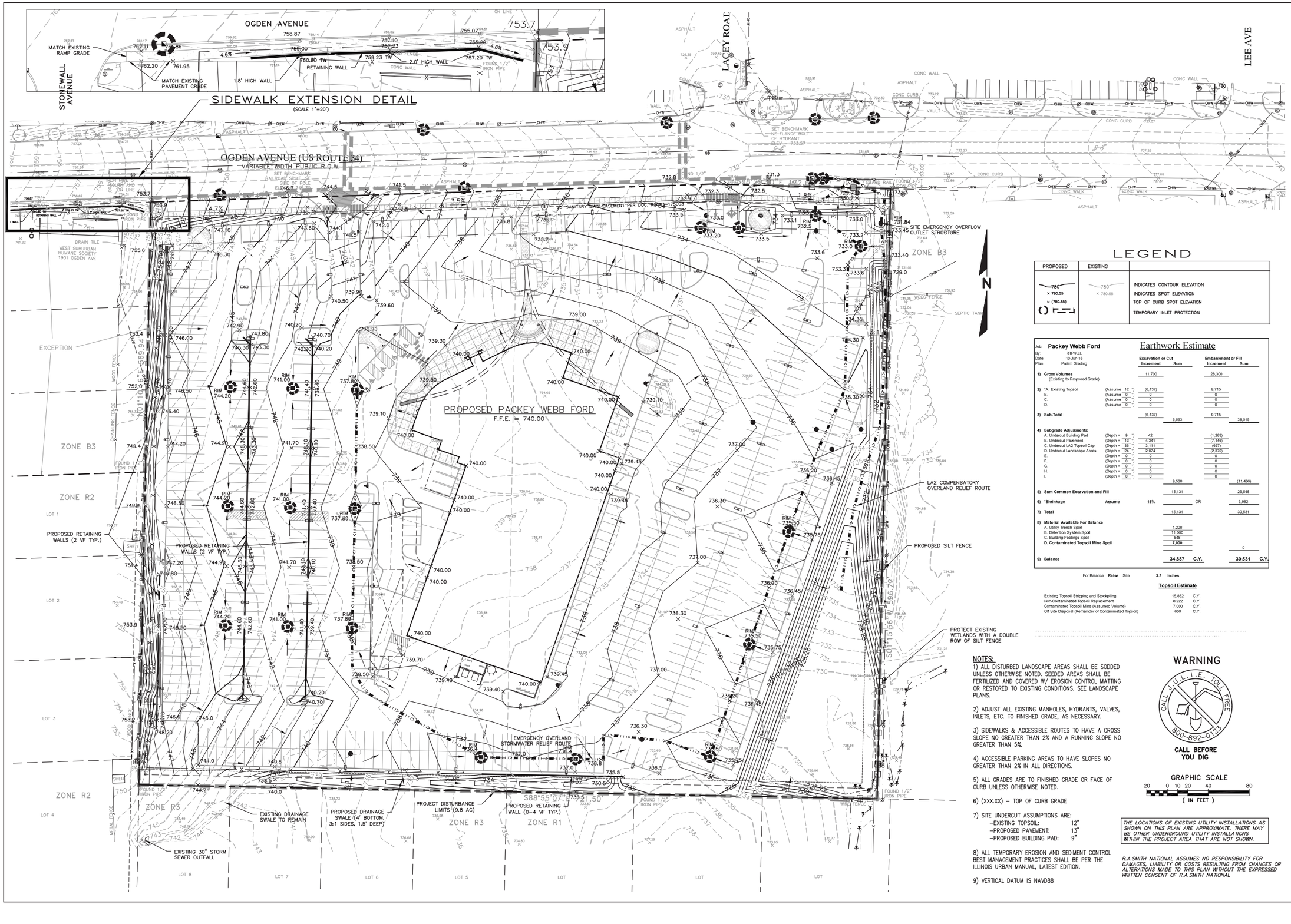
PRELIMINARY NOT FOR CONSTRUCTION

DATE: 06-10-16
SCALE: 1"=40'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: KLL
CHECKED BY: RTP

SHEET NUMBER
C201

SIDEWALK EXTENSION DETAIL

(SCALE 1"=20')



LEGEND

PROPOSED	EXISTING	
780	780	INDICATES CONTOUR ELEVATION
× 780.55	× 780.55	INDICATES SPOT ELEVATION
× (780.55)		TOP OF CURB SPOT ELEVATION
		TEMPORARY INLET PROTECTION

Earthwork Estimate

Job: **Packey Webb Ford**
By: RTP/KLL
Date 10-Jun-16
Plan Prelim Grading

			Excavation or Cut Increment	Excavation or Cut Sum	Embankment or Fill Increment	Embankment or Fill Sum
1)	**Gross Volumes** (Existing to Proposed Grade)		11,700		28,300	
2)	"A. Existing Topsoil	(Assume 12 ")	(6,137)		9,715	
	B.	(Assume 0 ")	0		0	
	C.	(Assume 0 ")	0		0	
	D.	(Assume 0 ")	0		0	
3)	**Sub-Total**		(6,137)	5,563	9,715	38,015
4)	**Subgrade Adjustments:**					
	A. Undercut Building Pad	(Depth = 9 ")	42		(1,283)	
	B. Undercut Pavement	(Depth = 13 ")	4,341		(7,146)	
	C. Undercut LA2 Topsoil Cap	(Depth = 36 ")	3,111		(667)	
	D. Undercut Landscape Areas	(Depth = 24 ")	2,074		(2,370)	
	E.	(Depth = 0 ")	0		0	
	F.	(Depth = 0 ")	0		0	
	G.	(Depth = 0 ")	0		0	
	H.	(Depth = 0 ")	0		0	
	I.	(Depth = 0 ")	0		0	
				9,568		(11,466)
5)	**Sum Common Excavation and Fill**			15,131		26,548
6)	**"Shrinkage**	**Assume**	**15%**		OR	3,982
7)	**Total**			15,131		30,531
8)	**Material Available For Balance**					
	A. Utility Trench Spoil			1,208		
	B. Detention System Spoil			11,000		
	C. Building Footings Spoil			548		
	D. Contaminated Topsoil Mine Spoil			7,000		
						0
9)	**Balance**			**34,887 C.Y.**		**30,531 C.Y.**

For Balance **Raise** Site **3.3 Inches**

Topsoil Estimate

Existing Topsoil Stripping and Stockpiling	15,852	C.Y.
Non-Contaminated Topsoil Replacement	8,222	C.Y.
Contaminated Topsoil Mine (Assumed Volume)	7,000	C.Y.
Off Site Disposal (Remainder of Contaminated Topsoil)	630	C.Y.

NOTES:

1) ALL DISTURBED LANDSCAPE AREAS SHALL BE SODDED UNLESS OTHERWISE NOTED. SEEDED AREAS SHALL BE FERTILIZED AND COVERED W/ EROSION CONTROL MATTING OR RESTORED TO EXISTING CONDITIONS. SEE LANDSCAPE PLANS.

2) ADJUST ALL EXISTING MANHOLES, HYDRANTS, VALVES, INLETS, ETC. TO FINISHED GRADE, AS NECESSARY.

3) SIDEWALKS & ACCESSIBLE ROUTES TO HAVE A CROSS SLOPE NO GREATER THAN 2% AND A RUNNING SLOPE NO GREATER THAN 5%.

4) ACCESSIBLE PARKING AREAS TO HAVE SLOPES NO GREATER THAN 2% IN ALL DIRECTIONS.

5) ALL GRADES ARE TO FINISHED GRADE OR FACE OF CURB UNLESS OTHERWISE NOTED.

6) (XXX.XX) – TOP OF CURB GRADE

7) SITE UNDERCUT ASSUMPTIONS ARE:
- –EXISTING TOPSOIL: 12"
- –PROPOSED PAVEMENT: 13"
- –PROPOSED BUILDING PAD: 9"

8) ALL TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES SHALL BE PER THE ILLINOIS URBAN MANUAL, LATEST EDITION.

9) VERTICAL DATUM IS NAVD88

WARNING

CALL J.U.L.I.E. TOLL FREE 800-892-0123

CALL BEFORE YOU DIG

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

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Appleton, WI Madison, WI Naperville (Chicago), IL Irvine, CA Oakmount (Pittsburgh), PA

PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

GRADING, PAVING, & FINAL EROSION CONTROL PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 06-10-16
SCALE: 1"=40'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: KLL
CHECKED BY: RTP

SHEET NUMBER
C300

OGDEN AVENUE (US ROUTE 34)
VARIABLE WIDTH PUBLIC R.O.W.

LACEY ROAD

LEE AVE

PROPOSED PACKEY WEBB FORD
F.F.E. = 740.00

ZONE B3

ZONE R2

ZONE R3

ZONE R1

EXCEPTION

LOT 1

LOT 2

LOT 3

LOT 4

LOT 8

LOT 7

LOT 6

LOT 5

LOT

LOT

LOT

LEGEND

PROPOSED	EXISTING	
	( )	INDICATES RECORDED DIMENSION WHERE DIFFERENT FROM ACTUAL MEASUREMENT
	⊕ OR ⊞	SECTION OR 1/4 SECTION CORNER AS DESCRIBED
	○	1" DIA. IRON PIPE FOUND (UNLESS OTHERWISE NOTED)
	○	1" DIA. IRON PIPE, 18" LONG–SET (UNLESS OTHERWISE NOTED)
	●	BOLLARD
	◉	SOIL BORING/MONITORING WELL
	⚑	FLAGPOLE
	▭	MAILBOX
	▭	SIGN
	▭	BILLBOARD
	▭	CONTROL BOX
	▭	TRAFFIC SIGNAL
	▭	RAILROAD CROSSING SIGNAL
	▭	CABLE PEDESTAL
	▭	POWER POLE
	▭	GUY POLE
	▭	GUY WIRE
	▭	LIGHT POLE
	▭	SPOT/PEDESTAL/PAVER ACCENT LIGHT
	▭	HANDICAPPED PARKING
	▭	ELECTRIC MANHOLE
	▭	ELECTRIC PEDESTAL
	▭	ELECTRIC METER
	▭	TELEPHONE MANHOLE
	▭	TELEPHONE PEDESTAL
	▭	MARKED FIBER OPTIC
	▭	GAS VALVE
	▭	GAS METER
	▭	GAS WARNING SIGN
	▭	STORM MANHOLE
	▭	ROUND INLET OR CATCH BASIN
	▭	SQUARE INLET OR SLOT DRAIN
	▭	STORM SEWER END SECTION
	▭	SANITARY MANHOLE
	▭	CLEANOUT OR VENT
	▭	SANITARY INTERCEPTOR MANHOLE
	▭	MISCELLANEOUS MANHOLE
	▭	WATER VALVE
	▭	HYDRANT
	▭	WATER SERVICE CURB STOP
	▭	WATER MANHOLE
	▭	WELL
	▭	WATER SURFACE
	▭	WETLANDS FLAG
	▭	MARSH
	▭	CONIFEROUS TREE
	▭	DECIDUOUS TREE
	▭	SHRUB
S	S	–EDGE OF TREES –SANITARY SEWER
STO	STO	–STORM SEWER
W	W	–WATERMAIN
G	G	–MARKED GAS MAIN
E	E	–MARKED ELECTRIC
	OHW	–OVERHEAD WIRES
	B	–BUREAU ELEC. SERV.
T	T	–MARKED TELEPHONE
	TV	–MARKED CABLE TV LINE
	FO	–MARKED FIBER OPTIC

LA2 COMPENSATORY STORAGE
100–YR HWL = 731.84
REQUIRED STORAGE @ HWL = 0.96 AC–FT
STORAGE PROVIDED @ HWL = 0.96 AC–FT
AT GRADE STORAGE = 0.00 AC–FT
UNDERGROUND STORAGE = 0.96 AC–FT
CONTECH 8' DIA. CMP DRY
DETENTION SYSTEM (932 LF @ 0.25%)
INVERT BOTTOM OF SYSTEM = 723.00
SPOIL CALC 9,400 SF x 7.25' DEEP = 2,525 CY

PROPOSED UNDERGROUND DETENTION SYSTEM
CONTECH 8' & 10' DIA. CMP DRY
DETENTION SYSTEM (8' = 800 LF)
(10' = 2,104 LF)
EMERGENCY SPILLWAY = 731.84
INVERT TOP OF SYSTEM = 725.05
INVERT BOTTOM OF SYSTEM = 723.00
VOLUME OF SYSTEM STORAGE 4.6 AC–FT
SPOIL CALC 1,800 SF x 7.25' DEEP = 485 CY
SPOIL CALC 27,200 SF x 8' DEEP = 8,060 CY
SPOIL CALC 6,100 SF x 13' DEEP = 2,940 CY

LA3 COMPENSATORY STORAGE
100–YR HWL = 732.93
REQUIRED STORAGE @ HWL = 2.05 AC–FT
STORAGE PROVIDED @ HWL = 2.09 AC–FT
INVERT BOTTOM BASIN = 728.25

NOTES:

1) ALL PIPE LENGTHS ARE TO CENTER OF EXISTING OR PROPOSED STRUCTURE.

2) CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED POINTS OF CONNECTION TO EXISTING PIPE, STRUCTURES OR KNOWN CROSSINGS PRIOR TO PROPOSED UTILITY CONSTRUCTION. CONTACT ENGINEER FOR POSSIBLE REDESIGN IF EXISTING PIPE SIZES OR INVERTS VARY FROM THIS PLAN.

3) CONTRACTOR SHALL FIELD ADJUST ALL EXISTING UTILITY STRUCTURES TO PROPOSED GRADE WITHIN THE PROJECT LIMITS. SEE GRADING, PAVING AND FINAL EROSION CONTROL PLAN FOR PROPOSED RIM GRADES.

4) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.

5) PUBLIC WORKS INSPECTION IS NEEDED FOR ALL WORK IN PUBLIC RIGHT–OF–WAYS/EASEMENTS. CONTACT XXXX XXXXX, INSPECTION SUPERVISOR (XXX–XXX–XXXX), 72 HOURS PRIOR TO SCHEDULING WORK.

WARNING
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800–892–0123
CALL BEFORE YOU DIG

GRAPHIC SCALE
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(IN FEET)

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Appleton, WI Madison, WI Naperville (Chicago), IL Irvine, CA Oakmount (Pittsburgh), PA

DESCRIPTION | DATE

PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

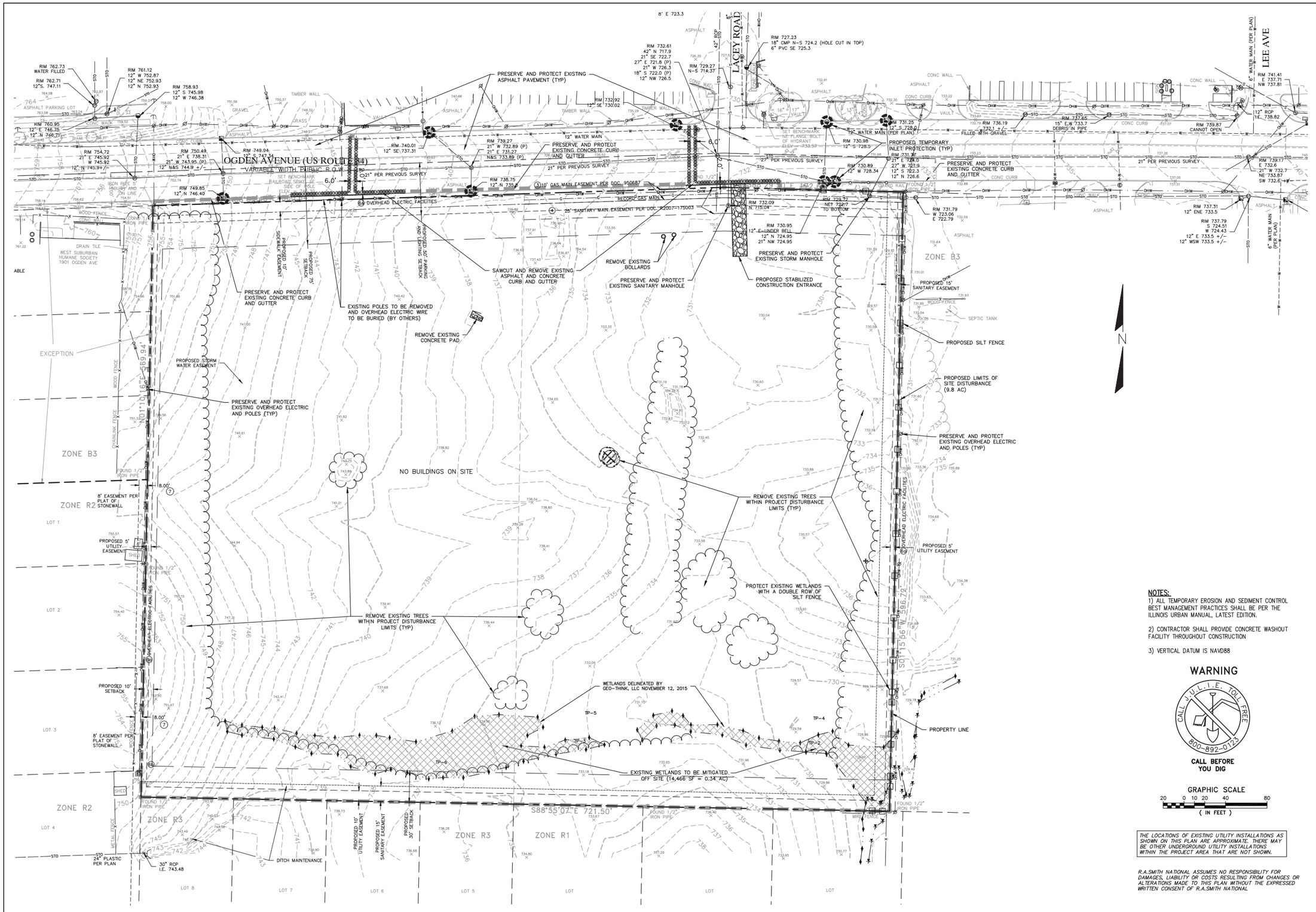
UTILITY PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 06–10–16
SCALE: 1"=40'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: KLL
CHECKED BY: RTP

SHEET NUMBER
C400

P:\3150545\Dwg\Sheets\UP00104D.dwg, Utility Plan, 6/27/2016 9:43:45 AM, rtp



NOTES:
1) ALL TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES SHALL BE PER THE ILLINOIS URBAN MANUAL, LATEST EDITION.

2) CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT FACILITY THROUGHOUT CONSTRUCTION

3) VERTICAL DATUM IS NAVD88

WARNING

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CALL BEFORE YOU DIG

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(IN FEET)

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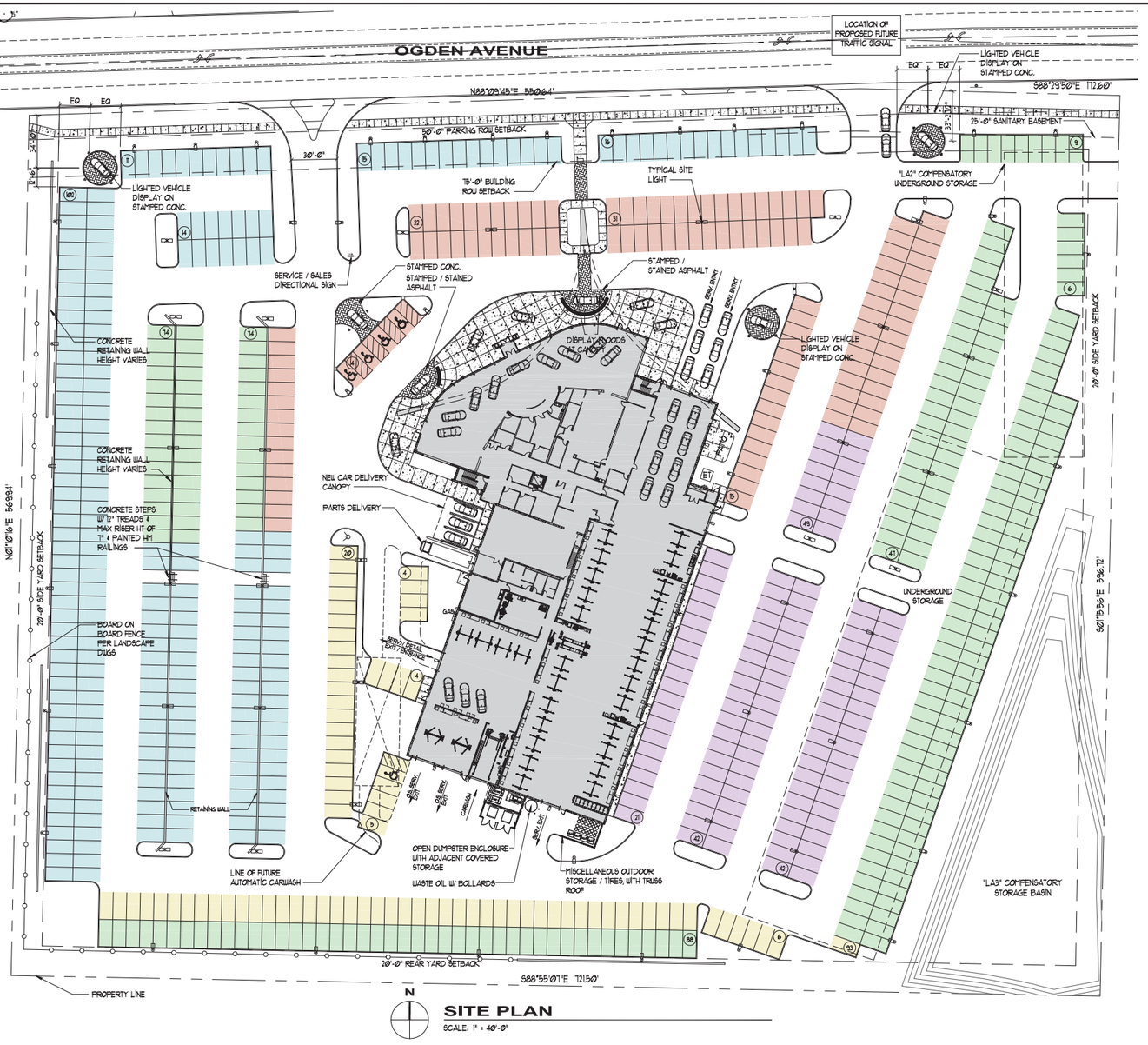
PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

DEMOLITION & INITIAL EROSION CONTROL PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: **06-10-16**
SCALE: **1"=40'**
JOB NO. **3150545**
PROJECT MANAGER: **DAVID CLEARY, P.E.**
DESIGNED BY: **KLL**
CHECKED BY: **RTP**

SHEET NUMBER
C100



SITE PLAN

SCALE: 1" = 40'-0"

ZONING ANALYSIS					
ADDRESS	1815 OGDEN AVENUE				
PIN	09-06-304-013 & 09-06-304-014				
ZONING DISTRICT	B-3 GENERAL SERVICE & HIGHWAY BUSINESS DISTRICT				
EXISTING USE	VACANT LAND				
PROPOSED USE	COMMERCIAL - AUTOMOBILE DEALERSHIP				
PETITION TYPE	PUD- PLANNED UNIT DEVELOPMENT				
REQUIREMENT	FACTOR	REQUIRED	PROVIDED	MEETS REQ	DIFFERENCE
LOT FRONTAGE			1232.4'		
LOT AREA			9.73 ACRES (423,921 SQ FT)		
STREET YARD					
BUILDING	MINIMUM	75' (FROM ROW)	104'	YES	+ 29'
PARKING / DISPLAY	MINIMUM	50'	60'	YES	+ 10'
REAR YARD					
BUILDING	MINIMUM	20' + 8' = 28'	101.5'	YES	+ 73.5'
PARKING / DISPLAY	MINIMUM	20'	20'	YES	+ 0'
SIDE YARD					
BUILDING	MINIMUM	10' + 8' = 18'	258.1'	YES	+ 240.1'
PARKING / DISPLAY	MINIMUM	10'	20'	YES	+ 10'
HEIGHT	MAXIMUM	60'	27.58'	YES	- 24'
OPEN SPACE	MINIMUM	10%	22.19%	YES	+ 12.19%
FAR	MAXIMUM	.75	10013	YES	- 6421
PARKING (CUSTOMER)					
REQUIRED					
PER SHOWROOM AREA & SERVICE STALL QTY	(2 / 10000 SQ FT OF SHOWROOM AREA) + (2 / PERSONAL VEHICLE SERVICE STALL) + (1 / COMMERCIAL VEHICLE STALL) [(12276 SQ FT / 10000 SQ FT) x 2] + [29 x 2) + (2 x 1) = (25 + 58 + 2) = 85 SPACES				
PER VEHICLE DISPLAY AREA	(VEHICLE DISPLAY AREA / 1000 SF) x .4 VEHICLE DISPLAY AREA = 813 TOTAL SPACES = (121 SERVICE + 84 EMPLOYEE + 85 CUSTOMER) = 525 SPACES 525 SPACES = [(9 FT x 18 FT) x 525 SPACES] = 85,050 SQ FT - - - [(85,050 SQ FT / 10000 SQ FT) x .4] = 35 SPACES				
	TOTAL REQUIRED PARKING = (85 SPACES + 35 SPACES) = 120 SPACES				
PROVIDED			PARKING LEGEND		
	SERVICE PARKING :	121	SERVICE PARKING		
	EMPLOYEE PARKING :	84	EMPLOYEE PARKING		
	USED VEHICLE PARKING :	245	USED VEHICLE PARKING		
	NEW VEHICLE PARKING :	245	NEW VEHICLE PARKING		
	REQ'D CUSTOMER PARKING :	120 (5 ADA)	REQ'D CUSTOMER PARKING		
	TOTAL PARKING SPACES :	815			

charles vincent george ARCHITECTS

1245 E. Diehl Rd. Suite 101
Naperville, Illinois 60563
P | 630.357.2023 F | 630.357.2662
cvgarchitects.com

STAMP:

EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO: 184-000544

DATE: _____

ISSUE AND/OR REVISIONS:

NO.	DATE	DESCRIPTION
	01/25/2016	PLAN COMMISSION SUBMITTAL
	03/01/2016	PLAN COMMISSION REVIEW
	06/10/2016	PLAN COMMISSION RESUBMITTAL
	06/28/2016	PLAN COMMISSION REVIEW

PROJECT:

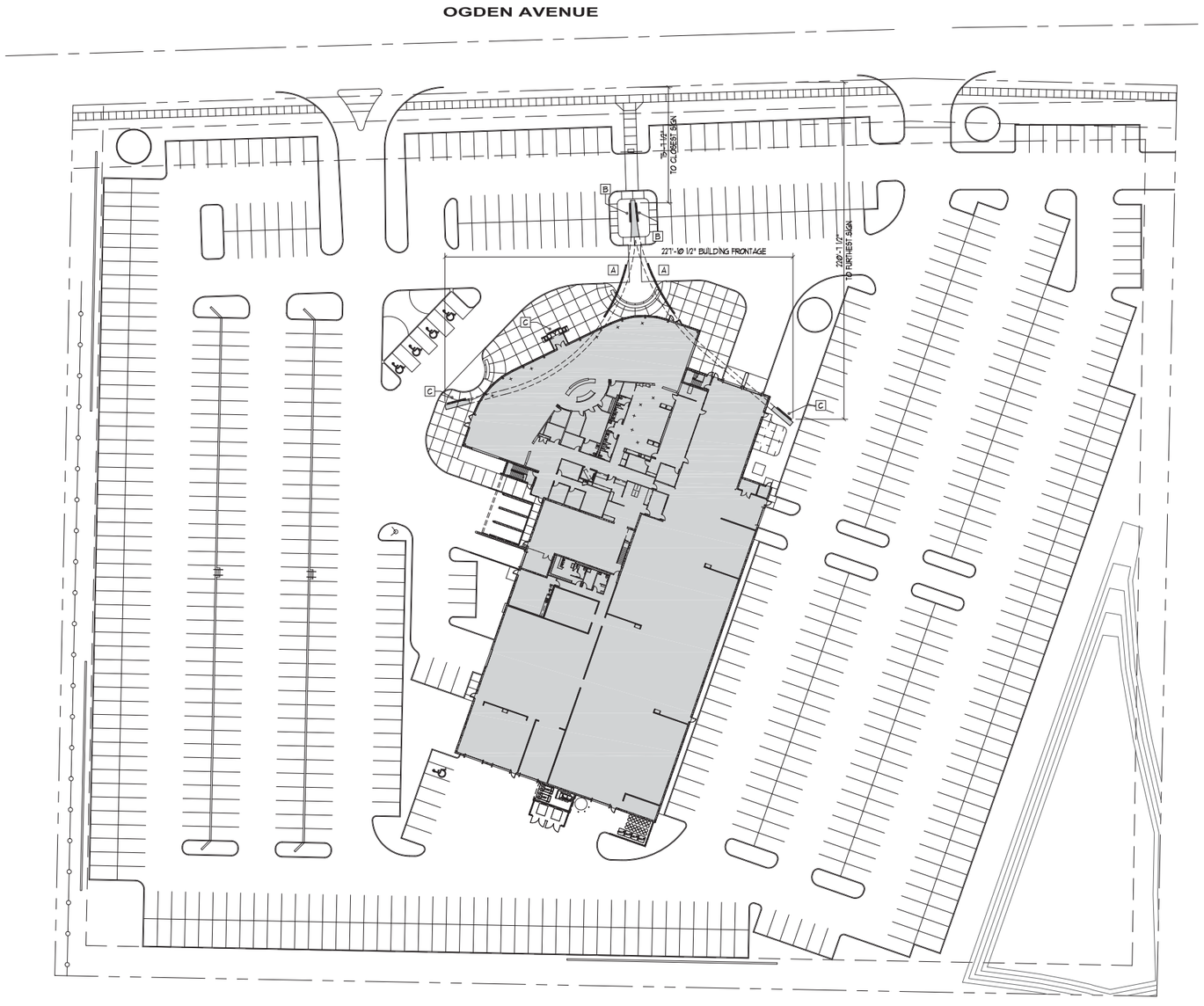
A NEW AUTOMOBILE DEALERSHIP FOR:

PACKEY WEBB FORD

1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

TITLE:
SITE PLAN

DATE:	PROJECT #
01/29/2016	2015-082
PRINCIPAL: BFG	SHEET:
PROJECT MGR: JBL / DRAWN BY: FJD	A1
DRAWING FILE PATH: W:/2015 JOBS/082/DRAW/	



SIGNAGE PLAN

SCALE: 1" = 40'-0"

3'-8"

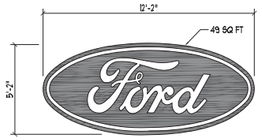
113 SQ FT

3'-0"

PACKEY WEBB

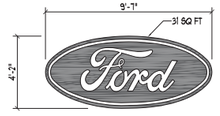
A "LETTER" WALL SIGN - 113 SQ FT

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



B "LOGO" WALL SIGN - 49 SQ FT

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



C "LOGO" WALL SIGN - 31 SQ FT

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

SIGNAGE TABLE

SIGN TYPE	DESIGNATION	AREA
LETTER WALL SIGN	A	113 SQ FT
LETTER WALL SIGN	A	113 SQ FT
LOGO WALL SIGN	B	49 SQ FT
LOGO WALL SIGN	B	49 SQ FT
LOGO WALL SIGN	C	31 SQ FT
LOGO WALL SIGN	C	31 SQ FT
LOGO WALL SIGN	C	31 SQ FT
TOTAL SIGN AREA PROVIDED :		417 SQ. FT.

charles vincent george
ARCHITECTS
1245 E. Diehl Rd. Suite 101
Naperville, Illinois 60563
P | 630.357.2023 F | 630.357.2662
cvgarchitects.com

STAMP:

EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO: 184-000544

DATE:

ISSUE AND/OR REVISIONS:

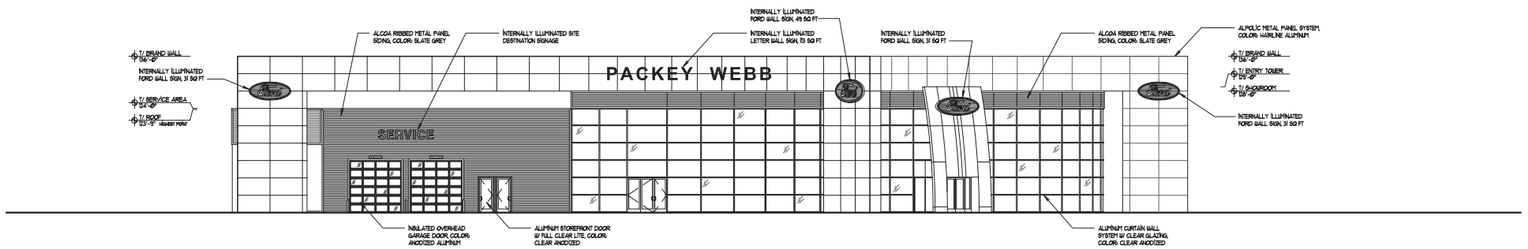
NO.	DATE	DESCRIPTION
	01/29/2016	PLAN COMMISSION SUBMITTAL
	03/01/2016	PLAN COMMISSION REVIEW
	06/10/2016	PLAN COMMISSION RESUBMITTAL

PROJECT:

A NEW AUTOMOBILE DEALERSHIP FOR:
PACKEY WEBB FORD
1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

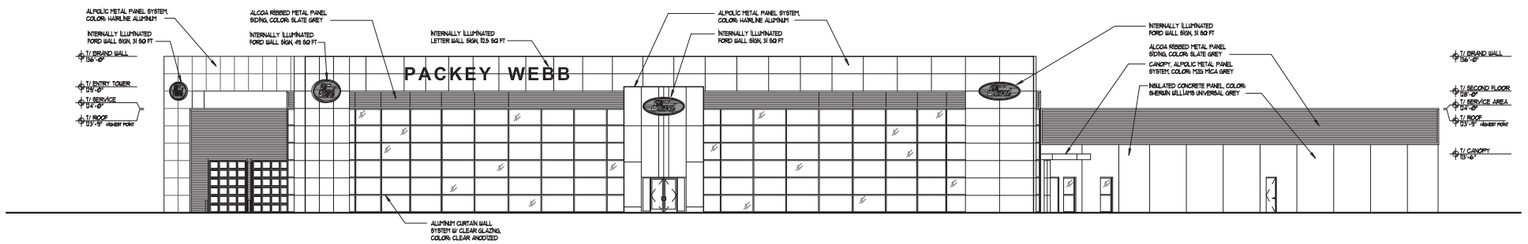
TITLE:
SIGN PLAN

DATE: 01/29/2016
PROJECT # 2015-082
PRINCIPAL: BFG
PROJECT MGR: JBL
DRAWN BY: FJD
DRAWING FILE PATH: M:/2015 JOBS/082/DRAW/
SHEET: A2



NORTH ELEVATION

SCALE: 1" = 16'-0"



NORTHWEST ELEVATION

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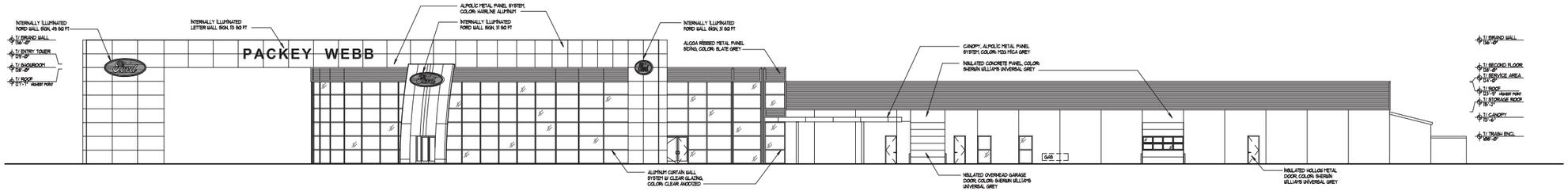

WEST ELEVATION

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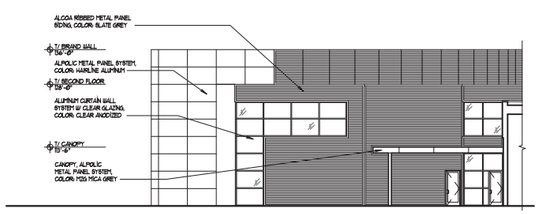
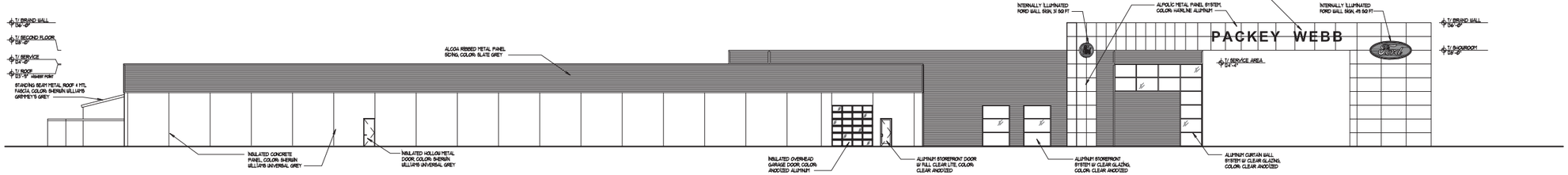


PARTIAL SOUTH ELEVATION

SCALE: 1" = 16'-0"

SOUTH ELEVATION

SCALE: 1" = 16'-0"



EAST ELEVATION

SCALE: 1" = 16'-0"

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cvgarchitects.com

STAMP:

EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO: 184-000544

DATE: _____

ISSUE AND/OR REVISIONS:

NO.	DATE	DESCRIPTION
	01/25/2016	PLAN COMMISSION SUBMITTAL
	03/01/2016	PLAN COMMISSION REVIEW
	06/10/2016	PLAN COMMISSION RESUBMITTAL

PROJECT:

A NEW AUTOMOBILE DEALERSHIP FOR:

PACKEY WEBB FORD

1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

TITLE:
EXTERIOR ELEVATIONS

DATE:	PROJECT #
01/29/2016	2015-082

PRINCIPAL:	SHEET:
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PROJECT MGR: JBL / DRAWN BY: FJD	
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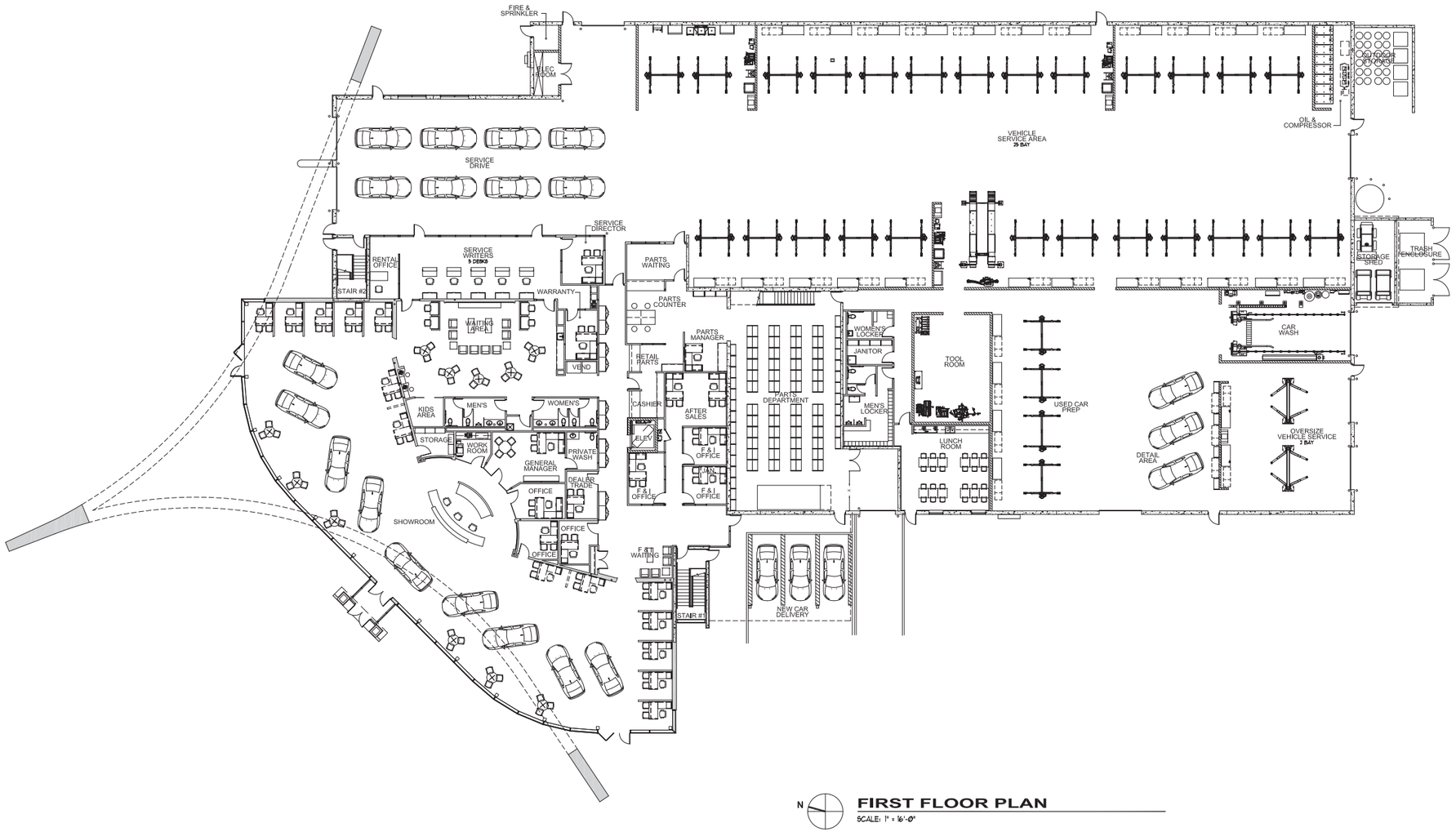

N

FIRST FLOOR PLAN

SCALE: 1" = 16'-0"

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EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO: 184-000544

DATE: _____

ISSUE AND/OR REVISIONS:

NO.	DATE	DESCRIPTION
	01/29/2016	PLAN COMMISSION SUBMITTAL
	03/01/2016	PLAN COMMISSION REVIEW
	06/10/2016	PLAN COMMISSION RESUBMITTAL

PROJECT:

A NEW AUTOMOBILE DEALERSHIP FOR:

PACKEY WEBB FORD

1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

TITLE:
FIRST FLOOR PLAN

DATE:	PROJECT #
01/29/2016	2015-082

PRINCIPAL: BFG
PROJECT MGR: JBL
DRAWN BY: FJD
DRAWING FILE PATH: M:/2015 JOBS/082/DRAW/
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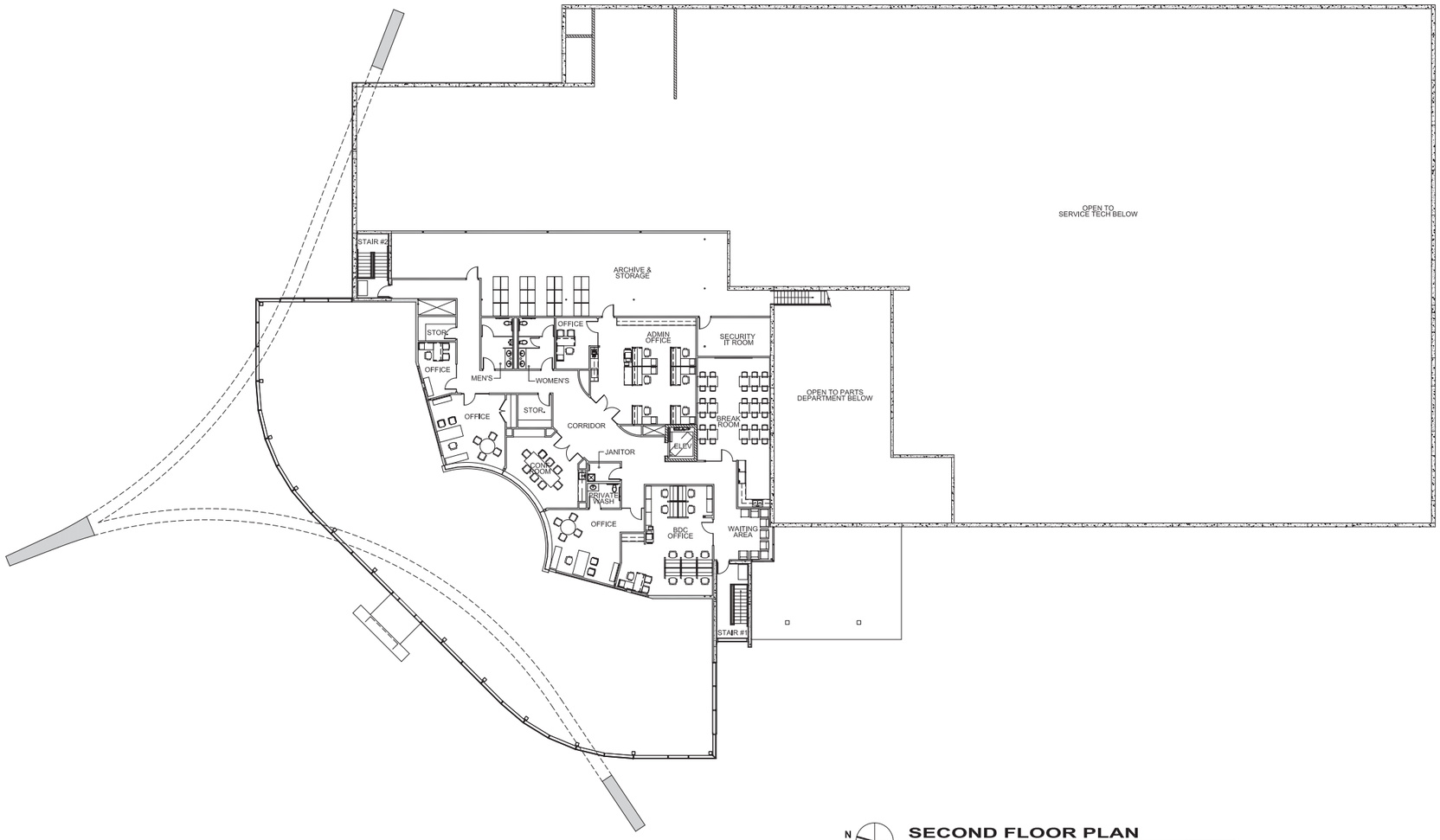

N

SECOND FLOOR PLAN

SCALE: 1" = 16'-0"

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STAMP:

EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO: 184-000544

DATE: _____

ISSUE AND/OR REVISIONS:

NO.	DATE	DESCRIPTION
	01/29/2016	PLAN COMMISSION SUBMITTAL
	03/01/2016	PLAN COMMISSION REVIEW
	06/10/2016	PLAN COMMISSION RESUBMITTAL

PROJECT:

A NEW AUTOMOBILE DEALERSHIP FOR:

PACKEY WEBB FORD

1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

TITLE:
SECOND FLOOR PLAN

DATE:	PROJECT #
01/29/2016	2015-082

PRINCIPAL: BFG
PROJECT MGR: JBL
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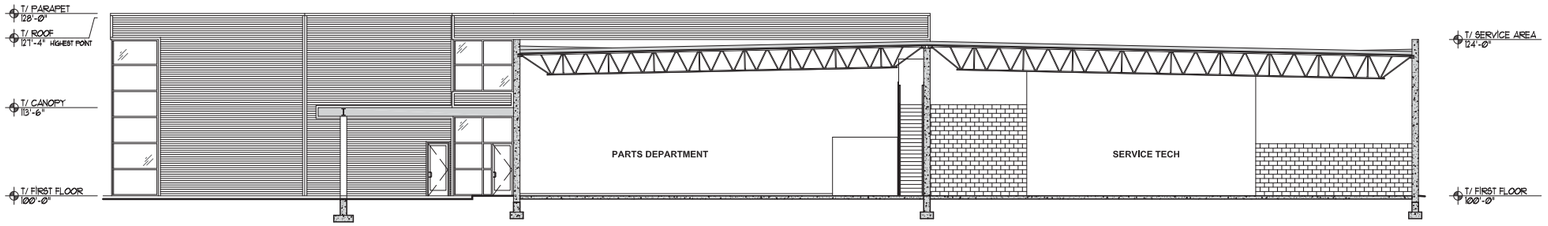
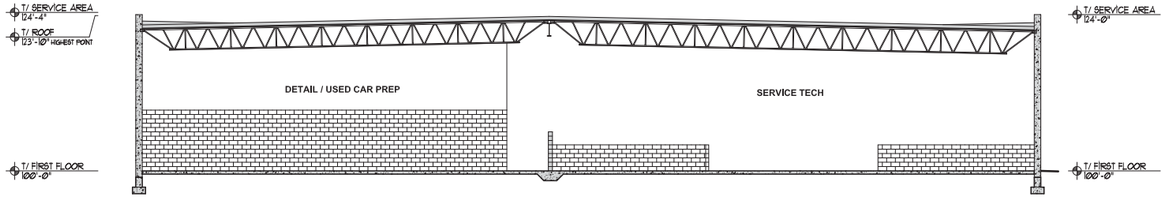


A BUILDING SECTION

SCALE: 3/32" = 1'-0"



B BUILDING SECTION

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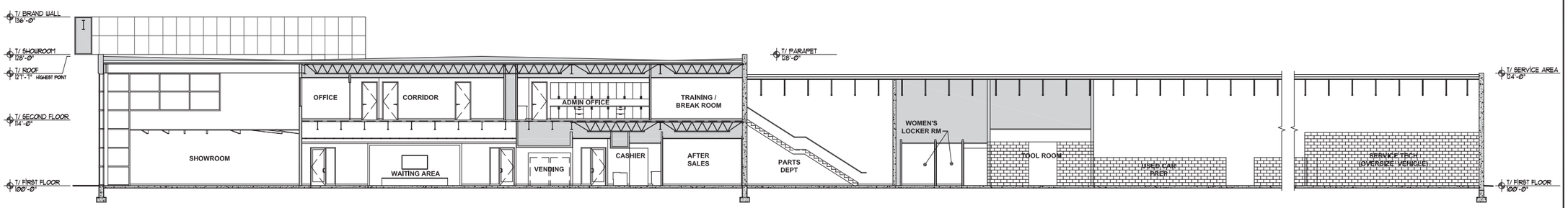

C BUILDING SECTION

SCALE: 3/32" = 1'-0"

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EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO.: 184-000544

DATE: _____

ISSUE AND/OR REVISIONS:

NO.	DATE	DESCRIPTION
	01/29/2016	PLAN COMMISSION SUBMITTAL
	03/01/2016	PLAN COMMISSION REVIEW
	06/10/2016	PLAN COMMISSION RESUBMITTAL

PROJECT:

A NEW AUTOMOBILE DEALERSHIP FOR:

PACKEY WEBB FORD

1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

TITLE:
BUILDING SECTIONS

DATE:	PROJECT #
01/29/2016	2015-082

PRINCIPAL: BFG
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PROJECT MGR: JBL
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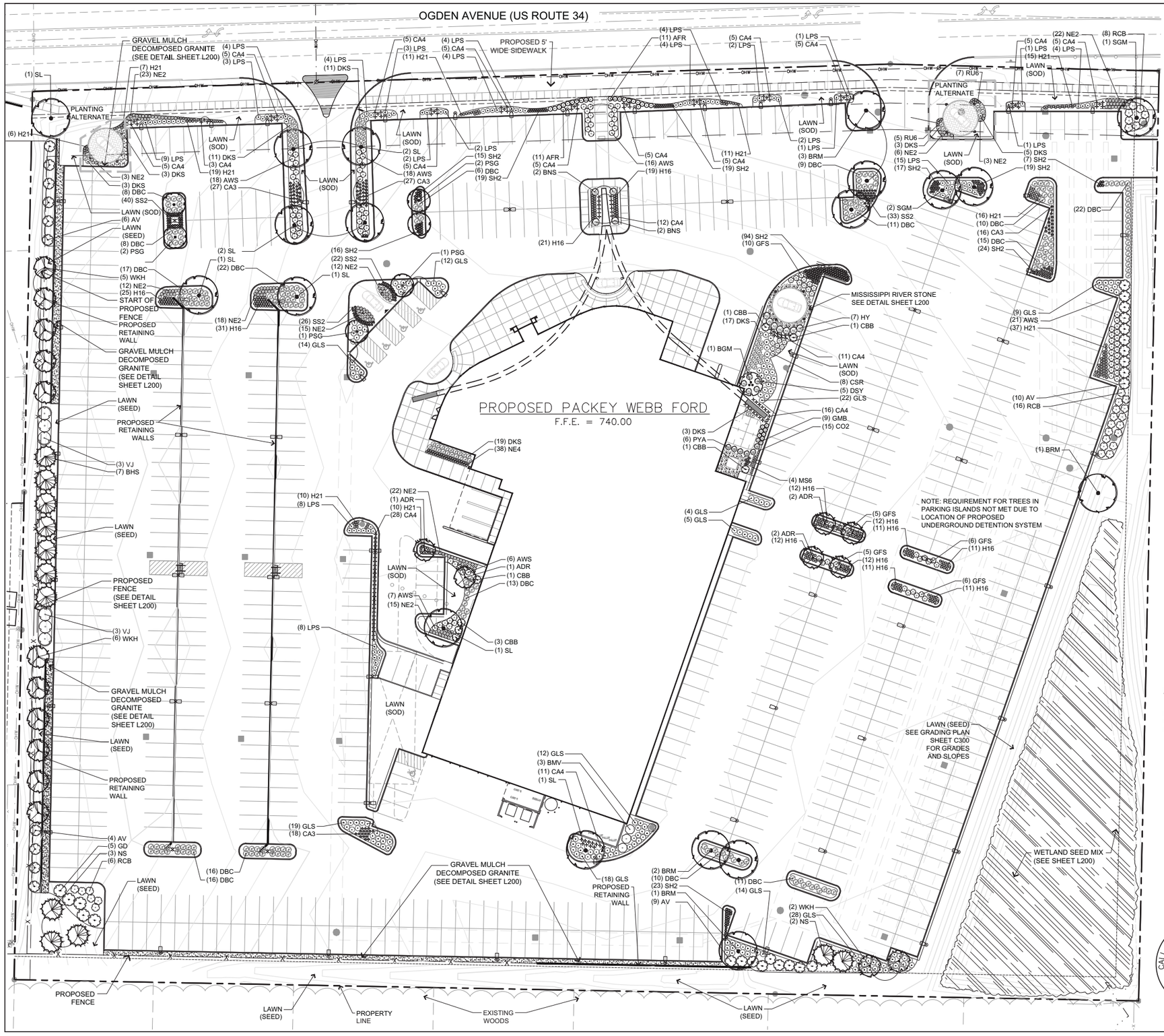


PLANT SCHEDULE

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
BRM	7	Brandywine Red Maple	Acer rubrum 'Brandywine'	2 1/2" CAL	B&B	Full, matching heads
SGM	3	Sienna Glen Maple	Acer x freemanii 'Sienna'	2 1/2" CAL	B&B	Full, matching heads
PSG	6	Princeton Sentry Ginkgo	Ginkgo biloba 'Princeton Sentry'	2 1/2" CAL	B&B	Full, matching heads
SL	9	Skyline Honey Locust	Gleditsia triacanthos 'Skyline'	2 1/2" CAL	B&B	Full, matching heads
EVERGREEN TREES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
NS	5	Norway Spruce	Picea abies	6' HT	B&B	Semi-sheared, fully branched to ground
BHS	7	Black Hills Spruce	Picea glauca 'Densata'	6' HT	B&B	Semi-sheared, fully branched to ground
PYA	6	Pyramidal Arborvitae	Thuja occidentalis 'Fastigiata'	5' HT	B&B	Semi-sheared, fully branched to ground
ORNAMENTAL TREES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
BGM	1	Bloodgood Japanese Maple	Acer palmatum 'Bloodgood'	7' HT	B&B	Clump, min, 3 stems
WKH	13	'Winter King' Hawthorn	Crataegus viridis 'Winter King'	1 1/2" CAL	B&B	Full, matching heads
ADR	6	Adirondack Crab Apple	Malus x 'Adirondack'	1 1/2" CAL	B&B	Full, matching heads
DECIDUOUS SHRUBS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
RCB	30	Brilliant Red Chokeberry	Aronia arbutifolia 'Brilliantissima'	24" HT	CONT.	
GD	5	Gray Dogwood	Cornus racemosa	3' HT	CONT.	
DBC	194	Cool Splash Fatse Honeysuckle	Diervilla sessilifolia 'Cool Splash'	18" HT	CONT.	
CBB	7	Compact Burning Bush	Euonymus alatus 'Compactus'	3' HT	CONT.	
GLS	157	Gro-Low Fragrant Sumac	Rhus aromatica 'Gro-Low	18" HT	CONT.	
CSR	8	Carefree Sunshine Shrub Rose	Rosa shrub 'Carefree Sunshine'	15" HT	CONT.	
DKS	61	Double Red Knock Out Shrub Rose	Rosa shrub 'Double Red Knock Out'	15" HT	CONT.	
AFR	22	Amber Flower Carpet Rose	Rosa x 'Flower Carpet Amber'	15" HT	CONT.	
AWS	86	Anthony Waterer Spiraea	Spiraea x bumalda 'Anthony Waterer'	18" HT	CONT.	
GFS	32	Goldflame Spirea	Spiraea x bumalda 'Goldflame'	15" HT	CONT.	
LPS	86	Little Princess Spirea	Spiraea x japonica 'Little Princess'	18" HT	CONT.	
AV	29	Arrowwood Viburnum	Viburnum dentatum	3' HT	B&B	
BMV	3	Blue Muffin Arrowwood	Viburnum dentatum 'Blue Muffin'	3' HT	B&B	
VJ	6	Judd Viburnum	Viburnum x juddii	4' HT	B&B	
EVERGREEN SHRUBS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
GMB	9	Green Mountain Boxwood	Buxus x 'Green Mountain'	24" HT	B&B	
BNS	4	Bird's Nest Spruce	Picea abies 'Nidiformis'	24" SPD	B&B	
DSY	5	Dense Yew	Taxus x media 'Densiformis'	18"SPD	CONT.	
HY	7	Hicks Yew	Taxus x media 'Hicksii'	36" SPD	B&B	
ORNAMENTAL GRASSES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
CA4	141	Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 GAL.	POT	30" Spacing
CA3	88	Overdam Feather Reed Grass	Calamagrostis x acutiflora 'Overdam'	1 GAL.	POT	24" Spacing
MS6	4	Morning Light Silver Grass	Miscanthus sinensis 'Morning Light'	1 GAL.	POT	36" Spacing
SS2	121	Carousel Little Bluestem	Schizachyrium scoparium 'Carousel'	1 GAL.	POT	18" Spacing
SH2	253	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	1 GAL.	POT	15" Spacing
PERENNIALS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
CO2	15	Zagreb Coreopsis	Coreopsis verticillata 'Zagreb'	4 1/2"	POT	15" Spacing
H16	188	Pardon Me Daylily	Hemerocallis x 'Pardon Me'	4 1/2"	POT	18" Spacing
H21	129	Stella de Oro Daylily	Hemerocallis x 'Stella de Oro'	4 1/2"	POT	18" Spacing
NE4	38	Kit Kat Catmint	Nepeta x faassenii 'Kit Kat'	4 1/2"	POT	18" Spacing
NE2	139	Walkers Low Catmint	Nepeta x faassenii 'Walkers Low'	4 1/2"	POT	24" Spacing

PLANT SCHEDULE - ALTERNATE

DECIDUOUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
DKS	14	Double Red Knock Out Shrub Rose	Rosa shrub 'Double Red Knock Out'	15" HT	CONT.	
PERENNIALS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
H21	13	Stella de Oro Daylily	Hemerocallis x 'Stella de Oro'	4 1/2"	POT	18" Spacing
NE2	12	Walkers Low Catmint	Nepeta x faassenii 'Walkers Low'	4 1/2"	POT	24" Spacing
RU6	12	Goldstrum Black-eyed Susan	Rudbeckia fulgida 'Goldsturm'	4 1/2"	POT	18" Spacing

MISSISSIPPI RIVER STONE
3" DEPTH
-

DECOMPOSED GRANITE
3" DEPTH
-

LANDSCAPE CALCULATIONS

Street Yard
Parking Lot Perimeter: 723 LF
Required: 75% landscape (543 LF)
Provided: 63% landscape (452 LF)

Trees along Ogden Ave: 5

Interior Yard
West Parking Lot Perimeter: 570 LF
Required: 50% landscape (285 LF)
Provided: 92% landscape (522 LF)

South Parking Lot Perimeter: 725 LF
Required: 50% landscape (363 LF)
Provided: 34% landscape (244 LF)
45% 327 LF of 6' HT. fence

East Parking Lot Perimeter: 597 LF
Required: 50% landscape (299 LF)
Provided: 34% landscape (201 LF)

TOTAL PROPOSED LANDSCAPE AREA	94,578 SF
TOTAL PROPOSED LANDSCAPE RATIO	22.31%
PROPOSED LANDSCAPE AREA ALONG OGDEN	15,926 SF

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

WARNING
CALL J.U.L.I.E. TOLL FREE 800-892-0123
CALL BEFORE YOU DIG

R.A.SMITH NATIONAL ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A.SMITH NATIONAL

0 15 30 60
GRAPHIC SCALE

NORTH

DESCRIPTION | DATE

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield, WI 53005-5938
262-781-1000 Fax 262-781-8466, www.rasmithnational.com
Appleton, WI Madison, WI Naperville (Chicago), IL Irvine, CA Oakmount (Pittsburgh), PA

PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

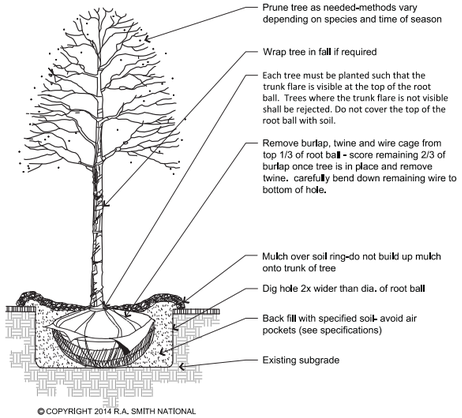
LANDSCAPE PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 06-10-16
SCALE: 1"=30'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: CNS
CHECKED BY: CNS

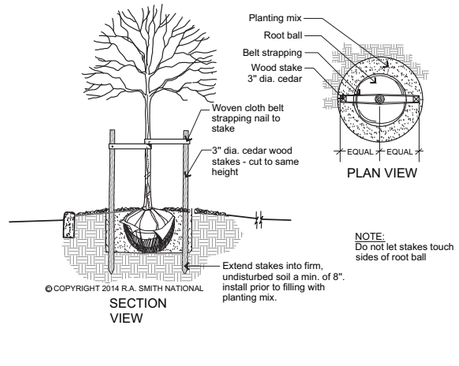
SHEET NUMBER
L100

P:\3150545\Dwg\Sheets\LSP01D30.dwg, Landscape Plan, 6/27/2016 11:36:50 AM, rjp



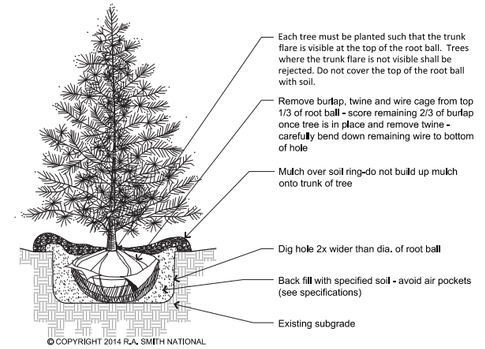
1 DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE



2 DECIDUOUS TREE STAKING FOR RESTRICTED AREAS

NOT TO SCALE P-PL-TREE-DEC-01



3 EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

4 EVERGREEN STAKING DETAIL

NOT TO SCALE P-PL-TREE-EVER-02

5 SHRUB PLANTING DETAIL

NOT TO SCALE P-PL-SHR-02

6 PLANTING LAYOUT

NOT TO SCALE P-PL-PLO-04

GENERAL LANDSCAPE NOTES

1. Contractor responsible for contacting J.U.L.I.E. at 800-892-0123 to have site marked prior to any digging or earthwork.
2. Contractor to verify all plant quantities shown on plant list and verify with plan. Report any discrepancies immediately to general contractor.
3. All plantings shall comply with standards as described in American Standard of Nursery Stock - ANSI Z60.1 (latest version). General contractor or owner's representative reserves the right to inspect and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged.
4. Any potential plant substitutions must be submitted in writing and approved by the general contractor or owner's representative prior to installation. All plants must be installed as per sizes shown on plant material schedule, unless approved by general contractor or owner's representative.
5. Topsoil should be placed to within 3" of finish grade by general / grading contractor during rough grading operations. All parking lot islands to be backfilled with topsoil to a minimum depth of 18" and crown all planting islands a minimum of 6" to provide proper drainage (unless otherwise specified) by grading contractor to insure long term plant health. .
6. The landscape contractor to be responsible for the fine grading of all landscaped areas. A minimum depth of 3" of blended, prepared and non-compacted topsoil is required for all seeded areas. Finished landscaped areas to be smooth, uniform and provide positive drainage away from all structures and pavement.
7. Tree planting (see planting detail):
   Plant all trees slightly higher than finished grade at root flare. Remove excess soil from top of root ball, if needed.Scarify side walls of tree pit prior to installation. Remove and discard non-biodegradable ball wrapping and support wire. Remove biodegradable burlap and wire cage (if applicable) from top one-third of rootball. Carefully bend remaining wire down to the bottom of hole once the tree has been placed into the hole and will no longer be moved. Score the remaining two-thirds of burlap and remove twine. Backfill pit with 80% existing soil removed from excavation and 20% plant starter mix blended prior to backfilling holes. Discard any gravel, heavy clay or stones. Avoid any air pockets and do not tamp soil down. When hole is two-thirds full, trees shall be watered thoroughly, and water left to soak in before proceeding.
   Provide a 3" deep, 4 ft. diameter shredded hardwood bark mulch ring around all lawn trees. Do not build up any mulch onto trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the landscape contractor. Stake trees according to the staking detail.
8. Shrub planting: all shrubs to be pocket planted with a 50/50 mix of plant starter and topsoil. Install topsoil into all plant beds as needed to achieve proper grade and replace undesirable soil (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole is two-thirds full, shrubs shall be watered thoroughly and water left to soak in before proceeding.
9. Mulching: all tree and shrub planting beds to receive a 3" deep layer of high quality shredded hardwood bark mulch (not enviromulch). All perennial planting areas to receive a 2" layer and groundcover areas a 1-2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.
10. Edging: edge all planting beds with a 4" deep spaded edge (shovel cut or mechanical). Bedlines are to be cut crisp, as per plan. A clean definition between lawn area and plant bed is required.
11. Plant bed preparation: all perennial, ornamental grass, annual and groundcover areas are required to receive a blend of organic soil amendments prior to installation. Rototill the following materials, at the following ratio, into required topsoil to a depth of approx. 8" -

    Per every 100 square feet of bed area add:

    2 cu. ft. bale of peat moss
    2 lbs. of 5-10-5 slow release fertilizer
    1/4 cu. yard of composted manure
12. Lawn installation for all seeded turfgrass areas: remove / kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil and seed bed by removing all surface stones 1" or larger and grading lawn areas to finish grade. Apply a starter fertilizer and specified seed uniformly and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer mix information to general contractor prior to installation. Erosion control measures are to be used in swales and on steep grades, where applicable. Methods of installation may vary at the discretion of the landscape contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum depth of 3" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind damage. Marsh hay containing reed canary grass is not acceptable as a mulch covering.

    An acceptable quality turf is defined as having no more than 10% of the total area with bare spots larger than 1 square foot and uniform coverage throughout all turf areas
13. Seed mix for lawn areas - use only a premium quality seed mix installed at recommended rates. Premium blend seed mix example (or equivalent): 50% blended bluegrass, 25% creeping red fescue, 25% perennial rye applied at 5 lbs per 1,000 SF. Provide seed specifications to general contractor prior to installation.
14. Lawn installation for all sodded turfgrass areas: remove / kill off any existing unwanted vegetation prior to sodding. Prepare the topsoil and sod bed by removing all surface stones 1" or larger and grading lawn areas to finish grade. Apply a 10-10-10 starter fertilizer uniformly throughout areas prior to laying the sod. Use only premium sod blend according to TPI (revised 1995) and ASPA standards. Install sod uniformly with staggered joints, laid tightly end to end and side to side. Roll sod with a walk behind roller and water immediately upon installation to a 3" depth. Stake any sod installed on steep slopes or in swales, etc. Landscape contractor is responsible to provide a smooth, uniform, healthy turf, and is responsible for the first two mowings of the newly installed turf, and is also responsible for the required watering during this period.
15. Seed mix for wetland areas: Detention Basin/Bio-Swale Mix available at Prairie Nursery - 608-296-3679 or equivalent mix from a reputable supplier. Apply at 10 lbs per acre (.25 lbs. per 1000 SF) or at recommended rates from supplier. Preparation of soil to be the same as for all other seeded turfgrass areas.
16. Warranty and replacements: Trees, evergreens, and shrubs to be guaranteed (100% replacement) for a minimum of one (1) year from the date of substantial project completion. Perennials, groundcovers, and ornamental grasses to be guaranteed for a minimum of one growing season from the date of substantial project completion. Perennials, groundcovers, and ornamental grasses planted after September 1st shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements.
17. The landscape contractor is responsible for the watering and maintenance of all landscape areas at time of planting, throughout construction and for a period of 60 days after the substantial completion of the installation. This includes all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, meadow grass and wildflower areas. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.
18. Project completion: upon substantial completion of the project, the landscape contractor is responsible to conduct a final review with the owner's representative and the general contractor to answer questions and insure that all specifications have been met. The landscape contractor is to provide watering and general ongoing maintenance instructions (in writing) for the new plantings and lawn to the owner and general contractor .

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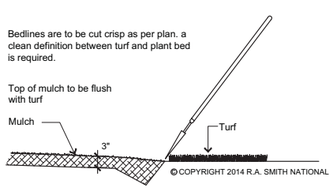
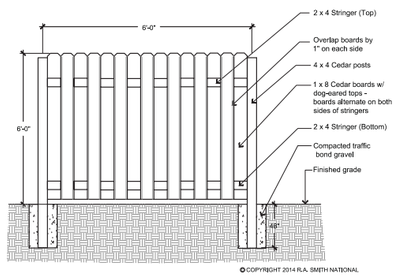


7 SHOVEL CUT PLANT BED EDGING DETAIL

NOT TO SCALE P-PL-BDEG-01



8 BOARD-ON-BOARD CEDAR FENCE DETAIL

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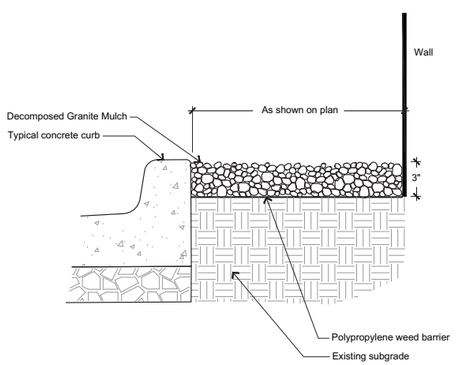
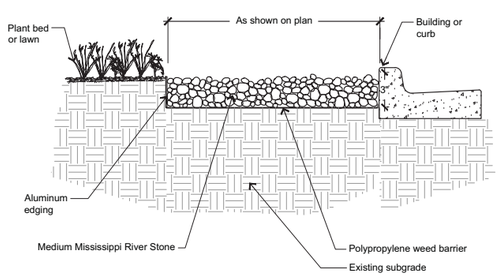


9 GRAVEL MULCH DETAIL

NOT TO SCALE



10 GRAVEL DETAIL

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WARNING

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DESCRIPTION	DATE

PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

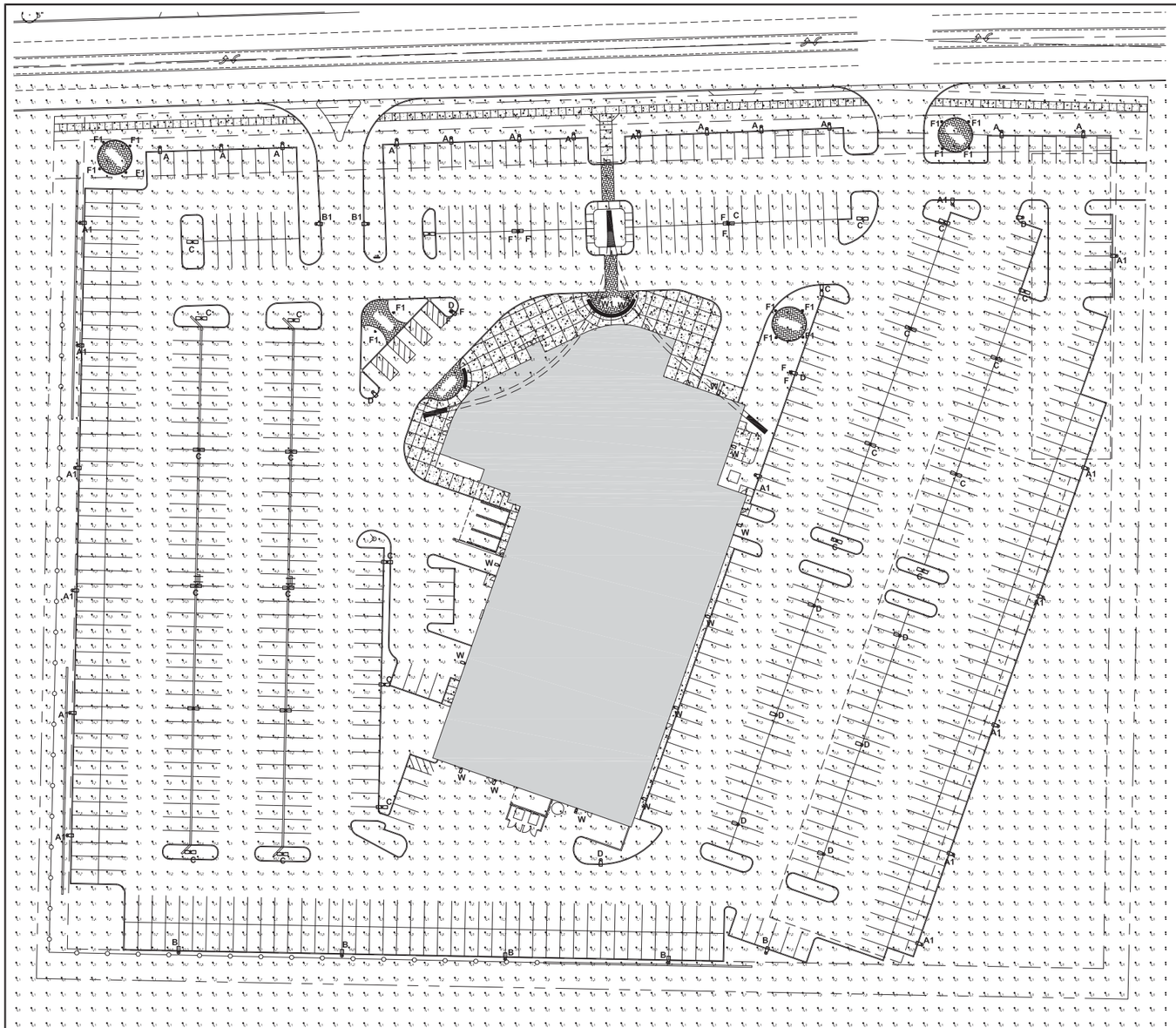
LANDSCAPE
NOTES AND DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

DATE: 06-10-16
SCALE: 1"=30'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: CNS
CHECKED BY: CNS

SHEET NUMBER
L200

P:\3150545\Dwg\Sheets\LSP01D30.dwg, Landscape Notes & Details, 6/8/2016 5:38:36 PM, nip



N

PHOTOMETRIC PLAN

SCALE: 1" = 40'-0"

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts@4' above grade	Illuminance	Fc	9.98	77.7	0.0	N.A.	N.A.
PROPERTY LINE	Illuminance	Fc	1.21	4.4	0.0	N.A.	N.A.
TYPICAL FRONT ROW	Illuminance	Fc	46.90	77.7	21.7	2.16	3.58
TYPICAL INTERIOR ROW EAST	Illuminance	Fc	11.92	51.9	1.2	9.93	43.25
TYPICAL INTERIOR ROW NORTH	Illuminance	Fc	15.05	41.8	4.9	3.07	8.53
TYPICAL INTERIOR ROW WEST	Illuminance	Fc	11.34	49.0	4.6	2.47	10.65

Luminaire Schedule									
Symbol	Qty	Label	Mounting Ht	Arrangement	Description	LLF	Lumens/Lamp	Arr. Lum. Lumens	Arr. Watts
	13	A	25	SINGLE	XLCL-FTA-LED-HO-CW-HSS-SINGLE-25' MH	1.000	N.A.	55388	532.5
	14	A1	25	SINGLE	XLCL-FT-LED-HO-CW-SINGLE-25' MH	1.000	N.A.	57320	544.8
	5	B	25	SINGLE	XLCL-3-LED-HO-CW-SINGLE-25' MH	1.000	N.A.	53365	544.8
	2	B1	25	SINGLE	XLCM-3-LED-HO-CW-SINGLE-25' MH	1.000	N.A.	27493	270.1
	27	C	25	D180°	XLCM-5-LED-HO-CW-D180-25' MH	1.000	N.A.	62284	552.8
	11	D	25	SINGLE	XLCL-5-LED-HO-CW-SINGLE-25' MH	1.000	N.A.	59153	546.8
	8	F	18	SINGLE	SAFL-400-40D-LED-5K-18' MH	1.000	N.A.	44926	445.8
	14	F1	Ground	SINGLE	XFLM-MF-LED-49-HO-CW-UE-GROUND MOUNTED	1.000	N.A.	6570	64
	11	W	15	SINGLE	XLCS-FT-LED-HO-CW-WALL MOUNT-15' MH	1.000	N.A.	15535	138.6
	2	W1	28	SINGLE	XLCS-FT-LED-HO-CW-WALL MOUNT-28' MH	1.000	N.A.	15535	138.6

10000 ALLIANCE RD. CINCINNATI, OHIO 45242 USA
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Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

charles vincent george
ARCHITECTS

1245 E. Diehl Rd. Suite 101
Naperville, Illinois 60563
P | 630.357.2023 F | 630.357.2662
cvgarchitects.com

STAMP:

EXPIRES 11/30/2016
IL ARCHITECTURAL DESIGN FIRM NO: 184-000544

DATE: _____

ISSUE AND/OR REVISIONS:

NO.	DATE	DESCRIPTION
	01/25/2016	PLAN COMMISSION SUBMITTAL
	06/10/2016	PLAN COMMISSION RESUBMITTAL

PROJECT:

A NEW AUTOMOBILE DEALERSHIP FOR:

PACKEY WEBB FORD

1815 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS 60515

TITLE:
PHOTOMETRIC PLAN

DATE: 01/29/2016
PROJECT # 2015-082
PRINCIPAL: BFG
SHEET: SPH1
PROJECT MGR: JBL
DRAWN BY: FJD
DRAWING FILE PATH: W:/2015 JOBS/082/DRAW/

Traffic Impact Study
Packey Webb Ford Auto Dealership
Downers Grove, Illinois

Prepared by

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

February 17, 2016
Revised July 6, 2016

Introduction

This report summarizes the methodologies, results and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Packey Webb Ford auto dealership to be located on the south side of Ogden Avenue at Lacey Road in Downers Grove, Illinois. The plans call for developing the site, which is currently vacant, with an approximately 64,500 square-foot building to include a parts and service department, showroom, and sales offices. The auto dealership will provide a total of 773 parking spaces, of which 29 parking spaces will be for guests and the remaining 744 parking spaces will be used for employee parking and vehicle inventory. Access to the development is proposed to be provided via a full movement access drive aligned opposite Lacey Road and via a right-in/right-out access drive located 375 feet west of Lacey Road. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site area.

The purpose of this study was to examine existing traffic conditions, assess the impact that the proposed development would have on traffic conditions in the area, determine if a traffic signal is warranted at the intersection of Ogden Avenue with Lacey Road/the proposed access drive and determine if any roadway and/or traffic control are necessary in order to accommodate Year 2022 projected traffic conditions.

The sections of this report present the following.

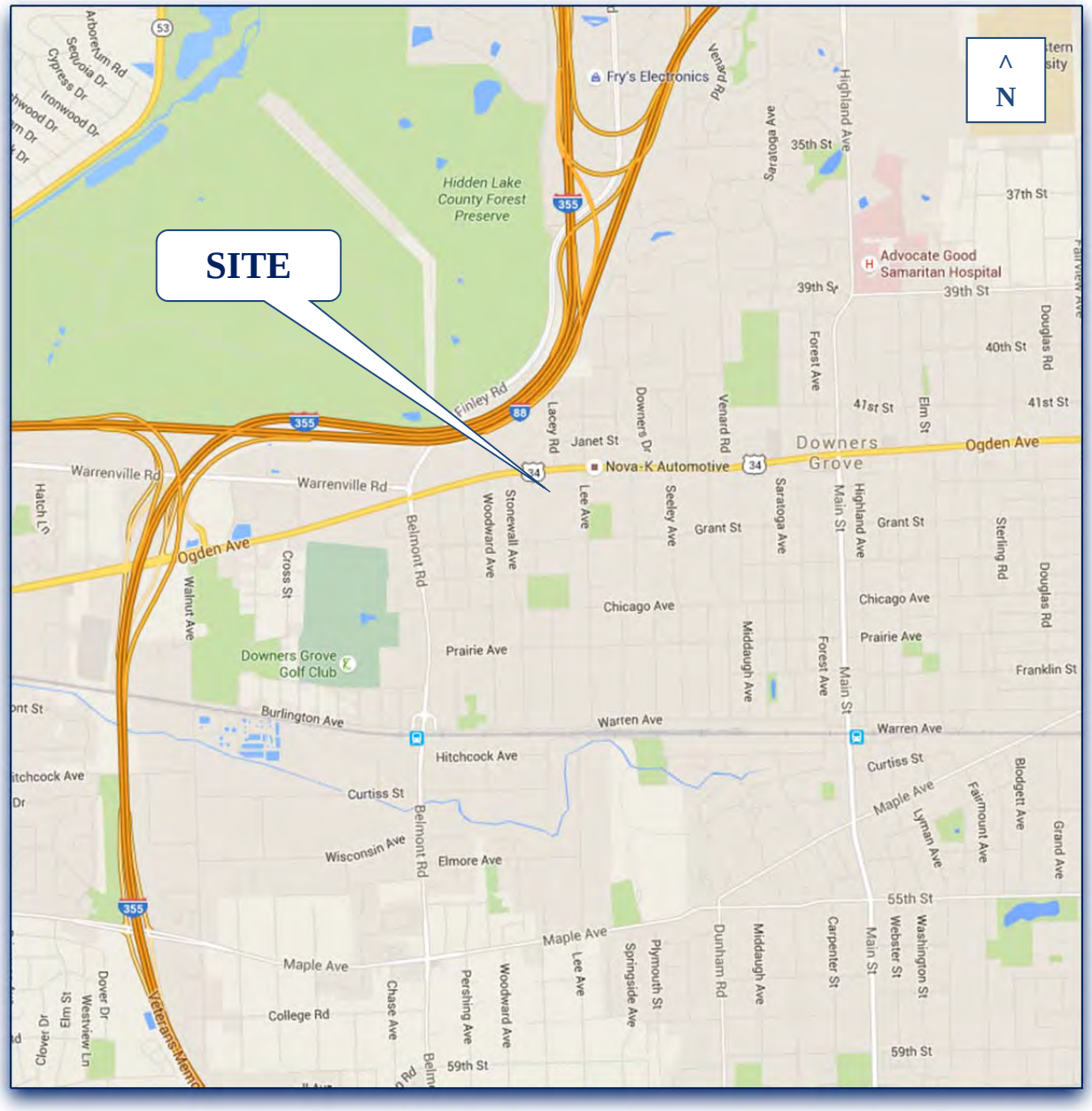
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and evening and Saturday midday peak hours
- Recommendations with respect to adequacy of the site access system and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions.

1. Existing Condition - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. No-Build Condition - The background traffic volumes include the existing traffic volumes increased to include ambient area growth not attributable to any particular development

3. Future Condition - The future projected traffic volumes include the existing traffic volumes, ambient area growth not attributable to any particular development and the traffic estimated to be generated by the proposed subject development.



Site Location **Figure 1**

Aerial View of Site Area **Figure 2**

Existing Conditions

Existing traffic and roadway conditions were documented based on field visits and traffic counts conducted by KLOA, Inc. The following provides a detailed description of the physical characteristics of the roadways including geometry and traffic control, adjacent land uses and peak hour traffic flows along area roadways.

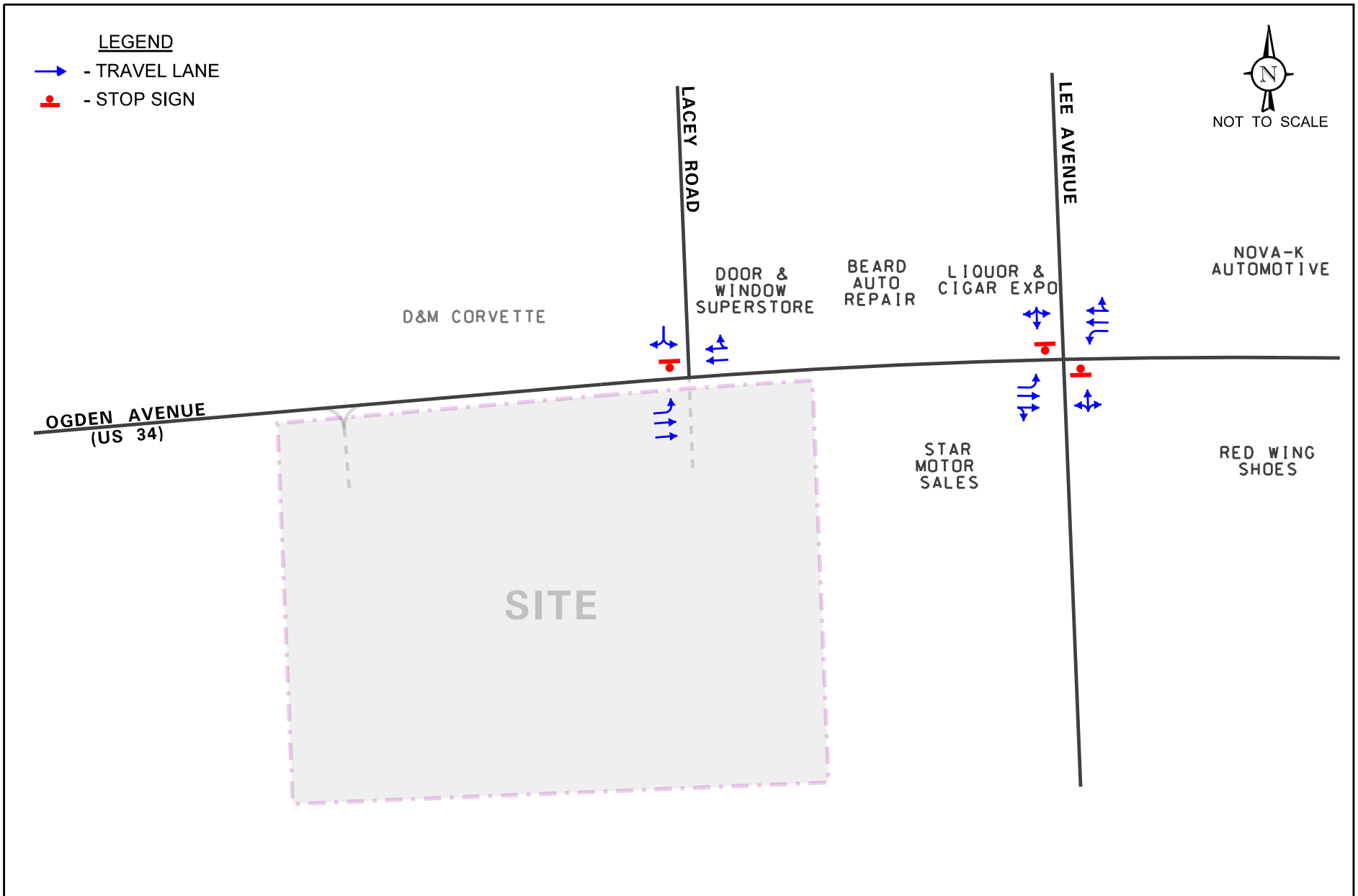
Existing Roadway System Characteristics

The characteristics of the existing roadways that surround the proposed development are illustrated in **Figure 3** and described below.

Ogden Avenue (US Route 34) is an east-west arterial roadway that in the vicinity of the site provides two through lanes in each direction separated by a two-way left-turn lane. At its unsignalized intersection with Lacey Road, Ogden Avenue provides an exclusive left-turn lane and two through lanes on the eastbound approach and an exclusive through lane and a shared through/right-turn lane on the westbound approach. At its unsignalized intersection with Lee Avenue, Ogden Avenue provides an exclusive left-turn lane, an exclusive through lane and a shared through/right-turn lane on both approaches. Ogden Avenue is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an average daily traffic (ADT) volume of 36,000 vehicles (IDOT AADT 2013) and has a posted speed limit of 35 miles per hour.

It should be noted that the closest signalized intersections to the intersection of Ogden Avenue with Lacey Road are located one half-mile to the west at the intersection of Ogden Avenue with Finley Road/Belmont Road and approximately seven-tenths of a mile to the east at the intersection of Ogden Avenue with Saratoga Avenue. The signalized intersection of Ogden Avenue with Finley Road/Belmont Road is part of an interconnect traffic signal system that extends from Finley Road/Belmont Road to approximately one mile west to the I-355 eastbound/westbound ramps. The signalized intersection of Ogden Avenue with Saratoga Avenue is part of an interconnect traffic signal system that extends from Saratoga Avenue to approximately five miles east to Salt Creek Lane/Oak Street. Furthermore, on Ogden Avenue in the vicinity of the site, there are approximately eight full access driveways on the north side of the roadway serving several free-standing commercial businesses and there are three full access driveways on the south side of the roadway that serve Star Motor Sales.

Lacey Road is a north-south local roadway that extends from Ogden Avenue approximately one-quarter of a mile north to Virginia Street and provides one through lane in each direction. At its unsignalized intersection with Ogden Avenue, Lacey Road provides a shared left/right-turn lane. Lacey Road is under the jurisdiction of the Village of Downers Grove, and has a posted speed limit of 25 miles per hour.



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Existing Roadway Characteristics	KLOA Job No: 15-289 Figure: 3

Lee Avenue is a north-south roadway that extends from approximately 250 feet north of Virginia Street south to Warren Avenue and provides one through lane in each direction. At its unsignalized intersection with Ogden Avenue, Lee Avenue provides a shared left/through/right-turn lane that is under stops sign control and a standard style crosswalk on both approaches. North of Ogden Avenue, Lee Avenue is a local roadway and south of Ogden Avenue, Lee Avenue is a collector roadway. Lee Avenue is under the jurisdiction of the Village of Downers Grove, carries an ADT volume of 750 vehicles (IDOT AADT 2012) south of Ogden Avenue and has a posted speed limit of 25 miles per hour.

Existing Traffic Volumes

Manual turning movement vehicle traffic counts were conducted on Saturday, January 16, 2016 during the midday (12:00 to 2:00 P.M.) peak period and on Tuesday, January 19, 2016 during the weekday morning (7:00 to 9:00 A.M.) and the weekday evening (4:00 to 6:00 P.M.) peak periods at the intersections of Ogden Avenue with Lacey Road and Ogden Avenue with Lee Avenue. The results of the manual turning movement counts indicated that the weekday morning peak hour generally occurs between 7:15 and 8:15 A.M., the weekday evening peak hour occurs between 4:45 and 5:45 P.M., and the Saturday midday peak hour occurs between 12:00 and 1:00 P.M. These three respective peak hours will be used for the traffic capacity analyses which are presented later in this report. Pedestrian and bicycle activity was observed and was found to be very low at these intersections.

The existing peak hour traffic volumes for the weekday morning, weekday evening, and Saturday midday peak hours are shown in **Figure 4**.

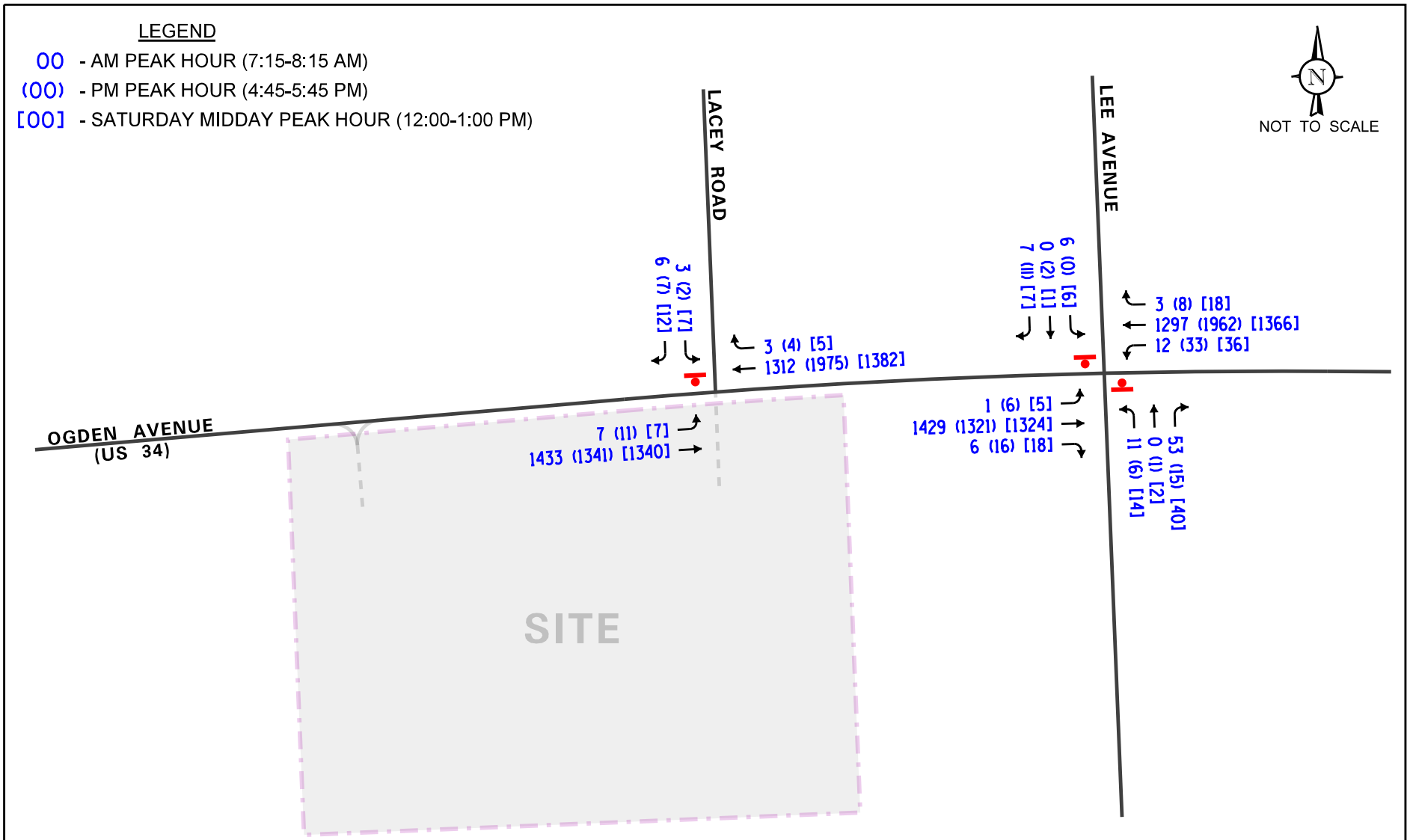
Traffic Characteristics of the Proposed Development

To evaluate the impact of the subject development on the area roadway system, it was necessary to quantify the number of vehicle trips the site will generate during the weekday morning, weekday evening, and Saturday midday peak hours and then determine the directions from which this traffic will approach and depart the site.

Proposed Site and Development Plan

As previously indicated, the plans call for an auto dealership with an approximate 64,500 square-foot building to include a parts and service department, showroom, and sales offices.

The proposed development will be served by a full movement access driveway aligned opposite Lacey Road creating a fourth leg to the intersection. The resulting four-way intersection is proposed to be signalized. This access drive will provide one inbound lane and one outbound lane. Additional access will be provided via a right-in/right-out access drive to be located approximately 375 feet west of Lacey Road. This access will provide one inbound lane and one outbound lane with outbound movement under stop-sign control. At this access drive, right-turns will be restricted via pavement markings to allow for trucks to perform right-turns into the site.



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Existing Traffic Volumes	KLOA Job No: 15-289 Figure: 4

The development will provide a total of 773 parking spaces, of which 29 parking spaces will be for guests, and the remaining 744 parking spaces will be used for employee parking and vehicle inventory.

A site plan illustrating the proposed development plan and site access is included in the Appendix.

Directional Distribution of Development-Generated Traffic

The directional distribution of development-generated traffic is based on the characteristics and operations of the surrounding roadway system and existing traffic patterns. **Figure 5** shows the estimated directional distribution for the three weekday peak hours. Figure 5 also shows the distance, in feet, between the existing intersections and the proposed access driveways.

Estimated Development Traffic Generation

The estimates of traffic to be generated by the development are based upon the proposed land use type and size. The volume of traffic generated for the auto dealership was estimated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition. The ITE rates and equations used are included in the Appendix.

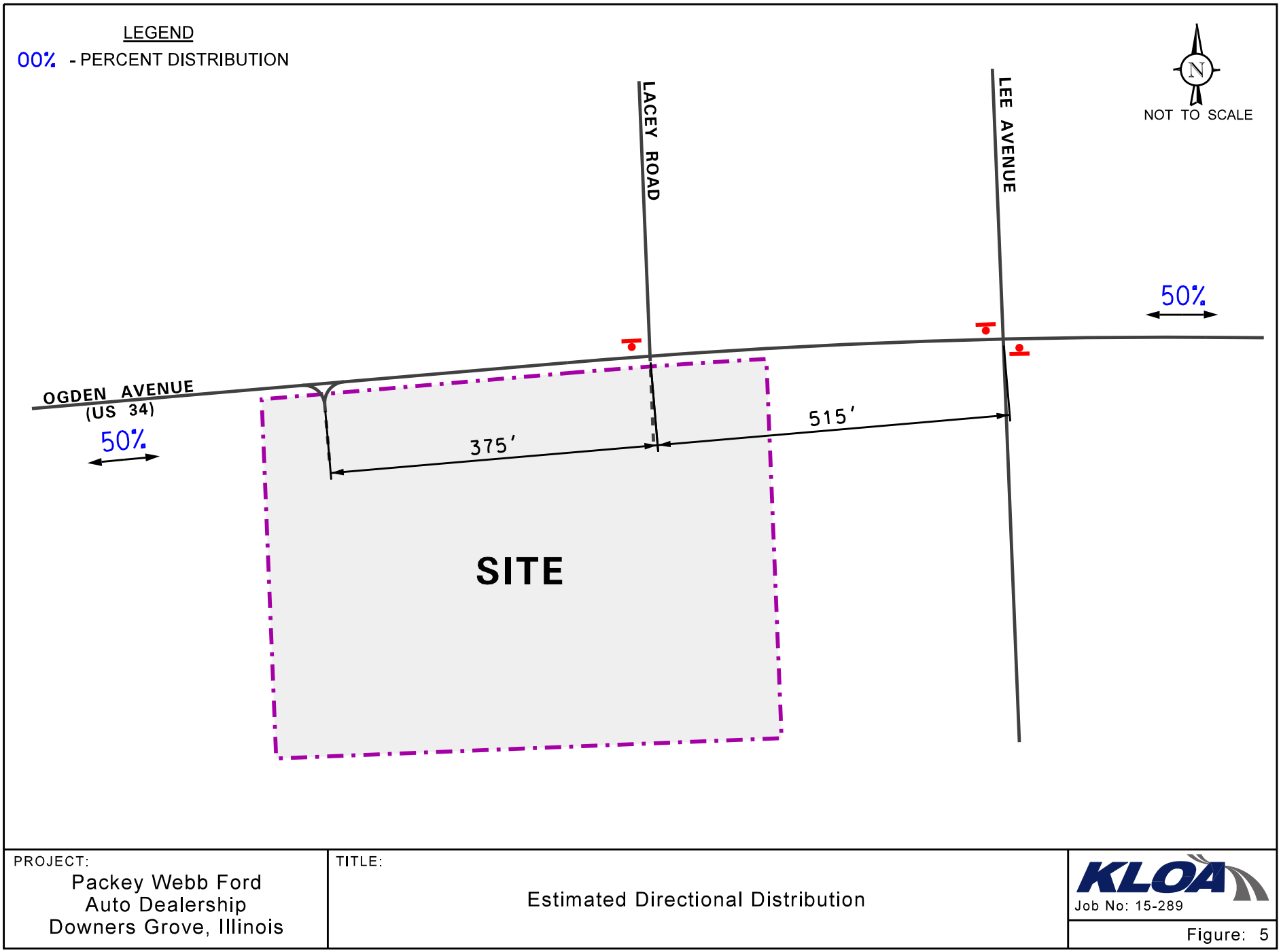
Table 3A tabulates the vehicle trips anticipated for this development for the weekday morning, weekday evening, and Saturday midday peak hours. **Table 3B** tabulates the weekday and Saturday daily (two-way vehicle trips).

Table 3A
ESTIMATED TRIP GENERATION

ITE Land-Use Code	Type/Size	Weekday A.M. Peak Hour		Weekday P.M. Peak Hour		Saturday Midday Peak Hour	
		In	Out	In	Out	In	Out
841	Auto Dealership 64,500 s.f.	93	31	59	88	129	130

Table 3B
ESTIMATED DEVELOPMENT-GENERATED DAILY TRAFFIC VOLUMES

ITE Land- Use Code	Type/Size	Weekday Daily		Saturday Daily	
		In	Out	In	Out
841	Auto Dealership 64,500 s.f.	1042	1042	959	959



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Estimated Directional Distribution	KLOA Job No: 15-289 Figure: 5

Development-Generated Traffic Volumes

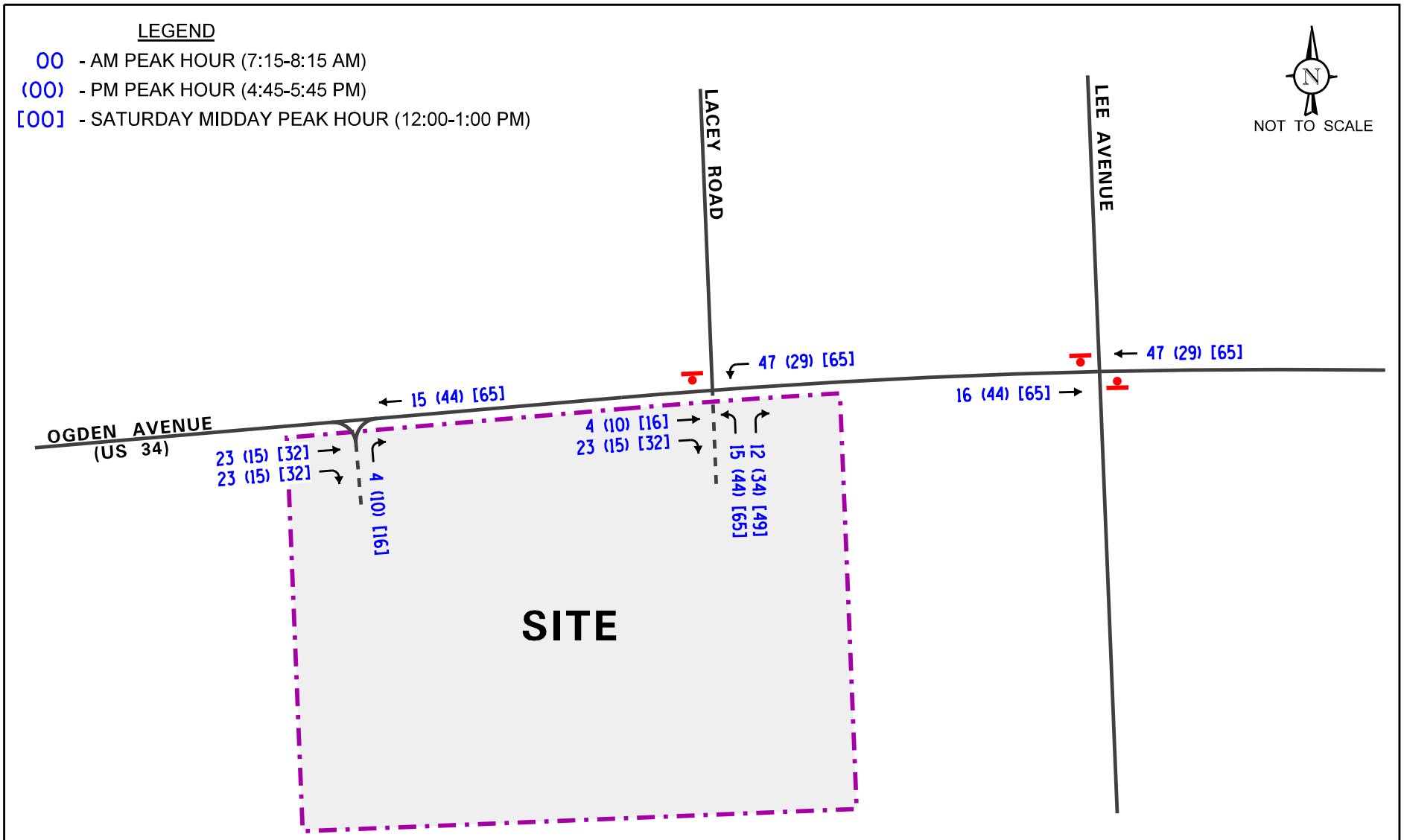
The development-generated traffic volumes (refer to Table 2) were assigned to the area roadways based on the directional distribution analysis (Figure 5) and the proposed access driveway and are shown in **Figure 6.**

Background Traffic Volumes

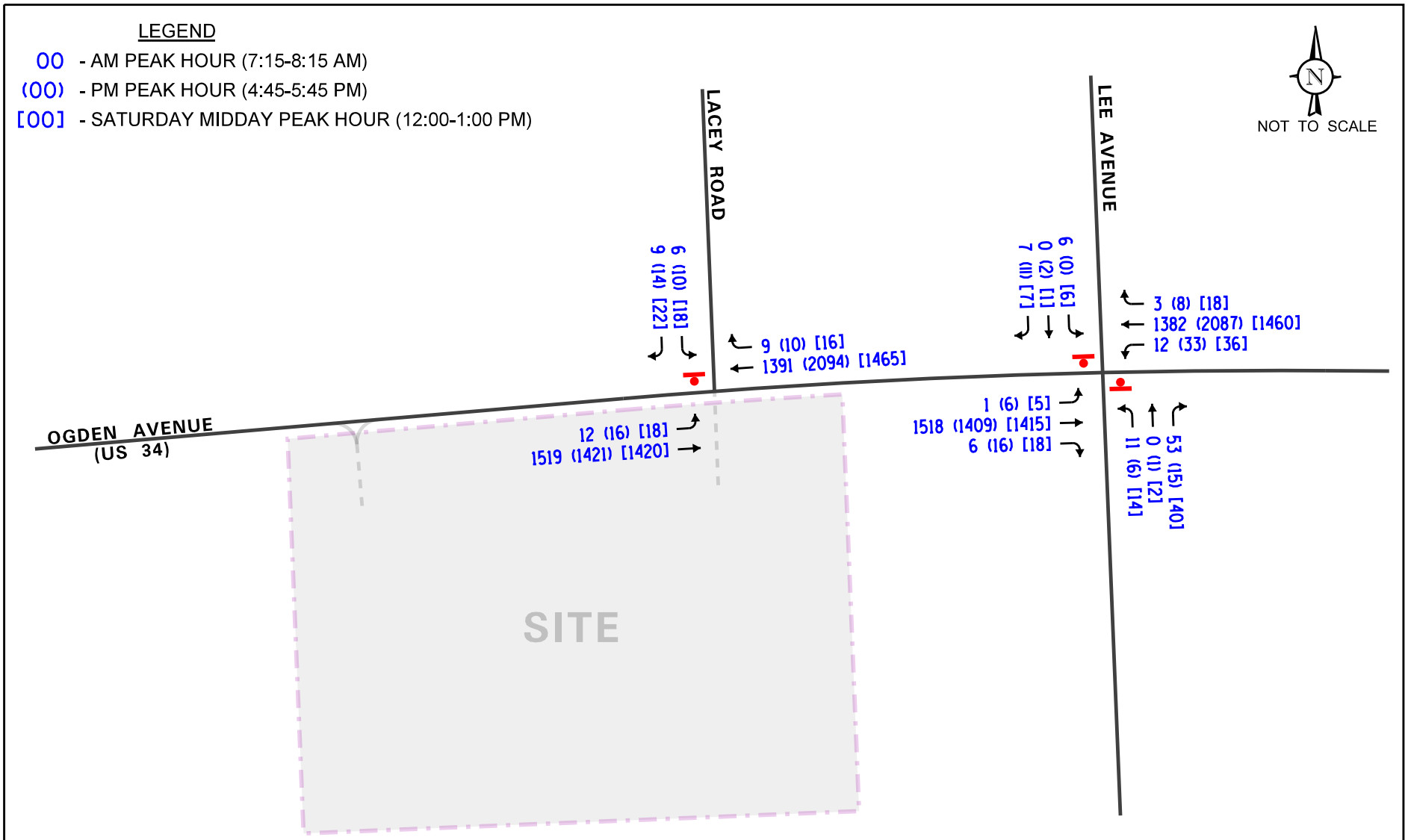
The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on ADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated February 19, 2016, an increase of approximately one percent per year for six years (buildout year plus five years) was applied to project Year 2022 conditions. It should be noted that the background growth was only applied to the through movements along Ogden Avenue since the study also includes the traffic that is projected to be generated by the previously approved Sheltered Care Facility. The facility will be located on the west side of Lacey Road approximately 750 feet north Ogden Avenue. The volumes of traffic projected to be generated by the Sheltered Care Facility were taken from the Traffic Impact Study prepared by Sam Schwartz Engineering dated July 3, 2013 and were assigned to the study area intersections. Year 2022 no-build traffic volumes are illustrated in **Figure 7**. A copy of the CMAP 2040 projections letter is included in the Appendix.

Total Projected Traffic Conditions

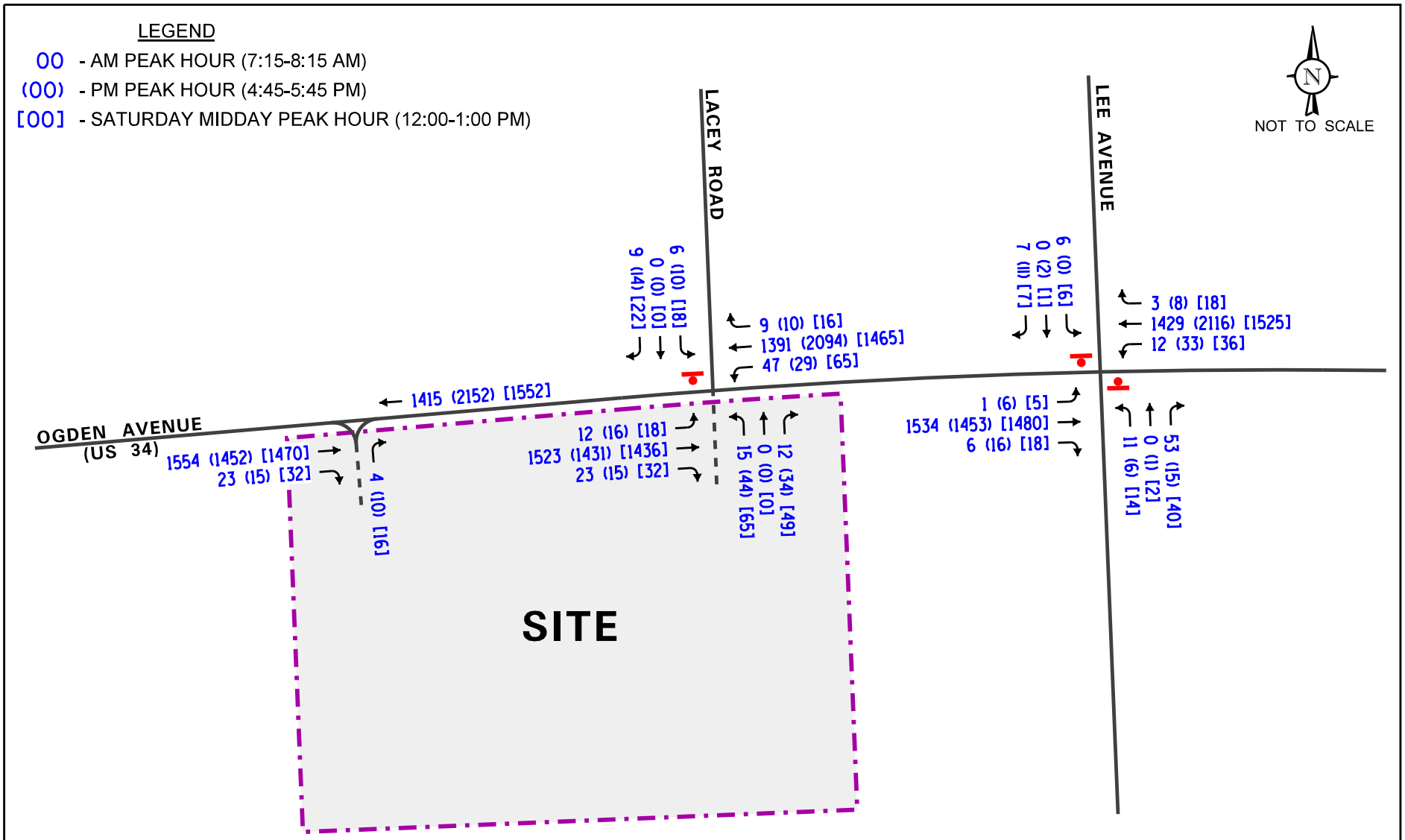
The total projected traffic volumes include the peak hour traffic volumes generated by the proposed development (refer to Figure 6) and the Year 2022 base traffic volumes plus the traffic projected to be generated by the Sheltered Care Facility (Figure 7). The total projected traffic volumes for Year 2022 conditions are shown in **Figure 8.**



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Estimated Site Traffic Assignment	KLOA Job No: 15-289 Figure: 6



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Year 2022 No-Build Traffic Volumes	KLOA Job No: 15-289 Figure: 7



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Year 2022 Total Projected Traffic Volumes	KLOA Job No: 15-289 Figure: 8

Traffic Signal Warrants

The installation of a traffic signal requires the satisfaction of one or more of the nine warrants from the Federal Highway Administration's Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009. A review of the site's physical characteristics and traffic conditions is also necessary to determine whether a traffic control signal installation is justified at a particular location. The following is a list of the warrants conducted in the study and a description of each.

- Warrant 3: Peak Hour
- Warrant 6: Coordinated Signal System

Warrant 3 (Peak Hour Vehicular Volume) is intended for application when traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. The threshold value of minor street traffic varies depending on the major street traffic volume and number of travel lanes. This signal warrant is primarily used in cases where a high volume of traffic is discharged over a short time.

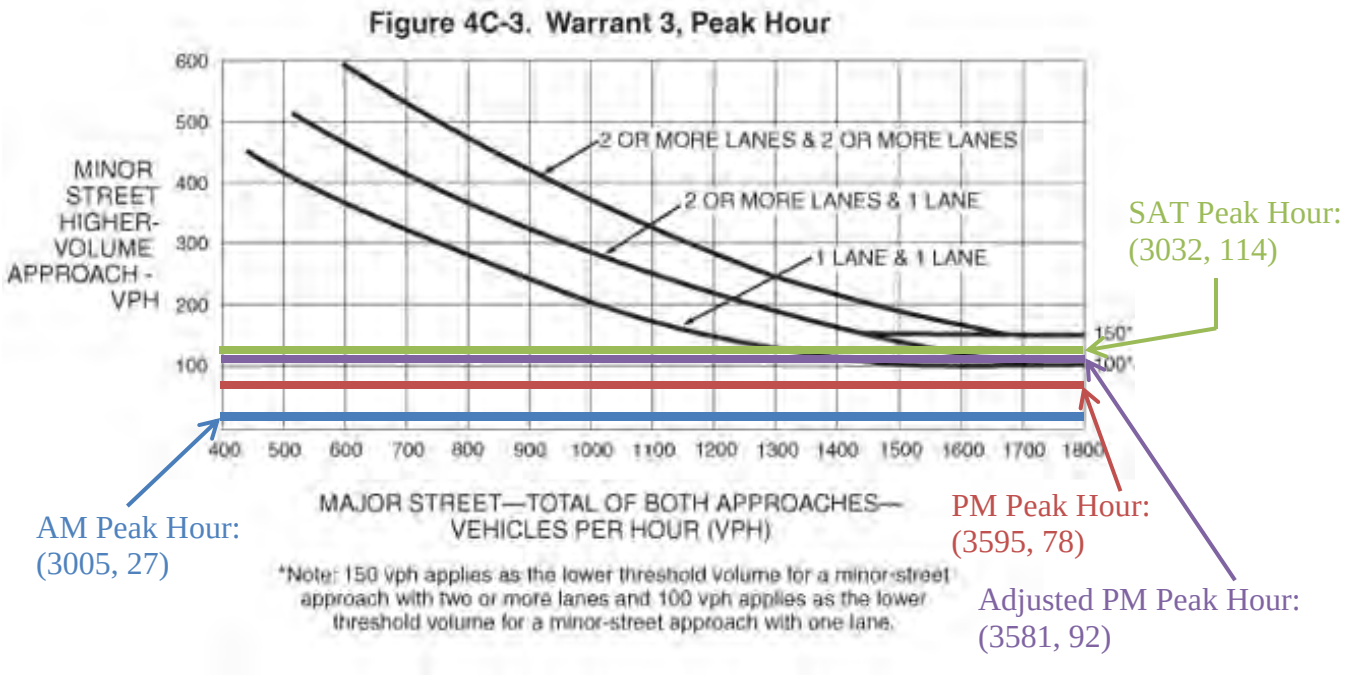
Warrant 6 (Coordinated Signal System) is intended for application when the progressive movement in a coordinated signal system sometimes necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles.

An evaluation of each warrant analyzed follows.

Warrant 3 (Peak Hour)

This warrant is met as **Figure 9** shows, during the Saturday midday peak hour. However, neither the weekday morning peak hour nor the weekday evening peak hour meet the minimum value for the minor street higher-volume approach (vehicles per hour).

While the year 2022 total projected traffic volumes do not meet the peak hour warrant during the weekday morning and weekday evening peak hours, the provision of a traffic signal at the intersection of Ogden Avenue with Lacey Road will provide opportunity for other developments within the study area to have access to the signal. Based on discussion with the Village of Downers Grove, the proposed Packey Webb Ford auto dealership could provide cross access to the Star Motor Sales located in the southwest quadrant of the intersection of Ogden Avenue with Lee Avenue allowing the customers and employees of Star Motor Sales to utilize the signal at Lacey Road. Additionally, the north leg of the intersection of Ogden Avenue with Lee Avenue could be converted to right-turn in and right-turn out movements only. This conversion would encourage the residences located behind the commercial developments along the north side of Ogden Avenue to utilize the signal to turn left onto Ogden Avenue.

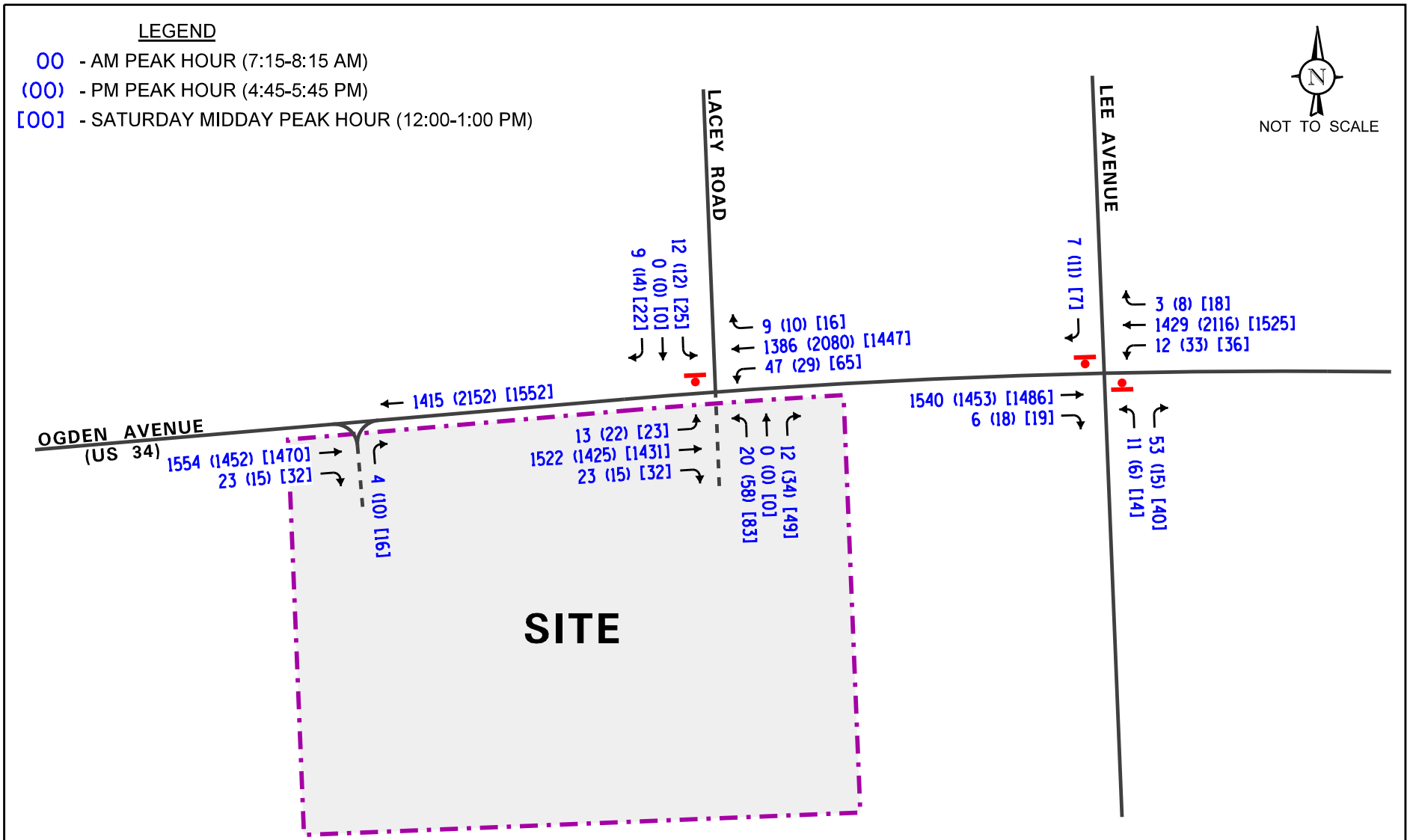


Peak Hour Vehicular Volume Warrant **Figure 9**

The traffic projected to be generated by the cross connection to Star Motor Sales were assigned to the study area intersections and the southbound Lee Avenue at Ogden Avenue left-turning and through traffic was reassigned to the roadway network based on the conversion of southbound Lee Avenue to right-in/right-out only. The Star Motor Sales traffic assignment and the Lee Avenue traffic reassignment were combined with the Year 2022 total projected traffic volumes (Figure 7) to represent the Year 2022 total adjusted traffic volumes and are illustrated in **Figure 10**. These traffic volumes were used in the traffic capacity analyses presented later in this report.

Based on the Year 2022 adjusted traffic volumes, Warrant 3 will be marginally met, as shown in Figure 9, during the weekday evening peak hour.

Furthermore, the provision of a traffic signal at this intersection will draw traffic from the existing commercial developments in the northwest and northeast quadrants of the intersection which currently provide six curb cuts along Ogden Avenue. The traffic signal will increase the number of gaps available in the Ogden Avenue traffic stream for the neighboring developments. Additionally, the signal will enhance the long-term redevelopment potential for the immediate parcels within the northeast and northwest quadrants of the intersection. These quadrants have the potential to be developed with approximately 68,000 square-feet of retail which could generate approximately 80 inbound trips and 105 outbound trips during the evening peak hour. The majority of these trips would utilize the signalized intersection, especially the outbound left-turns onto Ogden Avenue, reducing the need for a large number of curb cuts along Ogden Avenue within the vicinity of the intersection.



PROJECT:	TITLE:	
Packey Webb Ford Auto Dealership Downers Grove, Illinois	Year 2022 Total Adjusted Traffic Volumes	KLOA Job No: 15-289 Figure: 10

Warrant 6 (Coordinated Signal System)

As previously indicated, the intersection of Ogden Avenue with Lacey Road is located one-half mile east of the signalized intersection of Ogden Avenue with Finley Road/Belmont Road and seven-tenths of a mile west of the signalized intersection of Ogden Avenue with Saratoga Avenue, creating a total separation distance of approximately 1.2 miles between the signals. This distance between signals causes the potential for speeding along the roadway, the elimination of platooning along the roadway and reduces the number of available gaps in the Ogden Avenue traffic stream for the commercial developments and intersecting minor roadways along Ogden Avenue between the two signals.

Furthermore, the proposed traffic signal at this intersection will be interconnected to the existing signal to the west (Finley Road/Belmont Road) allowing for a continuous coordinated system along Ogden Avenue from the I-355 eastbound and westbound ramps to Lacey Road. The proposed signal would reduce the separation of the previously discussed coordinated systems from approximately 1.2 miles to approximately seven-tenths of a mile.

In addition, the provision of a traffic signal at the intersection of Ogden Avenue with Lacey Road would be beneficial for providing access for emergency vehicles to the planned Sheltered Car Facility on Lacey Road. By providing Traffic Signal Preemption, this signalized intersection will improve response time of emergency vehicles.

Traffic Analysis and Recommendations

Capacity analyses were performed for the key intersections included in the study area to determine the ability of the existing roadway system to accommodate existing and future traffic demands. Analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing, no-build (Year 2022 background) and projected (Year 2022) traffic volumes

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 2010* and using HCS 2010 analysis software.

The analyses for the proposed traffic-signal controlled intersection of Ogden Avenue with Lacey Road were based on the existing cycle lengths (120 seconds for the weekday morning, 120 seconds for the weekday evening, and 90 seconds for the Saturday midday) at the intersection of Ogden Avenue with Finley Road/Belmont Road. These cycle lengths were used to optimize the intersection's overall LOS while minimizing the delays and queuing experienced along Ogden Avenue.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the LOS and overall intersection delay (measured in seconds) for existing traffic volumes (Figure 4), no-build Year 2022 background (Figure 7) and projected Year 2022 traffic conditions (Figure 8) are presented in **Tables 4** through **6**, respectively. A table summarizing the red time queues for the projected signalized intersection of Ogden Avenue with Lacey Road/Proposed Access Drive is included in the appendix. A discussion of the intersections follows.

Table 4
CAPACITY ANALYSES RESULTS—EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour LOS	Weekday Morning Peak Hour Delay	Weekday Evening Peak Hour LOS	Weekday Evening Peak Hour Delay	Saturday Midday Peak Hour LOS	Saturday Midday Peak Hour Delay
Ogden Avenue with Lacey Road[1]						
• Southbound Approach	C	20.6	E	40.4	C	23.9
• Eastbound Lefts	B	12.4	C	18.4	B	13.0
Ogden Avenue with Lee Avenue[1]						
• Southbound Approach	D	28.5	C	22.6	D	31.4
• Northbound Approach	D	27.3	D	29.5	D	28.8
• Eastbound Lefts	B	12.3	C	18.0	B	13.0
• Westbound Lefts	B	13.5	B	12.7	B	13.2

LOS = Level of Service
Delay is measured in seconds.
1 - Unsignalized Intersection
2 - Signalized Intersection

Table 5
CAPACITY ANALYSES RESULTS—YEAR 2022 NO-BUILD CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Ogden Avenue with Lacey Road[1]						
• Southbound Approach	D	27.9	F	81.5	E	38.5
• Eastbound Lefts	B	13.0	C	21.9	B	13.8
Ogden Avenue with Lee Avenue[1]						
• Southbound Approach	D	31.7	F	255.5	F	75.1
• Northbound Approach	D	30.7	F	104.0	F	68.6
• Eastbound Lefts	B	12.9	C	19.6	B	13.7
• Westbound Lefts	B	14.3	B	13.3	B	14.0

LOS = Level of Service
Delay is measured in seconds.
1 - Unsignalized Intersection
2 - Signalized Intersection

Table 6
CAPACITY ANALYSES RESULTS—YEAR 2022 PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour LOS	Weekday Morning Peak Hour Delay	Weekday Evening Peak Hour LOS	Weekday Evening Peak Hour Delay	Saturday Midday Peak Hour LOS	Saturday Midday Peak Hour Delay
Ogden Avenue with Lacey Road/Proposed Access Drive[1]						
• Northbound Approach	F	55.5	F	199.4	F	287.0
• Southbound Approach	E	45.7	F	110.4	F	73.3
• Eastbound Lefts	B	13.0	C	21.4	B	13.7
• Westbound Lefts	C	15.1	B	13.7	B	14.7
Ogden Avenue with Lacey Road/Proposed Access Drive[2]						
• Overall	A	4.8	B	10.7	A	9.1
• Eastbound Approach	A	1.9	A	2.0	A	4.0
• Westbound Approach	A	6.0	B	14.1	A	9.9
• Northbound Approach	E	55.8	E	61.3	D	46.8
• Southbound Approach	D	54.9	D	52.8	D	38.2
Ogden Avenue with Lee Avenue[2]						
• Southbound Approach	C	15.6	C	22.9	C	16.6
• Northbound Approach	D	31.6	D	29.2	E	35.2
• Westbound Lefts	B	14.5	B	13.7	B	14.7
Ogden Avenue with Proposed Right-in/Right-out Access Drive[1]						
• Northbound Approach	C	16.5	C	15.7	C	16.2

LOS = Level of Service
Delay is measured in seconds.
1 - Unsignalized Intersection
2 - Signalized Intersection

Discussion and Recommendations

The following summarizes traffic capacity analysis for the study intersections for the existing and projected future conditions.

Ogden Avenue with Lacey Road

The results of the capacity analyses indicates that this intersection currently operates at LOS C during the weekday morning and Saturday midday peak hour and at LOS E during the weekday evening peak hour. Assuming Year 2022 no-build conditions, the southbound approach is projected to operate at LOS D during the weekday morning peak hour, LOS F during the weekday evening peak hour and LOS E during the Saturday midday peak hour with increases in delay of approximately seven seconds, 41 seconds and 15 seconds, respectively. Under future conditions with the northbound and southbound approaches under stop-sign control, the northbound approach is projected to operate at LOS F during all three peak hours and the southbound approach is projected to operate at LOS E during the weekday morning peak hour and at LOS F during the weekday evening and Saturday midday peak hours.

Assuming the installation of a traffic signal and interconnecting to the signal at the intersection of Finley Road/Belmont Road with Ogden Avenue (approximately one-half mile west) as well as the provision of eastbound and westbound left-turn lanes on Ogden Avenue through restriping, this intersection is projected to operate overall at LOS A during the weekday morning and Saturday midday peak hours and at LOS B during the weekday evening peak hour. The northbound and southbound approaches are projected to operate at LOS E or better during the peak hours. Furthermore, eastbound and westbound left-turns from Ogden Avenue onto Lacey Road/the proposed access drive are projected to operate at LOS B or better during the peak hours with 95th percentile queues of one vehicle which will not extend beyond the full movement driveways of the adjacent commercial developments on the north side of Ogden Avenue. It should be further noted that the 95th percentile queues for the traffic on the eastbound approach on Ogden Avenue are projected to be less than 85 feet during all three peak hours which will not extend onto the curve to the west thus not causing sight distance concerns along Ogden Avenue. When compared to the turn-lane guidelines published in Chapter 36 of the IDOT Bureau of Design and Environment Manual, the eastbound and westbound right-turning volumes will not warrant a right-turn lane. As such, the proposed access drive and traffic signal will be adequate in accommodating the traffic projected to be generated by the proposed development and will not negatively impact the operations of Ogden Avenue.

Ogden Avenue with Lee Avenue

The results of the capacity analyses indicates that the northbound and southbound approaches at this intersection currently operate at LOS D or better during the peak hours. Assuming Year 2022 no-build conditions the northbound and southbound approaches are projected to operate at LOS D during the weekday morning peak hour with increases in delay of approximately three seconds and are projected to operate at LOS F during the weekday evening and Saturday midday peak hours with increases in delay of greater than 40 seconds during both peak hours. Assuming future conditions, the southbound approach is projected to operate at LOS C during all three peak hours. The northbound approach is projected to continue to operate at LOS D during the weekday morning and evening peak hours and is projected to operate on the threshold of LOS D/E during the Saturday midday peak hour. Furthermore, westbound left-turns onto Lee Avenue are projected to operate at LOS B during the peak hours with 95th percentile queues of one to two vehicles. However, these levels of service do not take into consideration the proximity of the proposed signalized intersection of Ogden Avenue with Lacey Road that will create additional gaps in the Ogden Avenue traffic stream for traffic to turn onto or off of Lee Avenue. As such, the proposed development and proposed traffic signal will not have a significant impact on the operations of this intersection and no roadway or traffic control improvements will be required.

Ogden Avenue with Right-in/Right-Out Access Drive

The proposed right-in/right-out access drive will provide one inbound lane and one outbound lane with outbound movements restricted to right-turning movements only with pavement marking and signage. Using pavement markings to restrict movements will allow for trucks to enter the development via the access drive and circulate counter clockwise around the development efficiently and exit at the proposed traffic signal. Additionally, right-turns do not need to be physically restricted as the provision of the traffic signal will allow vehicles to turn left out of the development efficiently. The results of the capacity analyses indicate that the northbound approach is projected to operate at LOS C during all three peak hours with 95th percentile queues of one to two vehicles. Based on the turn lane guidelines published in Chapter 36 of the IDOT BDE Manual and the proposed capacity analyses, widening of Ogden Avenue to provide an eastbound right-turn lane will not be necessary. As such, the proposed right-in/right-out access drive will provide for efficient truck access to the development and will allow for flexible access of passenger vehicles. Furthermore, the access drive will be adequate in accommodating the traffic projected to be generated by the proposed development.

Conclusion

Based on the proposed development plan and the preceding evaluation, the following conclusions and recommendations are made.

- The provision of a traffic signal at the intersection of Ogden Avenue with Lacey Road will be beneficial for the following reasons:
    - It will reduce the separation distance between the two coordinated traffic signal systems stretching from I-355 to Finley Road/Belmont Road and Saratoga Avenue to I-294.
    - It will reduce the potential for speeding on Ogden Avenue between Finley Road/Belmont Road and Saratoga Avenue
    - It will maintain the platooning of traffic along Ogden Avenue
    - It will create additional gaps in the Ogden Avenue traffic stream improving the ability of traffic to turn between Ogden Avenue and the local roadways and access drives serving the existing developments within the vicinity of the site
    - With traffic signal preemption, Lacey Road will provide unobstructed access for emergency vehicles to the Sheltered Care Facility and improve response time.
- The provision of a traffic signal will draw more vehicles from the residential developments to the north and will enhance the long-term development potential of neighboring parcels
- The proposed signal is projected to operate at LOS A with minimal delays experienced on both approaches and minimal queueing along the eastbound approach on Ogden Avenue.
- The proposed development traffic estimated to traverse through the signalized intersection of Ogden Avenue and Lee Avenue during peak hours is projected to have a minimal impact on the operations of the intersections.
- The proposed right-in/right-out access drive will provide flexible access for passenger vehicles and will provide for efficient access for trucks entering the site, allowing them to circulate counterclockwise to the proposed traffic signal.
- The widening of Ogden Avenue to provide an eastbound or westbound right-turn lane at Lacey Road or the proposed right-in/right-out access drive is not warranted based on the turn lane guidelines published in Chapter 36 of the IDOT BDE Manual.

Appendix

Traffic Count Summary Sheets

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lacey Road
Site Code:
Start Date: 01/16/2016

Turning Movement Data

Start Time	Ogden Avenue Eastbound					Ogden Avenue Westbound					Lacey Road Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:00 PM	0	3	295	0	298	0	331	2	0	333	0	2	4	0	6	637
12:15 PM	0	2	347	0	349	1	371	1	0	373	0	4	4	0	8	730
12:30 PM	0	2	340	0	342	0	312	1	0	313	0	0	1	0	1	656
12:45 PM	0	0	312	0	312	0	368	1	0	369	0	1	3	0	4	685
Hourly Total	0	7	1294	0	1301	1	1382	5	0	1388	0	7	12	0	19	2708
1:00 PM	0	1	283	0	284	0	317	1	0	318	0	0	0	2	0	602
1:15 PM	0	2	328	0	330	0	332	0	0	332	0	0	1	0	1	663
1:30 PM	0	1	306	0	307	0	343	0	0	343	0	0	0	0	0	650
1:45 PM	0	1	334	0	335	0	322	4	0	326	0	0	0	0	0	661
Hourly Total	0	5	1251	0	1256	0	1314	5	0	1319	0	0	1	2	1	2576
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	2	339	0	341	0	250	0	0	250	0	1	0	0	1	592
7:15 AM	0	2	377	0	379	0	296	1	0	297	0	2	0	0	2	678
7:30 AM	0	0	392	0	392	0	330	0	0	330	0	1	1	0	2	724
7:45 AM	0	3	343	0	346	0	340	0	0	340	0	0	2	0	2	688
Hourly Total	0	7	1451	0	1458	0	1216	1	0	1217	0	4	3	0	7	2682
8:00 AM	0	2	321	0	323	0	291	2	0	293	0	0	3	0	3	619
8:15 AM	0	2	319	0	321	0	339	0	0	339	0	0	0	0	0	660
8:30 AM	0	0	348	0	348	0	287	0	0	287	0	2	0	0	2	637
8:45 AM	0	1	324	0	325	0	255	2	0	257	0	2	1	0	3	585
Hourly Total	0	5	1312	0	1317	0	1172	4	0	1176	0	4	4	0	8	2501
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	206	0	206	0	223	2	0	225	0	0	4	0	4	435
11:15 AM	0	0	285	0	285	0	287	1	0	288	0	0	6	0	6	579
11:30 AM	0	0	266	0	266	0	302	0	0	302	0	0	0	2	0	568
11:45 AM	0	1	273	0	274	0	277	0	0	277	0	0	2	1	2	553
Hourly Total	0	1	1030	0	1031	0	1089	3	0	1092	0	0	12	3	12	2135
12:00 PM	0	4	277	0	281	0	274	3	0	277	0	2	6	0	8	566
12:15 PM	0	2	277	0	279	0	279	4	0	283	0	0	2	0	2	564
12:30 PM	0	0	278	0	278	0	273	1	0	274	0	0	0	0	0	552
12:45 PM	0	1	285	0	286	0	296	2	0	298	0	0	3	0	3	587
Hourly Total	0	7	1117	0	1124	0	1122	10	0	1132	0	2	11	0	13	2269
1:00 PM	0	1	271	0	272	0	267	2	0	269	0	1	1	0	2	543
1:15 PM	0	0	241	0	241	0	311	3	0	314	0	2	3	0	5	560
1:30 PM	0	2	238	0	240	0	326	0	0	326	0	1	1	0	2	568
1:45 PM	0	0	261	0	261	0	300	1	0	301	0	2	3	0	5	567
Hourly Total	0	3	1011	0	1014	0	1204	6	0	1210	0	6	8	0	14	2238
2:00 PM	0	2	274	0	276	0	272	2	0	274	0	0	1	0	1	551

2:15 PM	0	2	267	0	269	0	270	0	0	270	0	2	1	2	3	542
2:30 PM	0	0	298	0	298	0	310	0	0	310	0	0	1	0	1	609
2:45 PM	0	2	262	0	264	0	312	0	0	312	0	2	3	0	5	581
Hourly Total	0	6	1101	0	1107	0	1164	2	0	1166	0	4	6	2	10	2283
3:00 PM	0	6	302	0	308	0	305	2	0	307	0	0	3	0	3	618
3:15 PM	0	1	280	0	281	0	326	1	0	327	0	0	0	0	0	608
3:30 PM	0	0	306	0	306	0	402	0	0	402	0	0	6	0	6	714
3:45 PM	0	4	248	0	252	0	400	0	0	400	0	2	6	0	8	660
Hourly Total	0	11	1136	0	1147	0	1433	3	0	1436	0	2	15	0	17	2600
4:00 PM	0	0	311	0	311	0	406	2	0	408	0	3	4	0	7	726
4:15 PM	0	1	328	0	329	0	498	0	0	498	0	0	0	0	0	827
4:30 PM	0	0	285	0	285	0	474	1	0	475	0	0	1	1	1	761
4:45 PM	0	4	325	0	329	0	469	1	0	470	0	0	2	0	2	801
Hourly Total	0	5	1249	0	1254	0	1847	4	0	1851	0	3	7	1	10	3115
5:00 PM	0	5	335	0	340	0	488	0	0	488	0	0	3	0	3	831
5:15 PM	0	1	370	0	371	0	484	0	0	484	0	2	1	0	3	858
5:30 PM	0	1	311	0	312	0	518	3	0	521	0	0	1	0	1	834
5:45 PM	0	0	308	0	308	0	444	2	0	446	0	2	1	1	3	757
Hourly Total	0	7	1324	0	1331	0	1934	5	0	1939	0	4	6	1	10	3280
6:00 PM	0	1	282	0	283	0	433	0	0	433	0	0	0	0	0	716
6:15 PM	0	1	242	0	243	0	379	1	0	380	0	0	1	0	1	624
6:30 PM	0	3	201	0	204	0	301	0	0	301	0	0	2	0	2	507
6:45 PM	0	2	211	0	213	0	229	0	0	229	0	0	2	0	2	444
Hourly Total	0	7	936	0	943	0	1342	1	0	1343	0	0	5	0	5	2291
7:00 PM	0	0	199	0	199	0	245	0	0	245	0	0	2	0	2	446
7:15 PM	0	1	150	0	151	0	213	0	0	213	0	0	0	0	0	364
7:30 PM	0	0	112	0	112	0	223	2	0	225	0	0	0	1	0	337
7:45 PM	0	0	119	0	119	0	164	1	0	165	0	0	0	1	0	284
Hourly Total	0	1	580	0	581	0	845	3	0	848	0	0	2	2	2	1431
8:00 PM	0	0	108	0	108	0	174	0	0	174	0	0	0	0	0	282
8:15 PM	0	0	100	0	100	0	166	0	0	166	0	0	0	0	0	266
8:30 PM	0	0	109	0	109	0	135	0	0	135	0	0	1	0	1	245
8:45 PM	0	0	88	0	88	0	148	0	0	148	0	0	0	0	0	236
Hourly Total	0	0	405	0	405	0	623	0	0	623	0	0	1	0	1	1029
Grand Total	0	72	15197	0	15269	1	17687	52	0	17740	0	36	93	11	129	33138
Approach %	0.0	0.5	99.5	-	-	0.0	99.7	0.3	-	-	0.0	27.9	72.1	-	-	-
Total %	0.0	0.2	45.9	-	46.1	0.0	53.4	0.2	-	53.5	0.0	0.1	0.3	-	0.4	-
Lights	0	71	14936	-	15007	1	17357	50	-	17408	0	35	89	-	124	32539
% Lights	-	98.6	98.3	-	98.3	100.0	98.1	96.2	-	98.1	-	97.2	95.7	-	96.1	98.2
Buses	0	0	55	-	55	0	65	0	-	65	0	0	0	-	0	120
% Buses	-	0.0	0.4	-	0.4	0.0	0.4	0.0	-	0.4	-	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	1	162	-	163	0	203	2	-	205	0	1	4	-	5	373
% Single-Unit Trucks	-	1.4	1.1	-	1.1	0.0	1.1	3.8	-	1.2	-	2.8	4.3	-	3.9	1.1
Articulated Trucks	0	0	44	-	44	0	62	0	-	62	0	0	0	-	0	106
% Articulated Trucks	-	0.0	0.3	-	0.3	0.0	0.4	0.0	-	0.3	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	11	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lacey Road
Site Code:
Start Date: 01/16/2016

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Ogden Avenue Eastbound					Ogden Avenue Westbound					Lacey Road Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:00 PM	0	3	295	0	298	0	331	2	0	333	0	2	4	0	6	637
12:15 PM	0	2	347	0	349	1	371	1	0	373	0	4	4	0	8	730
12:30 PM	0	2	340	0	342	0	312	1	0	313	0	0	1	0	1	656
12:45 PM	0	0	312	0	312	0	368	1	0	369	0	1	3	0	4	685
Total	0	7	1294	0	1301	1	1382	5	0	1388	0	7	12	0	19	2708
Approach %	0.0	0.5	99.5	-	-	0.1	99.6	0.4	-	-	0.0	36.8	63.2	-	-	-
Total %	0.0	0.3	47.8	-	48.0	0.0	51.0	0.2	-	51.3	0.0	0.3	0.4	-	0.7	-
PHF	0.000	0.583	0.932	-	0.932	0.250	0.931	0.625	-	0.930	0.000	0.438	0.750	-	0.594	0.927
Lights	0	7	1283	-	1290	1	1368	5	-	1374	0	7	12	-	19	2683
% Lights	-	100.0	99.1	-	99.2	100.0	99.0	100.0	-	99.0	-	100.0	100.0	-	100.0	99.1
Buses	0	0	2	-	2	0	2	0	-	2	0	0	0	-	0	4
% Buses	-	0.0	0.2	-	0.2	0.0	0.1	0.0	-	0.1	-	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	9	-	9	0	8	0	-	8	0	0	0	-	0	17
% Single-Unit Trucks	-	0.0	0.7	-	0.7	0.0	0.6	0.0	-	0.6	-	0.0	0.0	-	0.0	0.6
Articulated Trucks	0	0	0	-	0	0	4	0	-	4	0	0	0	-	0	4
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.3	0.0	-	0.3	-	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lacey Road
Site Code:
Start Date: 01/16/2016

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Ogden Avenue Eastbound					Ogden Avenue Westbound					Lacey Road Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:15 AM	0	2	377	0	379	0	296	1	0	297	0	2	0	0	2	678
7:30 AM	0	0	392	0	392	0	330	0	0	330	0	1	1	0	2	724
7:45 AM	0	3	343	0	346	0	340	0	0	340	0	0	2	0	2	688
8:00 AM	0	2	321	0	323	0	291	2	0	293	0	0	3	0	3	619
Total	0	7	1433	0	1440	0	1257	3	0	1260	0	3	6	0	9	2709
Approach %	0.0	0.5	99.5	-	-	0.0	99.8	0.2	-	-	0.0	33.3	66.7	-	-	-
Total %	0.0	0.3	52.9	-	53.2	0.0	46.4	0.1	-	46.5	0.0	0.1	0.2	-	0.3	-
PHF	0.000	0.583	0.914	-	0.918	0.000	0.924	0.375	-	0.926	0.000	0.375	0.500	-	0.750	0.935
Lights	0	7	1396	-	1403	0	1212	3	-	1215	0	3	6	-	9	2627
% Lights	-	100.0	97.4	-	97.4	-	96.4	100.0	-	96.4	-	100.0	100.0	-	100.0	97.0
Buses	0	0	12	-	12	0	16	0	-	16	0	0	0	-	0	28
% Buses	-	0.0	0.8	-	0.8	-	1.3	0.0	-	1.3	-	0.0	0.0	-	0.0	1.0
Single-Unit Trucks	0	0	22	-	22	0	23	0	-	23	0	0	0	-	0	45
% Single-Unit Trucks	-	0.0	1.5	-	1.5	-	1.8	0.0	-	1.8	-	0.0	0.0	-	0.0	1.7
Articulated Trucks	0	0	3	-	3	0	6	0	-	6	0	0	0	-	0	9
% Articulated Trucks	-	0.0	0.2	-	0.2	-	0.5	0.0	-	0.5	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lacey Road
Site Code:
Start Date: 01/16/2016

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Ogden Avenue Eastbound					Ogden Avenue Westbound					Lacey Road Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:45 PM	0	4	325	0	329	0	469	1	0	470	0	0	2	0	2	801
5:00 PM	0	5	335	0	340	0	488	0	0	488	0	0	3	0	3	831
5:15 PM	0	1	370	0	371	0	484	0	0	484	0	2	1	0	3	858
5:30 PM	0	1	311	0	312	0	518	3	0	521	0	0	1	0	1	834
Total	0	11	1341	0	1352	0	1959	4	0	1963	0	2	7	0	9	3324
Approach %	0.0	0.8	99.2	-	-	0.0	99.8	0.2	-	-	0.0	22.2	77.8	-	-	-
Total %	0.0	0.3	40.3	-	40.7	0.0	58.9	0.1	-	59.1	0.0	0.1	0.2	-	0.3	-
PHF	0.000	0.550	0.906	-	0.911	0.000	0.945	0.333	-	0.942	0.000	0.250	0.583	-	0.750	0.969
Lights	0	11	1328	-	1339	0	1942	4	-	1946	0	1	7	-	8	3293
% Lights	-	100.0	99.0	-	99.0	-	99.1	100.0	-	99.1	-	50.0	100.0	-	88.9	99.1
Buses	0	0	1	-	1	0	2	0	-	2	0	0	0	-	0	3
% Buses	-	0.0	0.1	-	0.1	-	0.1	0.0	-	0.1	-	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	8	-	8	0	12	0	-	12	0	1	0	-	1	21
% Single-Unit Trucks	-	0.0	0.6	-	0.6	-	0.6	0.0	-	0.6	-	50.0	0.0	-	11.1	0.6
Articulated Trucks	0	0	4	-	4	0	3	0	-	3	0	0	0	-	0	7
% Articulated Trucks	-	0.0	0.3	-	0.3	-	0.2	0.0	-	0.2	-	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lee Avenue
Site Code:
Start Date: 01/16/2016

Turning Movement Data

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Lee Avenue Northbound						Lee Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	0	2	286	7	0	295	0	7	318	1	0	326	0	7	0	8	0	15	0	3	0	1	0	4	640
12:15 PM	0	3	362	2	0	367	0	10	363	1	0	374	0	4	1	10	0	15	0	2	0	0	0	2	758
12:30 PM	0	0	358	3	0	361	0	7	302	1	0	310	0	2	1	7	0	10	0	1	1	3	0	5	686
12:45 PM	0	0	318	6	0	324	0	12	366	1	0	379	0	1	0	15	0	16	0	0	0	3	0	3	722
Hourly Total	0	5	1324	18	0	1347	0	36	1349	4	0	1389	0	14	2	40	0	56	0	6	1	7	0	14	2806
1:00 PM	0	2	285	4	0	291	0	9	317	3	0	329	0	1	0	9	0	10	0	1	0	4	2	5	635
1:15 PM	0	2	319	5	1	326	1	5	325	4	0	335	0	3	0	3	0	6	0	3	0	4	1	7	674
1:30 PM	0	3	300	5	0	308	0	4	334	0	0	338	0	3	0	2	0	5	0	0	0	6	0	6	657
1:45 PM	0	1	328	5	0	334	0	7	315	2	0	324	0	1	0	4	0	5	0	1	0	7	0	8	671
Hourly Total	0	8	1232	19	1	1259	1	25	1291	9	0	1326	0	8	0	18	0	26	0	5	0	21	3	26	2637
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	335	1	0	336	0	2	260	1	0	263	0	1	0	7	0	8	0	1	0	2	0	3	610
7:15 AM	0	0	378	1	0	379	0	3	306	0	0	309	0	3	0	7	0	10	0	1	0	3	0	4	702
7:30 AM	0	1	389	2	0	392	0	4	346	2	0	352	0	4	0	10	0	14	0	3	0	1	0	4	762
7:45 AM	0	0	341	1	0	342	0	0	352	1	0	353	0	3	0	12	0	15	0	2	0	1	0	3	713
Hourly Total	0	1	1443	5	0	1449	0	9	1264	4	0	1277	0	11	0	36	0	47	0	7	0	7	0	14	2787
8:00 AM	0	0	319	2	0	321	0	5	293	0	0	298	0	1	0	24	0	25	0	0	0	2	0	2	646
8:15 AM	0	0	316	3	0	319	0	2	333	0	0	335	0	1	0	10	0	11	0	0	0	6	0	6	671
8:30 AM	0	1	345	0	0	346	0	1	283	0	0	284	0	4	0	10	0	14	0	0	0	1	0	1	645
8:45 AM	0	1	338	1	0	340	0	3	256	0	0	259	0	3	0	8	0	11	0	2	0	2	1	4	614
Hourly Total	0	2	1318	6	0	1326	0	11	1165	0	0	1176	0	9	0	52	0	61	0	2	0	11	1	13	2576
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	2	306	4	0	312	0	8	405	4	0	417	0	2	0	1	0	3	0	2	0	2	0	4	736
4:15 PM	0	1	320	1	0	322	0	5	496	3	0	504	0	1	0	4	0	5	0	2	0	2	0	4	835
4:30 PM	0	2	289	3	0	294	0	6	469	3	0	478	0	1	0	7	0	8	0	3	0	3	0	6	786
4:45 PM	0	2	317	4	0	323	0	7	466	4	0	477	0	0	1	5	0	6	0	0	2	3	0	5	811
Hourly Total	0	7	1232	12	0	1251	0	26	1836	14	0	1876	0	4	1	17	0	22	0	7	2	10	0	19	3168
5:00 PM	0	1	328	3	0	332	0	8	482	2	0	492	0	1	0	3	0	4	0	0	0	2	0	2	830
5:15 PM	0	3	348	8	0	359	0	10	477	0	0	487	0	4	0	5	0	9	0	0	0	3	0	3	858
5:30 PM	0	0	318	1	0	319	0	8	537	2	0	547	0	1	0	2	0	3	0	0	0	3	0	3	872
5:45 PM	0	3	303	7	0	313	0	9	445	1	0	455	0	2	0	7	0	9	0	0	0	3	0	3	780
Hourly Total	0	7	1297	19	0	1323	0	35	1941	5	0	1981	0	8	0	17	0	25	0	0	0	11	0	11	3340
Grand Total	0	30	7846	79	1	7955	1	142	8846	36	0	9025	0	54	3	180	0	237	0	27	3	67	4	97	17314
Approach %	0.0	0.4	98.6	1.0	-	-	0.0	1.6	98.0	0.4	-	-	0.0	22.8	1.3	75.9	-	-	0.0	27.8	3.1	69.1	-	-	-
Total %	0.0	0.2	45.3	0.5	-	45.9	0.0	0.8	51.1	0.2	-	52.1	0.0	0.3	0.0	1.0	-	1.4	0.0	0.2	0.0	0.4	-	0.6	-
Lights	0	29	7733	77	-	7839	1	141	8706	35	-	8883	0	53	2	176	-	231	0	27	3	66	-	96	17049
% Lights	-	96.7	98.6	97.5	-	98.5	100.0	99.3	98.4	97.2	-	98.4	-	98.1	66.7	97.8	-	97.5	-	100.0	100.0	98.5	-	99.0	98.5

Buses	0	1	23	1	-	25	0	0	34	1	-	35	0	0	0	2	-	2	0	0	0	0	-	0	62
% Buses	-	3.3	0.3	1.3	-	0.3	0.0	0.0	0.4	2.8	-	0.4	-	0.0	0.0	1.1	-	0.8	-	0.0	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	0	78	1	-	79	0	1	79	0	-	80	0	1	1	2	-	4	0	0	0	1	-	1	164
% Single-Unit Trucks	-	0.0	1.0	1.3	-	1.0	0.0	0.7	0.9	0.0	-	0.9	-	1.9	33.3	1.1	-	1.7	-	0.0	0.0	1.5	-	1.0	0.9
Articulated Trucks	0	0	12	0	-	12	0	0	27	0	-	27	0	0	0	0	-	0	0	0	0	0	-	0	39
% Articulated Trucks	-	0.0	0.2	0.0	-	0.2	0.0	0.0	0.3	0.0	-	0.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lee Avenue
Site Code:
Start Date: 01/16/2016

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Lee Avenue Northbound						Lee Avenue Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	2	286	7	0	295	0	7	318	1	0	326	0	7	0	8	0	15	0	3	0	1	0	4	640
12:15 PM	0	3	362	2	0	367	0	10	363	1	0	374	0	4	1	10	0	15	0	2	0	0	0	2	758
12:30 PM	0	0	358	3	0	361	0	7	302	1	0	310	0	2	1	7	0	10	0	1	1	3	0	5	686
12:45 PM	0	0	318	6	0	324	0	12	366	1	0	379	0	1	0	15	0	16	0	0	0	3	0	3	722
Total	0	5	1324	18	0	1347	0	36	1349	4	0	1389	0	14	2	40	0	56	0	6	1	7	0	14	2806
Approach %	0.0	0.4	98.3	1.3	-	-	0.0	2.6	97.1	0.3	-	-	0.0	25.0	3.6	71.4	-	-	0.0	42.9	7.1	50.0	-	-	-
Total %	0.0	0.2	47.2	0.6	-	48.0	0.0	1.3	48.1	0.1	-	49.5	0.0	0.5	0.1	1.4	-	2.0	0.0	0.2	0.0	0.2	-	0.5	-
PHF	0.000	0.417	0.914	0.643	-	0.918	0.000	0.750	0.921	1.000	-	0.916	0.000	0.500	0.500	0.667	-	0.875	0.000	0.500	0.250	0.583	-	0.700	0.925
Lights	0	5	1310	17	-	1332	0	36	1332	4	-	1372	0	14	1	38	-	53	0	6	1	6	-	13	2770
% Lights	-	100.0	98.9	94.4	-	98.9	-	100.0	98.7	100.0	-	98.8	-	100.0	50.0	95.0	-	94.6	-	100.0	100.0	85.7	-	92.9	98.7
Buses	0	0	4	0	-	4	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	6
% Buses	-	0.0	0.3	0.0	-	0.3	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Single-Unit Trucks	0	0	10	1	-	11	0	0	11	0	-	11	0	0	1	2	-	3	0	0	0	1	-	1	26
% Single-Unit Trucks	-	0.0	0.8	5.6	-	0.8	-	0.0	0.8	0.0	-	0.8	-	0.0	50.0	5.0	-	5.4	-	0.0	0.0	14.3	-	7.1	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	4
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.3	0.0	-	0.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lee Avenue
Site Code:
Start Date: 01/16/2016

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Lee Avenue Northbound						Lee Avenue Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:15 AM	0	0	378	1	0	379	0	3	306	0	0	309	0	3	0	7	0	10	0	1	0	3	0	4	702
7:30 AM	0	1	389	2	0	392	0	4	346	2	0	352	0	4	0	10	0	14	0	3	0	1	0	4	762
7:45 AM	0	0	341	1	0	342	0	0	352	1	0	353	0	3	0	12	0	15	0	2	0	1	0	3	713
8:00 AM	0	0	319	2	0	321	0	5	293	0	0	298	0	1	0	24	0	25	0	0	0	2	0	2	646
Total	0	1	1427	6	0	1434	0	12	1297	3	0	1312	0	11	0	53	0	64	0	6	0	7	0	13	2823
Approach %	0.0	0.1	99.5	0.4	-	-	0.0	0.9	98.9	0.2	-	-	0.0	17.2	0.0	82.8	-	-	0.0	46.2	0.0	53.8	-	-	-
Total %	0.0	0.0	50.5	0.2	-	50.8	0.0	0.4	45.9	0.1	-	46.5	0.0	0.4	0.0	1.9	-	2.3	0.0	0.2	0.0	0.2	-	0.5	-
PHF	0.000	0.250	0.917	0.750	-	0.915	0.000	0.600	0.921	0.375	-	0.929	0.000	0.688	0.000	0.552	-	0.640	0.000	0.500	0.000	0.583	-	0.813	0.926
Lights	0	0	1390	5	-	1395	0	12	1251	3	-	1266	0	11	0	51	-	62	0	6	0	7	-	13	2736
% Lights	-	0.0	97.4	83.3	-	97.3	-	100.0	96.5	100.0	-	96.5	-	100.0	-	96.2	-	96.9	-	100.0	-	100.0	-	100.0	96.9
Buses	0	1	11	1	-	13	0	0	17	0	-	17	0	0	0	2	-	2	0	0	0	0	-	0	32
% Buses	-	100.0	0.8	16.7	-	0.9	-	0.0	1.3	0.0	-	1.3	-	0.0	-	3.8	-	3.1	-	0.0	-	0.0	-	0.0	1.1
Single-Unit Trucks	0	0	20	0	-	20	0	0	24	0	-	24	0	0	0	0	-	0	0	0	0	0	-	0	44
% Single-Unit Trucks	-	0.0	1.4	0.0	-	1.4	-	0.0	1.9	0.0	-	1.8	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	1.6
Articulated Trucks	0	0	6	0	-	6	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	11
% Articulated Trucks	-	0.0	0.4	0.0	-	0.4	-	0.0	0.4	0.0	-	0.4	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Ogden Avenue with Lee Avenue
Site Code:
Start Date: 01/16/2016

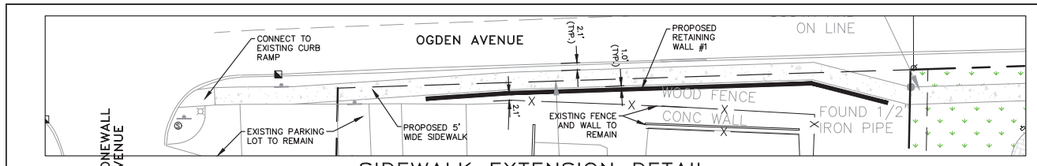
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Lee Avenue Northbound						Lee Avenue Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	2	317	4	0	323	0	7	466	4	0	477	0	0	1	5	0	6	0	0	2	3	0	5	811
5:00 PM	0	1	328	3	0	332	0	8	482	2	0	492	0	1	0	3	0	4	0	0	0	2	0	2	830
5:15 PM	0	3	348	8	0	359	0	10	477	0	0	487	0	4	0	5	0	9	0	0	0	3	0	3	858
5:30 PM	0	0	318	1	0	319	0	8	537	2	0	547	0	1	0	2	0	3	0	0	0	3	0	3	872
Total	0	6	1311	16	0	1333	0	33	1962	8	0	2003	0	6	1	15	0	22	0	0	2	11	0	13	3371
Approach %	0.0	0.5	98.3	1.2	-	-	0.0	1.6	98.0	0.4	-	-	0.0	27.3	4.5	68.2	-	-	0.0	0.0	15.4	84.6	-	-	-
Total %	0.0	0.2	38.9	0.5	-	39.5	0.0	1.0	58.2	0.2	-	59.4	0.0	0.2	0.0	0.4	-	0.7	0.0	0.0	0.1	0.3	-	0.4	-
PHF	0.000	0.500	0.942	0.500	-	0.928	0.000	0.825	0.913	0.500	-	0.915	0.000	0.375	0.250	0.750	-	0.611	0.000	0.000	0.250	0.917	-	0.650	0.966
Lights	0	6	1298	16	-	1320	0	33	1946	8	-	1987	0	6	1	15	-	22	0	0	2	11	-	13	3342
% Lights	-	100.0	99.0	100.0	-	99.0	-	100.0	99.2	100.0	-	99.2	-	100.0	100.0	100.0	-	100.0	-	-	100.0	100.0	-	100.0	99.1
Buses	0	0	1	0	-	1	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	3
% Buses	-	0.0	0.1	0.0	-	0.1	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	10	0	-	10	0	0	11	0	-	11	0	0	0	0	-	0	0	0	0	0	-	0	21
% Single-Unit Trucks	-	0.0	0.8	0.0	-	0.8	-	0.0	0.6	0.0	-	0.5	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.6
Articulated Trucks	0	0	2	0	-	2	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	5
% Articulated Trucks	-	0.0	0.2	0.0	-	0.2	-	0.0	0.2	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Site Plan

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.



SIDEWALK EXTENSION DETAIL

(SCALE 1"=20')

NOTES:

1) ACCESSIBLE PARKING STALL SIGNS SHALL BE STANDARD (NON-VAN) UNLESS OTHERWISE NOTED ON PLAN.

2) ALL ACCESSIBLE SIGNS AND POSTS SHALL BE TYPE IV. SEE DETAIL.

3) ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

4) ALL RADII ARE 4.5' UNLESS OTHERWISE NOTED.

5) PROPOSED BUILDING FOOTPRINT SHOWN WITHIN THIS PLAN SET IS FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS FOR FINAL BUILDING FOOTPRINT AND ALIGNMENT.

6) PUBLIC WORKS INSPECTION IS NEEDED FOR ALL WORK IN PUBLIC RIGHT-OF-WAYS/EASEMENTS. CONTACT XXXX XXXXXX, INSPECTION SUPERVISOR (XXX-XXX-XXXX), 72 HOURS PRIOR TO SCHEDULING WORK.

7) SEE ARCHITECTURAL PLANS FOR RETAINING WALL DESIGN AND DETAILS.

8) SEE ARCHITECTURAL PLANS FOR TRASH ENCLOSURE DETAILS.

9) SEE VEHICLE EXHIBIT FOR TRUCK ACCESS.

WARNING

CALL J.U.L.I.E. TOLL FREE 800-892-0123

CALL BEFORE YOU DIG

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

R.A.SMITH NATIONAL ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A.SMITH NATIONAL

DESCRIPTION	DATE

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield, WI 53005-5938
262-781-1000 Fax 262-781-8466 www.rasmithnational.com
Appleton, WI Orange County, CA Pittsburgh, PA

PACKEY WEBB FORD
VILLAGE OF DOWNERS GROVE, ILLINOIS

SITE PLAN

PRELIMINARY NOT FOR CONSTRUCTION

DATE: 01-29-16
SCALE: 1"=40'
JOB NO. 3150545
PROJECT MANAGER: DAVID CLEARY, P.E.
DESIGNED BY: RTP
CHECKED BY: RTP

SHEET NUMBER
C200

P:\3150545\Dwg\Sheets\SP001040.dwg, Site Plan, 2/17/2016 3:32:04 PM, orl

ITE Rates and Equations

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

Automobile Sales
(841)

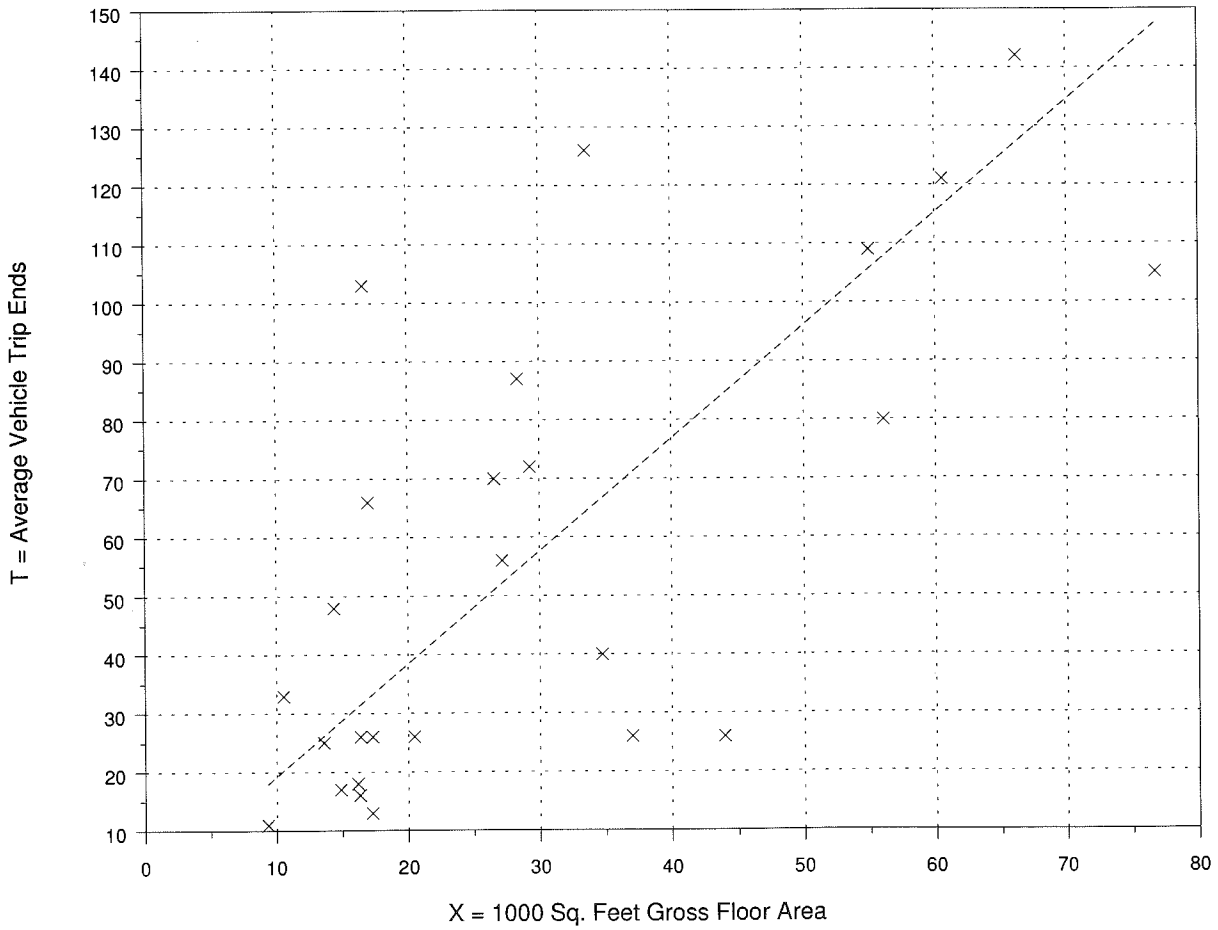
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 26
Average 1000 Sq. Feet GFA: 30
Directional Distribution: 75% entering, 25% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.92	0.59 - 6.17	1.72

Data Plot and Equation



× Actual Data Points

------ Average Rate

Fitted Curve Equation: Not given

R^2 = ****

Automobile Sales
(841)

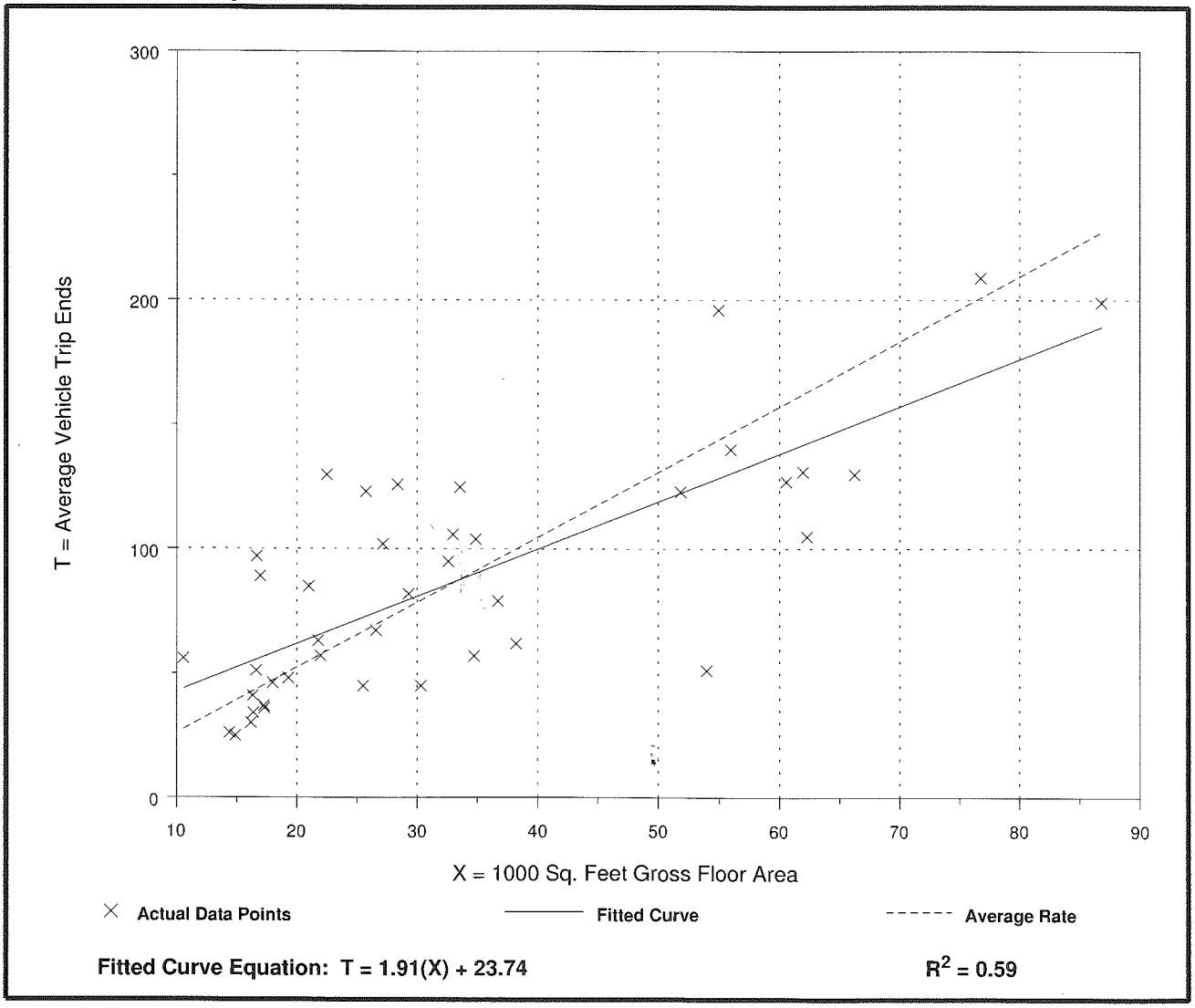
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 41
Average 1000 Sq. Feet GFA: 33
Directional Distribution: 40% entering, 60% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.62	0.94 - 5.81	1.90

Data Plot and Equation



Fitted Curve Equation: T = 1.91(X) + 23.74

R^2 = 0.59

Automobile Sales
(841)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday,
Peak Hour of Generator

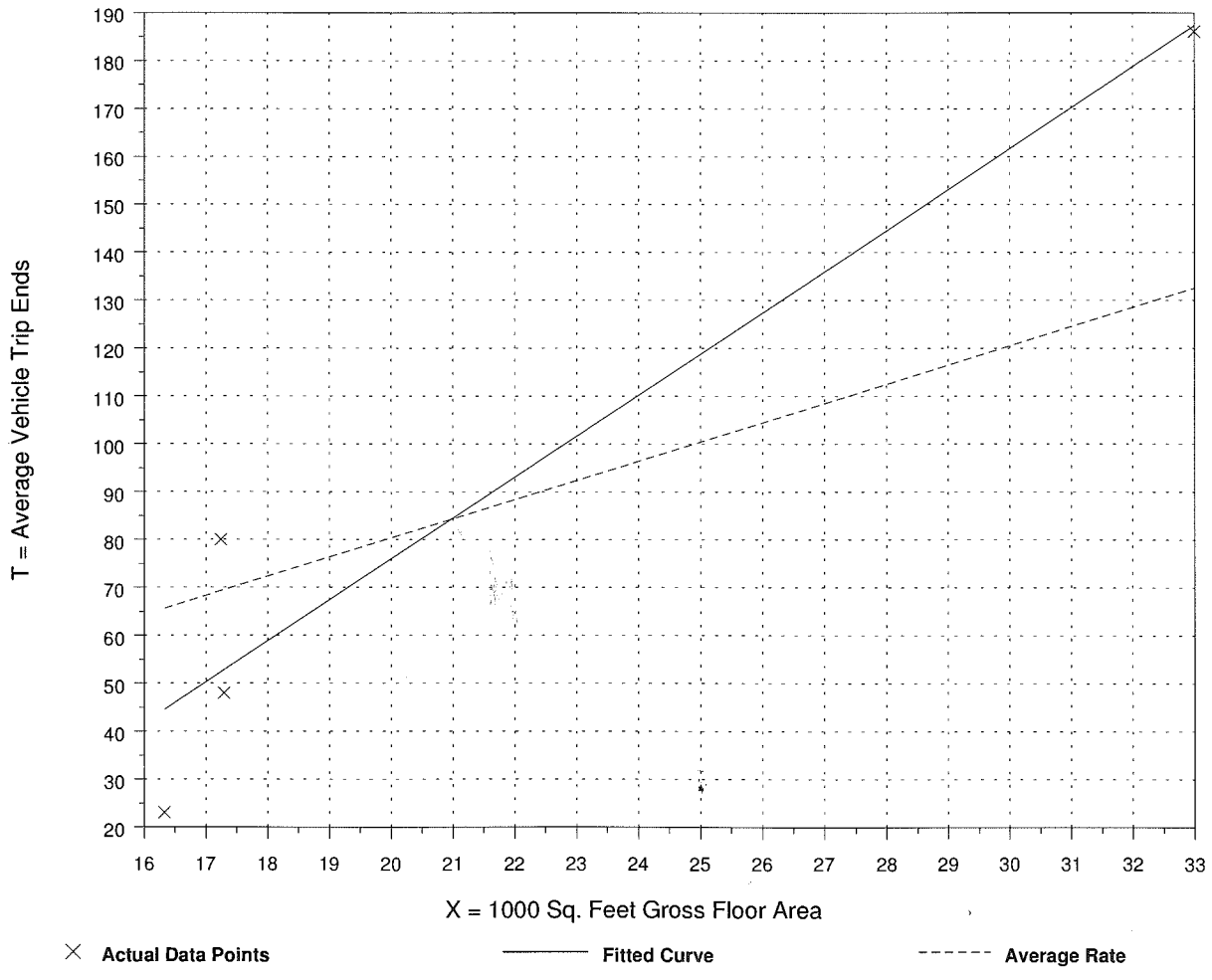
Number of Studies: 4
Average 1000 Sq. Feet GFA: 21
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.02	1.41 - 5.64	2.58

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Fitted Curve Equation: T = 8.56(X) - 95.28

R^2 = 0.92

Automobile Sales
(841)

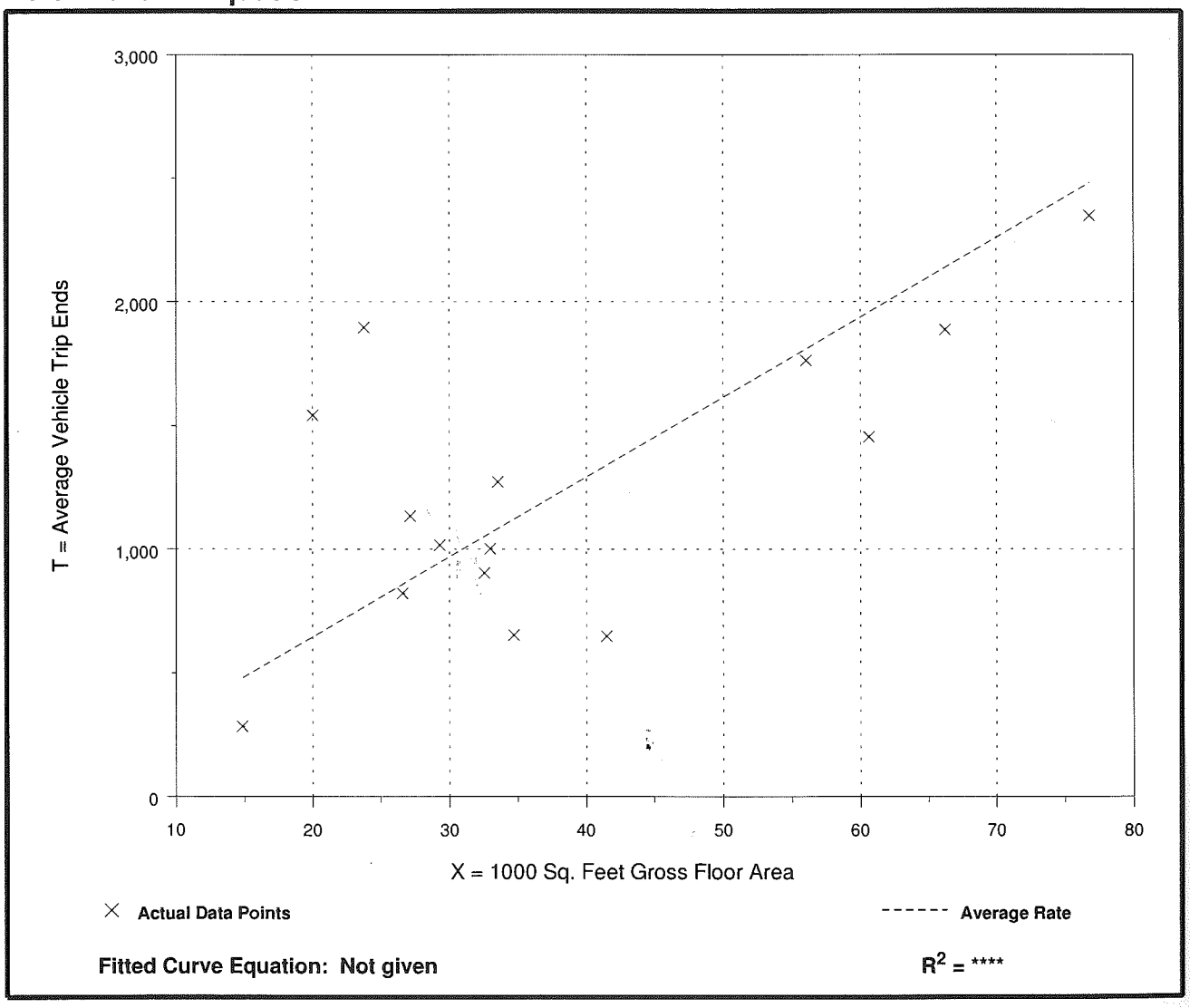
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 15
Average 1000 Sq. Feet GFA: 38
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
32.30	15.64 - 79.66	15.70

Data Plot and Equation



Fitted Curve Equation: Not given

R^2 = ****

Automobile Sales
(841)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday

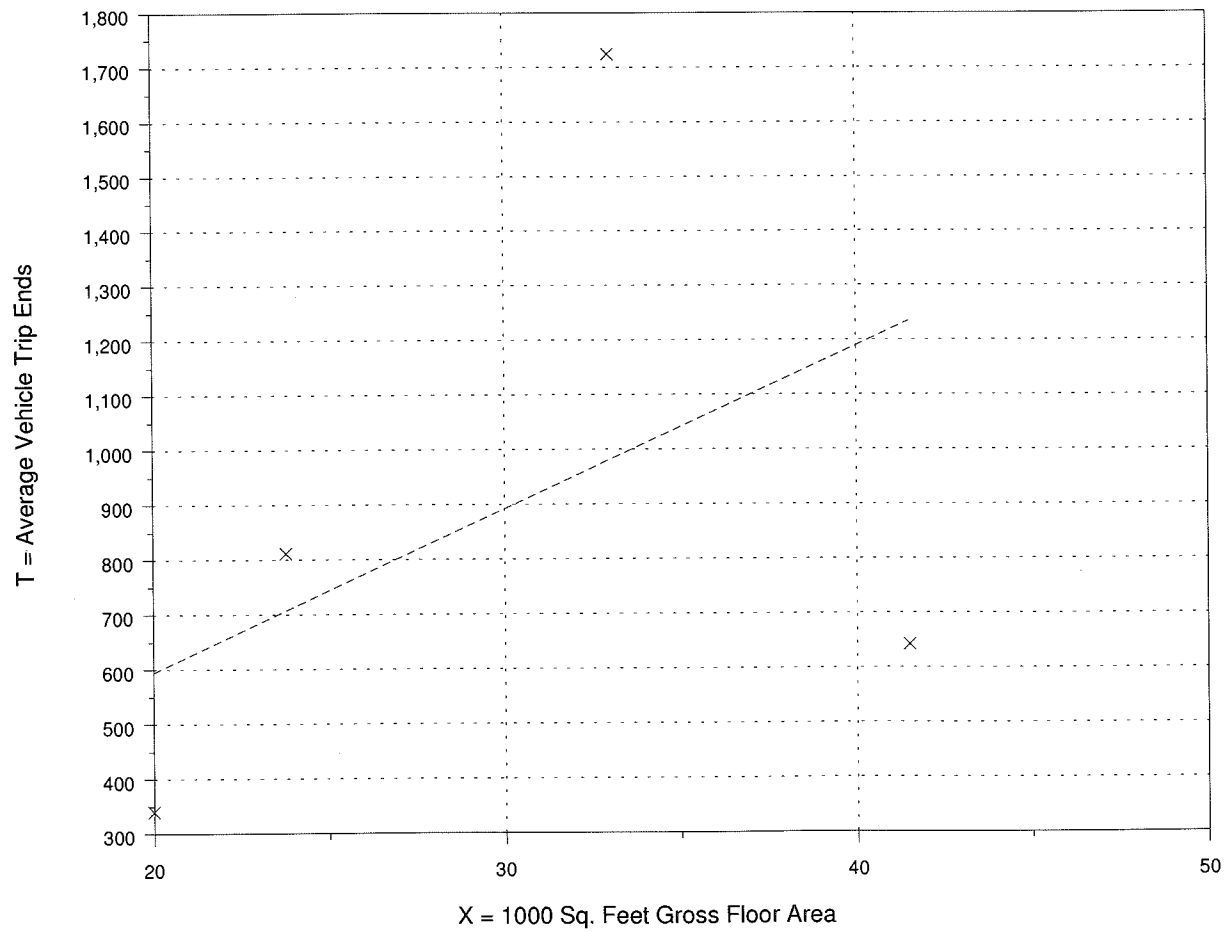
Number of Studies: 4
Average 1000 Sq. Feet GFA: 30
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
29.74	15.47 - 52.24	16.58

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Fitted Curve Equation: Not given

R^2 = ****

CMAP 2040 Projections Letter

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

Chicago Metropolitan
Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

February 19, 2016

Brendan May
Consultant
Kenig, Lindgren, O'Hara, and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: ***Ogden Avenue @ Lee Avenue***
IDOT

Dear Mr. May:

In response to a request made on your behalf and dated February 18, 2016, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Year 2040 ADT
Ogden Avenue	39,000
Lee Avenue	900

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2015 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the GO TO 2040 Comprehensive Regional Plan for the Northeastern Illinois area.

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

Sincerely,

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

cc: Fortmann (IDOT)
S:\AdminGroups\ResearchAnalysis\SmallAreaTrafficForecasts_CY16\DownersGrove\du-04-16\du-04-16.docx

Level of Service Criteria

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

LEVEL OF SERVICE CRITERIA

Signalized Intersections

Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections

Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

HCS 2010 Two-Way Stop Control Summary Report

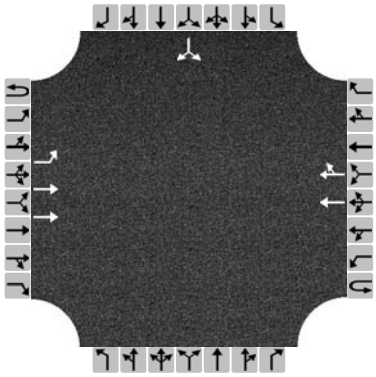
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2016
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	0	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)		7	1433				1312	3						3		6
Percent Heavy Vehicles		0												0		0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left + Thru															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		7													9	
Capacity		495													240	
v/c Ratio		0.01													0.04	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		12.4													20.6	
Level of Service (LOS)		B													C	
Approach Delay (s/veh)	0.1												20.6			
Approach LOS	A												C			

HCS 2010 Two-Way Stop Control Summary Report

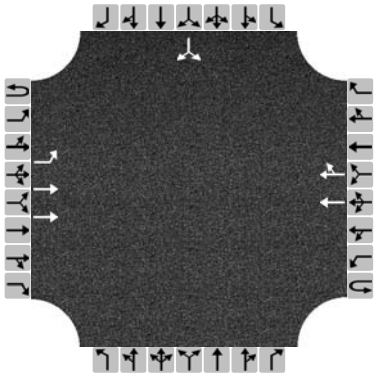
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2016
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	0	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)		11	1341				1975	4						2		7
Percent Heavy Vehicles		0												50		0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left + Thru															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		11													9	
Capacity		281													111	
v/c Ratio		0.04													0.08	
95% Queue Length		0.1													0.3	
Control Delay (s/veh)		18.4													40.4	
Level of Service (LOS)		C													E	
Approach Delay (s/veh)	0.1												40.4			
Approach LOS	A												E			

HCS 2010 Two-Way Stop Control Summary Report

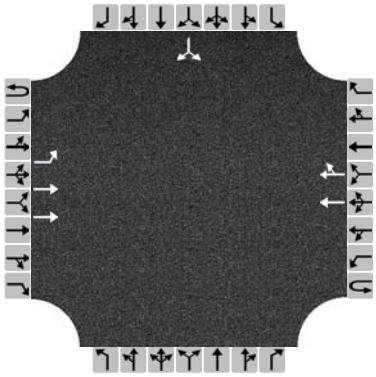
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2016
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	0	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)		7	1340				1382	5						7		12
Percent Heavy Vehicles		0												0		0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left + Thru															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		8													21	
Capacity		457													212	
v/c Ratio		0.02													0.10	
95% Queue Length		0.1													0.3	
Control Delay (s/veh)		13.0													23.9	
Level of Service (LOS)		B													C	
Approach Delay (s/veh)	0.1												23.9			
Approach LOS	A												C			

HCS 2010 Two-Way Stop Control Summary Report

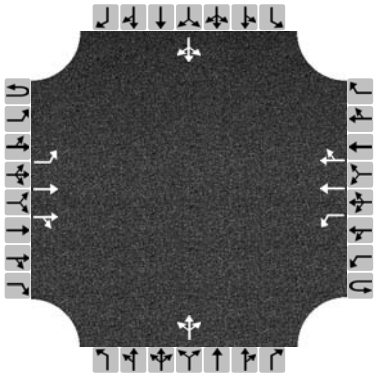
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2016
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		1	1429	6		12	1297	3		11	0	53		6	0	7
Percent Heavy Vehicles		0				0				0	0	4		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		1				13					69				14	
Capacity		495				436					230				167	
v/c Ratio		0.00				0.03					0.30				0.08	
95% Queue Length		0.0				0.1					1.2				0.3	
Control Delay (s/veh)		12.3				13.5					27.3				28.5	
Level of Service (LOS)		B				B					D				D	
Approach Delay (s/veh)	0.0				0.1				27.3				28.5			
Approach LOS	A				A				D				D			

HCS 2010 Two-Way Stop Control Summary Report

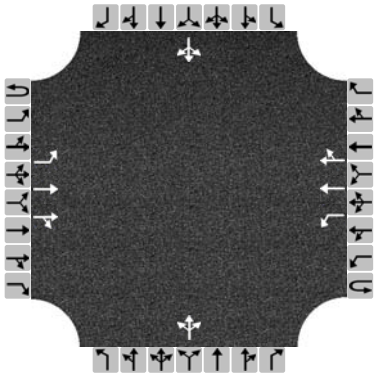
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2016
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		6	1321	16		33	1962	8		6	1	15		0	2	11
Percent Heavy Vehicles		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		6				34					22				13	
Capacity		283				504					169				218	
v/c Ratio		0.02				0.07					0.13				0.06	
95% Queue Length		0.1				0.2					0.4				0.2	
Control Delay (s/veh)		18.0				12.7					29.5				22.6	
Level of Service (LOS)		C				B					D				C	
Approach Delay (s/veh)	0.1				0.2				29.5				22.6			
Approach LOS	A				A				D				C			

HCS 2010 Two-Way Stop Control Summary Report

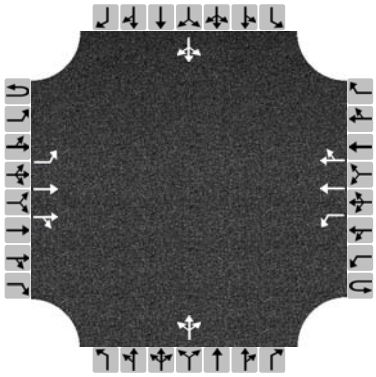
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2016
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		5	1324	18		36	1366	18		14	2	40		6	1	7
Percent Heavy Vehicles		0				0				0	0	4		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		5				39					60				15	
Capacity		458				476					211				151	
v/c Ratio		0.01				0.08					0.28				0.10	
95% Queue Length		0.0				0.3					1.1				0.3	
Control Delay (s/veh)		13.0				13.2					28.8				31.4	
Level of Service (LOS)		B				B					D				D	
Approach Delay (s/veh)	0.0				0.3				28.8				31.4			
Approach LOS	A				A				D				D			

HCS 2010 Two-Way Stop Control Summary Report

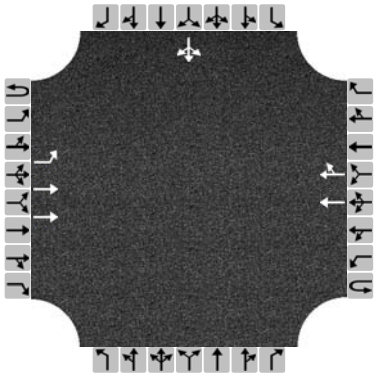
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey/Access
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road/Full Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LTR	
Volume (veh/h)		12	1519				1391	9						6	0	9
Percent Heavy Vehicles		0												0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		13													15	
Capacity		464													172	
v/c Ratio		0.03													0.09	
95% Queue Length		0.1													0.3	
Control Delay (s/veh)		13.0													27.9	
Level of Service (LOS)		B													D	
Approach Delay (s/veh)	0.1												27.9			
Approach LOS													D			

HCS 2010 Two-Way Stop Control Summary Report

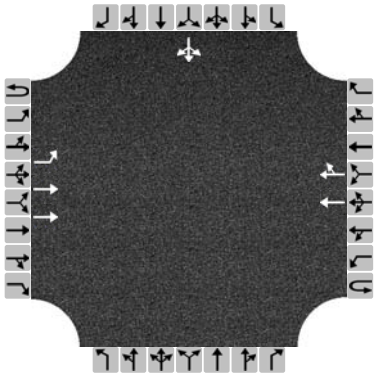
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey/Access
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road/Full Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LTR	
Volume (veh/h)		26	1421				2094	10						10	0	14
Percent Heavy Vehicles		0												0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		27													26	
Capacity		240													72	
v/c Ratio		0.11													0.36	
95% Queue Length		0.4													1.4	
Control Delay (s/veh)		21.9													81.5	
Level of Service (LOS)		C													F	
Approach Delay (s/veh)	0.4												81.5			
Approach LOS													F			

HCS 2010 Two-Way Stop Control Summary Report

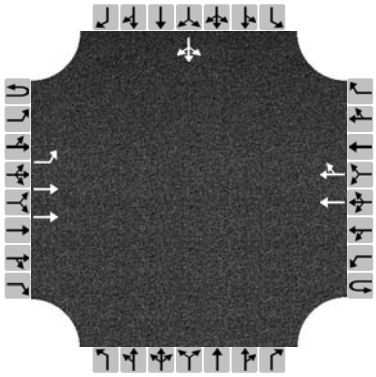
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey/Access
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road/Full Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LTR	
Volume (veh/h)		18	1420				1465	16						18	0	22
Percent Heavy Vehicles		0												0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		19													42	
Capacity		430													149	
v/c Ratio		0.04													0.28	
95% Queue Length		0.1													1.1	
Control Delay (s/veh)		13.8													38.5	
Level of Service (LOS)		B													E	
Approach Delay (s/veh)	0.2												38.5			
Approach LOS													E			

HCS 2010 Two-Way Stop Control Summary Report

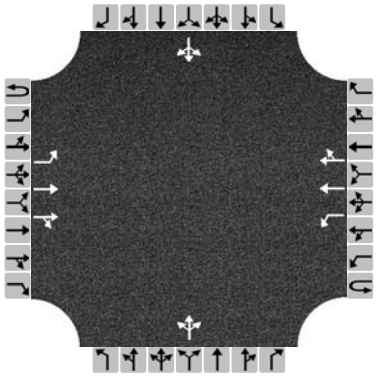
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		1	1518	6		12	1382	3		11	0	53		6	0	7
Percent Heavy Vehicles		0				0				0	0	4		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		1				13					69				14	
Capacity		457				401					208				149	
v/c Ratio		0.00				0.03					0.33				0.09	
95% Queue Length		0.0				0.1					1.4				0.3	
Control Delay (s/veh)		12.9				14.3					30.7				31.7	
Level of Service (LOS)		B				B					D				D	
Approach Delay (s/veh)	0.0				0.1				30.7				31.7			
Approach LOS									D				D			

HCS 2010 Two-Way Stop Control Summary Report

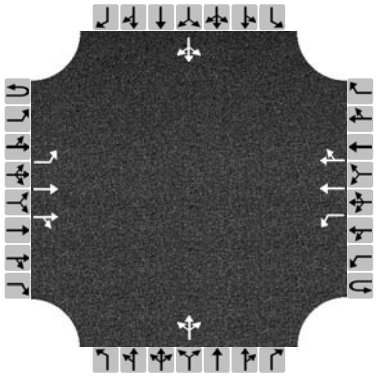
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		6	1409	16		33	2087	8		6	1	15		0	2	11
Percent Heavy Vehicles		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		6				34					22				13	
Capacity		252				465					57				25	
v/c Ratio		0.02				0.07					0.39				0.52	
95% Queue Length		0.1				0.2					1.4				1.6	
Control Delay (s/veh)		19.6				13.3					104.0				255.5	
Level of Service (LOS)		C				B					F				F	
Approach Delay (s/veh)	0.1				0.2				104.0				255.5			
Approach LOS									F				F			

HCS 2010 Two-Way Stop Control Summary Report

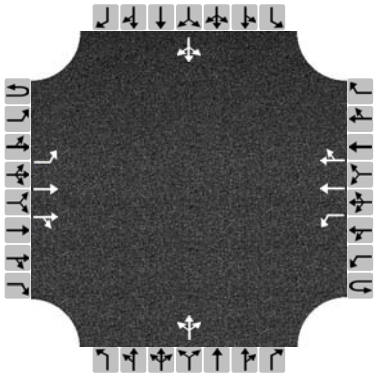
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		4	1415	18		36	1460	18		14	2	40		6	1	7
Percent Heavy Vehicles		0				0				0	0	4		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		4				39					60				15	
Capacity		419				437					113				66	
v/c Ratio		0.01				0.09					0.53				0.23	
95% Queue Length		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		13.7				14.0					68.6				75.1	
Level of Service (LOS)		B				B					F				F	
Approach Delay (s/veh)	0.0				0.3				68.6				75.1			
Approach LOS									F				F			

HCS 2010 Two-Way Stop Control Summary Report

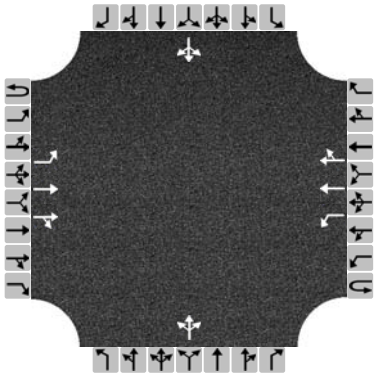
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey/Access
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road/Full Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		13	1522	23		47	1386	9		20	0	12		12	0	9
Percent Heavy Vehicles		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		14				49					34				22	
Capacity		466				405					104				110	
v/c Ratio		0.03				0.12					0.33				0.20	
95% Queue Length		0.1				0.4					1.3				0.7	
Control Delay (s/veh)		13.0				15.1					55.5				45.7	
Level of Service (LOS)		B				C					F				E	
Approach Delay (s/veh)	0.1				0.5				55.5				45.7			
Approach LOS									F				E			

HCS 2010 Two-Way Stop Control Summary Report

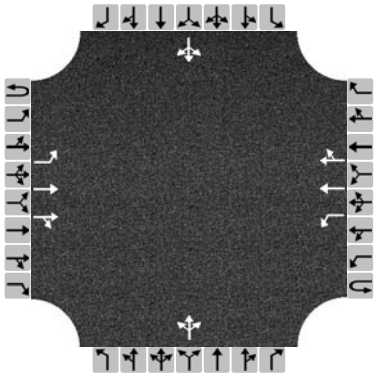
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey/Access
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road/Full Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		22	1425	15		29	2080	10		58	0	34		12	0	14
Percent Heavy Vehicles		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		23				31					97				28	
Capacity		243				447					91				60	
v/c Ratio		0.09				0.07					1.07				0.47	
95% Queue Length		0.3				0.2					6.4				1.8	
Control Delay (s/veh)		21.4				13.7					199.4				110.4	
Level of Service (LOS)		C				B					F				F	
Approach Delay (s/veh)	0.3				0.2				199.4				110.4			
Approach LOS									F				F			

HCS 2010 Two-Way Stop Control Summary Report

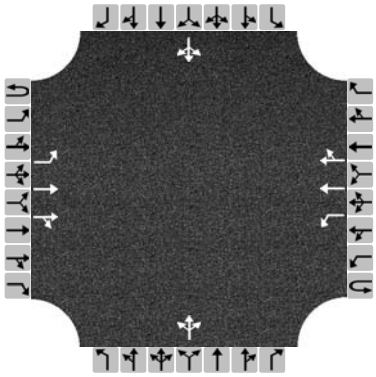
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lacey/Access
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lacey Road/Full Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

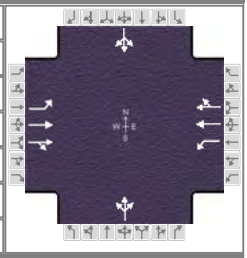
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		23	1431	32		65	1447	16		83	0	49		25	0	22
Percent Heavy Vehicles		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		24				68					139				49	
Capacity		437				437					103				98	
v/c Ratio		0.05				0.16					1.36				0.50	
95% Queue Length		0.2				0.5					9.9				2.2	
Control Delay (s/veh)		13.7				14.7					287.0				73.3	
Level of Service (LOS)		B				B					F				F	
Approach Delay (s/veh)	0.2				0.6				287.0				73.3			
Approach LOS									F				F			

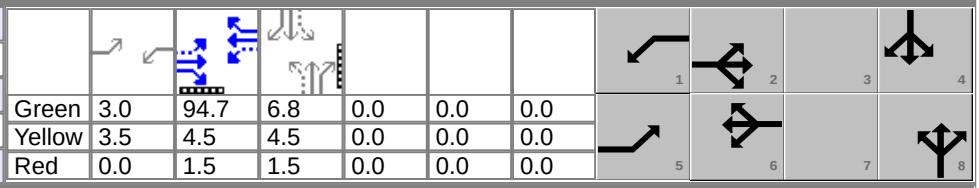
HCS 2010 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey AMPR.xus		
Project Description	AM Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	13	1522	23	47	1386	9	20	0	12	12	0	9

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.0	94.7	6.8	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0

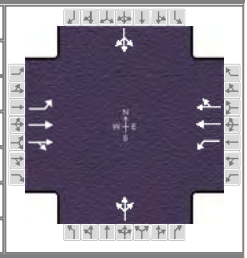
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	13	1522	23	47	1386	9	20	0	12	12	0	9
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	9		2	9			2			2	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0			15.0			15.0	
Turn Bay Length, ft	145	0		145	0			0			0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	10.0	95.0	10.0	95.0		15.0		15.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	3.0	7.0	3.0	4.0	3.0	4.0
Recall Mode	Off	Min	Off	Off	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s	0.0	7.0	0.0	0.0	0.0	7.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	10.0	0.0	0.0	0.0	17.0	0.0	0.0

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

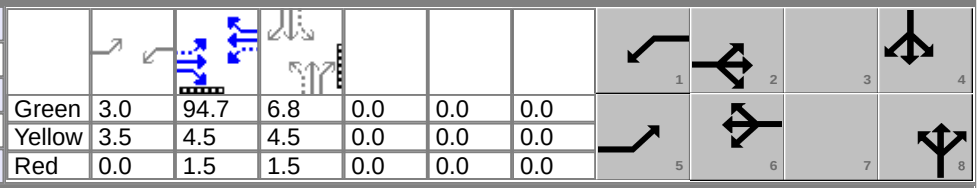
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey AMPR.xus		
Project Description	AM Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	13	1522	23	47	1386	9	20	0	12	12	0	9

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.0	94.7	6.8	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0

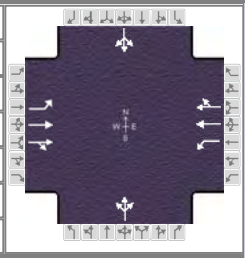
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		8.0		8.0
Phase Duration, s	6.5	100.7	6.5	100.7		12.8		12.8
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		5.2		5.2
Queue Clearance Time (g_s), s	2.2		2.6			4.3		3.4
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0		0.1		0.1
Phase Call Probability	1.00		1.00			0.84		0.84
Max Out Probability	0.01		0.07			1.00		0.72

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	14	814	812	49	735	734		34			22	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1774	1743	1734	1774	1743	1739		1574			1597	
Queue Service Time (g_s), s	0.2	0.0	0.9	0.6	18.4	18.4		0.9			0.0	
Cycle Queue Clearance Time (g_c), s	0.2	0.0	0.9	0.6	18.4	18.4		2.3			1.4	
Green Ratio (*g/C*)	0.81	0.79	0.79	0.81	0.79	0.79		0.06			0.06	
Capacity (*c*), veh/h	327	1376	1369	341	1376	1373		137			137	
Volume-to-Capacity Ratio (*X*)	0.042	0.592	0.593	0.145	0.534	0.534		0.245			0.161	
Back of Queue (*Q*), ft/ln (95 th percentile)	2.1	34.6	36.8	7.9	251.5	234.4		47.5			30.8	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.1	1.3	1.5	0.3	9.4	9.4		1.9			1.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.01	0.00	0.00	0.05	0.00	0.00		0.00			0.00	
Uniform Delay (d_1), s/veh	3.9	0.0	0.1	2.2	4.6	4.6		54.5			54.1	
Incremental Delay (d_2), s/veh	0.1	1.9	1.9	0.2	1.5	1.5		1.3			0.8	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (*d*), s/veh	3.9	1.9	2.0	2.4	6.1	6.1		55.8			54.9	
Level of Service (LOS)	A	A	A	A	A	A		E			D	
Approach Delay, s/veh / LOS	1.9	A		6.0	A		55.8	E		54.9	D	
Intersection Delay, s/veh / LOS	4.8						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.0	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.8	A	1.7	A	0.5	A	0.5	A

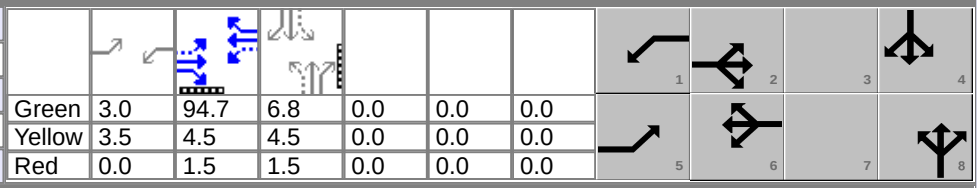
HCS 2010 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey AMPR.xus		
Project Description	AM Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	13	1522	23	47	1386	9	20	0	12	12	0	9

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB			WB			NB			SB		
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Green	3.0	94.7		6.8	0.0		0.0			0.0		
Yellow	3.5	4.5		4.5	0.0		0.0			0.0		
Red	0.0	1.5		1.5	0.0		0.0			0.0		
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.040	1.000	1.000	1.040	1.000
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.917	1.000	0.980	0.917	1.000	1.000	0.980	1.000	1.000	0.980	1.000
Approach Grade Adjustment Factor (f_g)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000			0.812			0.825	
Right-Turn Adjustment Factor (f_{RT})		0.995			0.998			0.000			0.000	
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Movement Saturation Flow Rate (s), veh/h	1774	3425		1774	3460			0			0	
Proportion of Vehicles Arriving on Green (P)	0.03	1.00	0.79	0.03	0.79	0.79	0.06	0.00	0.06	0.06	0.00	0.06
Incremental Delay Factor (k)	0.11	0.50	0.50	0.11	0.50	0.50		0.15			0.15	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.81	0.79	0.81	0.79		0.06		0.06
Permitted Saturation Flow Rate (s_p), veh/h/ln	359	0	309	0		1428		1424
Shared Saturation Flow Rate (s_{sh}), veh/h/ln						1605		1626
Permitted Effective Green Time (g_p), s	94.7	0.0	94.7	0.0		6.8		6.8
Permitted Service Time (g_u), s	74.3	0.0	91.9	0.0		5.3		4.4
Permitted Queue Service Time (g_{ps}), s	0.8		0.5			0.9		0.0
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		1.2		1.4
Queue Service Time Before Blockage (g_{fs}), s						1.1		0.6
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.389	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.039	0.000	0.039	0.000	0.160	0.000	0.160
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1579.09	2.66	1579.09	2.66	112.57	53.44	112.57	53.44
Bicycle F_w / F_v	-3.64	1.35	-3.64	1.25	-3.64	0.06	-3.64	0.04

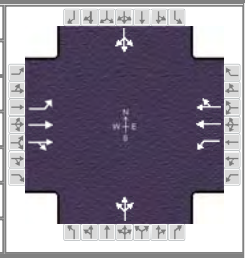
--- Messages ---

No errors or warnings exist.

--- Comments ---

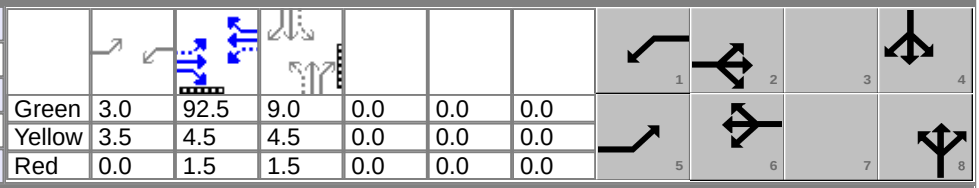
HCS 2010 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey PMPR.xus		
Project Description	PM Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	22	1425	15	29	2080	10	58	0	34	12	0	14

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.0	92.5	9.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0

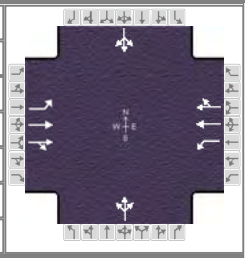
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	22	1425	15	29	2080	10	58	0	34	12	0	14
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	9		2	9			2			2	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0			15.0			15.0	
Turn Bay Length, ft	145	0		145	0			0			0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	10.0	95.0	10.0	95.0		15.0		15.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	3.0	7.0	3.0	4.0	3.0	4.0
Recall Mode	Off	Min	Off	Off	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s	0.0	7.0	0.0	0.0	0.0	7.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	10.0	0.0	0.0	0.0	17.0	0.0	0.0

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

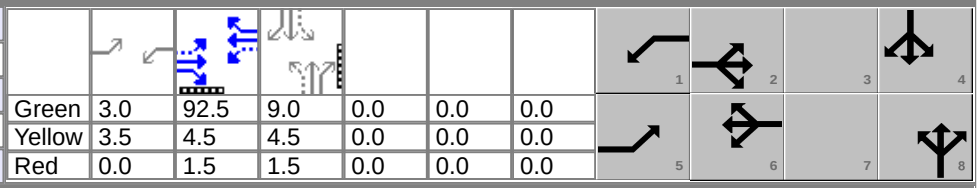
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey PMPR.xus		
Project Description	PM Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	22	1425	15	29	2080	10	58	0	34	12	0	14

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.0	92.5	9.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0

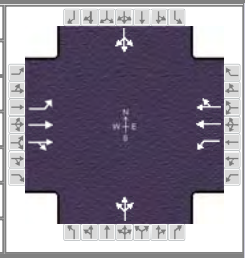
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		8.0		8.0
Phase Duration, s	6.5	98.5	6.5	98.5		15.0		15.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		5.2		5.2
Queue Clearance Time (g_s), s	2.3		2.4			9.4		3.7
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0		0.0		0.2
Phase Call Probability	1.00		1.00			0.98		0.98
Max Out Probability	0.82		0.97			1.00		0.99

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	23	759	757	31	1100	1100		97			27	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1774	1743	1737	1774	1743	1740		1539			1663	
Queue Service Time (g_s), s	0.3	0.0	0.6	0.4	47.0	47.3		5.7			0.0	
Cycle Queue Clearance Time (g_c), s	0.3	0.0	0.6	0.4	47.0	47.3		7.4			1.7	
Green Ratio (*g/C*)	0.80	0.77	0.77	0.80	0.77	0.77		0.08			0.08	
Capacity (*c*), veh/h	168	1344	1339	362	1344	1341		164			169	
Volume-to-Capacity Ratio (*X*)	0.138	0.565	0.565	0.084	0.819	0.820		0.589			0.162	
Back of Queue (*Q*), ft/ln (95 th percentile)	13.7	31	32.3	5.7	594.2	555.7		146.7			37.1	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	1.2	1.3	0.2	22.2	22.2		5.8			1.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.09	0.00	0.00	0.04	0.00	0.00		0.00			0.00	
Uniform Delay (d_1), s/veh	14.2	0.0	0.1	2.6	8.5	8.6		54.7			52.1	
Incremental Delay (d_2), s/veh	0.4	1.7	1.7	0.1	5.7	5.7		6.5			0.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (*d*), s/veh	14.5	1.7	1.8	2.7	14.2	14.3		61.3			52.8	
Level of Service (LOS)	B	A	A	A	B	B		E			D	
Approach Delay, s/veh / LOS	2.0	A		14.1	B		61.3	E		52.8	D	
Intersection Delay, s/veh / LOS	10.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.0	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.8	A	2.3	B	0.6	A	0.5	A

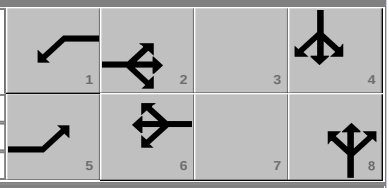
HCS 2010 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey PMPR.xus		
Project Description	PM Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	22	1425	15	29	2080	10	58	0	34	12	0	14

Signal Information													
Cycle, s	120.0	Reference Phase	2										
Offset, s	0	Reference Point	Begin										
Uncoordinated	No	Simult. Gap E/W	On	Green	3.0	92.5	9.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	4.5	4.5	0.0	0.0	0.0			
				Red	0.0	1.5	1.5	0.0	0.0	0.0			



	EB			WB			NB			SB		
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.040	1.000	1.000	1.040	1.000
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.917	1.000	0.980	0.917	1.000	1.000	0.980	1.000	1.000	0.980	1.000
Approach Grade Adjustment Factor (f_g)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000			0.794			0.858	
Right-Turn Adjustment Factor (f_{RT})		0.996			0.998			0.000			0.000	
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Movement Saturation Flow Rate (s), veh/h	1774	3443		1774	3467			0			0	
Proportion of Vehicles Arriving on Green (P)	0.03	1.00	0.77	0.03	0.77	0.77	0.08	0.00	0.08	0.08	0.00	0.08
Incremental Delay Factor (k)	0.11	0.50	0.50	0.11	0.50	0.50		0.22			0.15	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.80	0.77	0.80	0.77		0.08		0.08
Permitted Saturation Flow Rate (s_p), veh/h/ln	176	0	343	0		1421		1394
Shared Saturation Flow Rate (s_{sh}), veh/h/ln						1598		1659
Permitted Effective Green Time (g_p), s	92.5	0.0	92.5	0.0		9.0		9.0
Permitted Service Time (g_u), s	43.2	0.0	89.9	0.0		7.3		1.6
Permitted Queue Service Time (g_{ps}), s	7.5		0.3			5.7		0.0
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.3		2.2
Queue Service Time Before Blockage (g_{fs}), s						0.3		0.6
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.389	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.046	0.000	0.046	0.000	0.158	0.000	0.158
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1541.66	3.15	1541.66	3.15	150.00	51.34	150.00	51.34
Bicycle F_w / F_v	-3.64	1.27	-3.64	1.84	-3.64	0.16	-3.64	0.05

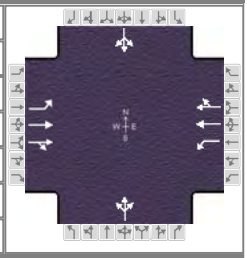
--- Messages ---

No errors or warnings exist.

--- Comments ---

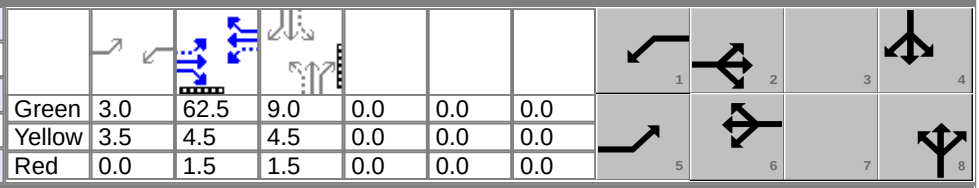
HCS 2010 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey SATPR.xus		
Project Description	SAT Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	23	1431	32	65	1447	16	83	0	49	25	0	22

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.0	62.5	9.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0

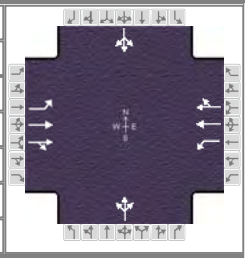
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	23	1431	32	65	1447	16	83	0	49	25	0	22
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	9		2	9			2			2	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0			15.0			15.0	
Turn Bay Length, ft	145	0		145	0			0			0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	10.0	65.0	10.0	65.0		15.0		15.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	3.0	7.0	3.0	4.0	3.0	4.0
Recall Mode	Off	Min	Off	Off	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s	0.0	7.0	0.0	0.0	0.0	7.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	10.0	0.0	0.0	0.0	17.0	0.0	0.0

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

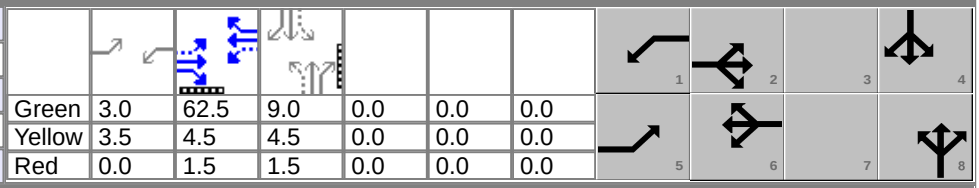
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey SATPR.xus		
Project Description	SAT Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	23	1431	32	65	1447	16	83	0	49	25	0	22

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.0	62.5	9.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0

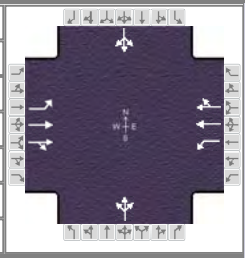
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		8.0		8.0
Phase Duration, s	6.5	68.5	6.5	68.5		15.0		15.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		5.3		5.3
Queue Clearance Time (g_s), s	2.3		3.0			10.0		4.4
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0		0.0		0.4
Phase Call Probability	1.00		1.00			0.99		0.99
Max Out Probability	0.84		1.00			1.00		1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	24	772	768	68	771	769		139			49	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1774	1743	1729	1774	1743	1736		1534			1632	
Queue Service Time (g_s), s	0.3	7.2	8.2	1.0	21.8	21.9		5.7			0.0	
Cycle Queue Clearance Time (g_c), s	0.3	7.2	8.2	1.0	21.8	21.9		8.0			2.4	
Green Ratio (*g/C*)	0.73	0.69	0.69	0.73	0.69	0.69		0.10			0.10	
Capacity (*c*), veh/h	283	1210	1201	342	1210	1206		219			224	
Volume-to-Capacity Ratio (*X*)	0.086	0.638	0.640	0.200	0.637	0.638		0.636			0.220	
Back of Queue (*Q*), ft/ln (95 th percentile)	4.6	87.9	88.7	13.1	309.5	288.3		157.5			48.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.2	3.3	3.5	0.5	11.5	11.5		6.2			1.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.03	0.00	0.00	0.09	0.00	0.00		0.00			0.00	
Uniform Delay (d_1), s/veh	6.8	1.3	1.5	3.9	7.5	7.5		40.0			37.5	
Incremental Delay (d_2), s/veh	0.1	2.6	2.6	0.3	2.6	2.6		6.8			0.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (*d*), s/veh	6.9	3.9	4.1	4.2	10.1	10.1		46.8			38.2	
Level of Service (LOS)	A	A	A	A	B	B		D			D	
Approach Delay, s/veh / LOS	4.0	A		9.9	A		46.8	D		38.2	D	
Intersection Delay, s/veh / LOS	9.1						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.0	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.8	A	1.8	A	0.7	A	0.6	A

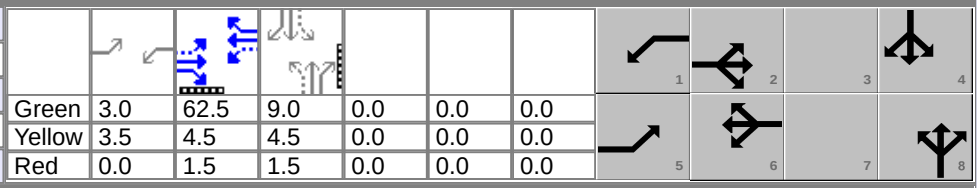
HCS 2010 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	BSM	Analysis Date	Feb 12, 2016	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2022	Analysis Period	1> 7:00
Intersection	Ogden Avenue with Lac…	File Name	Ogden with Lacey SATPR.xus		
Project Description	SAT Projected Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	23	1431	32	65	1447	16	83	0	49	25	0	22

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB			WB			NB			SB		
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Green	3.0	62.5	9.0	0.0	0.0	0.0						
Yellow	3.5	4.5	4.5	0.0	0.0	0.0						
Red	0.0	1.5	1.5	0.0	0.0	0.0						
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.040	1.000	1.000	1.040	1.000
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.917	1.000	0.980	0.917	1.000	1.000	0.980	1.000	1.000	0.980	1.000
Approach Grade Adjustment Factor (f_g)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000			0.792			0.842	
Right-Turn Adjustment Factor (f_{RT})		0.992			0.996			0.000			0.000	
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Movement Saturation Flow Rate (s), veh/h	1774	3397		1774	3441			0			0	
Proportion of Vehicles Arriving on Green (P)	0.03	0.93	0.69	0.03	0.69	0.69	0.10	0.00	0.10	0.10	0.00	0.10
Incremental Delay Factor (k)	0.11	0.50	0.50	0.11	0.50	0.50		0.25			0.15	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.73	0.69	0.73	0.69		0.10		0.10
Permitted Saturation Flow Rate (s_p), veh/h/ln	335	0	335	0		1410		1374
Shared Saturation Flow Rate (s_{sh}), veh/h/ln						1590		1610
Permitted Effective Green Time (g_p), s	62.5	0.0	62.5	0.0		9.0		9.0
Permitted Service Time (g_u), s	38.6	0.0	54.3	0.0		6.6		1.0
Permitted Queue Service Time (g_{ps}), s	1.9		2.1			5.7		0.0
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.2		1.7
Queue Service Time Before Blockage (g_{fs}), s						0.2		0.9
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.389	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.058	0.000	0.058	0.000	0.144	0.000	0.144
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1388.41	4.21	1388.89	4.20	200.00	36.45	200.00	36.45
Bicycle F_w / F_v	-3.64	1.29	-3.64	1.33	-3.64	0.23	-3.64	0.08

--- Messages ---

No errors or warnings exist.

--- Comments ---

HCS 2010 Two-Way Stop Control Summary Report

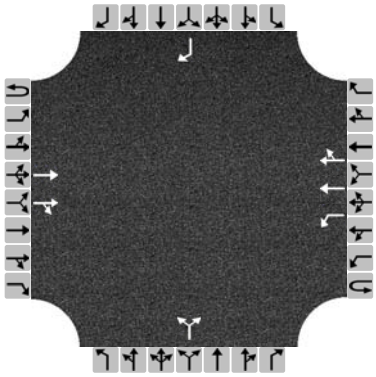
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	1
Configuration			T	TR		L	T	TR			LR					R
Volume (veh/h)			1540	6		12	1429	3		11		53				7
Percent Heavy Vehicles						0				0		4				0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						13					69					8
Capacity						393					203					348
v/c Ratio						0.03					0.34					0.02
95% Queue Length						0.1					1.4					0.1
Control Delay (s/veh)						14.5					31.6					15.6
Level of Service (LOS)						B					D					C
Approach Delay (s/veh)					0.1				31.6				15.6			
Approach LOS									D				C			

HCS 2010 Two-Way Stop Control Summary Report

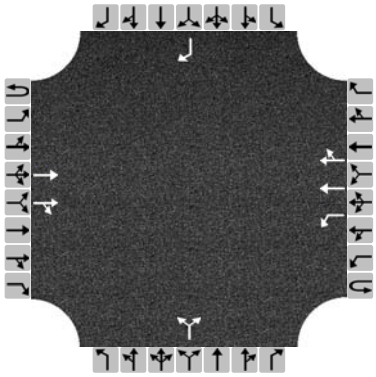
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	1
Configuration			T	TR		L	T	TR			LR					R
Volume (veh/h)			1453	18		33	2116	8		6		15				11
Percent Heavy Vehicles						0				0		0				0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						34					21					11
Capacity						446					170					212
v/c Ratio						0.08					0.12					0.05
95% Queue Length						0.2					0.4					0.2
Control Delay (s/veh)						13.7					29.2					22.9
Level of Service (LOS)						B					D					C
Approach Delay (s/veh)					0.2				29.2				22.9			
Approach LOS									D				C			

HCS 2010 Two-Way Stop Control Summary Report

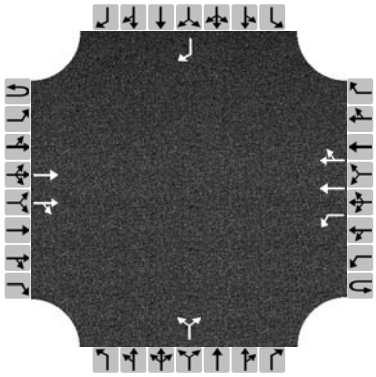
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with Lee
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Lee Avenue
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	1
Configuration			T	TR		L	T	TR			LR					R
Volume (veh/h)			1486	19		36	1525	18		14		40				7
Percent Heavy Vehicles						0				0		4				0
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						39					58					8
Capacity						408					176					318
v/c Ratio						0.10					0.33					0.03
95% Queue Length						0.3					1.4					0.1
Control Delay (s/veh)						14.7					35.2					16.6
Level of Service (LOS)						B					E					C
Approach Delay (s/veh)					0.3				35.2				16.6			
Approach LOS									E				C			

HCS 2010 Two-Way Stop Control Summary Report

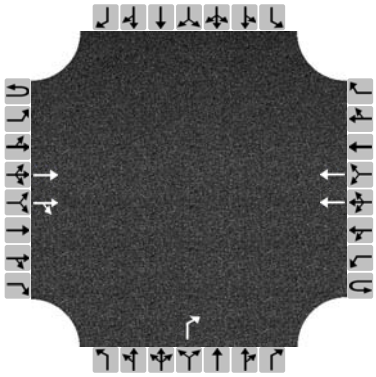
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with RIRO
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Right-In/Right-Out Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1554	23			1415					4				
Percent Heavy Vehicles												0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)												4				
Capacity												318				
v/c Ratio												0.01				
95% Queue Length												0.0				
Control Delay (s/veh)												16.5				
Level of Service (LOS)												C				
Approach Delay (s/veh)									16.5							
Approach LOS									C							

HCS 2010 Two-Way Stop Control Summary Report

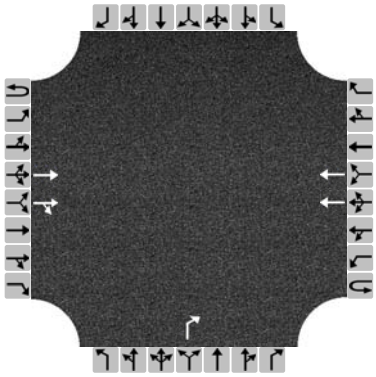
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with RIRO
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Right-In/Right-Out Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1452	15			2152					10				
Percent Heavy Vehicles												0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)												11				
Capacity												347				
v/c Ratio												0.03				
95% Queue Length												0.1				
Control Delay (s/veh)												15.7				
Level of Service (LOS)												C				
Approach Delay (s/veh)									15.7							
Approach LOS									C							

HCS 2010 Two-Way Stop Control Summary Report

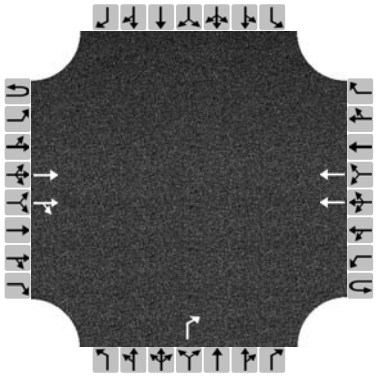
General Information

Analyst	BSM
Agency/Co.	KLOA, Inc.
Date Performed	2/12/2016
Analysis Year	2022
Time Analyzed	SAT Peak Hour
Intersection Orientation	East-West
Project Description	15-289

Site Information

Intersection	Ogden with RIRO
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Right-In/Right-Out Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1470	32			1552					16				
Percent Heavy Vehicles												0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)												17				
Capacity												337				
v/c Ratio												0.05				
95% Queue Length												0.2				
Control Delay (s/veh)												16.2				
Level of Service (LOS)												C				
Approach Delay (s/veh)									16.2							
Approach LOS									C							

Red Time Queue Table

Packey Webb Ford
Downers Grove, Illinois

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

RED TIME QUEUE FOR US 34 WITH LACEY ROAD (YEAR 2022 TOTAL ADJUSTED TRAFFIC)

(1 + T%) * (1 - G/C) * (2 * 25) * (DHV) / (# LANES) * (CYCLES / HR)

AM

Movements	EBL	EBT	EBTR	WBL	WBT	WBTR	NBL	NBLTR	NBR	SBL	SBLTR	SBR
Lanes	1	1	1	1	1	1	-	1	-	-	1	-
T %	2	9	9	2	9	9	-	2	-	-	2	-
DHV	13	773	772	47	698	697	-	32	-	-	21	-
G (Sec)	10	95	95	10	95	95	-	15	-	-	15	-
Gu (Sec)	74.3	0	0	91.9	0	0	-	5.3	-	-	4.4	-
Cycle Length	120	120	120	120	120	120	120	120	120	120	120	120
G+Gu/C	0.70	0.79	0.79	0.85	0.79	0.79	-	0.17	-	-	0.16	-
1+T%	1.02	1.09	1.09	1.02	1.09	1.09	-	1.02	-	-	1.02	-
Cycles/HR	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000
95th% Queue	1	33	38	8	235	235	-	48	-	-	30	-
Red Time Queue	7	293	292	12	264	264	-	45	-	-	30	-

PM

Movements	EBL	EBT	EBTR	WBL	WBT	WBTR	NBL	NBLTR	NBR	SBL	SBLTR	SBR
Lanes	1	1	1	1	1	1	-	1	-	-	1	-
T %	2	9	9	2	9	9	-	2	-	-	2	-
DHV	22	720	720	29	1045	1045	-	92	-	-	26	-
G (Sec)	10	95	95	10	95	95	-	15	-	-	15	-
Gu (Sec)	43.2	0	0	89.9	0	0	-	7.3	-	-	1.6	-
Cycle Length	120	120	120	120	120	120	120	120	120	120	120	120
G+Gu/C	0.44	0.79	0.79	0.83	0.79	0.79	-	0.19	-	-	0.14	-
1+T%	1.02	1.09	1.09	1.02	1.09	1.09	-	1.02	-	-	1.02	-
Cycles/HR	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000
95th% Queue	13	30	33	13	213	215	-	145	-	-	38	-
Red Time Queue	21	273	273	8	396	396	-	127	-	-	38	-

SAT

Movements	EBL	EBT	EBTR	WBL	WBT	WBTR	NBL	NBLTR	NBR	SBL	SBLTR	SBR
Lanes	1	1	1	1	1	1	-	1	-	-	1	-
T %	2	9	9	2	9	9	-	2	-	-	2	-
DHV	23	732	731	65	732	731	-	132	-	-	47	-
G (Sec)	10	65	65	10	65	65	-	15	-	-	15	-
Gu (Sec)	38.6	0	0	54.3	0	0	-	6.6	-	-	1	-
Cycle Length	90	90	90	90	90	90	90	90	90	90	90	90
G+Gu/C	0.54	0.72	0.72	0.71	0.72	0.72	-	0.24	-	-	0.18	-
1+T%	1.02	1.09	1.09	1.02	1.09	1.09	-	1.02	-	-	1.02	-
Cycles/HR	40.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000
95th% Queue	5	83	88	13	288	288	-	155	-	-	48	-
Red Time Queue	13	277	277	24	277	277	-	128	-	-	49	-