AMENDED MINUTES
Audio Recording Available
PLANNING COMMISSION MEETING
JULY 5, 2012
LAKEWOOD CITY HALL
7:00 P.M.
AUDITORIUM

Meeting called to order at 7:00 P.M.

Roll Call

MEMBERS PRESENT	OTHERS PRESENT
Hanna Belsito	Dru Siley, Commission Secretary, Dir. of P&D
Mary Cierebiej, Vice-Chairman	Bryce Sylvester, Project Specialist II
Ruth Gillett	Jennifer Mladek, Assistant Law Director
Robert Greytak	
Tamara Karel	
Patrick Metzger	
Mark Stockman, Chairman	

Approval of the ~~May 3, 2012~~ June 7, 2012 Meeting Minutes

A motion was made by Ms. Cierebiej, seconded by Ms. Karel, to **APPROVE** the minutes of the ~~May 3, 2012~~ June 7, 2012 meeting as amended. Ms. Belsito, Ms. Cierebiej, Ms. Gillett, Mr. Greytak, Ms. Karel and Mr. Metzger voting yea, and Mr. Stockman voting to abstain, the motion passed.

Opening Remarks

A motion was made by Mr. Stockman, seconded by Ms. Karel, to WAIVE the reading of the Opening Remarks.

OLD BUSINESS

5. **Docket 06-10-12** **1413 Wagar Avenue**
Handley-Boyt Gallery

Anitra L. Boyt, property owner and applicant, requests Variance approval, pursuant to Section 1173.04(d), to allow a business use. This property is in an R2, Single and Two Family Residential district. This item was deferred from the meeting of June 7, 2012. (Page 4)

Anitra L. Boyt was present to explain the request. She wanted to operate an art gallery from one half of her home; a private gallery was already there. She felt it should be approved since her was surrounded by commercially.

Victoria Power, 1421 Wagar Avenue, was an abutting neighbor. She was concerned about loss of privacy. Ms. Boyt and she had a conversation, and Ms. Boyt agreed to the construction of a six foot high fence. She wondered about the availability of parking spots. If the subject home were to be sold, she felt her property values would decrease because of the variance. She thought Ms. Boyt ought to be allowed to run a home-based business in lieu of being granted a variance. However, she said the gallery was beautiful. She was in favor of the home business.

Mr. Stockman said it seemed she was seeking a use variance for use that meant the home would remain zoned residential with the permission to use the property commercially. Section 1173.04 showed eight (8) criteria that needed to be met prior to the granting of a variance. He said none were being met. He suggested that to seek a rezoning might resolve the issue, but it would be very difficult. She countered it was an equal protection issue; she paid the same rate of taxes but was denied the same benefits as her neighbors received. She said her property was an anomaly, and she was subject to nuisance.

Ms. Mladek said there was a provision for conditional use for an in-house business but not open it to the general public that required a different application. Ms. Mladek suggested that Ms. Boyt could defer the item to next month in order to allow time to meet with the commercial division of building.

Mr. Siley clarified what Ms. Mladek suggested. He said the property was not an anomaly within the city of Lakewood. Granting of a conditional use would not transfer to a new owner.

Ms. Boyt asked for a deferral.

A motion was made by Ms. Cierebiej, seconded by Mr. Metzger, to **DEFER** the application to the meeting of August 2, 2012. All of the members voting yea, the motion passed.

6. **Docket 06-12-12** **13215 Detroit Avenue**
Family Dollar

Brad Kowit, Lakewood-FDBTS, LLC, property owner and applicant, requests approval for Lot Consolidation of three (3) Permanent Parcel Numbers: 315-07-009, 315-07-010, and 315-07-093, pursuant to Section 1155.06 – Procedures for Lot Consolidations and Resubdivisions. This property is located in a C3, Commercial and General Business district. This item was deferred from the meeting of June 7, 2012. (Page 5)

Dale Ferraro, Family Dollar, 6001 Landerhaven Drive, was present to explain the request.

There were no comments or questions from the Commission.

Mr. Siley stated the city had no questions or concerns; all of the lots were zoned commercial.

There were no comments or questions from the public.

A motion was made by Ms. Gillett, seconded by Ms. Cierebiej, to **GRANT** the application as submitted. All of the members voting yea, the motion passed.

4. **Docket 06-09-12** **13123 Detroit Avenue**
Discount Drug Mart

Eric Newland and Kurt Schmitz, ADA Architects, Inc., applicants, request approval of two (2) Lot Combinations of Permanent Parcel Numbers 315-07-008, 315-07-007, and ~~315-07-015~~ 315-07-095 and of Permanent Parcel Numbers 315-07-006, 315-07-038, and 315-07-039, pursuant to Section 1155.06 – Procedures for Lot Consolidations and Resubdivisions. The applicants request Conditional Use for accessory parking lot in a residential district, pursuant to Sections 1123.04(b) – Conditionally Permitted Uses and 1161.03(a) – Supplemental Regulations for Specific Uses. This property is located in a C3, Commercial and General Business district and in n R1H, Single Family and High Density Residential district. This item was deferred from the meeting of June 7, 2012. (Page 3)

NEW BUSINESS

7. **Docket 07-15-12** **13123 Detroit Avenue**
Discount Drug Mart

Kurt Schmitz, ADA Architects, Inc., applicant, requests approval for an additional Conditional Use permit for a drive-thru. This property is located in a C3, Commercial and General Business district and in n R1H, Single Family and High Density Residential district. (Page 6)

Kurt Schmitz was present to explain the requests.

Mr. Siley conducted a PowerPoint presentation (made part of record) to clarify the requests, history of the zone districts, considerations for the lot consolidations and lot split/consolidation, the request for accessory parking, and the drive-thru. The parcels were labeled by their addresses and their associated zonings. The house at 1420 Cohassett Avenue was split zoned. He stressed Conditional Use did not change the zoning. The presentation went back to 1907. He discussed the 1938 and 1983 zoning maps. Disparity in zonings occurred in the 1990's. The City and Planning commission's responsibility was to uphold the codes. The parcels has been split and consolidated several times over the years.

The first request was for a split and consolidation of all the commercially zoned parcels into one. Currently, one could not consolidate different zoned parcels. One request had to do with 1419 Grace Avenue, 1420 Cohassett Avenue, and 1425 Grace Avenue.

The Conditionally Use request was for the two commercial parcels to use for commercial parking/support.

The Conditional Use for a drive-thru was for a pharmacy. He explained the drive-thru policy was changed last year.

Mr. Stockman wanted to be read into record the receipt of two written communiques from the public; Denise Everet and Marie-France Schreiber.

Mr. Schmitz said that Discount Drug Mart ("DDM") was more than a drug store, as it had more departments and enhanced interiors. He recapped information given at the June meeting. The existing Ganley site was over 29,000 square feet, and the apartment building had a 6,000 square foot footprint. The existing white house would still be a conforming use with the taking of thirteen feet of land. The truck dock was moved to face into the property, add a landscaped area, eliminated traveling onto the side streets and keep truck traffic on DDM property; screening was accomplished with landscaping and an eight-foot fence. A traffic study had been conducted, submitted to the city and reviewed by the city's engineer. The trash receptacle had been moved closer to the back property. The curb cut on Detroit Avenue was changed from twenty-four feet to thirty feet. The landscaped areas were modified and relocated to minimize the parking field. More parking racks were added which reduced the parking spaces from 82 to 79. Topography was taken into consideration and added four feet of height; the rear view of the property from the neighboring houses. The design was increased with the addition of two awnings, the increase in the number of light fixtures, along with decorative sconces and gooseneck lighting. All of the photometric light would remain on DDM property. The width of the horizontal band was reduced to enhance the verticals and medallions. Listening to the residents, DDM had made a number of concessions.

Referring to a slide, Ms. Cierebiej asked if there was striping to allow for safe movement of trucks. Mr. Schmitz replied to the affirmative. She asked about possible encroachment by delivery trucks and the possibility to remove some (eight) parking spots. Mr. Schmitz said they could take it into consideration.

Mr. Greytak inquired about DDM's preferred parking ratio. Mr. Schmitz did not have the number but said that typically was 5 per 1,000 square feet. Mr. Greytak said the standard in the city of Lakewood was 2.5 per 1,000 square feet. He continued that if DDM eliminated eight spaces, it would still exceed the 2.5. Mr. Greytak said the eight spaces were bothersome to him, and their removal would still allow maneuverability of trucks (it would increase the distance of five feet from the bay window of the white house to ten feet). Mr. Schmitz said the eight spots were important and needed for employee parking. Ms. Cierebiej said parking was a premium in Lakewood, and this store would be different from the one at Westlake which had a lot more parking. He countered this proposed store would have customers spending more time shopping as it would have more departments, such as a deli. Ms. Karel said the Westlake store did not have a deli section; it sold prepackaged deli meats.

Mr. McConnell said DDM would add a deli section to the Westlake store. He said the Strongsville or Independence store would be a better example. Ms. Karel asked if four parallel spots could be placed where the eight spots were. Mr. Schmitz said he'd not considered it. Mr. Siley said the building code would allow three parallel spaces. Ms. Karel asked if a deli section would be added to the renovated store at the Lakewood Plaza site. Mr. McConnell said it would, and there was a basement at that store.

Colleen Cotter, 1437 Grace Avenue, requested of the Commission permission to submit a presentation on behalf of the neighbors of Grace Avenues and Cohassett Avenues and concerned citizens. Mr. Stockman accepted the request (the presentation was made part of the record of the minutes). She requested the memorandum and petition submitted at the last meeting were included in the current meeting minutes. The Commission and City concurred. She read from the 1993 City's Vision. She quoted from the law and the enforcement of the codes (Chapters 1161 and 1173). She then stated reasons why the size of design would not fit in Lakewood. The apartment building was slated for removal by the developers, and the tenants of the apartment building were evicted before DDM had been granted approval. The two apartment buildings were across from one another and framed the entrance to the residential section. The split of the lot at 1420 Cohassett Avenue was not simply 13 feet but increased to 20 feet at the rear of the lot. She questioned the percentages of green space versus asphalt coverage. The bay window was six feet from the ground; the view from it would be of a concrete parking lot. The photometrics was still wrong on the drawing. Other public speakers would address the underground hazardous materials, traffic patterns, and pedestrian traffic. She spoke of accessory parking being for parking of passenger vehicles, not for use as a through way and dumpsters. She said the site and plan were ill conceived. The lot split and lot consolidated requests were inappropriate, as it would take three residentially zoned properties and change them to commercially zoned parcels forever. She thanked the service of the Planning Commission members.

Theresa M. Kress, 1426 Cohassett Avenue, said her house abutted the Ganley lot which was in disrepair and posed health and safety hazards. When Ganley was in operation, her family was exposed to fumes, and the overhead sound system was loud. She was fearful of what commercial business might be built on the site if DDM was denied approval. She was faced with cleaning debris, vagrancy, illegal activity and other issues as a result of the abandonment.

Carl Roloff, 1438 Grace Avenue, passed handouts to the Commission. He addressed the traffic study. He referred to pages 29 and 30 and determined, based on the tables, the level of service would decline. Along with other errors he found in the study, he hypothesized the study could be inaccurate and/or incomplete. The study did not include the peak hours of Garfield school traffic (between 2:00 pm and 3:00 pm), pedestrian/bicycle traffic patterns, or the effect of the approved neighboring Family Dollar store. The second handout was for the Jun 14th Freshwater publication featuring Dru Siley and Lakewood. He then referred to a Community Vision meeting on June 25th where a concept of form-based zoning codes was introduced, a new urbanism concept. He addressed the number of possible parking spaces, said the project was too large for the lot, and felt would be detrimental to the neighborhood. He asked to Planning Commission to deny the proposal.

Mary Callahan Zunt, 1472 Cohassett Avenue, thanked DDM, its consultants, and the Planning Commission for their hard work and consideration of the City. She wanted to know the life span of the proposed building and the duration time a customer spent in their larger stores. She asked if the current trees on Cohassett would stay or be replaced. Would there be accommodation for the frequently used the RTA bus stop? She had visited other DDMs throughout the area, and wondered if they would be a good community partner.

Dave Bliss, 1504 Grace Avenue, felt the apartments framed the entrance to Grace and felt the developers were insensitive to the veterans of war by evicting them. He just spent $40,000 in fixing the repairs of his home and wanted the commercial to be kept from encroaching into the residential.

Joan Groth, 1504 Grace Avenue, said she was concerned about Mr. Bliss crossing the street as he was blind and thought the increased traffic would be hazardous.

Peter Viiberg, 1472-74 Grace Avenue, passed a handout to the commissioners. From the 70 stores that DDM had in Ohio, how many were the larger size? He said the site was too small for the proposed store. He was concerned because he felt all the information given to the public was too close to the meeting dates to allow for the studying of it. The eleven unit apartment building located at 1414 Grace Avenue had no required parking which concerned him due the development of two large stores, Family Dollar and DDM, taking parking spaces on the streets for ingress and egress. He did not know how the relocated truck dock would allow for the navigation of the large semi-trucks within the property. He felt the traffic study was incomplete and erroneous because it did not include school year accounts and did not include the results of the 2010 traffic study. He then referred to the revised drawings with the larger dimensions and the decreased square footage; he wanted confirmation of square footage and the length of the west wall. He quoted from the ADA Act handout; he questioned the size of the parking spaces. Mr. Stockman interjected that was not to be addressed at the Planning Commission. Mr. Viiberg referred another handout which pertained to the environment issue of two waste storage tanks on the property. In 1999, the tanks were decommissioned for use and deemed too unstable to be removed. Mr. Stockman interjected that was not to be addressed at the Planning Commission. Mr. Viiberg said it pertinent to the issue of the reluctance of DDM to change the rotation of the new store.

At this point, the Chairman called for a five minute break.

Todd Saporito, 1450 Cohassett Avenue, had never seen an issue that divided the neighbors as this one. He asked if public records request was feasible and direction as to request them. He asked if the combined impact of two developments would have a relevant impact on traffic. Mr. Stockman said the Planning Commission looked at the information in total. Mr. Saporito said they would also like to see the traffic impact information in total. He was concerned about the children. He wanted to know what processes DDM would establish to contain the debris and protect the surrounding neighbor during deconstruction and reconstruction periods.

Tammi Hanson, 1501 Grace Avenue, asked the Planning Commission to not grant anything but the creation of one commercial parcel from the three commercial lots on Detroit. She said the apartment building acted a barrier between the residential and commercial areas.

John Costo, 1430 Cohassett Avenue, felt there were some unaddressed issues in respect to the parking of the delivery trucks, truck idling, and delivery times. He was concerned about the number of children walking to and from school, and the number of cars parked waiting for some of the children. Would there be a car stacking issue with vehicles waiting to enter the business? He asked the city to enforce the maintenance of the current site. He was not

against development but wanted something that was good for Lakewood and the neighborhood.

Mary Grodek, 1441 Grace Avenue, asked the Planning Commission to not grant the conditional use. She said a DDM representative spoke to some of the neighbors and stated that the 13 feet for eight parking spaces was not needed to complete the project. She was for development but more time, thought, and consideration to the project were needed..

Mike Malloy, 1524 Grace Avenue, addressed the traffic study and questioned its validity. He was concerned about front footage, the loss of income tax with displacement of the apartment's residents, volume of traffic, children, trash, and the neighborhood.

Kevin Wenderoth, 1463 Grace Avenue, reiterated some of the previous statements. He asked the commission to not grant the conditional use.

Barb Marburger, 1475 Grace Avenue, toured the stores in the surrounding communities and felt they were wonderful. However, that type of store would not fit Lakewood in its present concept, and a plan was needed that addressed the city's zoning laws and the concerns of its citizens. She asked about the two handicap parking spaces.

Michael Ciccarello, 1519 Grace Avenue, reiterated some of the issues, was for the development but not the conditional use. He said there should be no exits south onto Cohassett and Grace Avenues.

Denise Evert, 1435 Cohassett Avenue, felt there was not adequate setback on Cohassett, the parking issues needed adherence to the codes, conditional use parking on Cohassett Avenue was of equal importance as to Grace Avenue. She provided a handout to the commission which addressed parking, additional set back on Cohassett Avenue. She asked about the sliver of land that Mr. Siley addressed and if it served the purpose of the drive-thru.

Steven Vrusko (spelling), 1487 Grace Avenue, was new to the neighborhood. He was against the conditional use.

Linda Kolodny, 1470 Cohassett Avenue, wanted to know what would happen to the vacant property that was purchased by DDM if the conditional use were not granted. Mr. Siley it would continue as a nonconforming use of land, DDM would have to resurface it, and it could continue as parking facility "as is" and maintain it. With the granting of the request, DDM could landscape and improve it.

Linda McDonough, 1422 Grace Avenue, requested the commission not grant the conditional use.

As there were no additional members of the public who wished to speak, Mr. Stockman closed the public comment portion of the meeting.

Mr. Schmitz answered the questions as asked by Mr. Stockman.

Q: What is the expected lifespan of the building?
A: Because DDM owns the property, it will be built of steel and brick to last longer than a wooden structure.

Q: Is there a difference in the length of customer visit time between a suburban store and one in Lakewood?
A: A study had never been conducted.

Q: What about the existing trees on Cohassett Avenue?
A: The plan was to keep them and assess them throughout the project. If a tree or trees needed to be removed, it would be replaced.

Q: What about the existing RTA bus stop?
A: It would remain.

Q: What percentage of DDM stores were of the new format?
A: About 20 of the 70 stores.

Q: What about the storage tanks.
A: The storage tanks were an EPA issue. The rotation of the building would not allow access from and onto Detroit Avenue; it would have to come via Cohassett Avenue. The expansion of the curb cut on Detroit Avenue was in response to the previous public comment. DDM had not received a full report from EPA to date. Mr. Moran, DDM, 211 Commerce Drive, Medina, was not aware of any tanks and said they had spent in excess of $40,000 so far. Mr. Siley said multiple public entities (state, county and city) would be involved in the process, and DDM would have to comply with all environmental issues.

Q: What about the delivery trucks and what would be the result if there were multiple delivery trucks on the property at the same time?
A: Mr. Schmitz said the traffic pattern shown on the renderings was for 53' trucks. Not of all deliveries be made through the loading truck. Some delivery trucks would use the parking spaces at the south end of the lot. Occasionally, the driveway adjacent to the loading dock would be used in a period of less than thirty minutes.

Mr. Stockman asked the city to give its view of the traffic study. Mr. Siley replied the city did not accept traffic studies without verification from professional traffic engineers (kept on retainer by the city), CT Consultants. Tammy Fuller, P.E., Traffic Engineer, reviewed the study and sent her analysis to the city via e-mail. Mr. Siley read it into record:

> *I have completed my review of the subject study as requested. The study has been found to be compliant with accepted methods for Traffic Impact Studies and makes assumptions that are suitable for the study area and the data collected.*
>
> *I am summarizing the following highlights for your reference:*

1. *The study uses 9-hour traffic count data as baseline traffic volumes. The peak hours of the development and surrounding streets have been covered during the hours counted.*
2. *The traffic data on Detroit at Grace was adjusted according to the traffic data obtained for Detroit at Cohasset. This was done to account for Garfield Middle school traffic and the fact that Detroit/Cohasset was counted during a time that school was in session; Detroit/Grace was counted during summer break. The count data on Detroit at Grace was adjusted upwards slightly to account for the school.*
3. *The design year (2033) calculations were performed using a growth rate of 0.25% per year on Detroit Avenue.*
4. *The intersections of Detroit/Grace and Detroit/Cohasset were analyzed as part of the study. The three proposed site accesses were analyzed as part of the study.*

There are some typographical errors in the study that do not affect the outcome of the analyses. If you would like me to mark the study up with regard to these errors please contact me.

Thank You,

Ms. Cierebiej asked if bicycle and pedestrian counts done and were traffic counts from the McDonald's project considered in this one. Mr. Greytak did not see actual traffic/bicycle/pedestrian traffic counts; he did see the level of service addressed for both pedestrians and bicycles. Additionally, the party who provided the study would have documented information to validate the results.

Mr. Schmitz said the parallel parking option would be dangerous with an open door next to a drive. Mr. Moran said he understood the desire for sustainability and locally owned independent stores, but felt his proposed development was a business based on reality. Mr. McDonnell added they needed the conditional use as there was not an alternate plan.

Ms. Karel said she would have liked to receive all of the materials earlier because it was a difficult decision. Mr. Stockman concurred with the concerns of the citizens, agreed it was a difficult site, and felt that an agreement among all parties could be achieved with the guidance of the city's administration. Ms. Cierebiej said the concern was when one took residential zoned properties and changing them into commercial. Ms. Gillett said the second lot was the issue even though it was conforming, and how did it fit into the vision. Ms. Belsito was excited about the addition of the development but not with the second property (white house). Mr. Schmitz said the white house was in terrible condition, and the city's code would not allow the taking the abutting lot for commercial use. He continued that DDM did not own the white house but had plans to purchase once they received approval from the Planning Commission. They planned to market for resale to a rehabber or rehab it themselves. Ms. Gillett said she did not support the consolidation of the residential parcels or the conditional use. The plan did not fit the site and was not appropriate. Ms. Karel if they had considered moving the building closer to Grace thereby eliminating a curb cut and eliminating the need to take 13 feet from the

white house lot. Mr. Siley said a shift of the building to the west would result with the southern third of the proposed building on residential zoned property.

Mr. Siley there had been a number of lengthy discussions about commercial development in the past years. The Planning Commission and Architectural Board of Review were deemed with the responsibility to protect the citizens of the community, and past experience had demonstrated major developers could not intimidate the community. The proposed development on the Ganley site would surpass the redeveloped Lakewood Plaza when completed, and both of those stores would be the best of all of them. DDM had responded positively to the requests of the citizens. The request regarding the apartment building was appropriate. The parking lot and eight parking spaces were valid issues. However, the administration was beholden to the law. The 13 foot piece of land did abut commercial on the east side. Very few developers could afford to build quality structures in today's environment and felt the developer had been sensitive.

Ms. Gillett felt the proposed redevelopment was not appropriate to the scale of the vision of Lakewood or the area. Mr. Greytak said he worked in close proximity to their Independence store and frequented it three times a week and did not see that specific parking lot being used to its maximum capacity; part of it was leased to Enterprise for vehicle storage. He said they would have a viable lot without the additional eight spaces. He did not support the lot split. Mr. Moran said there were about 120 spaces at that store, and the store was over 50,000 square feet.

Ms. Clerebiej asked if DDM was willing to eliminate the eight spaces. Mr. Siley said his count for available on street parking was close to 15 metered parking spaces (Cohassett Avenue and Grace Avenue).

Mr. McConnell, Mr. Moran and Mr. Schmitz asked for a brief recess in order to consult with each other.

Mr. McConnell said DDM could not eliminate the eight spaces and go forward with the project. Mr. Moran said they had calculated the off-street parking and needed the eight spaces; they were purchasing the white house, rehabbing it in return for the 13 feet.

A motion was made by Ms. Belsito, seconded by Ms. Clerebiej, to **GRANT** the request for item 1A; lot consolidation of three commercial properties. All of the members voting yea, the motion passed.

A motion was made by Ms. Gillett, seconded by Mr. Greytak, to **DENY** the request for item 1B; lot split and consolidation of two residential properties based on the fact it would connect one residential property from one street onto another street and was not necessary for the project.

Ms. Gillett withdrew her motion.

A motion was made Ms. Gillett, seconded by Mr. Greytak, to **DENY** the lot split for the property at 1425 Grace Avenue, northern 13 feet. The reason being as it was inconsistent with the

Community Vision. Mr. Stockman, Ms. Gillett, Ms. Cierebiej, Ms. Belsito and Mr. Greytak voting yea, Ms. Karel voting nay, and Mr. Metzger abstaining, the motion passed.

A motion was made by Ms. Gillett, seconded by Ms. Cierebiej, to **GRANT** the request for 2A, conditional use for the property at1420 Cohassett Avenue to use it as accessory parking. Mr. Stockman, Ms. Gillett, Ms. Cierebiej, Ms. Belsito, Mr. Greytak, Ms. Karel, and Mr. Metzger voting yea, the motion passed.

A motion was made by Ms. Cierebiej, seconded by Mr. Metzger, to **GRANT** the request for 2B, accessory parking at 1419 Grace Avenue. Mr. Stockman, Ms. Gillett, Ms. Belsito and Mr. Greytak voting nay, Ms. Cierebiej, Ms. Karel and Mr. Metzger voting yea, the motion failed.

Docket 07-15-12 became a non-actionable item and was tabled from discussion.

8. **Docket 07-16-12** **16910 Detroit Avenue**
Wash Stop/Lube Stop

Tom Morley, Wash Stop/Lube Stop, requests approval to demolish and rebuild a new car wash. This property is located in a C3, Commercial and General Business district. (Page 7)

Mr. Siley said communication from the applicant had been received late in the day with the request that the item be deferred to the meeting of August 2, 2012.

9. **Docket 07-17-12** **Communication from Planning and Development Director Dru Siley: Renewal of Conditional Use Permit for Outdoor Seasonal Dining.**

The following received approval of the annual renewal of Conditional Use permit for the year of 2012 through administrative review by the Director of Planning and Development:

- 12401 Detroit Avenue, Peppers Italian Restaurant, and
- 13715 Madison Avenue, Angelo's Pizza. (Page 28)

A motion was made by Ms. Cierebiej, seconded by Ms. Karel, to **Receive and File** the application as submitted. All of the members voting yea, the motion passed.

10. **Adjourn.**

A motion was made by Ms. Cierebiej, seconded by Ms. Karel, to **ADJOURN** at 11:20 PM. All of the members voting yea, the motion passed.

Signature

For the Chair

August 2, 2012

Date

Oath

I, the undersigned, hereby agree that the testimony I give at this proceeding will be the truth, the whole truth and nothing but the truth:

PRINT NAME:	SIGN NAME:
1. Anitra Bont	Anitra Bont
2. Victoria Power	Victoria Power
3. Dale Ferdam	[illegible]
4. Kurt Schmitz	Kurt J. Schmitz
5. Tom McConnell	Tom McConnell
6. Colleen Cotter	
7. Terri Kraw	Theresa M Kraw
8. Carl Roloff	Carl Roloff
9. MC Zunt	[illegible]
10. Dave Bliss	Dave Bliss
11. Joan Ghod	Joan Groth
John Costo	[illegible]

Prepared by: The City of Lakewood Law Department, 12650 Detroit Ave., Lakewood, Ohio 44107

FOR CITY USE ONLY

Lakewood Administrative Procedure: ☐ ABR/BBS/Sign ☐ Citizens Advisory ☐ Civil Service ☐ Dangerous Dog ☐ Income Tax Appeals ☐ Loan Approval ☐ Nuisance Abatement Appeals ☒ Planning ☐ Zoning Appeals ☐ Other:

Date of Proceeding: July 5, 2012

LAKEWOOD OHIO

Oath

I, the undersigned, hereby agree that the testimony I give at this proceeding will be the truth, the whole truth and nothing but the truth:

PRINT NAME:	SIGN NAME:
1. Peter Voerder	Todd Simpson
2. Tammi Hanson	Tammi Hanson
3. Mary Grodek	Mary Grodek
4. MIKE MALLOY	Michael Malloy
5. Kevin Wendworth	[illegible]
6. Barb Marburger	1475 Grace
7. Michael Crandall	1519 Grace
8. DENISE EVERT	Denise M. Evert
9. Stephen Marks	1467 Grace
10. Linda Kolodny	1417 Cohassett Ave
11. Linda McBryan	1422 Grace

Prepared by: The City of Lakewood Law Department, 12650 Detroit Ave., Lakewood, Ohio 44107

FOR CITY USE ONLY

Lakewood Administrative Procedure: ☐ ABR/BBS/Sign ☐ Citizens Advisory ☐ Civil Service ☐ Dangerous Dog ☐ Income Tax Appeals ☐ Loan Approval ☐ Nuisance Abatement Appeals ■ Planning ☐ Zoning Appeals ☐ Other:

Date of Proceeding: July 5, 2012

Oath

I, the undersigned, hereby agree that the testimony I give at this proceeding will be the truth, the whole truth and nothing but the truth:

	PRINT NAME:	SIGN NAME:
1.	Tim Moran	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Prepared by: The City of Lakewood Law Department, 12650 Detroit Ave., Lakewood, Ohio 44107

FOR CITY USE ONLY

Lakewood Administrative Procedure: ☐ ABR/BBS/Sign ☐ Citizens Advisory ☐ Civil Service ☐ Dangerous Dog ☐ Income Tax Appeals ☐ Loan Approval ☐ Nuisance Abatement Appeals ■ Planning ☐ Zoning Appeals ☐ Other:

Date of Proceeding: July 5, 2012

FDBTS, LLC

6001-D Landerhaven Drive
Mayfield Hts, OH 44124
216.514.5100 – Phone
216.514.5106 – Fax

Tuesday, July 3, 2012

Dru Siley
Secretary
Lakewood Planning
12650 Detroit Road
Lakewood, Ohio 44107

Via Email and US Mail

RE: July 5th Planning Commission: Docket 06-12-12 13215 Detroit Road lot consolidation; Authority of Agent.

Dear Mr. Siley;

Pursuant to your letter regarding our appearance in front of the Planning Commission on July 5th, Dale Ferraro, construction/project manager of Lakewood-FDBTS, LLC has complete authority to act on behalf of Lakewood-FDBTS, LLC to request said lot consolidation, and bind Lakewood-FDBTS, LLC to any decision made between the parties.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Brad Kowit
Manager-Lakewood-FDBTS, LLC

BTK:lms

Siley, Dru

From: Bob Greytak <BGreytak@ctconsultants.com>
Sent: Thursday, July 05, 2012 1:45 PM
To: Siley, Dru
Subject: Fwd: Lakewood - Drug Mart Traffic Impact Study
Attachments: image001.png

Dru,
Please find Tammy Fuller's review of the subject report.
Bob Greytak

Sent from my iPhone

Begin forwarded message:

> **From:** Tammy Fuller <TFuller@ctconsultants.com>
> **Date:** July 5, 2012 8:38:10 AM EDT
> **To:** Bob Greytak <BGreytak@ctconsultants.com>
> **Cc:** Bill Baker <BBaker@ctconsultants.com>
> **Subject: Lakewood - Drug Mart Traffic Impact Study**
>
> Hi Bob,
>
> I have completed my review of the subject study as requested. The study has been found to be compliant with accepted methods for Traffic Impact Studies and makes assumptions that are suitable for the study area and the data collected.
>
> I am summarizing the following highlights for your reference:
>
> 1. The study uses 9-hour traffic count data as baseline traffic volumes. The peak hours of the development and surrounding streets have been covered during the hours counted.
> 2. The traffic data on Detroit at Grace was adjusted according to the traffic data obtained for Detroit at Cohasset. This was done to account for Garfield Middle school traffic and the fact that Detroit/Cohasset was counted during a time that school was in session; Detroit/Grace was counted during summer break. The count data on Detroit at Grace was adjusted upwards slightly to account for the school.
> 3. The design year (2033) calculations were performed using a growth rate of 0.25% per year on Detroit Avenue.
> 4. The intersections of Detroit/Grace and Detroit/Cohasset were analyzed as part of the study. The three proposed site accesses were analyzed as part of the study.
>
> There are some typographical errors in the study that do not affect the outcome of the analyses. If you would like me to mark the study up with regard to these errors please contact me.
>
> Thank You,
>
> Tammy Jo Fuller, P.E., PTOE
> Traffic Engineer
>
> CT Consultants, Inc.
> 8150 Sterling Court
> Mentor, OH 44060
> 440.530.2352 (Direct)
> 440.951.7487 (Fax)

CHAPTER 1161
Conditional Uses

CROSS REFERENCES

State regulations - see Ohio R.C. 4731.15
Noise - see GEN. OFF. Ch. 515
Residential child day care services resource registry - see BUS. REG. Ch. 774
Lot area and frontage regulations - see P.& Z. 1129.05
Minimum yard requirements - see P.& Z. 1129.06
Gasoline stations, regulations - see P.& Z. 1129.09
Motor vehicles sales/leasing, regulations - see P.& Z. 1129.10
Supplemental regulations for outdoor dining facility - see P.& Z. 1129.13
Supplemental regulations for extended business hours of operation - see P.& Z. 1129.16
Mixed Use Overlay District - see P.& Z. Ch. 1135
Landscaping and screening - see P.& Z. Ch. 1141
Off-street parking - see P.& Z. Ch. 1143
Non-conformities - see P.& Z. Ch. 1149
Fence - see P.& Z. Ch. 1153
Wireless telecommunication facilities - see P.& Z. 1159.04(b)
Conditional use permit - see P.& Z. 1173.02
Architectural Board of Review - see BLDG. Ch. 1325
Signs - see BLDG. Ch. 1329

1161.01 PURPOSE.

Several unique uses require regulations intended to accommodate such uses in a reasonable and equitable manner while safeguarding the property rights of all individuals and the health, safety, and general welfare of the community. Toward these ends, this Chapter provides for a more detailed evaluation of each use conditionally permitted in a specific zoning district with respect to such considerations as location, design, size, method(s) of operation, intensity of use, public facility requirements, and traffic generation to ensure that each proposal is consistent with the intent and objectives of the particular district in which it is to be located. Accordingly, a Conditional Use Permit shall be required for any use deemed a conditional use by this ***Code***, subject to the procedures and requirements of this Chapter and Section 1173.02.
(Ord. 91-95. Passed 10-7-96.)

1161.02 GENERAL STANDARDS FOR ALL CONDITIONAL USES.

A conditional use, and uses accessory to such conditional uses, shall be permitted where the use is identified by this *Code* as a conditionally permitted use, or is found by the Commission to be a substantially similar use, in the zoning district in which the use is located. In addition to any specific regulations required by this *Code* or the Ordinances, the Commission shall find:

(a) That the conditional use will be consistent with the general objectives, or any specific objectives, for the zoning district in which it is located, as set forth in this *Code* and the *Vision*.

(b) That the conditional use will be designed, constructed, operated and maintained so as not to be detrimental to or endanger the public health, safety, or general welfare.

(c) That the conditional use will not change the essential character of the general vicinity in which it is located.

(d) That the conditional use will not be injurious to the uses permitted by right in the immediate vicinity, nor substantially diminish or impair property values within said vicinity.

(e) That establishment of the conditional use will not impede the normal and orderly development of uses permitted by right in the immediate vicinity.

(f) That adequate utilities and public facilities and services, such as streets and sewer and water services, are or will be provided; and that establishment of the conditional use will not require expenditures of public funds for such public facilities or services.

(g) That adequate measures have been taken to minimize traffic congestion on public streets.

(h) That the conditional use will not suffer substantial hardship in the future due to the conditional use being surrounded by uses permitted by right, which are incompatible with the conditional use.

(i) That the conditional use shall, in all other respects, conform to the applicable regulations of the district in which it is located as well as the specific conditions set forth in Section 1161.03.

(j) A Conditional Use Permit issued pursuant to this Chapter may not be transferred to any other person or address.
(Ord. 91-95. Passed 10-7-96.)

(k) Notwithstanding the above provisions, a Conditional Use Permit issued pursuant to this Chapter for a Mixed Use Overlay development may be transferred to another person or address provided that the regulations in Chapter 1135, Mixed Use Overlay District, and all other provisions of the Ordinances and this *Code* that are not in conflict with Chapter 1135 have been satisfied.
(Ord. 61-04. Passed 7-6-04.)

Notwithstanding anything in this Chapter or this Section to the contrary, where the Commissioner determines, after compliance with the requirements of Section 1173.02, that a permit holder seeking renewal of a permit issued pursuant to this Section has remained in compliance with the conditions of said permit, the Commissioner may issue such renewal.
(Ord. 91-95. Passed 10-7-96.)

1161.03 SUPPLEMENTAL REGULATIONS FOR SPECIFIC USES.

In addition to the general standards established in Section 1161.02, the following specific conditions shall apply to each use or class of uses listed in this Section 1161.03. Nothing in this Section shall prohibit the Commission from prescribing supplementary conditions and safeguards in addition to these requirements, or where no specific conditions are stated.

(a) Accessory Parking. In a residential district, accessory parking for a lot in a commercial district may be permitted as a conditional use provided that:

(1) The lot on which the proposed use is to be located abuts the commercial lot to which it is accessory;

(2) The parking lot shall be used only for the parking of non-commercial passenger motor vehicles; and
(Ord. 91-95. Passed 10-7-96.)

(3) The proposed parking lot conforms to the design requirements set forth in Chapter 1325 of the Building Code and has been approved by the Architectural Board of Review prior to the demolition of any existing single-, two- or three-family dwelling, in the R1L, R1M, R1H, R2, ML, MH and L zoning districts, on the proposed lot. In addition, if applicable, approval by the Commission for conditional use as accessory parking under this subsection must also be approved prior to the demolition of any existing single-, two- or three-family dwelling on the proposed lot. If such lot is substantially vacant due to demolition prior to the time of application for parking lot design approval and conditional use approval, the lot shall have been vacant for at least twenty-four (24) months preceding the application unless the Commission grants a waiver from such time requirement based on reasonable causes for such demolition by an owner, or prior owner, beyond his/her reasonable control, such as fire or other source of property damage or loss.
(Ord. 24-98. Passed 5-18-98.)

When determining whether to grant a conditional use permit for accessory parking, the Commission may limit the hours of operation of the proposed conditional use.

(b) Animal Clinics/Hospitals, Veterinarian Offices, and Grooming Services. In a C2 Retail District, animal clinics/hospitals, veterinarian offices, and grooming services may be permitted as a conditional use provided that:

(1) There shall be four (4) off-street parking spaces for each veterinarian or groomer practicing at the location of the proposed use;

(2) No outside animal runs, stalls, or cages shall be permitted on the lot; and

(3) The proposed use shall not be located in any structure housing a residential use.
(Ord. 91-95. Passed 10-7-96.)

(c) Bed and Breakfast Establishment. In any commercial district or multiple-family residential district, a bed and breakfast establishment may be permitted as a conditionally permitted use subject to all or any of the following:

(1) The building in which a bed and breakfast establishment is located is a single-family dwelling which serves as the principal residence of the applicant and is recognized as architecturally, historically or culturally significant;

(2) The owner/operator of a bed and breakfast establishment shall live full-time on the premises. Such owner/operator shall be the record owner of no less than fifty percent (50%) interest of the property in question;

(3) The architectural integrity of the structure, and arrangement of existing interior space must be maintained;

(4) Only minimal outward modification is allowed and only if compatible with neighboring structures;

(5) There shall be no more than three (3) guest rooms within a single-family dwelling that are utilized by bed and breakfast guest(s). A guest room shall contain no less than 100 square feet of living space, not including closets, for two (2) guests and thirty square feet for each additional guest up to a total of four (4) guests per room;

(6) Bedrooms shall be an existing part of the primary residential structure and not specifically constructed or remodeled for rental purposes;

(7) Each paying guest may stay at a bed and breakfast establishment for not more than three (3) consecutive nights at any single visit or more than a total of fourteen (14) nights in any given calendar year;

(8) Parking for all vehicles, including vehicles owned by the owner/operator shall be in the garage or rear yard on an approved surface improved with concrete or asphalt;

(9) There shall be at least one (1) off-street parking space for each guest room;

(10) Only one (1) meal shall be served to each guest of the bed and breakfast establishment and that meal shall be breakfast. The sale or service of alcoholic beverages to paying guests is prohibited in a bed and breakfast establishment;

(11) Only one (1) kitchen facility shall be permitted per structure for which a conditional use permit is granted to operate a bed and breakfast establishment. No cooking facilities shall be permitted in individual guest rooms nor shall guests have access to kitchen facilities for the purpose of preparing meals;

(12) A minimum of one (1) full bathroom, including tub/shower, toilet and sink, shall be required for every two (2) guest rooms to be available for the exclusive use of bed and breakfast paying guest(s);

(13) Rental of the bed and breakfast establishment for special gatherings such as wedding receptions and parties shall be prohibited;

(14) One (1) on-premise sign shall be permitted for each bed and breakfast establishment not to exceed two (2) square feet in area. The sign shall not be internally illuminated. Such sign(s) shall be limited to three (3) colors. The applicable standards of Chapter 1329 of the Building Code shall apply unless otherwise superseded by this section;

(15) No individual(s) who are nonresidents of the dwelling may be employed in the operation of a bed and breakfast establishment;

(16) The Bed and Breakfast establishment, shall within three (3) months of commencing operation, be listed with the Ohio Bed and Breakfast Association or similar recognized listing agency;

(17) The building complies with all state and local laws, including but not limited to *City* Fire, Health, and Housing Codes and the Ohio Building Code regulations for R-1 Use Group Structures;

(18) A Conditional Use Permit issued pursuant to this Section 1161.03(c) shall expire thirty-six (36) months after the date of issuance.

Notwithstanding anything in this Chapter or this Section to the contrary, where the Commissioner determines, after compliance with the requirements of Section 1173.02, that a permit holder seeking renewal of a permit issued pursuant to this Section remains in compliance with the conditions of said permit, the Commissioner may issue such renewal.

(Ord. 124-05. Passed 2-6-06.)

CHAPTER 1173
Procedures for Conditional Use and Occupancy Permits, Variances, and Appeals; Determination of Similar Use; Fees; Amendments

CROSS REFERENCES

Publication of legal notices - see ADM. Ch. 107
Historic Preservation Districts and Historic Properties - see P.& Z. Ch. 1134
Mixed Use Overly District - see P.& Z. Ch. 1135
Planned Development - see P.& Z. Ch. 1156
Wireless telecommunication facilities - see P.& Z. Ch. 1159
Conditional uses - see P.& Z. Ch. 1161
Planning Commission - see P.& Z. 1171.03
Board of Zoning Appeals - see P.& Z. 1171.04

1173.01 CERTIFICATE OF USE AND OCCUPANCY REQUIRED.

A certificate of use and occupancy shall be obtained from the Commissioner for any of the following:

(a) Use and occupancy of a building hereafter erected or structurally altered.
(b) A change in use of an existing building to a use of a different district classification under this *Code*.
(c) Use and occupancy of vacant land or change in use of land.
(d) Any change in the use of a non-conforming use.
(e) Any change of tenants of a retail unit.
(f) Any change in the ownership of a non-owner occupied single- or two-family dwelling.
(g) Any change in the ownership of any three-family or multi-family dwelling.

No such occupancy, use or change of use shall take place until a Certificate of Use and Occupancy has been issued by the Commissioner.
(Ord. 91-95. Passed 10-7-96.)

1173.02 CONDITIONAL USE PERMITS.

(a) Submission Requirements.
  (1) An application for a Conditional Use Permit shall be on a form approved by the Director and shall contain the following information:

A. The name, address, and telephone number of the applicant.
B. The address and zoning district of the subject property.
C. A narrative description of the existing use.
D. A narrative description of the proposed conditional use, including a discussion of the compatibility of the proposed use with the existing uses of adjacent properties and the impact of the proposed use on adjacent properties considering such elements as parking, traffic, noise, lighting, fumes, and the outdoor storage of goods.
E. Where applicable, a site plan of the proposed conditional use showing the locations of all buildings, parking and loading areas, streets and access ways, service areas, utilities, signs, yards, landscaping, and other information the Commission may require.
F. Whether or not the property is listed on the federal, state, or local register of historic places.
G. Any documents reasonably deemed necessary by the Director.
H. The fee as established pursuant to Section 1173.06.

(2) Upon receipt of an application for a Conditional Use Permit, the Director shall, within three (3) working days, make a preliminary review of the application to determine compliance with the requirements of paragraph (a)(1) herein. If the Director determines that the application is not complete, the Director shall immediately notify the applicant; otherwise, the Director shall forward the application to the Commission for review at its next regularly scheduled meeting.

(b) In addition to the specific criteria for a conditionally permitted use specified in Chapters 1135, 1159 or 1161, the Commission shall consider and weigh the following factors when reviewing an application for a Conditional Use Permit:

(1) Whether the proposed use is consistent with the comprehensive plan;
(2) Whether the proposed use will be designed, constructed, operated, and maintained so as to be harmonious with existing and/or intended adjacent uses;
(3) Whether the proposed use will be served adequately by existing public utilities and services, and the impact of the proposed use on such utilities and services;
(4) Whether the proposed use will have a substantially detrimental impact on the public health, safety, and welfare;
(5) Whether the proposed use will interfere substantially with vehicular and pedestrian traffic on surrounding public rights-of-way;
(6) Whether the proposed use will result in the destruction, loss, or damage to a property listed on the federal, state, or local register of historic places; and
(7) Any other factors the Commission reasonably deems applicable.
(Ord. 91-95. Passed 10-7-96.)

(c) Notice Procedures. Where a Conditional Use Permit is requested, notice of the public hearing held pursuant to Section 1171.03(i) shall be made in a newspaper of general circulation no less than seven (7) days before the hearing; said notice shall state the time and place of the hearing in accordance with Chapter 107 (Publication of Legal Notices) of the Ordinances. (Ord. 124-05. Passed 2-6-06.)

(1) In addition, notice, indicating the time, place, and subject of the hearing, shall be sent by regular mail to the owners of:

A. All properties abutting the subject property;
(Ord. 91-95. Passed 10-7-96.)

B. All properties abutting such properties described in subsection (c)(1)A. hereof, excepting properties located across the right-of-way from or behind said abutting properties.
(Ord. 24-98. Passed 5-18-98.)

C. Any other property the Director deems affected by the proposed variance.

(2) Where a lot described in subsection (c)(1) hereof contains a condominium of more than ten (10) units, notice shall be sent to the president of the condominium association and the management company responsible for the building; the management company shall receive sufficient copies of the notice to post two (2) on every floor of the building at locations determined by the company.

(d) A Conditional Use Permit shall be deemed to authorize only one (1) particular conditional use and said permit shall automatically expire if such conditionally permitted use has not been instituted or utilized within one (1) year of the date on which the permit was issued or if for any reason such use shall be discontinued for more than one (1) year.
(Ord. 91-95. Passed 10-7-96; Ord. 61-04. Passed 7-6-04.)

1173.03 DETERMINATION OF SIMILAR USE.

(a) Submission Requirements.

(1) A request for a determination of similar use shall be on a form approved by the Director and shall contain the following information:

A. The name, address, and telephone number of the applicant.

B. Proof of ownership, legal interest, or written authority to make the application.

C. A description of the proposed similar use, including a discussion of the compatibility of the proposed use with uses otherwise permitted in the subject district.

D. Where applicable, site plans, elevations, and other drawings at a reasonable scale to show the need for the variance.

E. Any other documents reasonably deemed necessary by the Director.

F. The fee established pursuant to Section 1173.06.

(2) Upon receipt of a request for a determination of similar use, the Director shall, within three (3) working days, make a preliminary review of the application to determine compliance with the requirements of subsection (a)(1) hereof. If the Director determines that the application is not complete, the Director shall immediately notify the applicant; otherwise, the Director shall forward the application to the Commission for review at its next regularly scheduled meeting.

(b) The Commission shall consider and weigh the following factors when making a determination of similar use:

Comparative Analysis - Build vs. No Build

A comparison was performed to show the incremental effects on the capacity of the study area intersections due to the construction of the proposed school in the years 2013 and 2033. The following tables show a side by side comparison of the Build versus No-Build conditions for the 2013 and 2033 AM and PM peak hours.

2013 NO-BUILD VS BUILD SCENARIO

AM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.4)	B (12.6)	+0.2
	Eastbound	A (8.6)	A (8.7)	+0.1
	Westbound	B (16.2)	B (16.4)	+0.2
	Northbound	B (16.2)	B (16.4)	+0.2
Detroit & Grace	Westbound	A (8.1)	A (8.2)	+0.1
	Northbound	B (11.9)	B (12.4)	+0.5

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

2013 NO-BUILD VS BUILD SCENARIO

PM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.4)	B (13.1)	+0.7
	Eastbound	A (8.0)	A (8.1)	+0.1
	Westbound	B (16.2)	B (16.6)	+0.4
	Northbound	B (16.5)	B (17.2)	+0.7
Detroit & Grace	Intersection	A (8.1)	A (8.2)	+0.1
	Southbound	B (13.1)	C (15.3)	+2.2

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

2033 NO-BUILD VS BUILD SCENARIO

AM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.4)	B (12.7)	+0.3
	Eastbound	A (8.6)	A (8.7)	+0.1
	Westbound	B (16.3)	B (16.5)	+0.2
	Northbound	B (16.4)	B (16.6)	+0.2
Detroit & Grace	Intersection	A (8.2)	A (8.2)	0.0
	Southbound	B (12.2)	B (12.7)	+0.5

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

2033 NO-BUILD VS BUILD SCENARIO

PM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.5)	B (13.2)	+0.7
	Eastbound	A (8.0)	A (8.0)	0.0
	Westbound	B (16.4)	B (16.7)	+0.3
	Northbound	B (16.7)	B.(17.5)	+0.8
Detroit & Grace	Intersection	A (8.2)	A (8.2)	0.0
	Southbound	B (13.4)	C (15.9)	+2.5

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

The 2013 and 2033 comparison analyses indicate that both intersections within the study area are expected to be only minimally affected by the generated traffic from the proposed development during the AM and PM peak hours. All intersections and their respective approaches are expected to continue to operate with LOS C or better. The largest increase in delay experienced is 2.2 seconds in 2013 and 2.5 seconds in 2033. This increase occurs at the northbound approach of the Detroit Avenue and Grace Avenue intersection during the PM peak hour. These and the other increases in delay are minimal and would not likely be noticed by the general public.

VONOVCH PARK - PHOTO BOB PERKOSKI | DOWNLOAD

features

extreme makeover: redesigning the 'burbs to make them more sustainable

LEE CHILCOTE | THURSDAY, JUNE 14, 2012

DRU SILEY, DIRECTOR OF PLANNING AND DEVELOPMENT FOR CITY OF LAKEWOOD - PHOTO BOB PERKOSKI

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Cyclists flock to the Root Cafe in Lakewood. The hippie-friendly vegetarian cafe always had a rack, but it was often full, so riders would resort to locking their bikes to trees, parking meters or anything else that wouldn't move. Tables, too, are highly sought-after; on a typical weekday morning, the three-year-old coffeeshop is full of parents with strollers, Albanian immigrants playing dominoes, and happily caffeinated laptop workers.

To address the bike parking shortage, owner Julie Hutchison and city officials converted a patch of asphalt on Detroit Avenue into Northeast Ohio's first on-street bike parking corral. The rack accommodates a dozen or so bikes and is an outgrowth of the city's bike plan.

top 10 feature stories

i live here (now): julie foucher, '5th fittest woman on earth'

You'd never know it by looking at her, but Julie Foucher is the "Fifth-Fittest Woman on Earth." Weighing in at a trim 130 pounds, the 5-foot, 4-inch 23-year-old battled her way to the fifth-best spot among women at last year's Reebok CrossFit Games. Foucher isn't just wicked fit; she's wicked smart, too. The University of Michigan graduate is a first-year med student at the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University.

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"The Root has always been a hotspot for bicycles, and it's amazing to see how well it's used," says Hutchinson. "We're giving people more momentum to ride their bikes here."

That intersection -- Detroit and Andrews -- has one of the highest rates of bike and pedestrian traffic in the city, notes Dru Siley, Lakewood's Director of Planning and Development, registering 300 bikes and 1,200 walkers in a recent six-hour period.

"It was a good opportunity to locate on-street bike parking without taking away vehicle parking," adds Siley, who boomeranged back to Lakewood from Washington D.C. with his wife and family five years ago. "You hear, *Build it and they will come*. We had the people. Now we're not only enhancing the area, but also the experience of moving around these spaces."

Downtown Lakewood is in the midst of a renaissance. In the past five years, more than $20 million of new development and 20-plus new businesses have been added to the inner-ring suburb's historic centers, which sit along Detroit and Madison avenues. Lakewood's urban core -- a mix of century-old storefronts and redeveloped office buildings -- has become a magnet for new residents, visitors and businesses.

The city also is perhaps the region's best example of the trend touted by the authors of *Retrofitting Suburbia*, a 2008 book arguing that the defining trend of the 21st century will be to redevelop suburbs as walkable, sustainable urban places.

"'Drive 'til you qualify' affordability is no longer sustainable," co-authors Ellen Dunham-Jones and June Williamson wrote last year in a *New York Times* op-ed. "Instead, we need to use cheap land for food and energy production, redirect growth inward, ease the production of affordable infill housing and retrofit our shrinking suburbs."

Walkable and convenient places also have higher real estate values than car-dominated locales, argued urban planning professor Christopher Leinberger in a recent *New York Times* opinion piece. Across Northeast Ohio, suburbs are now grappling with how to become more pedestrian and bike friendly and enhance or create a sense of place. That's one major focus of the Northeast Ohio Sustainable Communities Consortium (NEOSCC), a $4.2 million initiative to foster sustainable solutions to sprawl.

Of course, Lakewood already had a historic urban

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LAKEWOOD

core to build off, and it's a far cry from the vacancy-plagued strip malls and 'zombie' subdivisions Dunham-Jones and Williamson decry in their text. Yet the city's hearty embrace of density and urban placemaking might offer a model for other 'burbs wrestling with their own identities.

The historic Bailey building at the southeast corner of Warren and Detroit offers one example. This early-20th century gem was wrapped in a curtain wall of concrete when Siley relocated to Lakewood. "I lived here for two years before I realized it wasn't some kind of utility substation," he jokes grimly. Now, it's been fully restored by owner Brad Kowit following a massive $6 million renovation.

Today, Lakewood is one of the rare places in Northeast Ohio where office demand actually is increasing, thanks in no small part to the entrepreneurs and startups flocking to the area's recently renovated office buildings.

"I still get several calls per week," says Brant Smith, co-owner of the Detroit-Warren building on the southwest corner of that intersection. Following an energy-efficient re-do completed last year, occupancy in his building has soared from 65 to 100 percent. Lakewood rents are also cheaper than those in Cleveland, at $10 to $12 per square foot.

Downtown Lakewood's resurgence started a few years ago with a streetscape project that included reconstruction of Detroit Avenue and new traffic signals. New sidewalks and curbs, bike parking and flower planters, and wayfinding and district signage should be finished this year.

As a result of the city's investment in placemaking and an identifiable urban district, independent businesses continue to set up shop here, including restaurants like Melt Bar and Grilled and Deagan's Kitchen and boutiques like the Paisley Monkey.

Mainstay retailers like Rozi's Wine House and Geiger's Sporting Goods also have done major renovations, restoring their storefronts to their original, classic form. Thanks to Lakewood's stringent design review, chains like CVS and Marc's have built stores that fit neatly into the streetscape. Finally, the city has become a hub for startups, nonprofits and firms like the Newry Corporation, which just relocated from Westlake.

"Tenants are moving here because they see the excitement of being a part of an urban district," says Ian Andrews, Director of LakewoodAlive, an economic development group. "The downtown environment is attractive and they want to

be a part of it."

"Since we've been here, we've seen such a revitalization of the business community," adds Tamara Racin, owner of the Paisley Monkey, a "clicks-to-brick" success story that started selling children's clothing online and now occupies a cozy Detroit storefront.

Dan Deagan, who opened Deagan's Kitchen in a glassy storefront that housed several unmemorable sports bars, completed a lot of research on the city's density and restaurant demand before opening his acclaimed gastropub in 2010.

"A lot of people told me, 'Nothing can survive in that place.' But to me that didn't make sense," says Deagan. "I knew that Lakewood is an area that people will come to."

Deagan's tasty, affordable cuisine has made it a destination for suburbanites seeking an urban experience that's more authentic than that dished up at lifestyle centers like Legacy Village and Crocker Park.

Downtown Lakewood is also a place where new and old sit side by side. Rozi's Wine House has been here since 1938, yet owners Gary and Carol Rosen recently updated their shop with a renovation that transformed a tasting room into a breezy sun porch.

"Lakewood people support Lakewood businesses," says Gary Rosen, who jokes that his store is "older than dirt." He adds, "Now you see a lot of younger people coming back."

Of course, this urban district is not without major challenges. Many older buildings remain plagued by vacancy. Residents hope a historic building that was recently purchased by Lakewood Hospital won't suffer the same fate as the historic Detroit Theatre, which was torn down recently to make way for a McDonald's.

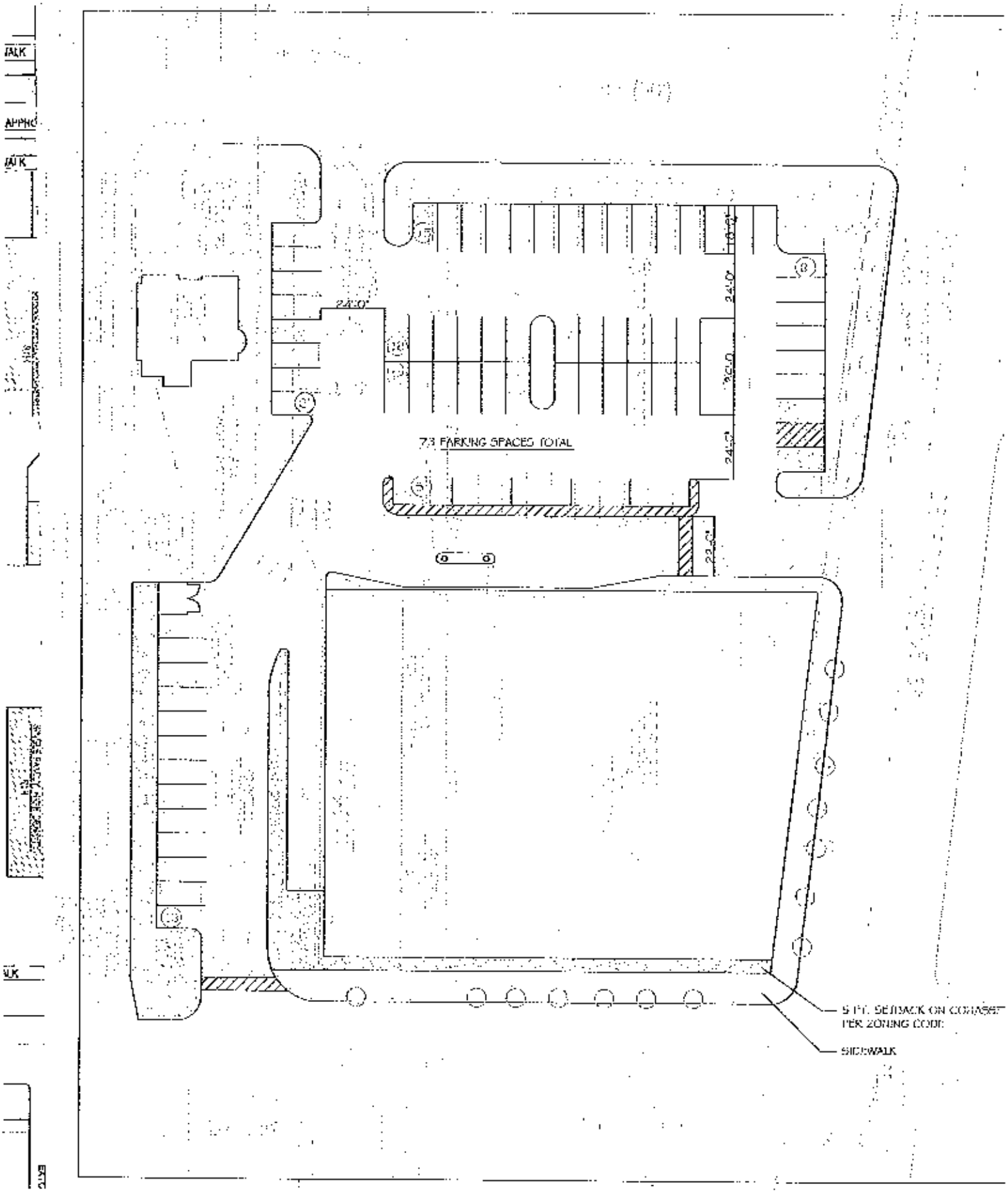
Yet committed merchants here believe downtown Lakewood is a lasting success story. The University of Akron has opened a satellite campus that will offer classes in September, and the city is studying the possibility of adding a boutique hotel.

Downtown Lakewood's unfolding success story is underwritten by the city's committed residents, who embody the "shop local" ideal as they pedal, stroll and walk to stores.

"Lakewood is attracting Millenials who see driving as a vice, empty nesters who want to walk to the store, and hardworking middle class folks who want great education for their kids," says Siley. "If you want a five-bedroom house on a one acre lot, then we'll never be for you. If you're interested in what a city has to offer -- and more and more people are interested in that opportunity -- then Lakewood is going to benefit from that trend."

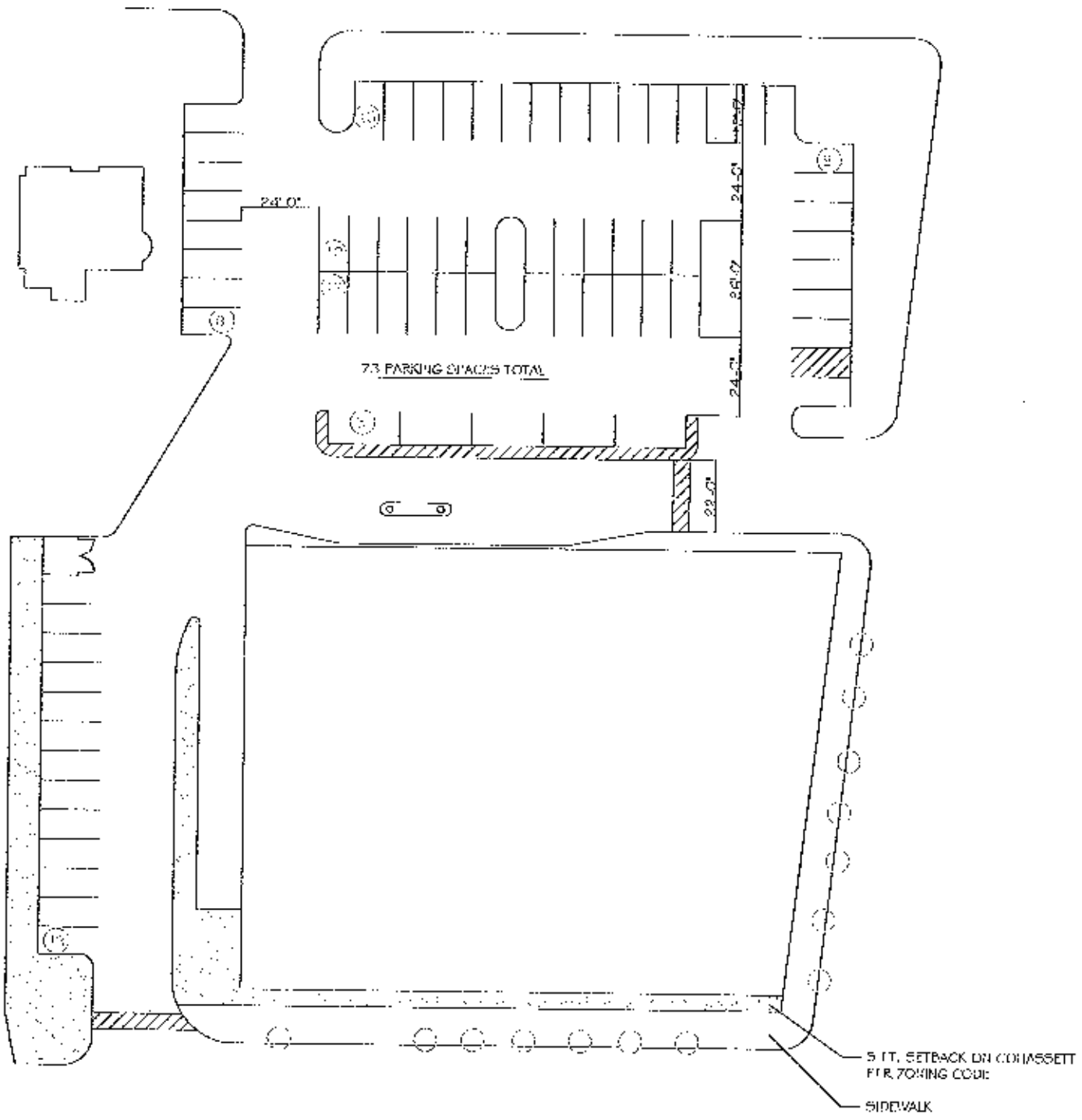
Photos Bob Perkoski
- Images 1 & 2: Dru Siley, Director of Planning and Development for City of Lakwood
- Image 3: The Root Cafe
- Image 4: The Bailey Bldg
- Image 5: The Detroit-Warren Bldg
- Images 8 & 9: Deagan's Kitchen & Bar

- Images 10 & 11: Rozi's Wine Shop
- Images 12 & 13: Paisley Monkey
- Image 14: Artist Peter Diepenbrock's sculpture "Transversion" at the Lakewood Public Library



DISCOUNT DRUG MART (ADJUSTED FOR SIDE SETBACK)

SCALE: 1" = N.T.S.



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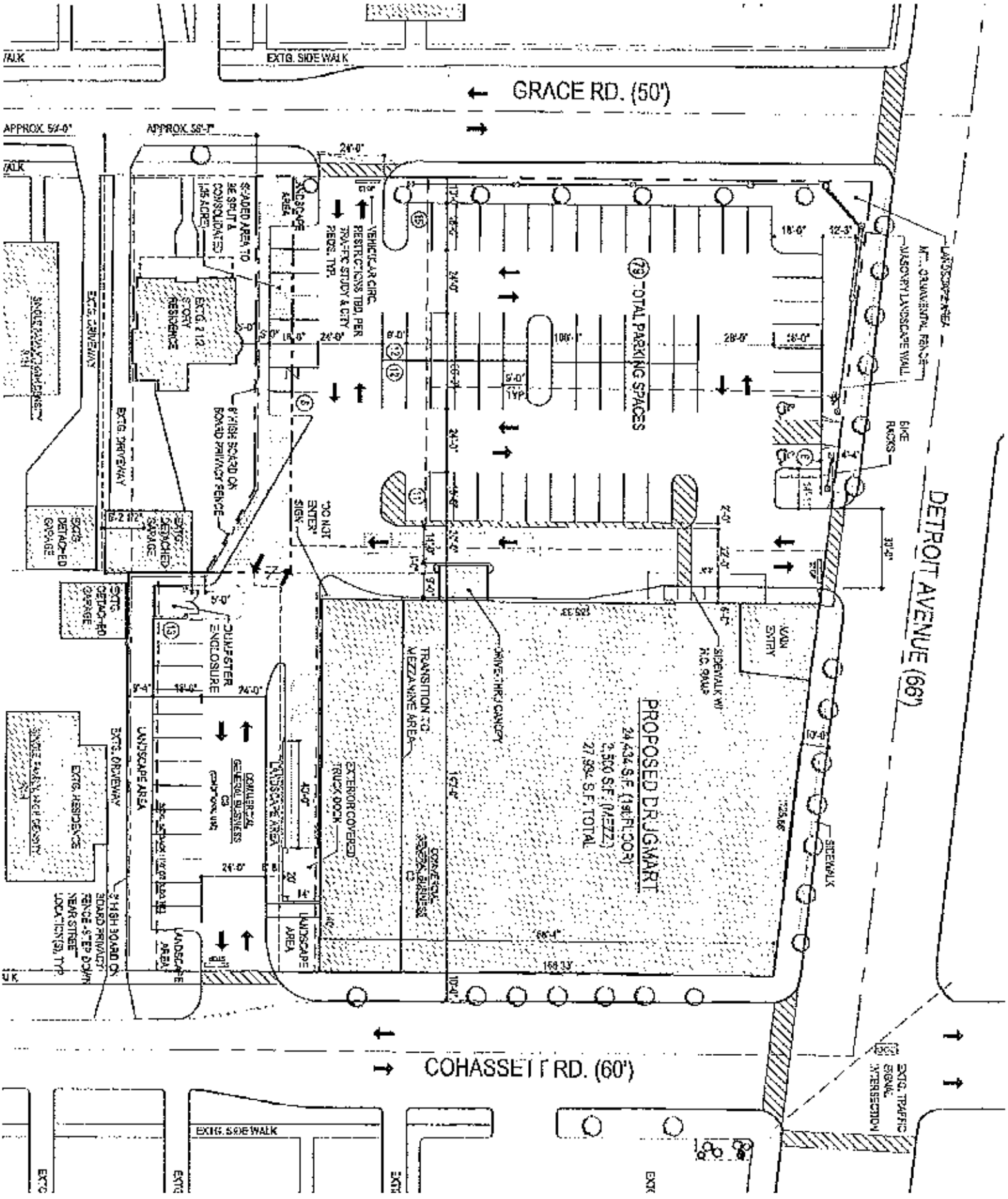


DISCOUNT DRUG MART

SCALE: = N.T.S.

From: Eric Newland [mailto:enewland@adaarchitects.cc]
Sent: Monday, July 02, 2012 4:42 PM
To: Siley, Dru
Cc: Kurt Schmitz; Tim Moran
Subject: Discount Drug Mart -Lakewood: Planning Commission Materials

Good Afternoon, Dru.

Please find the attached zip file, containing our updated Site Plan, Landscape Plan, Photometrics, Traffic Study and Renderings from the primary corners.

We were able to incorporate and respond to some neighborhood concerns by flipping the truck dock, increasing landscape buffering and isolating our delivery truck access to Detroit Ave. exclusively. These changes are displayed in the attached files.

Please let us know if there is anything else you need for Thursday's meeting.

Please confirm receipt of this email.

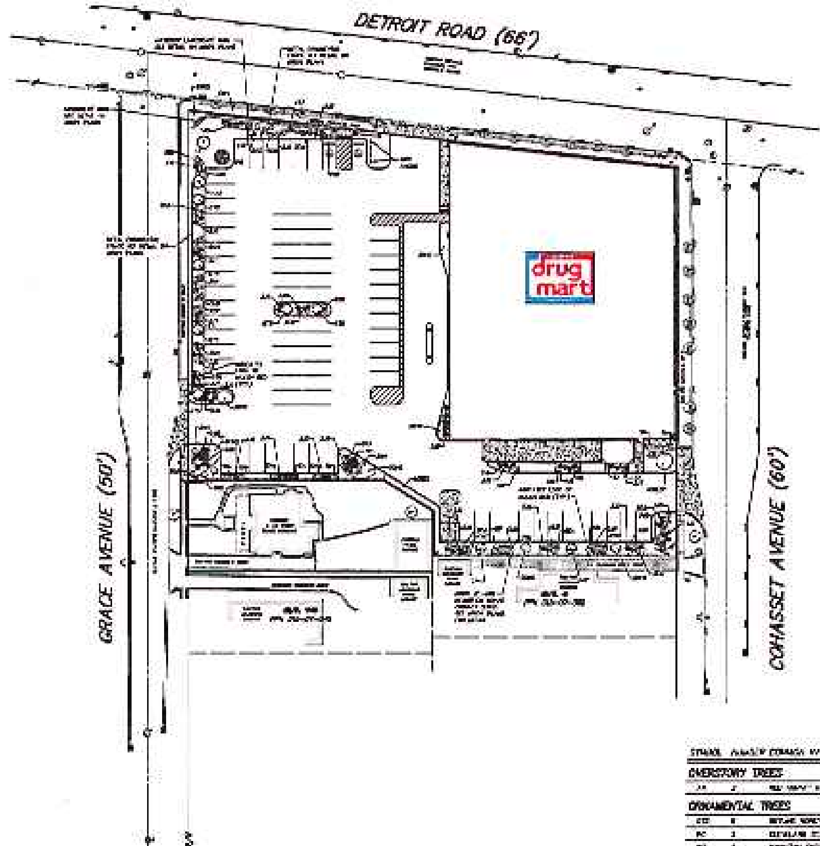
Eric Newland
ADA Architects, Inc.
(P) 216.920.3129
ENewland@ADAarchitects.cc<mailto:ENewland@ADAarchitects.cc>

ARCHITECTS, INC.

DISCOUNT DRUG MART
LAKEWOOD, OH
06-25-12

ARCHITECTS, INC.

DISCOUNT DRUG MART
LAKEWOOD, OH
06-25-12



GENERAL LANDSCAPE NOTES:

[illegible]

PLANTING TREES AND SHRUBS NOTES:

[illegible]

FINAL GRADING NOTES:

[illegible]

TEMPORARY SEEDING NOTES:

[illegible]

IRRIGATION SYSTEM NOTES:

[illegible]

EROSION CONTROL DURING LANDSCAPING NOTES:

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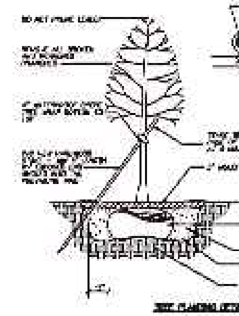
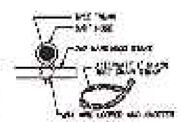


TREE PLANTING DETAIL



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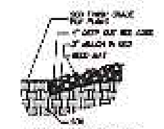
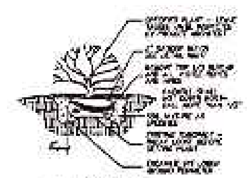


PLANTER SECTION DETAIL



SHRUB PLANTING DETAIL

SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	PLANT TYPE	PLANTING SIZE	MATURE HEIGHT	MATURE SPREAD	LIGHT REQUIREMENTS
OVERSTORY TREES								
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ORNAMENTAL TREES								
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SHRUBS								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GROUNDCOVER								
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GENERAL DRAINAGE REFERENCES FOR SWPP PLAN

[illegible]

PRIME CONTRACTOR SWPP PLAN RESPONSIBILITIES

[illegible]

STORM WATER POLLUTION PREVENTION PLAN ADDENDUM

[illegible]

GRAPHIC SCALE

BEFORE YOU DIG
CALL TOLL FREE 800-362-2764

McSTEEN AND ASSOCIATES, INC.
ENGINEERS & SURVEYORS
1415 EAST 286th STREET · WICKLIFFE, OH 44092
PHONE: 1-440-585-9800 · FAX: 1-440-585-9800

ARCHITECTS, INC.

Discount Drug Mart

DETROIT AVENUE

LAKEWOOD, OHIO

REVISIONS

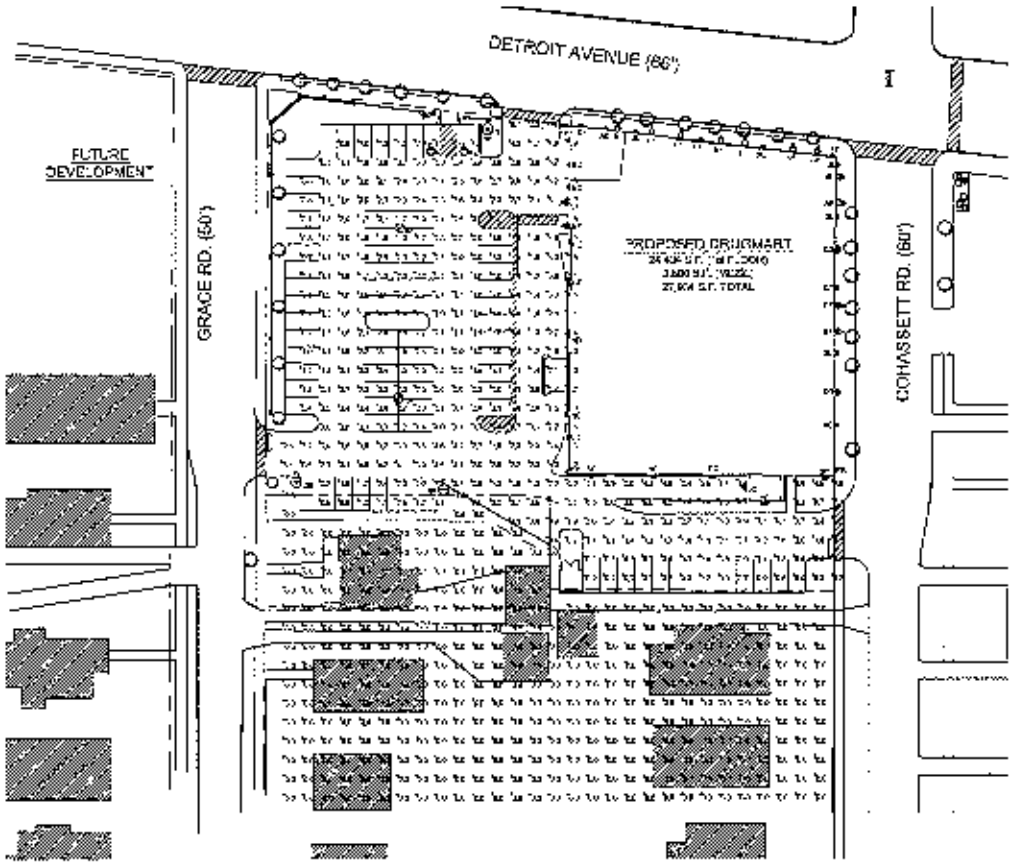
LANDSCAPE PLAN

LS-1

STATISTICS					

LIGHTING FIXTURE SCHEDULE

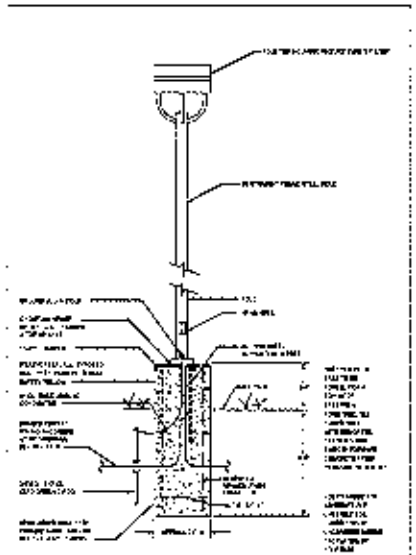
TYPE	LAMP	WATTS	DESCRIPTION	CATALOG NO.
SA				
SB				
SC				
SD				
SE				
SF				



N

PHOTOMETRICS PLAN

SCALE: 1" = 30'-0"



TYPE SA LIGHT FIXTURE BASE DETAIL

PROPOSED

DISCOUNT DRUGMART

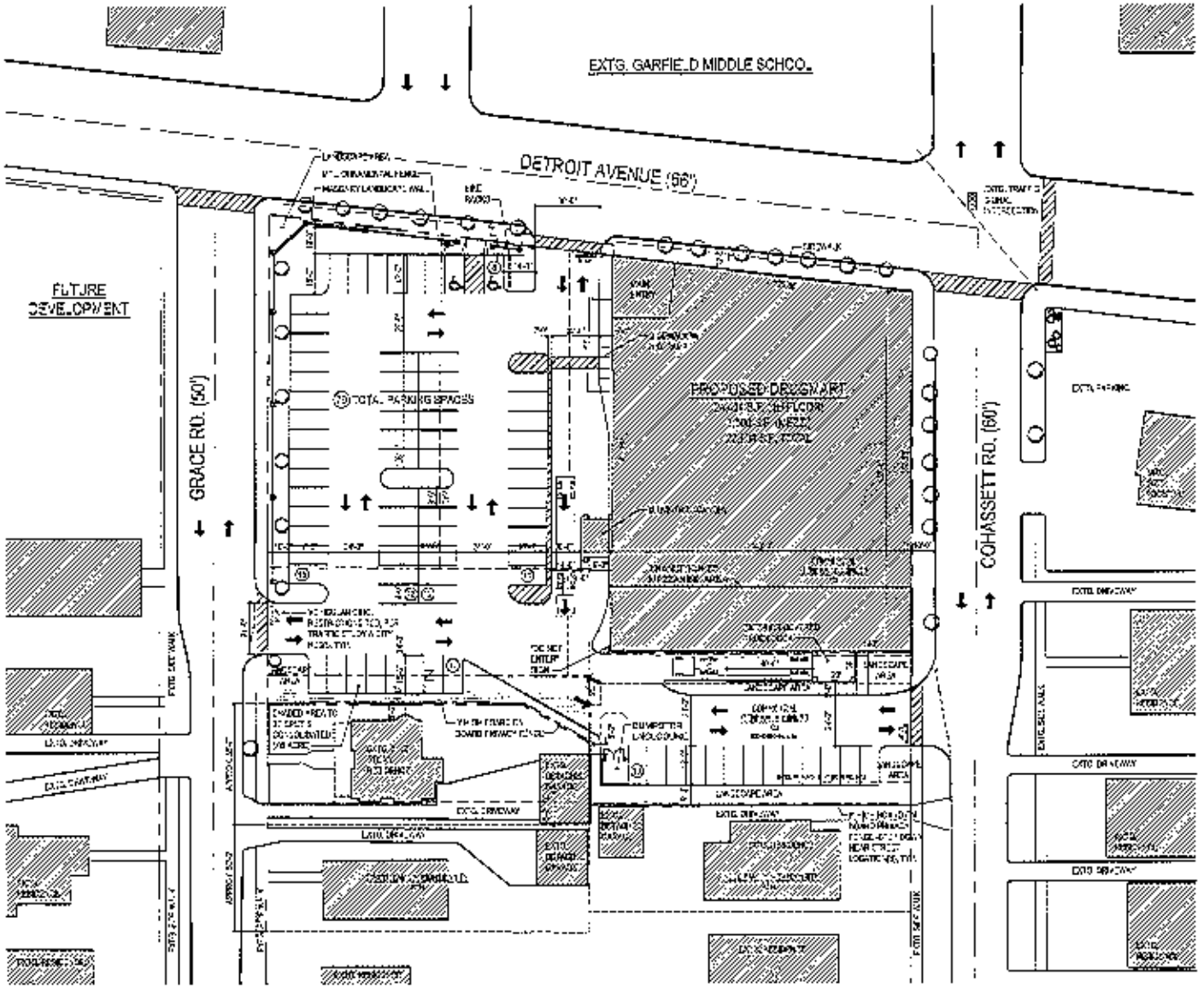
ARCHITECTS, INC.

ELECTRICAL SITE PLAN

DATE: 08/14/15

JOB NO: 15-25

PH-1



ARCH. SITE PLAN (08.29.12)

SITE SUMMARY

TOTAL LOT AREA	
TOTAL BUILDING AREA	
PARKING PROVIDED	
PARKING REQUIRED	

Discount Drug Mart

SCHEMATIC ARCHITECTURAL SITE PLAN

AS-7.0

TRAFFIC IMPACT STUDY
Discount Drug Mart
Lakewood, Ohio

June 29, 2012

Prepared for:
Discount Drug Mart, Inc.
211 Commerce Drive
Medina, OH 44256

Providing Practical Experience
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TMS Engineers, Inc.
Transportation Management Services
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Email: Mail@TMSEngineers.com
Web site: http:// www.TMSEngineers.com

TRAFFIC IMPACT STUDY

DISCOUNT DRUG MART

LAKEWOOD, OHIO

JUNE 29, 2012

Prepared For:

DISCOUNT DRUG MART, INC.
211 COMMERCE DRIVE
MEDINA, OHIO 44256

Prepared By:

TMS ENGINEERS, INC.
4547 HUDSON DRIVE
STOW, OHIO 44224

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B. Trip Generation Worksheets

C. Growth Rate Calculations

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E. No-Build Capacity Analysis Worksheets - 2013

F. No-Build Capacity Analysis Worksheets - 2033

G. Build Capacity Analysis Worksheets - 2013

H. Build Capacity Analysis Worksheets - 2033

I. Access Capacity Analysis Worksheets - 2013

J. Access Capacity Analysis Worksheets - 2033

K. ODOT Turn Lane Warrant Graphs

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EXECUTIVE SUMMARY

This traffic impact study has been prepared at the request of Discount Drug Mart, Inc. for a proposed Discount Drug Mart retail development. The project site is located along the south side of Detroit Avenue between Grace Avenue to the west and Cohasselt Avenue to the east in Lakewood, Cuyahoga County, Ohio.

The proposed development is expected to consist of a 24,688 square foot pharmacy/drugstore with a drive-through window.

The development is expected to be open by the year 2013. Therefore, 2013 will be analyzed as the opening year and 2033 will be analyzed as the design year for the twenty year analysis.

The development is proposed with three full access drives . There is one drive along the south side of Detroit Avenue, one along the east side of Grace Avenue, and one along the west side of Cohassett Avenue. The proposed site plan can be seen in **Figure 2**.

The proposed development will generate additional traffic which may impact the area roadways. This traffic impact study presents an assessment of the impact of the traffic generated by the proposed development on the existing road network adjacent to the site. The results of the analysis have been used to determine what improvements will be required to handle the traffic which will be associated with this use.

The proposed development is expected to generate the following average hourly traffic during the AM and PM peak periods after completion:

ITE TRIP GENERATION		SIZE	TRIP ENDS			
ITE Code	Description		Weekday Peak Hour Between 7-9 AM (Enter/Exit)		Weekday Peak Hour Between 4-6 PM (Enter/Exit)	
881	Pharmacy/Drugstore with Drive-Through Window	*24,688 s.f.*	*38*	*28*	*128*	*128*
	Pass-by Trips (AM-0%, PM-49%)		-	-	*-63*	*-63*
TOTAL NEW TRIPS			***38***	***28***	***65***	***65***
			66		***130***	

The following intersections within the study area were analyzed as part of this study:

1. Detroit Avenue & Grace Avenue
2. Detroit Avenue & Cohassett Avenue

Recommended Improvements to Serve Existing Conditions
No improvements were found to be necessary to accommodate the existing 2012 traffic at the study area intersections.

Recommend Improvements to Serve Future Conditions without the Development
No improvements were found to be necessary to accommodate the expected 2013 and 2033 No Build traffic at the study area intersections.

Recommended Improvements to Mitigate the Traffic Associated with the Development
No additional improvements were found to be necessary to accommodate the 2013 and 2033 site generated (Build) traffic at the study area intersections.

Development Access Recommendations
The following lane use and traffic control are recommended at the development access drives to accommodate the 2013 and 2033 site generated (Build) traffic :

Detroit Avenue & Site Access Drive
- Construct the northbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the northbound approach.

Grace Avenue & Site Access Drive
- Construct the westbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the westbound approach.

Cohassett Avenue & Site Access Drive
- Construct the eastbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the eastbound approach.

Conclusion
Based upon the results of the analysis in this study, it can be seen that with no additional improvements to the surrounding area roadway network and the proposed lane use and traffic control at the development access locations that the development traffic can be accommodated without impacting the area roadway network.

1. INTRODUCTION

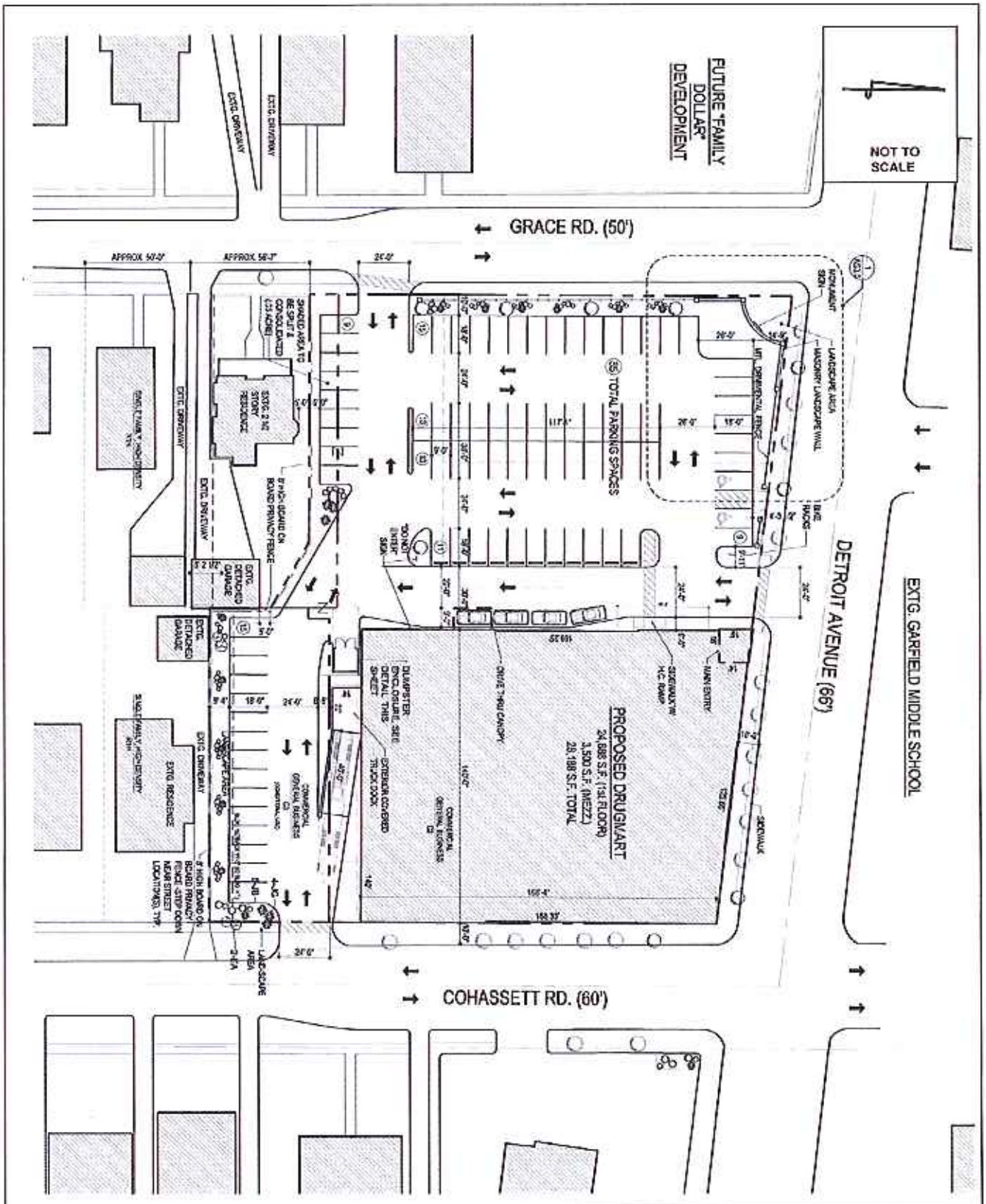
1.1 Purpose of Report

This traffic impact study has been prepared at the request of Discount Drug Mart, Inc. for a proposed Discount Drug Mart retail development. The project site is located along the south side of Detroit Avenue between Grave Avenue to the west and Cohassett Avenue to the west in Lakewood, Cuyahoga County, Ohio. **Figure 1, Page 2** shows the proposed location of the development.

The proposed development is expected to consist of a 24,688 square foot pharmacy/drugstore with a drive-through window. The development is expected to be open by the year 2013. Therefore, 2013 will be analyzed as the opening year and 2033 will be analyzed as the design year for the twenty year analysis.

The development is proposed with three full access drives. There is one drive along the south side of Detroit Avenue, one along the east side of Grace Avenue, and one along the west side of Cohassett Avenue. **Figure 2, Page 3** shows the proposed site plan for the proposed development.

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	Location Map	Figure 1 Page 2



TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	Site Plan	Figure 2 Page 3

1.2 Study Objectives

This study is structured for the following purposes;

- to adequately assess the traffic impacts associated with the proposed development and to identify the level of off-site access and traffic,
- to provide a comprehensive study which evaluates and documents the traffic impacts and off-site improvements, where warranted,
- and to provide a technically sound basis to identify mitigation requirements to off-site traffic impacts.

This study documents the methodologies, findings and conclusions of the analysis, including the basis for all assumptions, traffic parameters utilized and conclusions reached.

The traffic impacts will be determined by comparing the existing intersection levels-of-service before the construction of the development to the anticipated intersection levels-of-service after the opening of the development. Levels-of-service for the study area intersections and access driveway will be calculated using the computerized version of the Transportation Research Board's **Highway Capacity Manual, HCM2010 (HCS2010, Release 6.1)**.

2. AREA CONDITIONS

2.1 Transportation Network Study Area

The Ohio Department of Transportation functionally classifies roadways to help define a roadway's characteristics as well as identify roadways that are eligible for federal funds. Functional classification is the grouping of roads, streets, and highways in a hierarchy based on the type of highway service they provide. Generally, streets and highways perform two types of service. They provide either traffic mobility or land access and can be ranked in terms of the proportion of service they provide. The functional classification of the roadways in the study area can be seen on ODOT's website at:

http://www.dot.state.oh.us/Divisions/Planning/SPPM/SystemsPlanning/Pages/RoadwayFunctionalClass.aspx

Detroit Avenue is a three-lane roadway with a center two-way left turn lane. Detroit Avenue has an east-west orientation in the study area. It is classified as a urban minor arterial according to the Ohio Department of Transportation. Detroit Avenue has an average daily traffic (ADT) of approximately 7,400 vehicles per day in the study area based on the 2012 traffic data collected for this study.

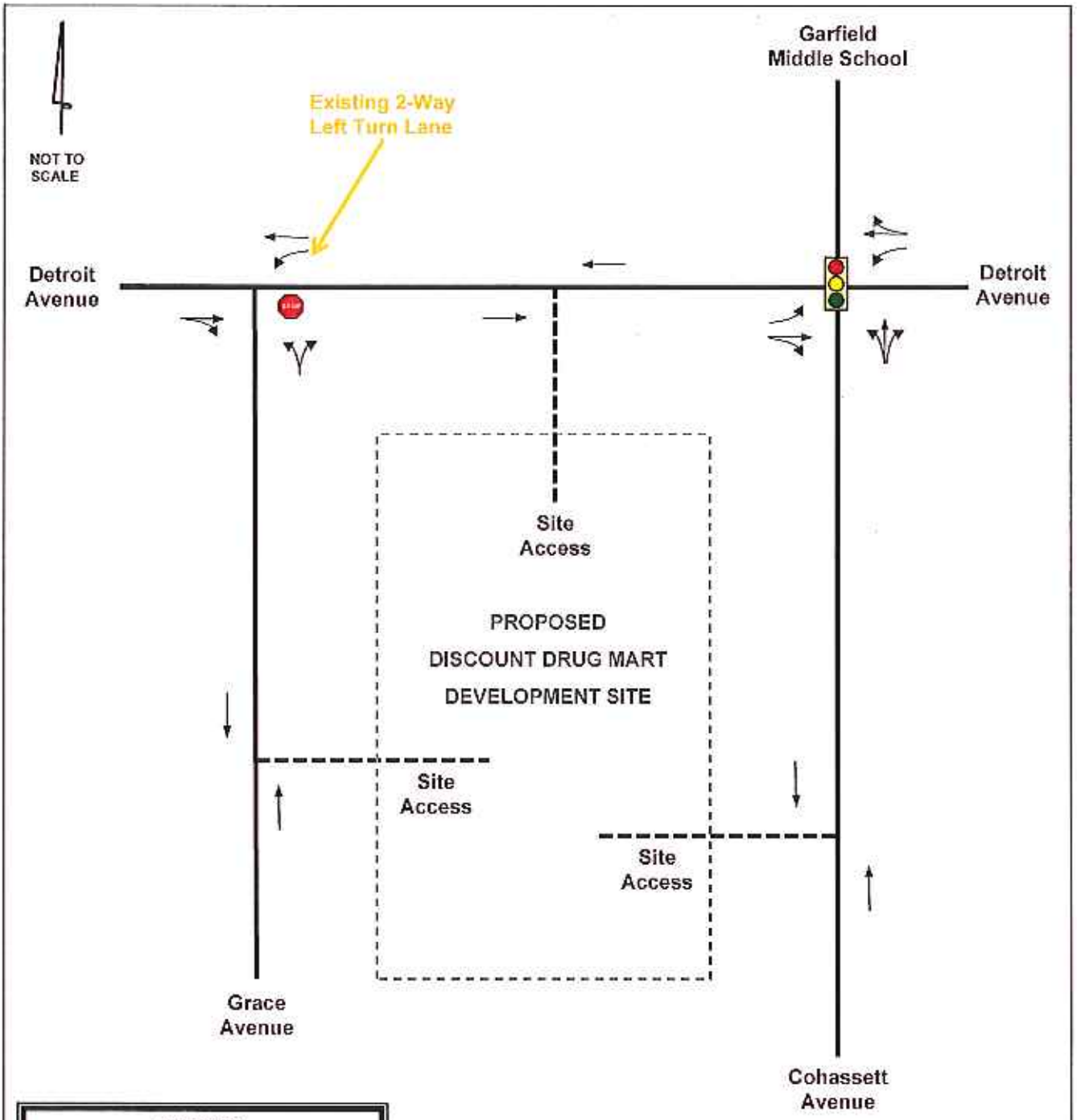
Grave Avenue & Cohassett Avenue are two-lane local roadways with a north-south orientation in the study area. Grace Avenue has an average daily traffic (ADT) of approximately 450 vehicles per day in the study area based on the 2012 traffic data collected for this study. Cohassett Avenue has an average daily traffic (ADT) of approximately 870 vehicles per day in the study area based on an available 2010 traffic count.

Detroit Avenue and Cohassett Avenue intersect at a four-way traffic signal controlled intersection. There are exclusive left turn lanes on the east and west intersection approaches. The north approach of the intersection is an entrance only drive for Garfield Middle School.

Detroit Avenue and Grace Avenue intersect at a three-way stop sign controlled intersection. The Grace Avenue approach is under stop sign control and the Detroit Avenue approaches operate under free-flow conditions. There is a center two-way left turn lane at the intersection for westbound left turns onto Grace Avenue.

Figure 3, Page 6 shows an aerial view of the study area. **Figure 4, Page 7** shows the lane use and traffic control conditions based upon the existing conditions in the study area.

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	Site Plan	Figure 3 Page 6



TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	Existing Conditions	Figure 4 Page 7

2.2 *Traffic*

Weekday nine hour turning movement counts were performed at the following intersections within the study area:

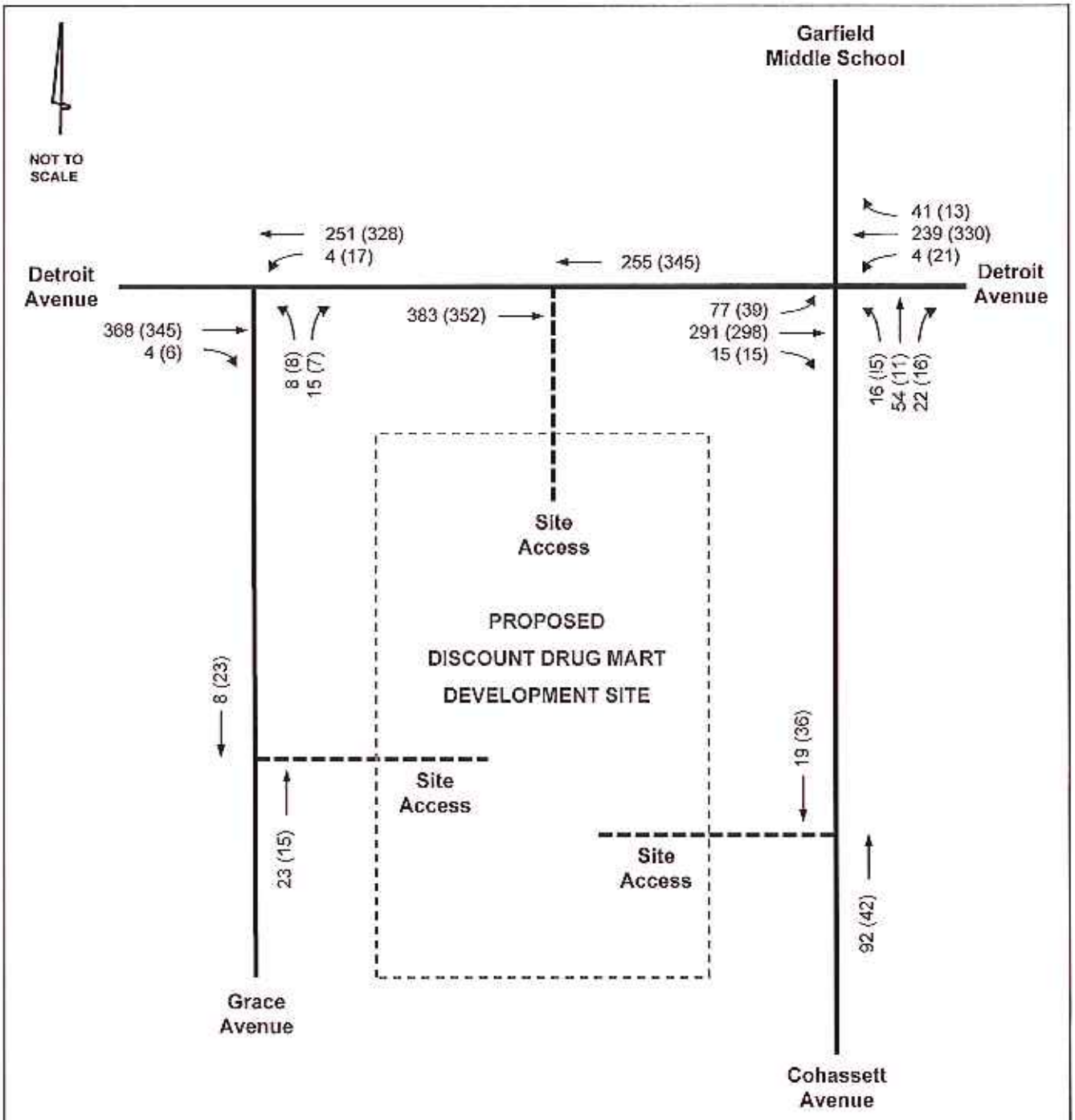
1. Detroit Avenue & Grace Avenue
2. Detroit Avenue & Cohassett Avenue

The Detroit Avenue and Grace Avenue count was performed on Tuesday, June 19, 2012. The Detroit Avenue and Cohassett Avenue was performed on Wednesday, November 10, 2011. The weekday traffic counts were conducted in fifteen (15) minute intervals between the hours of 7 AM - 10 AM, 11 AM - 1 PM, and 2 PM - 6 PM, then hourly totals were calculated. The Ohio Department of Transportation Hourly Percent by Vehicle charts were used to determine the percentage of truck traffic along the roadways. Copies of the intersection turn movement counts and the Hourly Percent by Vehicle charts are included in **Appendix A**.

Average daily traffic was calculated for each of the area roadways using expansion factors to account for daily and seasonal variations according to the recommendations and latest data from the Ohio Department of Transportation.

From the data, the weekday AM peak hour of traffic was determined to be 8:00 AM to 9:00 AM and the weekday PM peak hour of traffic was found to be 5:00 PM to 6:00 PM. These periods will be analyzed since they reflect the period of the highest volume of traffic flow for both the roadway and the proposed development. It will provide a worst case scenario for future traffic. Current AM and PM peak hour traffic volumes are shown in **Figure 5, Page 9.**

It should be noted that the traffic count data for the intersection at Detroit Avenue and Cohassett Avenue was collected while school was in session. The most recent count at Detroit Avenue and Grace Avenue was collected during the summer break period for the local schools. Therefore, the traffic count data from Detroit Avenue and Cohassett Avenue will serve as the control data and the through volumes at Detroit Avenue and Grace Avenue will be adjusted accordingly to include school traffic from the Garfield Middle School complex located directly across the street from the proposed development.



LEGEND	
XX	AM Peak Hour Traffic
(XX)	PM Peak Hour Traffic

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	Existing Weekday Traffic Volumes	Figure 5 Page 9

3. PROJECTED TRAFFIC CONDITIONS

3.1 Site Traffic

Trip Generation

Calculating future total driveway trips requires an estimate of the traffic generated by the proposed development. The most widely accepted method of determining the amount of traffic that a proposed development will generate is to compare the proposed site with existing facilities of the same use. The Institute of Transportation Engineers (ITE) has prepared a manual titled "**Trip Generation Manual**", which is a compilation of hundreds of similar traffic generation studies to aide in making such a comparison. The most recent update of this manual is the 8th edition and was utilized for this study.

The proposed development is expected to consist of a 24,688 square foot pharmacy/drugstore with a drive-through window. Trip generation calculations for the development were performed utilizing data contained in the **Trip Generation Manual** and the methods outlined in the (ITE) **Trip Generation Handbook**. Copies of the trip generation worksheets can be found in **Appendix B**.

Passer-by and Internal Trips

It should be noted that retail land uses generate a different mixture of traffic than land uses such as residential homes and office facilities, which add all of the "new" traffic to the adjacent roadway system. Retail and service land uses attract motorists from the existing passing flow of traffic. A portion of the estimated total generated trips are actually vehicles that are currently using the adjacent roadway system (i.e. motorists who are already on the road and stop by the drugstore on the way home from work). In which case those vehicles would be counted twice as existing and site generated traffic These vehicles are referred to as "Passer-by" trips.

The ITE **Trip Generation Handbook, Second Edition** provides pass-by rates for various land uses. For a pharmacy/drugstore with a drive-through window, the **Trip Generation Handbook** provides the pass-by trips rates from three different sites. The percentage of passer-by traffic for a pharmacy/drugstore ranges from 41% to 58% during the weekday PM peak hour with the average being 49%. While some passer-by traffic is expected to occur during the AM peak hour, no percentages have been documented by the **Trip Generation Handbook**. As previously discussed this means that potentially 41% to 58% of the trips generated in the PM peak by this land use are already using the adjacent roadway system. To provide a conservative estimate, the average passer-by percentages will be used for purposes of this analysis.

NET NEW TRIP GENERATION

Discount Drug Mart
Lakewood, Ohio

ITE TRIP GENERATION		SIZE	TRIP ENDS			
ITE Code	Description		Weekday Peak Hour Between 7-9 AM (Enter/Exit)		Weekday Peak Hour Between 4-6 PM (Enter/Exit)	
881	Pharmacy/Drugstore with Drive-Through Window	*24,688 s.f.*	*38*	*28*	*128*	*128*
	Pass-by Trips (AM-0%, PM-49%)		-	-	*-63*	*-63*
TOTAL NEW TRIPS			***38***	***28***	***65***	***65***
			66		***130***	

Distribution of Generated Traffic

The directional distribution for the new generated traffic is a function of several variables including size and type of the proposed development, the prevailing operating conditions on the existing roadways, population distribution within the defined area of influence and current land uses. The distribution pattern that was assumed is shown in the table that follows and is based upon engineering judgment of the preceding variables.

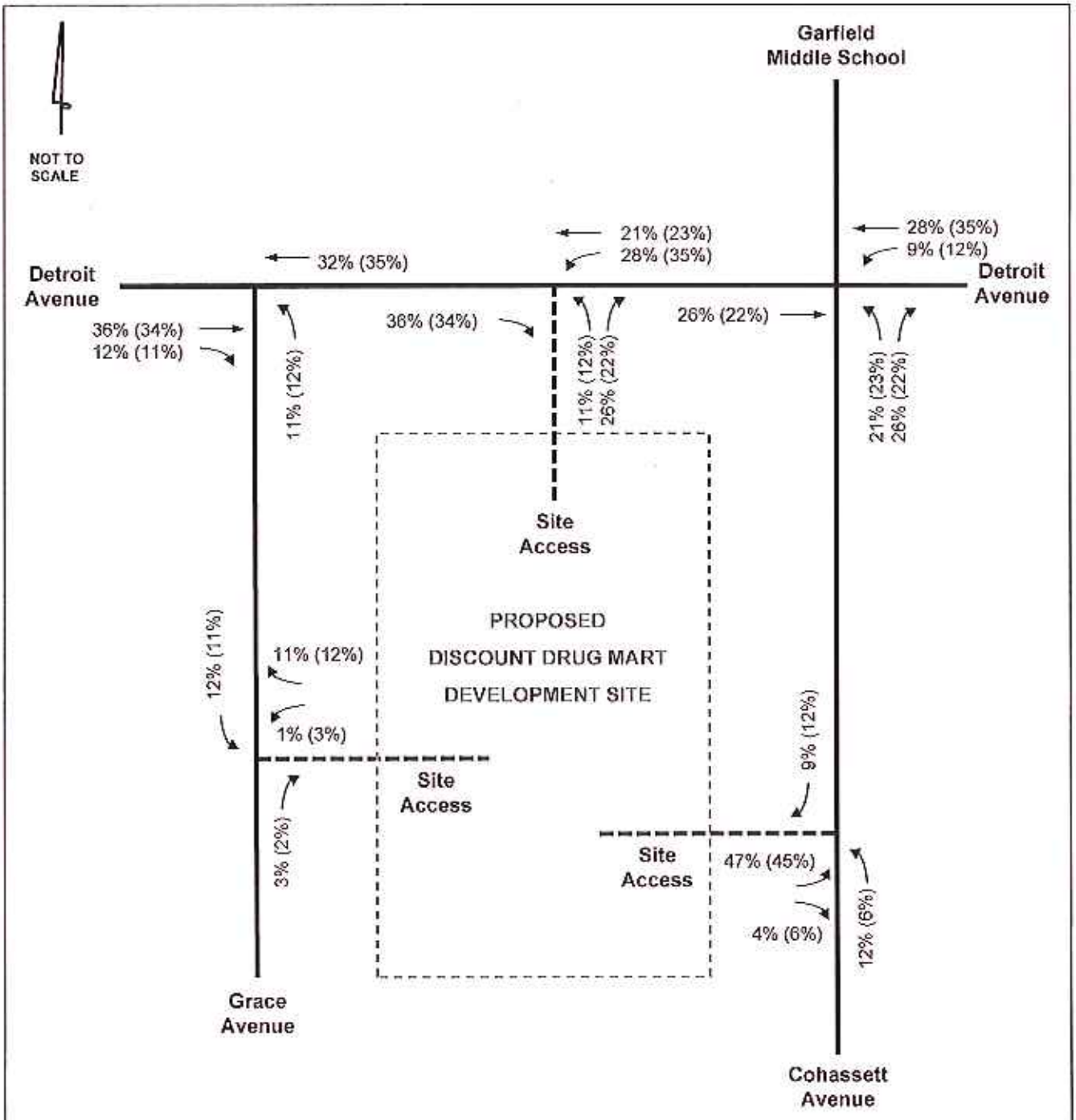
ORIGIN AND DESTINATION

ORIGIN/DESTINATION	AM		PM	
	TO	FROM	TO	FROM
East (Detroit)	52%	37%	44%	47%
West (Detroit)	43%	48%	47%	45%
South (Grace)	1%	3%	3%	2%
North (Cohassett)	4%	12%	6%	6%
Total	100%	100%	100%	100%

The directional distribution for the new AM and PM peak hour generated traffic volumes are shown graphically in **Figure 6, Page 13** The trip distributions for the PM peak hour passer-by traffic is shown graphically in **Figure 7, Page 14.**

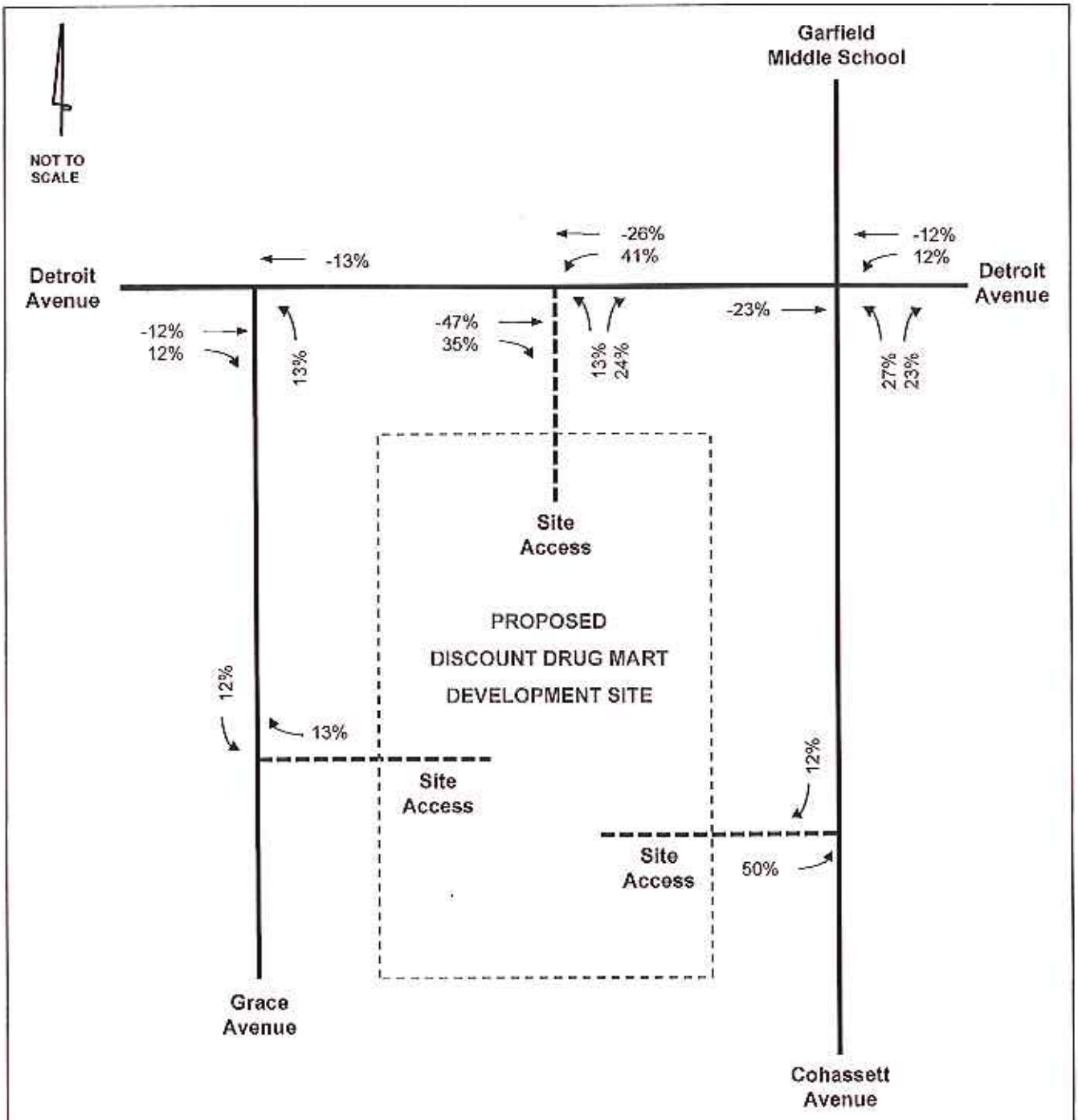
Assignment of Generated Traffic

Based upon this distribution pattern, the new AM and PM peak generated traffic were assigned to the study intersections. The assignments of the estimated new generated traffic for the proposed development are shown graphically in **Figure 8, Page 15.** The assignments of the estimated new passer-by traffic for the proposed development are shown graphically in **Figure 9, Page 16.**

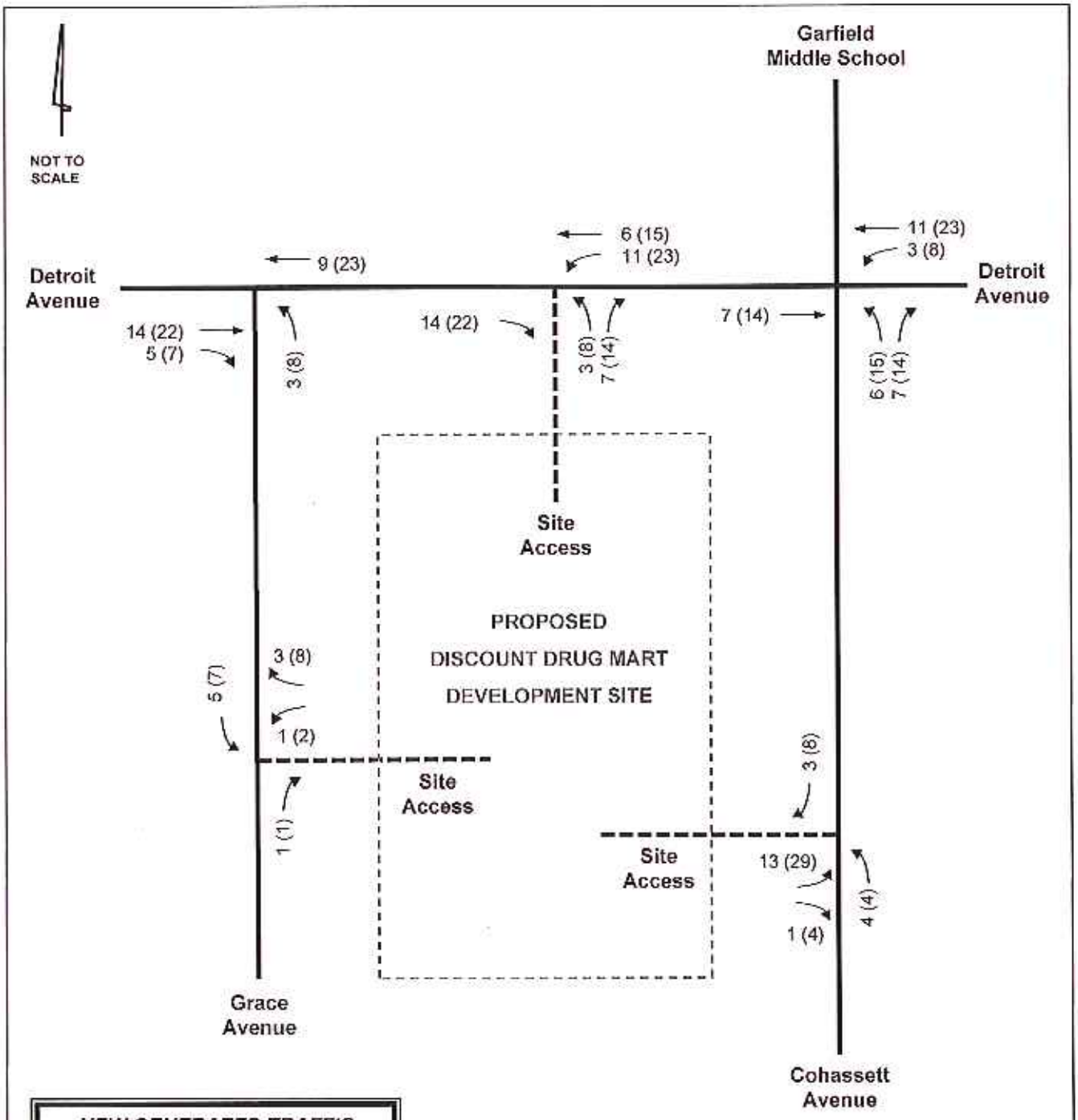


LEGEND
XX% AM Peak Hour Distribution
(XX%) PM Peak Hour Distribution

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	New Generated Traffic Distribution	Figure 6 Page 13

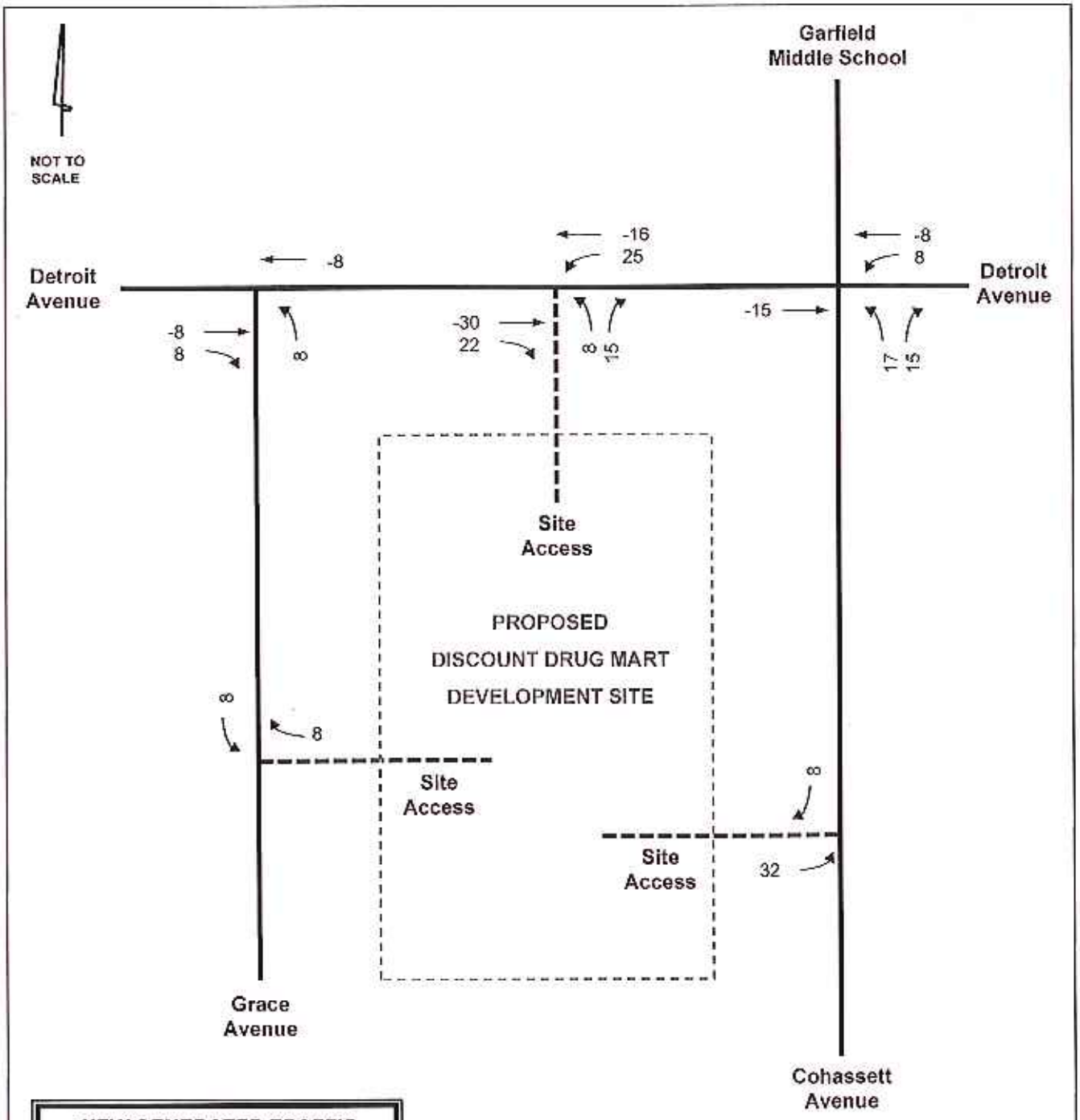


TMS Engineers, Inc. Transportation Management Services 4541 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	Pass-by Generated Traffic Distribution	Figure 7 Page 14



NEW GENERATED TRAFFIC	AM	PM
TOTAL TRIPS	66	130
ENTER	38	65
EXIT	28	65

LEGEND	
XX	AM Peak Hour Site Trips
(XX)	PM Peak Hour Site Trips



NEW GENERATED TRAFFIC	AM
TOTAL TRIPS	126
ENTER	63
EXIT	63

LEGEND	
XX	PM Peak Hour Site Trips

3.2 Non-Site Traffic

Design of new roadways or improvements to existing roadways should not usually be based on current traffic volumes alone, but should consider future traffic volumes expected to make use of the facilities. Roadways should be designed to accommodate the traffic volume that is likely to occur within the design life of the facility. In a practical sense, this design volume should be a value that can be estimated with reasonable accuracy. It is believed that the maximum design period is in the range of 15 to 24 years. Therefore, a period of twenty years is widely used as a basis for design. Traffic cannot usually be forecasted accurately beyond this period on a specific facility because of probable changes in the general regional economy, population, and land development along the roadway.

Roadways like Detroit Avenue carry a significant amount of through traffic due to their functional characteristics. This through traffic component generally increases as regional growth occurs. Therefore it is anticipated that existing traffic on this street will increase in future years.

The proposed development is expected to be constructed by the year 2013. The years 2013 and 2033 will be analyzed for the proposed development. Therefore it is necessary to estimate a historical growth rate in order to establish the future 2013 and 2033 traffic on Detroit Avenue due to non-site related conditions.

The ODOT traffic count website was consulted to determine past historical trends along US Route 6/State Route 20 in the study area. According to the web site, traffic count data was provided in 1980, 1984, 1988, 1992, 2000, 2003, 2007, and 2010. This historical traffic data was used to determine they study area growth rates. The data can be seen at the following web address:

http://www.odotonline.org/techservapps/traffmonit/countinformation/default.htm

The data indicated that traffic along the numbered routes in the study area had declined between the years 1980 and 2007. Traffic volumes then grew between 2007 and 2011 with the 2011 volumes reaching the 2000 levels. Based on these results, the characteristics of the roadway due to their functional classifications, and to provide a conservative analysis of the study area a growth rate of 0.25% per year will be used to determine the anticipated study area volumes under the 2013 and 2033 No-Build conditions for Detroit Avenue. This growth rate was determined based upon the historical trends in the ODOT traffic count data and the traffic count data that was collected for this report. A copy of the growth rate analysis can be seen in **Appendix C**.

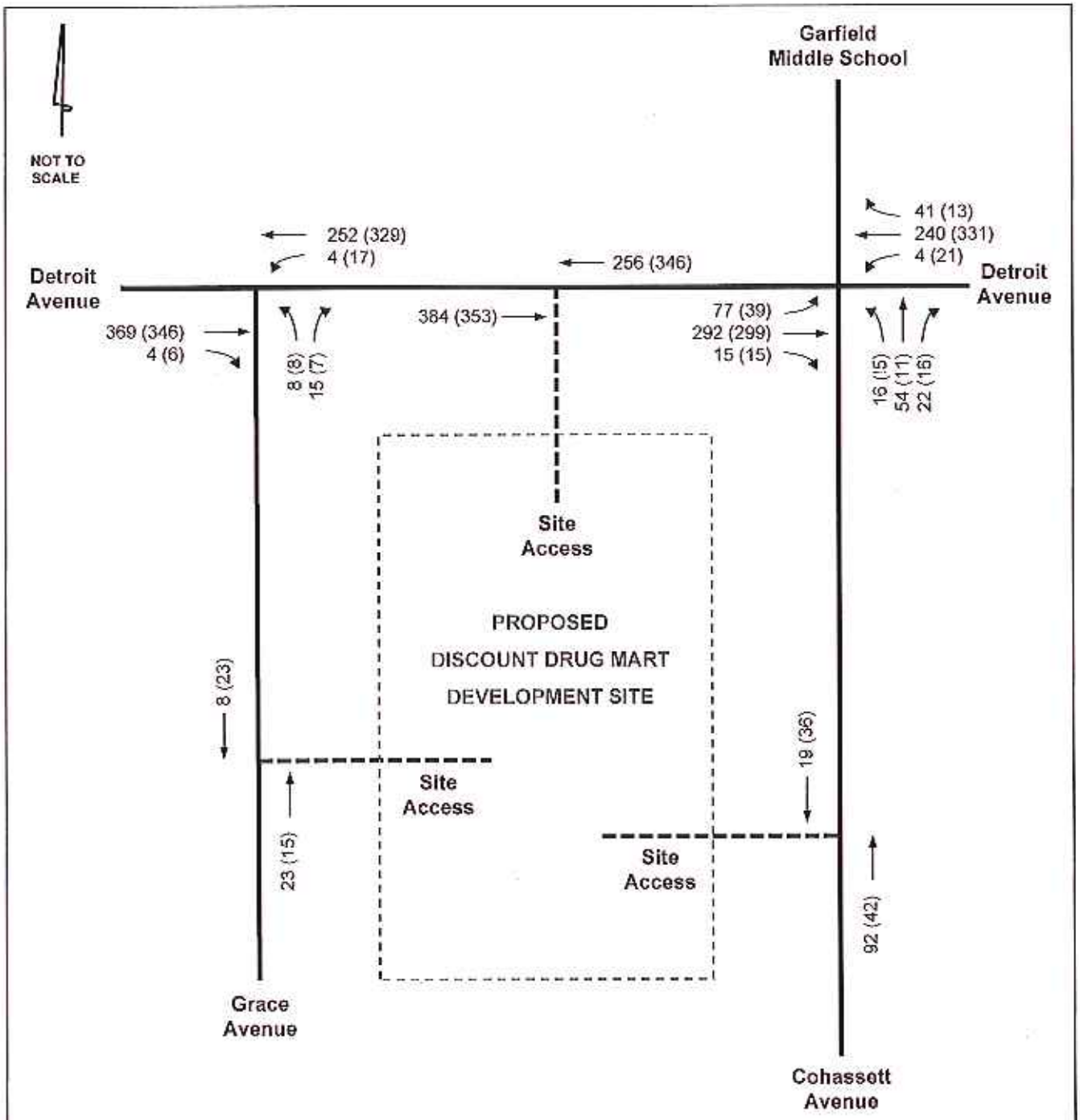
3.3 Future Traffic

No-Build Condition

In order to estimate the future traffic considering non-project traffic conditions, the above mentioned historical growth rate was applied to the traffic data collected for this report. The estimated 2013 and 2033 No-Build traffic volumes for the study area are shown graphically in **Figures 10 and 11, Pages 19 and 20**. This traffic is the expected traffic if the proposed development **is not** constructed, the **"No-Build"** condition.

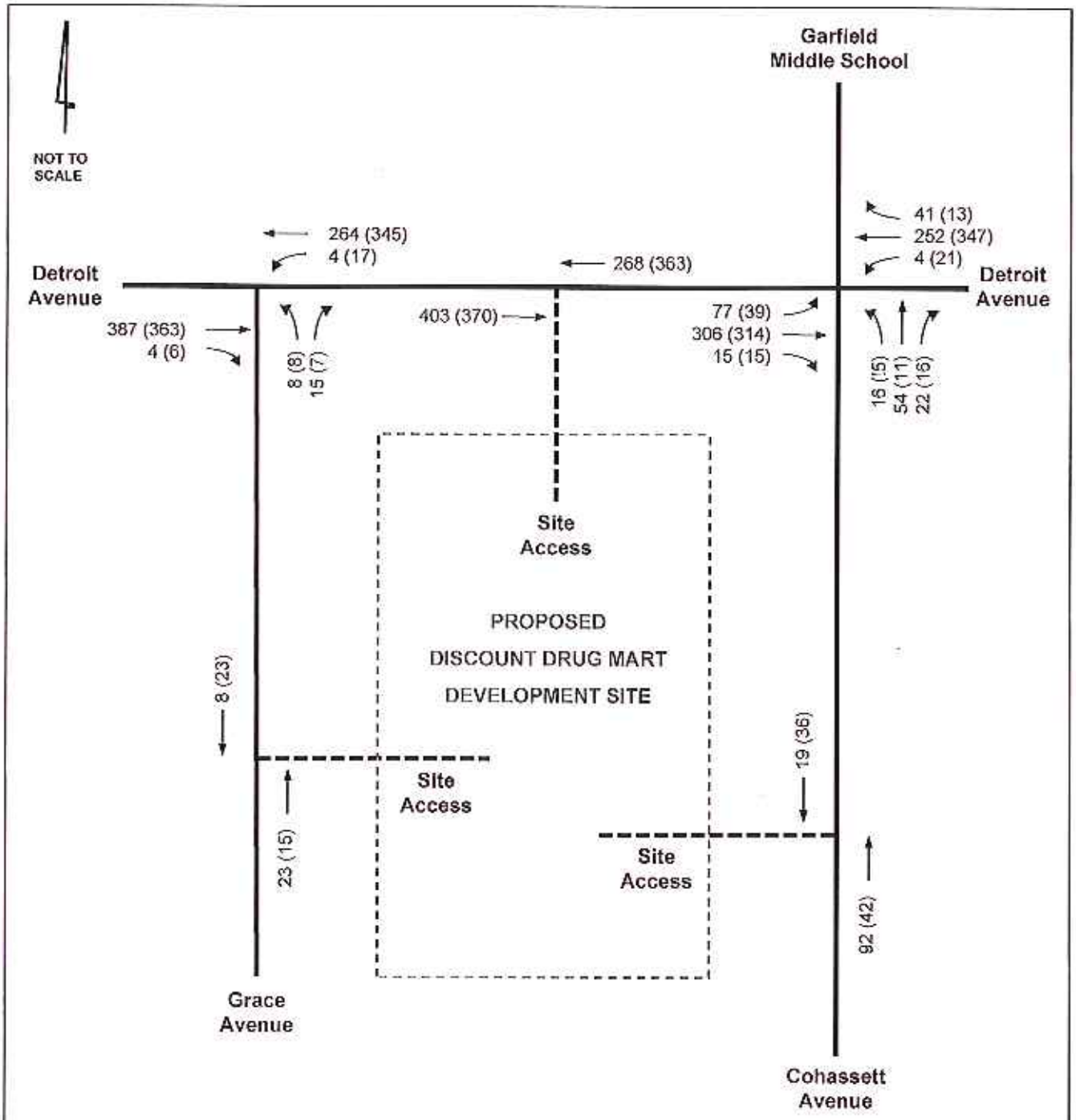
Build Condition

In order to estimate the future traffic considering project traffic conditions, the sum of the 2013 and 2033 No-Build volumes, shown in the previous figures, were added to the new and pass-by generated traffic to equal the future Build peak hour volumes. The estimated 2013 and 2033 Build traffic volumes for the study area are shown graphically in **Figures 12 and 13, Pages 21 and 22** for the proposed development. These traffic volumes are the expected volumes if the proposed development is constructed, or the **"Build"** condition.



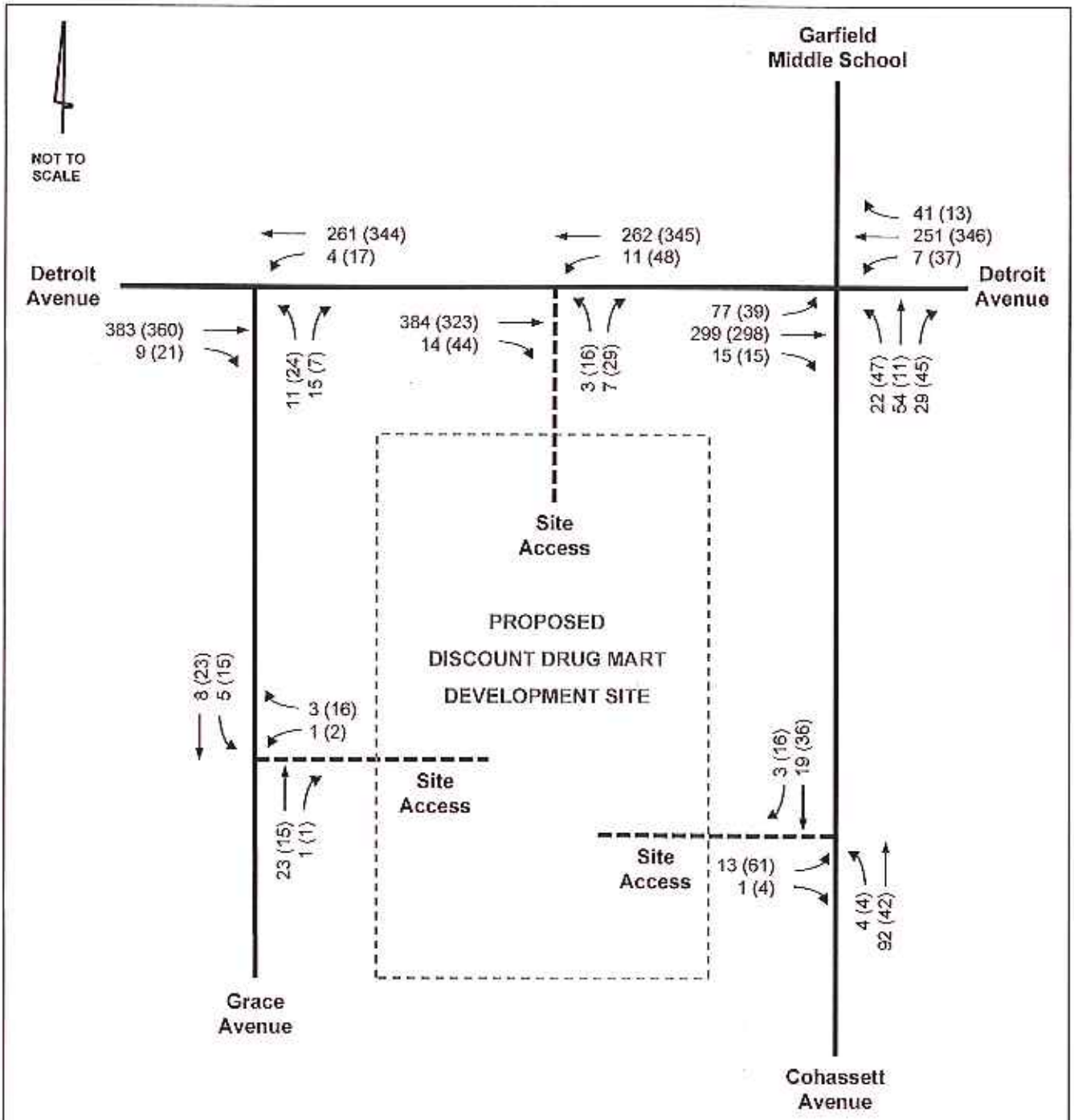
LEGEND	
XX	AM Peak Hour Traffic
(XX)	PM Peak Hour Traffic

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	2013 No Build Weekday Traffic Volumes	Figure 10 Page 19



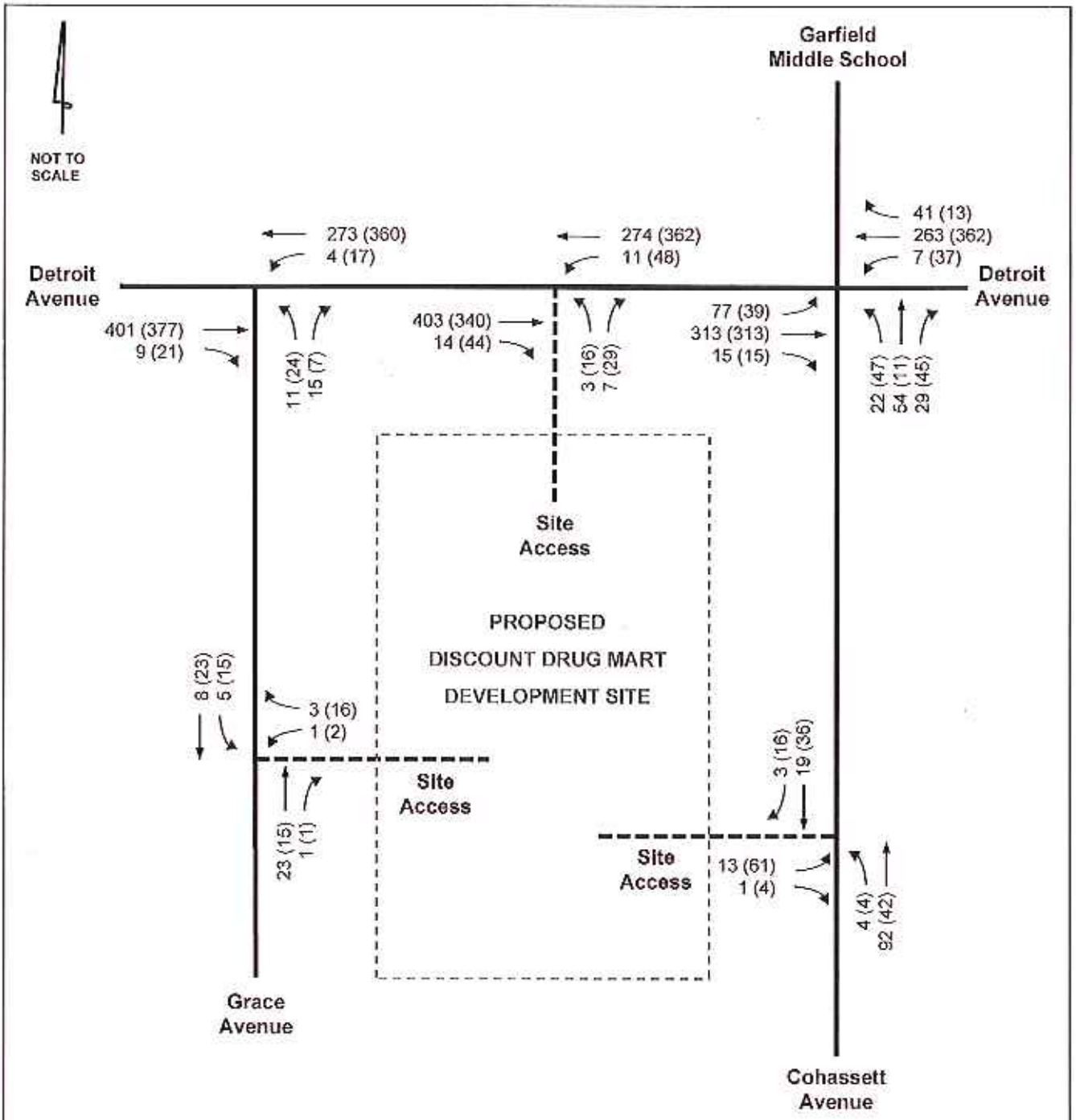
LEGEND	
XX	AM Peak Hour Traffic
(XX)	PM Peak Hour Traffic

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	2033 No Build Weekday Traffic Volumes	Figure 11 Page 20



LEGEND	
XX	AM Peak Hour Traffic
(XX)	PM Peak Hour Traffic

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	2013 Build Weekday Traffic Volumes	Figure 12 Page 21



LEGEND	
XX	AM Peak Hour Traffic
(XX)	PM Peak Hour Traffic

TMS Engineers, Inc. Transportation Management Services 4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com	Discount Drug Mart Lakewood, Ohio Traffic Impact Study	2033 Build Weekday Traffic Volumes	Figure 13 Page 22

4. TRAFFIC ANALYSIS

4.1 Capacity and LOS at Study Intersections

Intersection capacity analyses were performed at the study intersections using the procedures outlined in the computerized version of the Transportation Research Board's **Highway Capacity Manual, HCM2010 (HCS+, Release 6.1)**. The capacity analyses were performed in order to estimate the maximum amount of traffic that can be accommodated by a roadway facility while maintaining recommended operational qualities. 2012 Existing, 2013 No-Build, 2013 Build, 2033 No-Build, and 2033 Build peak hour traffic volumes were analyzed to determine the level-of-service (LOS) at the study area intersections.

The capacity analysis procedures provide a calculated "average vehicle delay", which is based on traffic volumes, number of lanes, type of traffic control, channelization, grade, and percentage of large vehicles in the traffic stream at each intersection. The average delay calculated at an intersection is then assigned a "grade" or level of service (LOS) ranging from LOS A, the best, to LOS F, the worst based upon driver expectation. The intersection LOS "grades" as defined by the Transportation Research Board are as follows:

INTERSECTION LOS

LOS	UNSIGNALIZED AVERAGE DELAY PER VEHICLE (sec)	SIGNALIZED AVERAGE DELAY PER VEHICLE (sec)
A	*≤ 10.0*	*≤ 10.0*
B	*10.1 to 15.0*	*10.1 to 20.0*
C	*15.1 to 25.0*	*20.1 to 35.0*
D	*25.1 to 35.0*	*35.1 to 55.0*
E	*35.1 to 50.0*	*55.1 to 80.0*
F	*> 50*	*> 80*

The capacity analysis procedures and the resulting level of service grades and delays are a recognized traffic engineering standard for measuring the efficiency of intersection operations by such organizations as the Institute of Transportation Engineers, American Association of State Highway and Transportation Officials, and the Ohio Department of Transportation.

Existing Conditions - 2012 Capacity Analysis

Analyses were performed for the current 2012 conditions under the Existing scenario. These analyses will be used to identify existing capacity and/or operational deficiencies. All analysis will assume that the signal timing would be optimized to balance critical lane delays at the signalized intersections. The traffic volumes used in this analysis can be seen in **Figure 5**. Copies of the capacity worksheets are included in **Appendix D**. The results of the 2012 Existing analysis are shown in the following table.

2012 LEVELS OF SERVICE

(Existing Conditions)

LOCATION	MOVEMENT	2012 AM PEAK LOS (DELAY)	2012 PM PEAK LOS (DELAY)
Detroit Avenue & Cohassett Avenue*	Intersection	B (12.4)	B (12.4)
	Eastbound	A (8.6)	A (8.0)
	Westbound	B (16.2)	B (16.2)
	Northbound	B (16.2)	B (16.5)
Detroit Avenue & Grace Avenue	Westbound	A (8.2)	A (8.1)
	Northbound	B (12.1)	B (13.5)

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

Conditions at all of the study intersections are currently operating at an acceptable level-of-service during the AM and PM peak hours. All approaches are operating with an LOS C or better.

No-Build Conditions - 2013 Capacity Analysis

Analyses were performed for the projected 2013 opening day conditions under the No-Build scenario. These analyses will be used to compare to the conditions expected under the Build scenario. All analysis will assume that the signal timing would be optimized to balance critical lane delays at the signalized intersections. The traffic volumes used in this analysis can be seen in **Figure 10**. Copies of the capacity worksheets are included in **Appendix E.** The results of the No-Build analysis are shown in the following table.

2013 LEVELS OF SERVICE

(No-Build Conditions)

LOCATION	MOVEMENT	2013 AM PEAK LOS (DELAY)	2013 PM PEAK LOS (DELAY)
Detroit Avenue & Cohassett Avenue*	Intersection	B (12.4)	B (12.4)
	Eastbound	A (8.6)	A (8.0)
	Westbound	B (16.2)	B (16.2)
	Northbound	B (16.2)	B (16.5)
Detroit Avenue & Grace Avenue	Westbound	A (8.1)	A (8.1)
	Northbound	B (11.9)	B (13.1)

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

The study area intersections are expected to operate with acceptable levels-of-service under the 2013 No-Build conditions during the AM and PM peak hours. All approaches continue to operate with an LOS C or better.

No-Build Conditions - 2033 Capacity Analysis

Analyses were performed for the projected 2033 design year conditions under the No-Build scenario. These analyses will be used to compare to the conditions expected under the Build scenario. The traffic volumes used in this analysis can be seen in **Figure 11**. Copies of the capacity worksheets are included in **Appendix F**. The results of the No-Build analysis are shown in the following table.

2033 LEVELS OF SERVICE

(No-Build Conditions)

LOCATION	MOVEMENT	2033 AM PEAK LOS (DELAY)	2033 PM PEAK LOS (DELAY)
Detroit Avenue & Cohassett Avenue*	Intersection	B (12.4)	B (12.5)
	Eastbound	A (8.6)	A (8.0)
	Westbound	B (16.3)	B (16.4)
	Northbound	B (16.4)	B (16.7)
Detroit Avenue & Grace Avenue	Intersection	A (8.2)	A (8.2)
	Southbound	B (12.2)	B (13.4)

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

The study area intersections are expected to operate with acceptable levels-of-service under the 2033 No-Build conditions during the AM and PM peak hours. All approaches continue to operate with an LOS D or better.

Build Condition - 2013 Capacity Analysis

Analyses were performed for the projected 2013 opening day conditions under the Build scenario. This analysis will be used to determine the future levels-of-service at the study intersections under the anticipated build conditions. The traffic volumes used in this analysis can be seen in **Figure 12**. Copies of the capacity worksheets are included in **Appendix G**. The results of the 2013 Build analyses are shown in the following table.

2013 LEVELS OF SERVICE

(Build Conditions)

LOCATION	MOVEMENT	2013 AM PEAK LOS (DELAY)	2013 PM PEAK LOS (DELAY)
Detroit Avenue & Cohassett Avenue*	Intersection	B (12.6)	B (13.1)
	Eastbound	A (8.7)	A (8.1)
	Westbound	B (16.4)	B (16.6)
	Northbound	B (16.4)	B (17.2)
Detroit Avenue & Grace Avenue	Intersection	A (8.2)	A (8.2)
	Southbound	B (12.4)	C (15.3)

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

The study area intersections are anticipated to continue operating with acceptable levels-of-service under the 2013 Build conditions during the AM and PM peak hours. All approaches continue to operate with an LOS C or better.

Build Condition - 2033 Capacity Analysis

Analyses were performed for the projected 2033 design year conditions under the Build scenario. This analysis will be used to determine the future levels-of-service at the study intersections under the anticipated build conditions. The traffic volumes used in this analysis can be seen in **Figure 13**. Copies of the capacity worksheets are included in **Appendix H**. The results of the 2033 Build analyses are shown in the following table.

2033 LEVELS OF SERVICE

(Build Conditions)

LOCATION	MOVEMENT	2033 AM PEAK LOS (DELAY)	2033 PM PEAK LOS (DELAY)
Detroit Avenue & Cohassett Avenue*	Intersection	B (12.7)	B (13.2)
	Eastbound	A (8.7)	A (8.0)
	Westbound	B (16.5)	B (16.7)
	Northbound	B (16.6)	B (17.5)
Detroit Avenue & Grace Avenue	Intersection	A (8.2)	A (8.2)
	Southbound	B (12.7)	C (15.9)

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

The study area intersections are anticipated to continue operating with acceptable levels-of-service under the 2033 Build conditions during the AM and PM peak hours. All approaches continue to operate with an LOS C or better.

Comparative Analysis - Build vs. No Build

A comparison was performed to show the incremental effects on the capacity of the study area intersections due to the construction of the proposed school in the years 2013 and 2033. The following tables show a side by side comparison of the Build versus No-Build conditions for the 2013 and 2033 AM and PM peak hours.

2013 NO-BUILD VS BUILD SCENARIO

AM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.4)	B (12.6)	+0.2
	Eastbound	A (8.6)	A (8.7)	+0.1
	Westbound	B (16.2)	B (16.4)	+0.2
	Northbound	B (16.2)	B (16.4)	+0.2
Detroit & Grace	Westbound	A (8.1)	A (8.2)	+0.1
	Northbound	B (11.9)	B (12.4)	+0.5

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

2013 NO-BUILD VS BUILD SCENARIO

PM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.4)	B (13.1)	+0.7
	Eastbound	A (8.0)	A (8.1)	+0.1
	Westbound	B (16.2)	B (16.6)	+0.4
	Northbound	B (16.5)	B (17.2)	+0.7
Detroit & Grace	Intersection	A (8.1)	A (8.2)	+0.1
	Southbound	B (13.1)	C (15.3)	+2.2

(XX.X) = Average vehicle delay in seconds per vehicle

*** Signalized Intersection**

2033 NO-BUILD VS BUILD SCENARIO

AM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.4)	B (12.7)	+0.3
	Eastbound	A (8.6)	A (8.7)	+0.1
	Westbound	B (16.3)	B (16.5)	+0.2
	Northbound	B (16.4)	B (16.6)	+0.2
Detroit & Grace	Intersection	A (8.2)	A (8.2)	0.0
	Southbound	B (12.2)	B (12.7)	+0.5

(XX.X) = Average vehicle delay in seconds per vehicle

* Signalized Intersection

2033 NO-BUILD VS BUILD SCENARIO

PM Peak Hour Comparison Table

LOCATION	MOVEMENT	BUILD LOS (DELAY)	NO-BUILD LOS (DELAY)	DIFFERENCE +/-
Detroit & Cohassett*	Intersection	B (12.5)	B (13.2)	+0.7
	Eastbound	A (8.0)	A (8.0)	0.0
	Westbound	B (16.4)	B (16.7)	+0.3
	Northbound	B (16.7)	B (17.5)	+0.8
Detroit & Grace	Intersection	A (8.2)	A (8.2)	0.0
	Southbound	B (13.4)	C (15.9)	+2.5

(XX.X) = Average vehicle delay in seconds per vehicle

* Signalized Intersection

The 2013 and 2033 comparison analyses indicate that both intersections within the study area are expected to be only minimally affected by the generated traffic from the proposed development during the AM and PM peak hours. All intersections and their respective approaches are expected to continue to operate with LOS C or better. The largest increase in delay experienced is 2.2 seconds in 2013 and 2.5 seconds in 2033. This increase occurs at the northbound approach of the Detroit Avenue and Grace Avenue intersection during the PM peak hour. These and the other increases in delay are minimal and would not likely be noticed by the general public.

4.2 Capacity and LOS at Development Access Intersection

Capacity analyses were performed for the proposed development access intersections located along Detroit Avenue, Grace Avenue, and Cohassett Avenue that would serve the development site using the procedures outlined in the computerized version of the Transportation Research Board's **Highway Capacity Manual, HCM2010 (HCS2010, Release 6.3)**.

Build Condition - 2013 Capacity Analysis

Analyses were performed for the projected 2013 opening day conditions under the Build scenario to determine the future level-of-service at the intersections where access to the proposed development is provided along Detroit Avenue, Grace Avenue, and Cohassett Avenue . The results of the 2013 Build analysis are shown in the following table. Copies of the capacity worksheets are included in **Appendix I**.

2013 LEVELS OF SERVICE

(Build Conditions - Access Intersections)

LOCATION	MOVEMENTS	AM PEAK LOS (DELAY)	PM PEAK LOS (DELAY)
Detroit Avenue & Site Access	Westbound	A (8.2)	A (8.2)
	Northbound	B (11.9)	B (13.3)
Grace Avenue & Site Access	Southbound	A (7.3)	A (7.3)
	Westbound	A (8.5)	A (8.5)
Cohassett Avenue & Site Access	Northbound	A (7.3)	A (7.3)
	Eastbound	A (9.1)	A (9.3)

(XX.X) = Average vehicle delay in seconds per vehicle

The analysis indicates that the development site access intersections along Detroit Avenue, Grace Avenue, and Cohassett Avenue are expected to operate with adequate levels-of-service during the AM and PM peak hour conditions for the year 2013 build conditions.

Build Condition - 2033 Capacity Analysis

Analyses were also performed for the projected 2033 conditions under the Build scenario to determine the future level-of-service at the intersections where access to the proposed development is provided along Detroit Avenue, Grace Avenue, and Cohassett Avenue . The results of the 2033 Build analysis are shown in the following table. Copies of the capacity worksheets are included in **Appendix J.**

2033 LEVELS OF SERVICE

(Build Conditions - Access Intersections)

LOCATION	MOVEMENTS	AM PEAK LOS (DELAY)	PM PEAK LOS (DELAY)
Detroit Avenue & Site Access	Westbound	A (8.3)	A (8.3)
	Northbound	B (12.2)	B (13.7)
Grace Avenue & Site Access	Southbound	A (7.3)	A (7.3)
	Westbound	A (8.5)	A (8.5)
Cohassett Avenue & Site Access	Northbound	A (7.3)	A (7.3)
	Eastbound	A (9.1)	A (9.3)

(XX.X) = Average vehicle delay in seconds per vehicle

The analysis indicates that the development site access intersections along Detroit Avenue, Grace Avenue, and Cohassett Avenue are expected to operate with adequate levels-of-service during the AM and PM peak hour conditions for the year 2033 build conditions.

4.3 Auxiliary Turning Lane Warrant Analysis

The ODOT **Location and Design Manual, Volume 1** recommends that the need for auxiliary turn lanes at unsignalized intersections be determined by using the Auxiliary Lane Graphs found in **Section 401-6** of the **Location and Design Manual, Volume 1**. This recommendation is made for the free-flow approaches at unsignalized intersections. **Section 401.6** of the ODOT **Location and Design Manual** states that:

"Intersection capacity analysis procedures of the current edition of the Highway Capacity Manual should be used to determine the number and use of left turn lanes. For unsignalized intersections, left turn lanes may also be needed if they meet warrants provided in Figures 401-5a, b, and c. The warrants apply only to the free-flow approach of the unsignalized intersection."

The need for an exclusive eastbound right turn lane at the proposed Detroit Avenue access drive was based upon a two-lane roadway with a speed limit less than 40 miles per hour. There is an existing center two-way left turn lane along Detroit Avenue at the proposed access location. Therefore there is no need to analysis the warrants for a left turn lane. The following table shows the results of the analysis of the need for a right turn lane along Detroit Avenue at the proposed access drive. Copies of the ODOT turn lane warrant graph s can be seen in **Appendix K**.

DETROIT AVENUE TURNING LANE WARRANTS

TURN LANE & LOCATION	2013		2033	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK
WB Right Turn Lane @ Detroit Access Drive	NO	NO	NO	NO

The results of the turn lane warrant analysis determined that an exclusive right turn lane is not warranted at the access drive along Detroit Avenue under the anticipated 2013 and 2033 Build conditions.

4.4 Improvements to Accommodate Study Area Traffic

No improvements were found to be necessary to accommodate the existing 2012 traffic at the study area intersections.

No improvements were found to be necessary to accommodate the expected 2013 and 2033 No Build traffic at the study area intersections.

No additional improvements were found to be necessary to accommodate the 2013 and 2033 site generated (Build) traffic at the study area intersections.

The following lane use and traffic control are recommended at the development access drives to accommodate the 2013 and 2033 site generated (Build) traffic :

Detroit Avenue & Site Access Drive

- Construct the northbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the northbound approach.

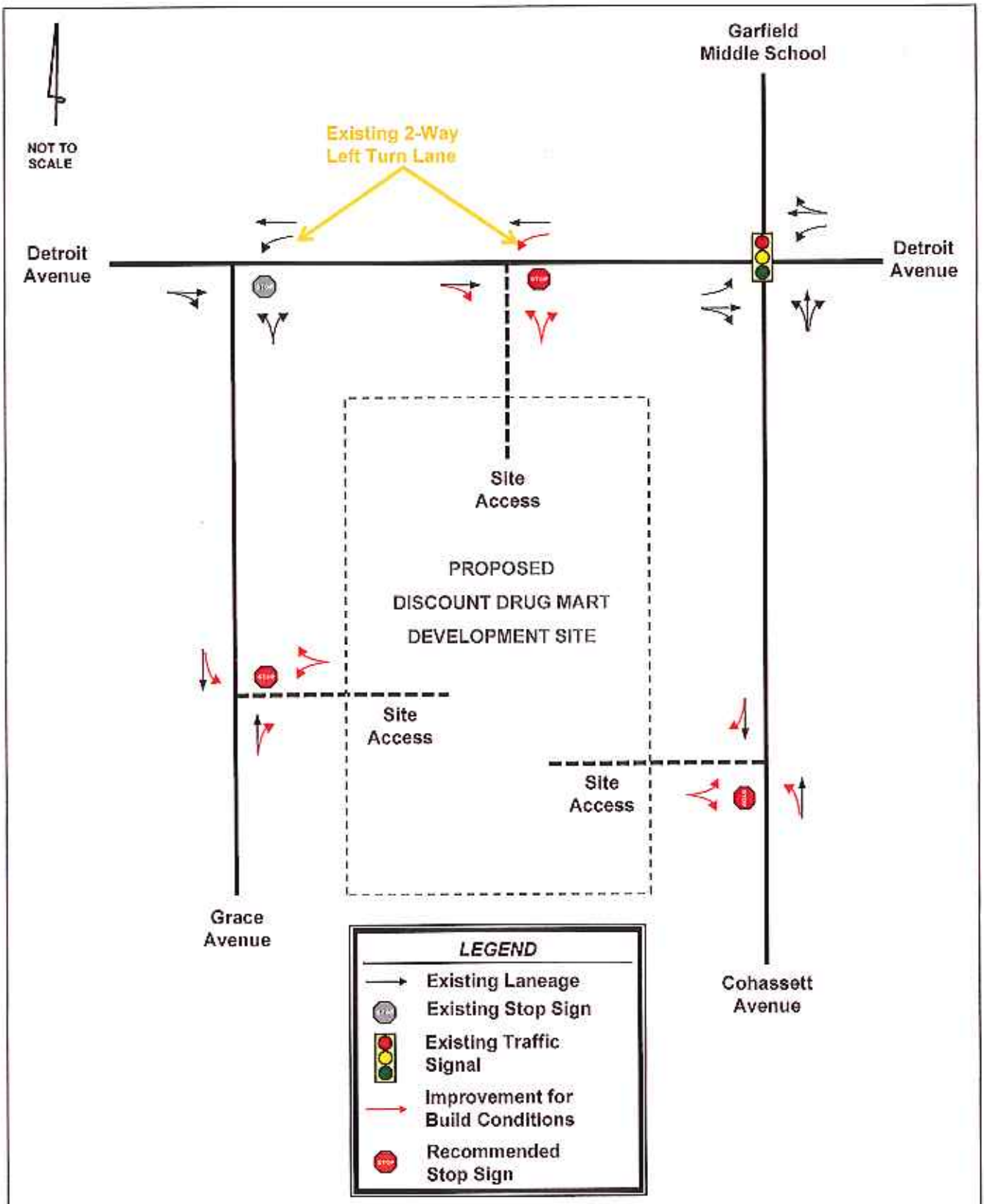
Grace Avenue & Site Access Drive

- Construct the westbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the westbound approach.

Cohassett Avenue & Site Access Drive

- Construct the eastbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the eastbound approach.

The recommended lane use and traffic control for the study area to accommodate the proposed development can be seen in **Figure 14, Page 35**.


NOT TO SCALE
Garfield Middle School
Existing 2-Way Left Turn Lane
Detroit Avenue
Detroit Avenue
Site Access
PROPOSED DISCOUNT DRUG MART DEVELOPMENT SITE
Site Access
Site Access
Grace Avenue
Cohassett Avenue
LEGEND
Existing Laneage
Existing Stop Sign
Existing Traffic Signal
Improvement for Build Conditions
Recommended Stop Sign

5. CONCLUSIONS

Based on the results of the analyses, we offer the following conclusions and recommendations:

5.1 The weekday AM peak hour of traffic was determined to be 8:00 AM to 9:00 AM and the weekday PM peak hour of traffic was found to be 5:00 PM to 6:00 PM. These periods will be analyzed since they reflect the period of the highest volume of traffic flow for both the roadway and the development. Current AM and PM peak hour traffic volumes were shown in **Figure 5**.

5.2 The proposed development is expected to consist of a 24,688 square foot pharmacy/drugstore with a drive-through window.

5.3 The development is expected to be open by the year 2013. Therefore, 2013 will be analyzed as the opening year and 2033 will be analyzed as the design year for the twenty year analysis.

5.4 The development is proposed with three full access drives . There is one drive along the south side of Detroit Avenue, one along the east side of Grace Avenue, and one along the west side of Cohassett Avenue. The proposed site plan can be seen in **Figure 2**.

5.5 The proposed development is expected to generate the following average hourly traffic during the AM and PM peak periods after completion:

ITE TRIP GENERATION		SIZE	TRIP ENDS			
ITE Code	Description		Weekday Peak Hour Between 7-9 AM (Enter/Exit)		Weekday Peak Hour Between 4-6 PM (Enter/Exit)	
881	Pharmacy/Drugstore with Drive-Through Window	*24,688 s.f.*	*38*	*28*	*128*	*128*
	Pass-by Trips (AM-0%, PM-49%)		-	-	*-63*	*-63*
TOTAL NEW TRIPS			*38*	*28*	*65*	*65*
			66		*130*	

5.6 No improvements were found to be necessary to accommodate the existing 2012 traffic at the study area intersections.

5.7 No improvements were found to be necessary to accommodate the expected 2013 and 2033 No Build traffic at the study area intersections.

5.8 No additional improvements were found to be necessary to accommodate the 2013 and 2033 site generated (Build) traffic at the study area intersections.

5.9 The following lane use and traffic control are recommended at the development access drives to accommodate the 2013 and 2033 site generated (Build) traffic:

Detroit Avenue & Site Access Drive

- Construct the northbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the northbound approach.

Grace Avenue & Site Access Drive

- Construct the westbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the westbound approach.

Cohassett Avenue & Site Access Drive

- Construct the eastbound development access drive with one lane each for the ingress and egress movements while permitting all turn movements to and from the site.
- Install stop sign control on the eastbound approach.

5.12 Based upon the results of the analysis in this study, it can be seen that with no additional improvements to the surrounding area roadway network and the proposed lane use and traffic control at the development access locations that the development traffic can be accommodated without impacting the area roadway network.

APPENDIX A
TRAFFIC COUNTS

VEHICULAR TRAFFIC COUNT SUMMARY

Municipality: Lakewood | At intersection of: Detroit Avenue and Grace Avenue

Date: 6/19/2012 Day: Tue. Comments: | Project: 12-071

Weather: Clear Recorder(s): JAD | Data entry by: JJO | Date entered: Jan. 20, 2012 | Detroit Ave & Grace Ave 061912

TIME BEGINS	Madison Graphic Business Driveway FROM NORTH						Grace Ave. FROM SOUTH						TOTAL NORTH SOUTH	Detroit Ave. FROM EAST						Detroit Ave. FROM WEST						TOTAL EAST WEST	TOTAL ALL DIREC.	PEAK HOUR FACTOR			
	Left	Thru	Right	Total	Trk	Bus	Left	Thru	Right	Total	Trk	Bus		Left	Thru	Right	Total	Trk	Bus	Left	Thru	Right	Total	Trk	Bus			North	South	East	West
06:00																														
07:00	0	2	0	2	1	1	4	0	17	23	0	0	25	1	110	0	111	19	3	0	182	10	192	8	7	303	328	0.500	0.575	0.617	0.957
08:00							8	0	15	23	0	0	23	4	202	0	206	26	8	0	258	4	262	18	3	468	491		0.719	0.972	0.885
09:00							1	0	13	14	1	0	14	7	197	0	204	21	2	0	202	4	206	17	3	410	424		0.500	0.911	0.831
10:00																														
11:00							7	0	10	17	1	0	17	7	298	0	305	23	3	2	285	4	291	20	3	596	613		0.472	0.976	0.827
12:00							9	2	3	14	0	0	14	9	296	0	305	11	4	3	306	8	317	22	4	622	636		0.700	0.820	0.755
1:00							5	0	9	14	1	0	14	11	302	0	313	17	3	0	280	9	289	16	4	602	616		0.500	0.824	0.951
2:00																														
3:00							8	1	8	17	0	0	17	9	280	2	291	8	3	0	267	14	281	15	3	572	589		0.607	0.957	0.912
4:00							4	0	8	12	0	0	12	14	317	0	321	4	3	0	240	10	250	4	3	581	593		0.600	0.909	0.845
5:00							8	0	7	15	0	0	15	17	328	0	345	3	3	1	270	6	277	2	3	622	637		0.625	0.971	0.888
6:00																														
7:00																														
8:00																														
9:00																														
TOTALS	0	2	0	2	1	1	56	3	90	149	3	0	151	79	2330	2	2411	182	33	6	2290	69	2365	122	33	4776	4927				
ADT	0	3	0	3	100.0%		86	5	139	230	2.0%		233	122	3592	3	3717	6.8%		9	3531	106	3646	6.6%		7364	7596				

HOURLY FACTOR: 1.70 MONTHLY FACTOR: 0.91 COMBINED FACTOR: 1.54

TMS ENGINEERS, INC.

4547 Hudson Drive
Stow, Ohio 44224
(330) 686-6402 FAX: (330) 686-6417

Figure #:

Page #:

VEHICULAR TRAFFIC COUNT SUMMARY

Municipality: Lakewood | At Intersection of: Detroit Avenue and Cohassett Avenue / Cohassett Place

Date: 11/10/2010 Day: Wed. Comments: | Project: 10-103

Weather: Clear Recorder(s): JAD Data entry by: JJD Date entered: Nov. 11, 2010 | I Ave & Cohassett Ave / Cohassett Pl 11

TIME BEGINS	Cohassett Pl. FROM NORTH						Cohassett Ave. FROM SOUTH						TOTAL NORTH SOUTH	Detroit Ave. FROM EAST						Detroit Ave. FROM WEST						TOTAL EAST WEST	TOTAL ALL DIREC.	PEAK HOUR FACTOR			
	Left	Thru	Right	Total	Trk	Bus	Left	Thru	Right	Total	Trk	Bus		Left	Thru	Right	Total	Trk	Bus	Left	Thru	Right	Total	Trk	Bus			North	South	East	West
06:00																														
07:00							12	32	21	65	1	0	65	6	146	23	175	7	6	43	248	12	303	5	7	478	543		0.524	0.643	0.670
08:00							16	54	22	92	1	0	92	4	239	41	284	25	5	77	291	15	383	20	4	667	759		0.561	0.947	0.760
09:00							13	4	6	23	2	0	23	8	220	3	231	16	3	9	240	9	258	14	4	489	512		0.821	0.917	0.849
10:00																														
11:00							8	2	11	21	0	0	21	6	248	4	258	23	2	10	249	11	270	14	3	528	549		0.656	0.796	0.951
12:00							13	4	11	28	2	0	28	11	297	3	311	16	4	9	312	8	329	30	3	640	668		0.778	0.804	0.966
1:00							8	5	15	28	1	0	28	8	294	2	304	13	4	12	305	4	321	18	3	625	653		0.636	0.874	0.854
2:00																														
3:00							11	5	20	36	0	0	36	4	328	7	339	11	7	8	343	17	368	12	3	707	743		0.750	0.874	0.911
4:00							10	18	11	39	0	0	39	14	325	9	348	5	4	37	273	7	317	11	3	665	704		0.542	0.988	0.817
5:00							15	11	16	42	1	0	42	21	288	13	322	3	2	29	298	15	352	3	3	674	716		0.750	0.752	0.880
6:00																														
7:00																														
8:00																														
9:00																														
TOTALS							106	135	133	374	8	0	374	82	2385	105	2572	119	37	244	2559	98	2901	127	33	5473	5847				
ADT							166	211	208	585	2.1%		585	129	3732	164	4024	6.1%		382	4004	153	4539	5.5%		8563	9148				

HOURLY FACTOR: 1.69 MONTHLY FACTOR: 0.93 COMBINED FACTOR: 1.56

TMS ENGINEERS, INC.

4547 Hudson Drive
Stow, Ohio 44224
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Figure #:

Page #:

APPENDIX B
TRIP GENERATION WORKSHEETS

Proposed Discount Drug Mart - Lakewood, OH
Summary of Trip Generation Calculation
For 24.688 Th.Sq.Ft. GFA of Pharmacy / Drugstore with Drive-Thru
June 27, 2012

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	88.16	14.37	1.00	2176
7-9 AM Peak Hour Enter	1.52	0.00	1.00	38
7-9 AM Peak Hour Exit	1.14	0.00	1.00	28
7-9 AM Peak Hour Total	2.66	1.80	1.00	66
4-6 PM Peak Hour Enter	5.18	0.00	1.00	128
4-6 PM Peak Hour Exit	5.18	0.00	1.00	128
4-6 PM Peak Hour Total	10.35	5.72	1.00	256
AM Pk Hr, Generator, Enter	3.86	0.00	1.00	95
AM Pk Hr, Generator, Exit	4.01	0.00	1.00	99
AM Pk Hr, Generator, Total	7.87	3.21	1.00	194
PM Pk Hr, Generator, Enter	4.61	0.00	1.00	114
PM Pk Hr, Generator, Exit	4.61	0.00	1.00	114
PM Pk Hr, Generator, Total	9.21	4.06	1.00	227
Saturday 2-Way Volume	0.00	0.00	1.00	0
Saturday Peak Hour Enter	3.93	0.00	1.00	97
Saturday Peak Hour Exit	3.93	0.00	1.00	97
Saturday Peak Hour Total	7.85	3.69	1.00	194
Sunday 2-Way Volume	0.00	0.00	1.00	0
Sunday Peak Hour Enter	0.00	0.00	1.00	0
Sunday Peak Hour Exit	0.00	0.00	1.00	0
Sunday Peak Hour Total	0.00	0.00	1.00	0

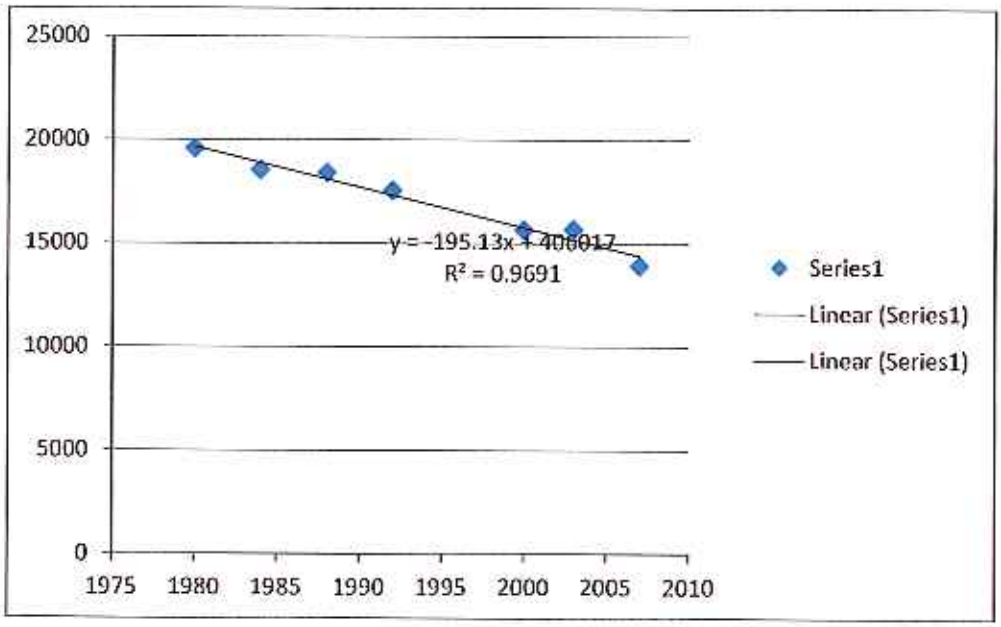
Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 8th Edition, 2008.

TRIP GENERATION BY MICROTRANS

APPENDIX C
GROWTH RATE CALCULATIONS

US 6 @ W. 117 COUNT DATA FROM ODOT WEBSITE/TRAFFIC COUNT DATA

Year	Volume	% Diff per Yr to Prev Yr Count	% Diff per Yr Since 2011	Ave per Yr Since 1980
2010	15330	3.38%		-0.72%
2007	13920	-2.79%	3.38%	
2003	15670	0.06%	-0.31%	
2000	15640	-1.35%	-0.20%	
1992	17540	-1.18%	-0.70%	
1988	18410	-0.18%	-1.28%	
1984	18540	-1.32%	-0.67%	
1980	19570		-0.72%	



APPENDIX D

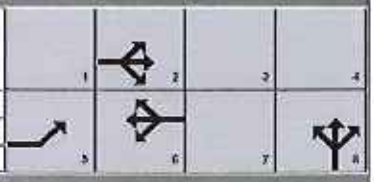
EXISTING CAPACITY ANALYSIS WORKSHEETS - 2012

HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	AM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2012	Analysis Period	1> 7:00
File Name	AM 12EX DetroitCohass.xus				
Project Description	Existing Conditions				

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	77	291	15	4	239	41	16	54	22			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.0	22.8	17.2	0.0	0.0	0.0	
Yellow	3.6	3.6	3.6	0.0	0.0	0.0	
Red	1.4	1.4	1.4	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	37.8		27.8		22.2		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (gs), s	3.5					4.6		
Green Extension Time (ge), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	84	333		4	304			100				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1777		1043	1746			1771				
Queue Service Time (gs), s	1.5	6.3		0.2	7.9			2.6				
Cycle Queue Clearance Time (gc), s	1.5	6.3		0.2	7.9			2.6				
Capacity (c), veh/h	535	971		516	664			508				
Volume-to-Capacity Ratio (X)	0.157	0.342		0.008	0.459			0.197				
Available Capacity (ca), veh/h	535	971		516	664			508				
Back of Queue (Q), veh/ln (50th percentile)	0.5	2.3		0.0	3.2			1.0				
Overflow Queue (Q3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d1), s/veh	8.9	7.6		11.6	14.0			16.2				
Incremental Delay (d2), s/veh	0.1	1.0		0.0	2.3			0.1				
Initial Queue Delay (d3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.9	8.5		11.6	16.2			16.2				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.6	A		16.2	B		16.2	B		0.0		
Intersection Delay, s/veh / LOS	12.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.0	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2012
Analysis Time Period	AM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue | North/South Street: Grace Avenue

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		368	4	4	251	
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.97	0.97	1.00
Hourly Flow Rate, HFR (veh/h)	0	413	4	4	258	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		15			
Peak-Hour Factor, PHF	0.72	1.00	0.72	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	11	0	20	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		4		31				
C (m) (veh/h)		1142		535				
v/c		0.00		0.06				
95% queue length		0.01		0.18				
Control Delay (s/veh)		8.2		12.1				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.1					
Approach LOS	--	--	B					

HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	PM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2012	Analysis Period	1> 7:00
File Name	PM 12EX DetroitCohass.xus				
Project Description	Existing Conditions				

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	298	15	21	330	13	15	11	16			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

							1	2	3	4		
Green	5.0	23.9	16.1	0.0	0.0	0.0	5	6	7	8		
Yellow	3.6	3.6	3.6	0.0	0.0	0.0						
Red	1.4	1.4	1.4	0.0	0.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	38.9		28.9		21.1		
Change Period, (*Y*+*Rc*), s	5.0	5.0		5.0		5.0		
Max Allow Headway (*MAH*), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	2.7					3.2		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.0		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (*v*), veh/h	42	340		23	373			46				
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1774	1777		1036	1780			1715				
Queue Service Time (g_s), s	0.7	6.2		0.8	9.6			1.2				
Cycle Queue Clearance Time (g_c), s	0.7	6.2		0.8	9.6			1.2				
Capacity (*c*), veh/h	508	1004		533	709			460				
Volume-to-Capacity Ratio (*X*)	0.083	0.339		0.043	0.526			0.099				
Available Capacity (c_a), veh/h	508	1004		533	709			460				
Back of Queue (*Q*), veh/ln (50th percentile)	0.2	2.2		0.2	4.0			0.5				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.4	7.0		11.1	13.7			16.5				
Incremental Delay (d_2), s/veh	0.0	0.9		0.2	2.8			0.0				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (*d*), s/veh	8.4	7.9		11.3	16.5			16.5				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.0	A		16.2	B		16.5	B		0.0		
Intersection Delay, s/veh / LOS	12.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.1	A	1.1	A	0.6	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2012
Analysis Time Period	PM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue	North/South Street: Grace Avenue
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		345	6	17	328	
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.87	0.87	1.00
Hourly Flow Rate, HFR (veh/h)	0	387	6	19	377	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		7			
Peak-Hour Factor, PHF	0.63	1.00	0.63	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	12	0	11	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

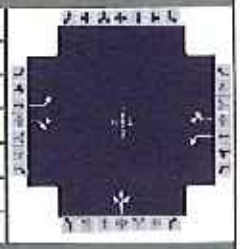
Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		19		23				
C (m) (veh/h)		1166		447				
v/c		0.02		0.05				
95% queue length		0.05		0.16				
Control Delay (s/veh)		8.1		13.5				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.5					
Approach LOS	--	--	B					

APPENDIX E
NO-BUILD CAPACITY ANALYSIS WORKSHEETS - 2013

HCS 2010 Signalized Intersection Results Summary

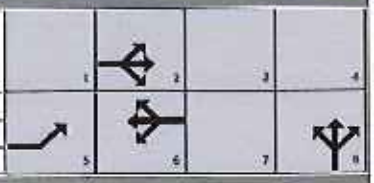
General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	AM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2013 No Build	Analysis Period	1> 7:00
File Name	AM 13NB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	77	292	15	4	240	41	16	54	22			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	22.8	17.2	0.0	0.0	0.0						
Yellow	3.6	3.6	3.6	0.0	0.0	0.0						
Red	1.4	1.4	1.4	0.0	0.0	0.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	37.8		27.8		22.2		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	3.5					4.6		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	84	334		4	305			100				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1777		1042	1747			1771				
Queue Service Time (g_s), s	1.5	6.3		0.2	7.9			2.6				
Cycle Queue Clearance Time (g_c), s	1.5	6.3		0.2	7.9			2.6				
Capacity (c), veh/h	534	971		516	664			508				
Volume-to-Capacity Ratio (X)	0.157	0.344		0.008	0.460			0.197				
Available Capacity (c_a), veh/h	534	971		516	664			508				
Back of Queue (Q), veh/ln (50th percentile)	0.5	2.3		0.0	3.3			1.0				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.9	7.6		11.6	14.0			16.2				
Incremental Delay (d_2), s/veh	0.1	1.0		0.0	2.3			0.1				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.9	8.6		11.6	16.3			16.2				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.6	A		16.2	B		16.2	B		0.0		
Intersection Delay, s/veh / LOS	12.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.0	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2013 No Build
Analysis Time Period	AM Peak Period		

Project Description	Existing Conditions
East/West Street:	Detroit Avenue
North/South Street:	Grace Avenue
Intersection Orientation:	East-West
Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		369	4	4	252	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	401	4	4	273	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		15			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	8	0	16	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		4		24				
C (m) (veh/h)		1154		544				
v/c		0.00		0.04				
95% queue length		0.01		0.14				
Control Delay (s/veh)		8.1		11.9				
LOS		A		B				
Approach Delay (s/veh)	--	--	11.9					
Approach LOS	--	--	B					

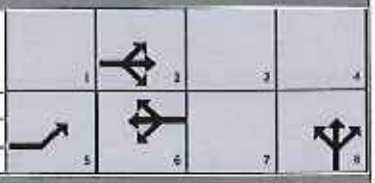
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	PM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2013 No Build	Analysis Period	1> 7:00
File Name	PM 13NB DetroitCohass.xus				
Project Description	Existing Conditions				

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	39	299	15	21	331	13	15	11	16			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	23.9	16.1	0.0	0.0	0.0	
Yellow	3.6	3.6	3.6	0.0	0.0	0.0	
Red	1.4	1.4	1.4	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	38.9		28.9		21.1		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	2.7					3.2		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.0		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	42	341		23	374			46				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1777		1035	1780			1715				
Queue Service Time (g_s), s	0.7	6.2		0.8	9.6			1.2				
Cycle Queue Clearance Time (g_c), s	0.7	6.2		0.8	9.6			1.2				
Capacity (c), veh/h	507	1004		532	709			460				
Volume-to-Capacity Ratio (X)	0.084	0.340		0.043	0.527			0.099				
Available Capacity (c_a), veh/h	507	1004		532	709			460				
Back of Queue (Q), veh/ln (50th percentile)	0.2	2.2		0.2	4.0			0.5				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.4	7.0		11.1	13.7			16.5				
Incremental Delay (d_2), s/veh	0.0	0.9		0.2	2.8			0.0				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.4	7.9		11.3	16.5			16.5				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.0	A		16.2	B		16.5	B		0.0		
Intersection Delay, s/veh / LOS	12.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.1	A	1.1	A	0.6	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2013 No Build
Analysis Time Period	PM Peak Period		

Project Description	Existing Conditions
East/West Street:	Detroit Avenue
North/South Street:	Grace Avenue
Intersection Orientation:	East-West
Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		346	6	17	329	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	376	6	18	357	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		7			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	8	0	7	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

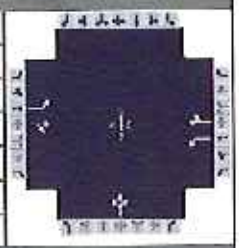
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		18		15				
C (m) (veh/h)		1176		460				
v/c		0.02		0.03				
95% queue length		0.05		0.10				
Control Delay (s/veh)		8.1		13.1				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.1					
Approach LOS	--	--	B					

APPENDIX F

NO-BUILD CAPACITY ANALYSIS WORKSHEETS - 2033

HCS 2010 Signalized Intersection Results Summary

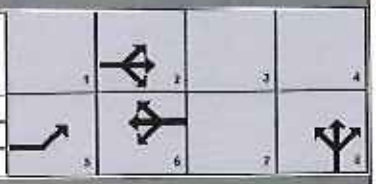
General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	AM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2033 No Build	Analysis Period	1> 7:00
File Name	AM 33NB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	77	306	15	4	252	41	16	54	22			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	23.0	17.0	0.0	0.0	0.0	
Yellow	3.6	3.6	3.6	0.0	0.0	0.0	
Red	1.4	1.4	1.4	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	38.0		28.0		22.0		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	3.5					4.6		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	84	349		4	318			100				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1778		1028	1748			1771				
Queue Service Time (g_s), s	1.5	6.6		0.2	8.2			2.6				
Cycle Queue Clearance Time (g_c), s	1.5	6.6		0.2	8.2			2.6				
Capacity (c), veh/h	528	978		514	670			502				
Volume-to-Capacity Ratio (X)	0.159	0.357		0.008	0.475			0.199				
Available Capacity (c_a), veh/h	528	978		514	670			502				
Back of Queue (Q), veh/ln (50th percentile)	0.5	2.4		0.0	3.4			1.0				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.8	7.6		11.5	13.9			16.3				
Incremental Delay (d_2), s/veh	0.1	1.0		0.0	2.4			0.1				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.9	8.6		11.5	16.4			16.4				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.6	A		16.3	B		16.4	B		0.0		
Intersection Delay, s/veh / LOS	12.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.0	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 No Build
Analysis Time Period	AM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue	North/South Street: Grace Avenue
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		387	4	4	264	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	420	4	4	286	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

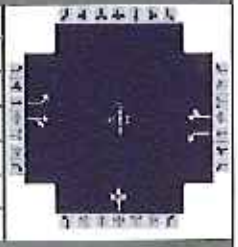
Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		15			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	8	0	16	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		4		24				
C (m) (veh/h)		1135		527				
v/c		0.00		0.05				
95% queue length		0.01		0.14				
Control Delay (s/veh)		8.2		12.2				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.2					
Approach LOS	--	--	B					

HCS 2010 Signalized Intersection Results Summary

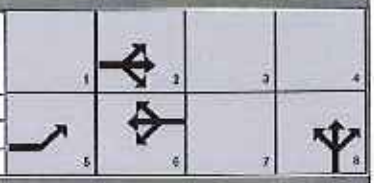
General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	PM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2033 No Build	Analysis Period	1> 7:00
File Name	PM 33NB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	39	314	15	21	347	13	15	11	16			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	24.1		15.9	0.0	0.0	0.0					
Yellow	3.6	3.6		3.6	0.0	0.0	0.0					
Red	1.4	1.4		1.4	0.0	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	39.1		29.1		20.9		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	2.7					3.2		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.0		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	42	358		23	391			46				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1778		1020	1781			1715				
Queue Service Time (g_s), s	0.7	6.5		0.8	10.1			1.2				
Cycle Queue Clearance Time (g_c), s	0.7	6.5		0.8	10.1			1.2				
Capacity (c), veh/h	498	1010		530	715			454				
Volume-to-Capacity Ratio (X)	0.085	0.354		0.043	0.547			0.100				
Available Capacity (c_a), veh/h	498	1010		530	715			454				
Back of Queue (Q), veh/ln (50th percentile)	0.2	2.3		0.2	4.3			0.5				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.4	7.0		11.0	13.8			16.7				
Incremental Delay (d_2), s/veh	0.0	1.0		0.2	3.0			0.0				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.4	8.0		11.1	16.8			16.7				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.0	A		16.4	B		16.7	B		0.0		
Intersection Delay, s/veh / LOS	12.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.1	A	1.2	A	0.6	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 No Build
Analysis Time Period	PM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue	North/South Street: Grace Avenue
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		363	6	17	345	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	394	6	18	374	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		7			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	8	0	7	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

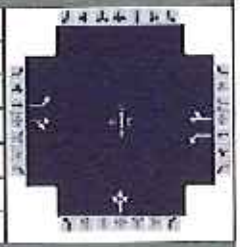
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		18		15				
C (m) (veh/h)		1159		443				
v/c		0.02		0.03				
95% queue length		0.05		0.10				
Control Delay (s/veh)		8.2		13.4				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.4					
Approach LOS	--	--	B					

APPENDIX G

BUILD CAPACITY ANALYSIS WORKSHEETS - 2013

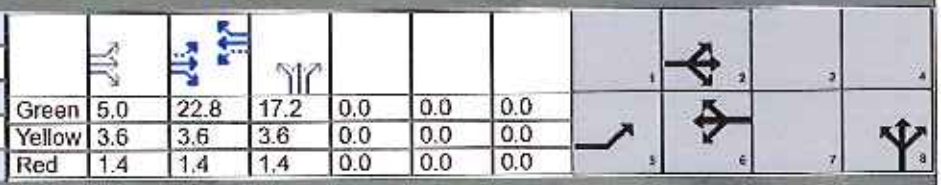
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	AM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2013 Build	Analysis Period	1> 7:00
File Name	AM 13FB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	77	299	15	7	251	41	22	54	29			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.0	22.8		17.2	0.0	0.0	0.0					
Yellow	3.6	3.6		3.6	0.0	0.0	0.0					
Red	1.4	1.4		1.4	0.0	0.0	0.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	37.8		27.8		22.2		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (gs), s	3.5					5.0		
Green Extension Time (ge), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	84	341		8	317			114				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1777		1035	1748			1757				
Queue Service Time (gs), s	1.5	6.5		0.3	8.3			3.0				
Cycle Queue Clearance Time (gc), s	1.5	6.5		0.3	8.3			3.0				
Capacity (c), veh/h	524	972		513	664			504				
Volume-to-Capacity Ratio (X)	0.160	0.351		0.015	0.478			0.227				
Available Capacity (ca), veh/h	524	972		513	664			504				
Back of Queue (Q), veh/ln (50th percentile)	0.5	2.3		0.1	3.4			1.1				
Overflow Queue (Q3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d1), s/veh	8.9	7.6		11.6	14.1			16.3				
Incremental Delay (d2), s/veh	0.1	1.0		0.1	2.5			0.1				
Initial Queue Delay (d3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	9.0	8.6		11.7	16.5			16.4				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.7	A		16.4	B		16.4	B		0.0		
Intersection Delay, s/veh / LOS	12.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.0	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*ABC*	Intersection	*Detroit & Grace Avenue*
Agency/Co.	*TMS Engineers, Inc.*	Jurisdiction	*Lakewood, Ohio*
Date Performed	*6/27/2012*	Analysis Year	*2013 Build*
Analysis Time Period	*AM Peak Period*		

Project Description: *Existing Conditions*

East/West Street: *Detroit Avenue*	North/South Street: *Grace Avenue*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*383*	*9*	*4*	*261*	
Peak-Hour Factor, PHF	*1.00*	*0.92*	*0.92*	*0.92*	*0.92*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*416*	*9*	*4*	*283*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

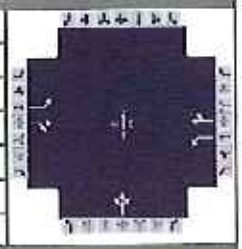
Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*11*		*15*			
Peak-Hour Factor, PHF	*0.92*	*1.00*	*0.92*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*11*	*0*	*16*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*		*LR*				
v (veh/h)		*4*		*27*				
C (m) (veh/h)		*1134*		*511*				
v/c		*0.00*		*0.05*				
95% queue length		*0.01*		*0.17*				
Control Delay (s/veh)		*8.2*		*12.4*				
LOS		*A*		*B*				
Approach Delay (s/veh)	--	--		*12.4*				
Approach LOS	--	--		*B*				

HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	PM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2013 Build	Analysis Period	1> 7:00
File Name	PM 13FB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	298	15	37	346	13	47	11	45			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	23.8	16.2	0.0	0.0	0.0						
Yellow	3.6	3.6	3.6	0.0	0.0	0.0						
Red	1.4	1.4	1.4	0.0	0.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	38.8		28.8		21.2		
Change Period, (*Y+Rc*), s	5.0	5.0		5.0		5.0		
Max Allow Headway (*MAH*), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	2.7					5.1		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (*v*), veh/h	42	340		40	390			112				
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1774	1777		1036	1781			1691				
Queue Service Time (g_s), s	0.7	6.2		1.5	10.2			3.1				
Cycle Queue Clearance Time (g_c), s	0.7	6.2		1.5	10.2			3.1				
Capacity (*c*), veh/h	493	1001		531	706			457				
Volume-to-Capacity Ratio (*X*)	0.086	0.340		0.076	0.552			0.245				
Available Capacity (c_a), veh/h	493	1001		531	706			457				
Back of Queue (*Q*), veh/ln (50th percentile)	0.2	2.2		0.3	4.3			1.2				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.6	7.1		11.4	14.0			17.1				
Incremental Delay (d_2), s/veh	0.0	0.9		0.3	3.1			0.1				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (*d*), s/veh	8.6	8.0		11.6	17.1			17.2				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.1	A		16.6	B		17.2	B		0.0		
Intersection Delay, s/veh / LOS	13.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.1	A	1.2	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*ABC*	Intersection	*Detroit & Grace Avenue*
Agency/Co.	*TMS Engineers, Inc.*	Jurisdiction	*Lakewood, Ohio*
Date Performed	*6/27/2012*	Analysis Year	*2013 Build*
Analysis Time Period	*PM Peak Period*		

Project Description *Existing Conditions*

East/West Street: *Detroit Avenue*	North/South Street: *Grace Avenue*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		360	21	17	344	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	391	22	18	373	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type			Undivided			
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	24		7			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	26	0	7	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

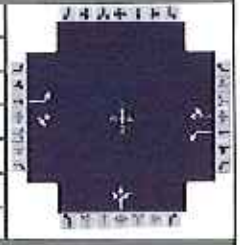
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		18		33				
C (m) (veh/h)		1146		382				
v/c		0.02		0.09				
95% queue length		0.05		0.28				
Control Delay (s/veh)		8.2		15.3				
LOS		A		C				
Approach Delay (s/veh)	--	--	15.3					
Approach LOS	--	--	C					

APPENDIX H

BUILD CAPACITY ANALYSIS WORKSHEETS - 2033

HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	AM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2033 Build	Analysis Period	1> 7:00
File Name	AM 33FB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	77	313	15	7	263	41	22	54	29			

Signal Information													
Cycle, s	60.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	5.0	23.0	17.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.6	3.6	3.6	0.0	0.0	0.0			
				Red	1.4	1.4	1.4	0.0	0.0	0.0			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	38.0		28.0		22.0		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	3.5					5.0		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	84	357		8	330			114				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1778		1021	1750			1757				
Queue Service Time (g_s), s	1.5	6.8		0.3	8.6			3.0				
Cycle Queue Clearance Time (g_c), s	1.5	6.8		0.3	8.6			3.0				
Capacity (c), veh/h	518	978		511	671			498				
Volume-to-Capacity Ratio (X)	0.161	0.365		0.015	0.493			0.229				
Available Capacity (c_a), veh/h	518	978		511	671			498				
Back of Queue (Q), veh/ln (50th percentile)	0.5	2.4		0.1	3.6			1.1				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.9	7.6		11.5	14.1			16.5				
Incremental Delay (d_2), s/veh	0.1	1.1		0.1	2.6			0.1				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.9	8.7		11.5	16.6			16.6				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.7	A		16.5	B		16.6	B		0.0		
Intersection Delay, s/veh / LOS	12.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.0	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*ABC*	Intersection	*Detroit & Grace Avenue*
Agency/Co.	*TMS Engineers, Inc.*	Jurisdiction	*Lakewood, Ohio*
Date Performed	*6/27/2012*	Analysis Year	*2033 Build*
Analysis Time Period	*AM Peak Period*		

Project Description: *Existing Conditions*

East/West Street: *Detroit Avenue*	North/South Street: *Grace Avenue*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*401*	*9*	*4*	*273*	
Peak-Hour Factor, PHF	*1.00*	*0.92*	*0.92*	*0.92*	*0.92*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*435*	*9*	*4*	*296*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

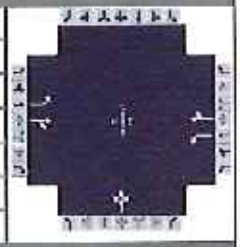
Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*11*		*15*			
Peak-Hour Factor, PHF	*0.92*	*1.00*	*0.92*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*11*	*0*	*16*	*0*	*0*	*0*
Percent Heavy Vehicles	2	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*		*LR*				
v (veh/h)		*4*		*27*				
C (m) (veh/h)		*1116*		*493*				
v/c		*0.00*		*0.05*				
95% queue length		*0.01*		*0.17*				
Control Delay (s/veh)		*8.2*		*12.7*				
LOS		*A*		*B*				
Approach Delay (s/veh)	--	--		*12.7*				
Approach LOS	--	--		*B*				

HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TMS Engineers, Inc.			Duration, h	0.25
Analyst	ABC	Analysis Date	Jun 27, 2012	Area Type	Other
Jurisdiction	Lakewood, OH	Time Period	PM Peak	PHF	0.92
Intersection	Detroit & Cohassett	Analysis Year	2033 Build	Analysis Period	1> 7:00
File Name	PM 33FB DetroitCohass.xus				
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	39	313	15	37	362	13	47	11	45			

Signal Information			
Cycle, s	60.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

								1	2	3	4	
Green	5.0	24.1	15.9	0.0	0.0	0.0						
Yellow	3.6	3.6	3.6	0.0	0.0	0.0	5	6	7	8		
Red	1.4	1.4	1.4	0.0	0.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		
Case Number	1.0	4.0		6.3		12.0		
Phase Duration, s	10.0	39.1		29.1		20.9		
Change Period, (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Allow Headway (MAH), s	3.3	0.0		0.0		3.3		
Queue Clearance Time (g_s), s	2.7					5.1		
Green Extension Time (g_e), s	0.0	0.0		0.0		0.1		
Phase Call Probability	1.00					1.00		
Max Out Probability	1.00					0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18			
Adjusted Flow Rate (v), veh/h	42	357		40	408			112				
Adjusted Saturation Flow Rate (s), veh/h/ln	1774	1778		1021	1781			1691				
Queue Service Time (g_s), s	0.7	6.5		1.5	10.7			3.1				
Cycle Queue Clearance Time (g_c), s	0.7	6.5		1.5	10.7			3.1				
Capacity (c), veh/h	486	1010		530	716			448				
Volume-to-Capacity Ratio (X)	0.087	0.353		0.076	0.570			0.250				
Available Capacity (c_a), veh/h	486	1010		530	716			448				
Back of Queue (Q), veh/ln (50th percentile)	0.2	2.3		0.3	4.5			1.2				
Overflow Queue (Q_3), veh/ln	0.0	0.0		0.0	0.0			0.0				
Queue Storage Ratio (RQ) (50th percentile)	0.00	0.00		0.00	0.00			0.00				
Uniform Delay (d_1), s/veh	8.5	7.0		11.2	13.9			17.4				
Incremental Delay (d_2), s/veh	0.0	1.0		0.3	3.3			0.1				
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0			0.0				
Control Delay (d), s/veh	8.6	8.0		11.5	17.2			17.5				
Level of Service (LOS)	A	A		B	B			B				
Approach Delay, s/veh / LOS	8.0	A		16.7	B		17.5	B		0.0		
Intersection Delay, s/veh / LOS	13.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	1.9	A	2.3	B	2.3	B
Bicycle LOS Score / LOS	1.1	A	1.2	A	0.7	A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & Grace Avenue
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	PM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue	North/South Street: Grace Avenue
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		377	21	17	360	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	409	22	18	391	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	24		7			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	26	0	7	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		18		33				
C (m) (veh/h)		1129		364				
v/c		0.02		0.09				
95% queue length		0.05		0.30				
Control Delay (s/veh)		8.2		15.9				
LOS		A		C				
Approach Delay (s/veh)	--	--		15.9				
Approach LOS	--	--		C				

APPENDIX I

ACCESS CAPACITY ANALYSIS WORKSHEETS - 2013

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2013 Build
Analysis Time Period	AM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue | North/South Street: DDM Access

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		384	14	11	262	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	417	15	11	284	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	3		7			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	3	0	7	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		11		10				
C (m) (veh/h)		1128		529				
v/c		0.01		0.02				
95% queue length		0.03		0.06				
Control Delay (s/veh)		8.2		11.9				
LOS		A		B				
Approach Delay (s/veh)	--	--	11.9					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*ABC*	Intersection	*Grace & DDM Access*
Agency/Co.	*TMS Engineers, Inc.*	Jurisdiction	*Lakewood, OH*
Date Performed	*6/27/2012*	Analysis Year	*2013 Build*
Analysis Time Period	*AM Peak Period*		

Project Description	*Build Conditions*
East/West Street:	*DDM Access*
Intersection Orientation:	*North-South*
North/South Street:	*Grace Avenue*
Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*23*	*1*	*5*	*8*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*24*	*1*	*5*	*8*	*0*
Percent Heavy Vehicles	*2*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*1*		*3*
Peak-Hour Factor, PHF	*1.00*	*0.92*	*0.92*	*0.92*	*0.92*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*1*	*0*	*3*
Percent Heavy Vehicles	*0*	*0*	*0*	*2*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (veh/h)		*5*		*4*				
C (m) (veh/h)		*1589*		*1029*				
v/c		*0.00*		*0.00*				
95% queue length		*0.01*		*0.01*				
Control Delay (s/veh)		*7.3*		*8.5*				
LOS		*A*		*A*				
Approach Delay (s/veh)	--	--	*8.5*					
Approach LOS	--	--	*A*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Cohassett & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2013 Build
Analysis Time Period	AM Peak Period		

Project Description: Build Conditions

East/West Street: DDM Access	North/South Street: Cohassett Avenue
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	4	72			19	3
Peak-Hour Factor, PHF	0.92	0.92	1.00	1.00	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	4	78	0	0	20	3
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13		1			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	14	0	1	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	4						15	
C (m) (veh/h)	1592						897	
v/c	0.00						0.02	
95% queue length	0.01						0.05	
Control Delay (s/veh)	7.3						9.1	
LOS	A						A	
Approach Delay (s/veh)	--	--				9.1		
Approach LOS	--	--				A		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2013 Build
Analysis Time Period	PM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue | North/South Street: DDM Access

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		323	44	48	345	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	351	47	52	374	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	16		29			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	17	0	31	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		52		48				
C (m) (veh/h)		1161		480				
v/c		0.04		0.10				
95% queue length		0.14		0.33				
Control Delay (s/veh)		8.2		13.3				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.3					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Grace & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, OH
Date Performed	6/27/2012	Analysis Year	2013 Build
Analysis Time Period	PM Peak Period		

Project Description: Build Conditions

East/West Street: DDM Access | North/South Street: Grace Avenue

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		15	1	15	23	
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	16	1	16	24	0
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				2		16
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	2	0	16
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		16		18				
C (m) (veh/h)		1600		1045				
v/c		0.01		0.02				
95% queue length		0.03		0.05				
Control Delay (s/veh)		7.3		8.5				
LOS		A		A				
Approach Delay (s/veh)	--	--	8.5					
Approach LOS	--	--	A					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*ABC*	Intersection	*Cohassett & DDM Access*
Agency/Co.	*TMS Engineers, Inc.*	Jurisdiction	*Lakewood, Ohio*
Date Performed	*6/27/2012*	Analysis Year	*2013 Build*
Analysis Time Period	*PM Peak Period*		

Project Description *Build Conditions*

East/West Street: *DDM Access*	North/South Street: *Cohassett Avenue*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	4	42			36	16
Peak-Hour Factor, PHF	0.92	0.92	1.00	1.00	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	4	45	0	0	39	17
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	61		4			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	66	0	4	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	4						70	
C (m) (veh/h)	1549						902	
v/c	0.00						0.08	
95% queue length	0.01						0.25	
Control Delay (s/veh)	7.3						9.3	
LOS	A						A	
Approach Delay (s/veh)	--	--					9.3	
Approach LOS	--	--					A	

APPENDIX J

ACCESS CAPACITY ANALYSIS WORKSHEETS - 2033

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	AM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue | North/South Street: DDM Access

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		403	14	11	274	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	438	15	11	297	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	3		7			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	3	0	7	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		11		10				
C (m) (veh/h)		1108		510				
v/c		0.01		0.02				
95% queue length		0.03		0.06				
Control Delay (s/veh)		8.3		12.2				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.2					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Grace & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, OH
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	AM Peak Period		

Project Description: Build Conditions

East/West Street: DDM Access	North/South Street: Grace Avenue
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		23	1	5	8	
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	24	1	5	8	0
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				1		3
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	1	0	3
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		5		4				
C (m) (veh/h)		1589		1029				
v/c		0.00		0.00				
95% queue length		0.01		0.01				
Control Delay (s/veh)		7.3		8.5				
LOS		A		A				
Approach Delay (s/veh)	--	--	8.5					
Approach LOS	--	--	A					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Cohasset & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	AM Peak Period		

Project Description: Build Conditions

East/West Street: DDM Access	North/South Street: Cohasset Avenue
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	4	72			19	3
Peak-Hour Factor, PHF	0.92	0.92	1.00	1.00	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	4	78	0	0	20	3
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13		1			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	14	0	1	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	4						15	
C (m) (veh/h)	1592						897	
v/c	0.00						0.02	
95% queue length	0.01						0.05	
Control Delay (s/veh)	7.3						9.1	
LOS	A						A	
Approach Delay (s/veh)	--	--					9.1	
Approach LOS	--	--					A	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Detroit & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	PM Peak Period		

Project Description: Existing Conditions

East/West Street: Detroit Avenue	North/South Street: DDM Access
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		340	44	48	362	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	369	47	52	393	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	16		29			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	17	0	31	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		52		48				
C (m) (veh/h)		1143		462				
v/c		0.05		0.10				
95% queue length		0.14		0.35				
Control Delay (s/veh)		8.3		13.7				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.7					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Grace & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, OH
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	PM Peak Period		

Project Description	Build Conditions
East/West Street:	DDM Access
North/South Street:	Grace Avenue
Intersection Orientation:	North-South
Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		15	1	15	23	
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	16	1	16	24	0
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				2		16
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	2	0	16
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		16		18				
C (m) (veh/h)		1600		1045				
v/c		0.01		0.02				
95% queue length		0.03		0.05				
Control Delay (s/veh)		7.3		8.5				
LOS		A		A				
Approach Delay (s/veh)	--	--	8.5					
Approach LOS	--	--	A					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ABC	Intersection	Cohassett & DDM Access
Agency/Co.	TMS Engineers, Inc.	Jurisdiction	Lakewood, Ohio
Date Performed	6/27/2012	Analysis Year	2033 Build
Analysis Time Period	PM Peak Period		

Project Description: Build Conditions

East/West Street: DDM Access | North/South Street: Cohassett Avenue

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	4	42			36	16
Peak-Hour Factor, PHF	0.92	0.92	1.00	1.00	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	4	45	0	0	39	17
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	61		4			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	66	0	4	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

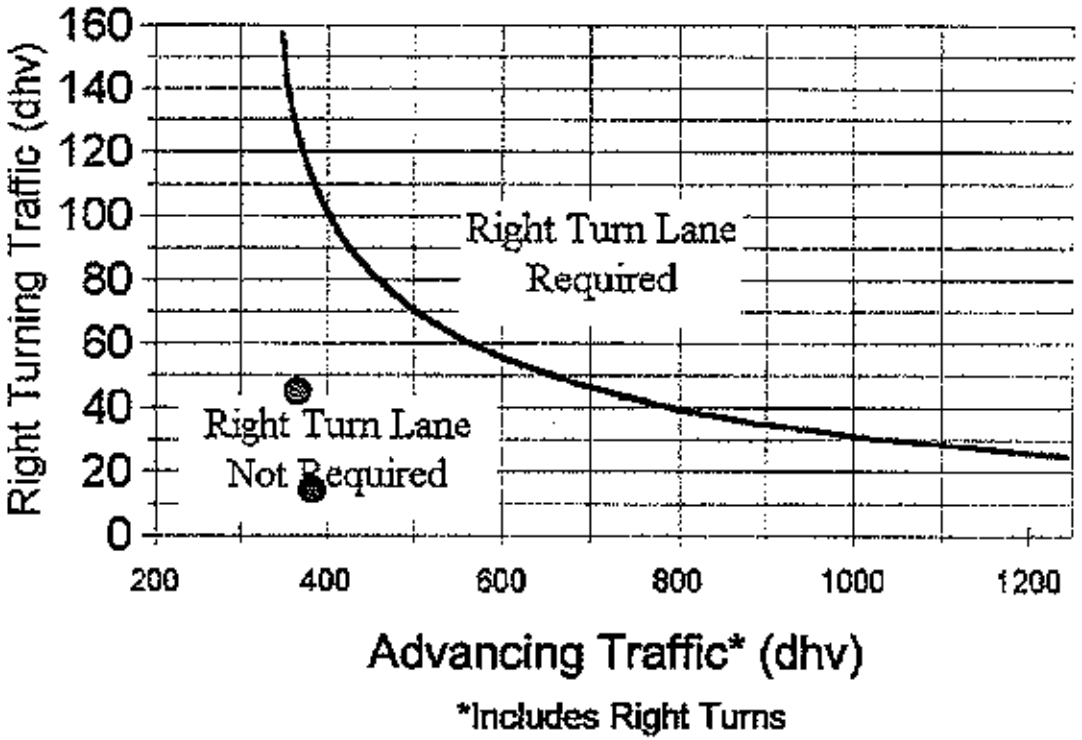
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	4						70	
C (m) (veh/h)	1549						902	
v/c	0.00						0.08	
95% queue length	0.01						0.25	
Control Delay (s/veh)	7.3						9.3	
LOS	A						A	
Approach Delay (s/veh)	--	--				9.3		
Approach LOS	--	--				A		

APPENDIX K
ODOT TURN LANE WARRANT GRAPHS

DETROIT AVENUE & SITE ACCESS DRIVE

2013 Build

2-Lane Highway Right Turn Lane Warrant
=< 40 mph or 70 kph Posted Speed



*Includes Right Turns

AM Advancing Volume = 398 vph	PM Advancing Volume = 367 vph
AM Right Turn Volume = 14 vph	PM Right Turn Volume = 44 vph

2-LANE RIGHT TURN LANE WARRANT (LOW SPEED)

401-6aE

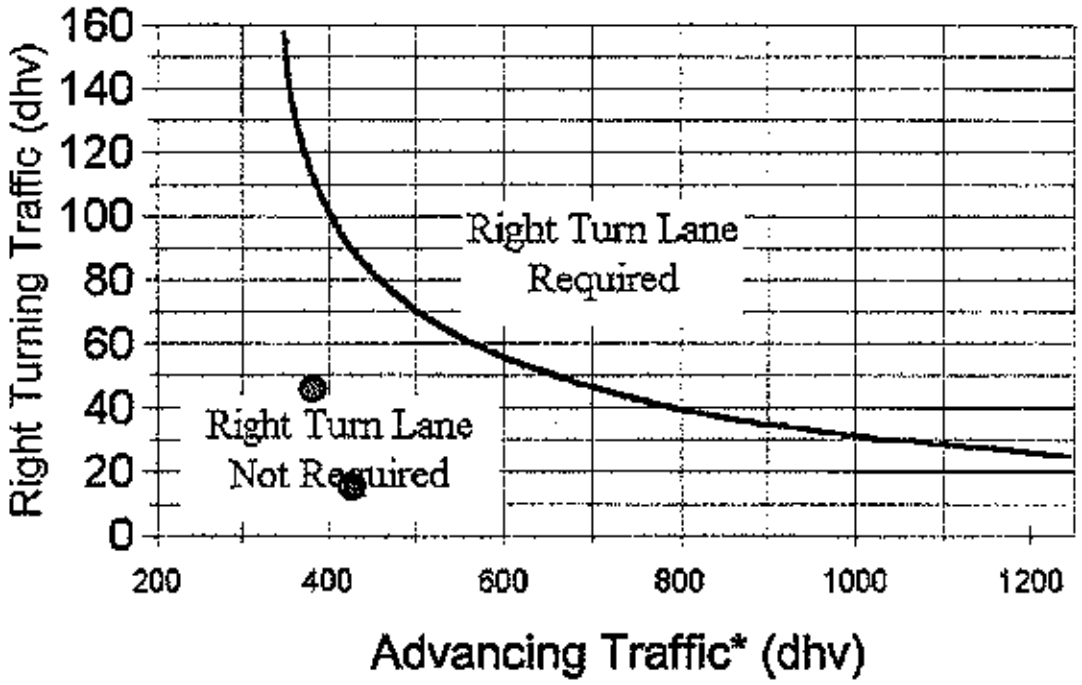
REFERENCE SECTION 401.6.3

DETROIT AVENUE & SITE ACCESS DRIVE

2033 Build

2-Lane Highway Right Turn Lane Warrant

=< 40 mph or 70 kph Posted Speed



*Includes Right Turns

AM Advancing Volume = 417 vph	PM Advancing Volume = 384 vph
AM Right Turn Volume = 14 vph	PM Right Turn Volume = 44 vph

2-LANE RIGHT TURN LANE WARRANT (LOW SPEED)

401-6aE

REFERENCE SECTION 401.6.3

TRAFFIC IMPACT STUDY

DISCOUNT DRUG MART

LAKEWOOD, OHIO

JUNE 29, 2012

Prepared For:
DISCOUNT DRUG MART, INC.
211 COMMERCE DRIVE
MEDINA, OH 44256

Prepared By:
TMS ENGINEERS, INC.
4547 HUDSON DRIVE
STOW, OHIO 44224

REGISTERED ENGINEER NO. E56982
CERTIFICATION NO. 2234

"This document was prepared consistent with local agency requirements and/or applicable guidelines contained in this report."

Planning Commission Hearing
July 5th, 2012

Discount Drugmart Redevelopment

13123 Detroit Avenue
Former Ganley Dealership

Item 1: Lot Split & Consolidation

Proposal to Split and Consolidation to create 1 commercial parcel zoned C3
Proposal to Split and Consolidation to create 1 residential parcel zoned R1H

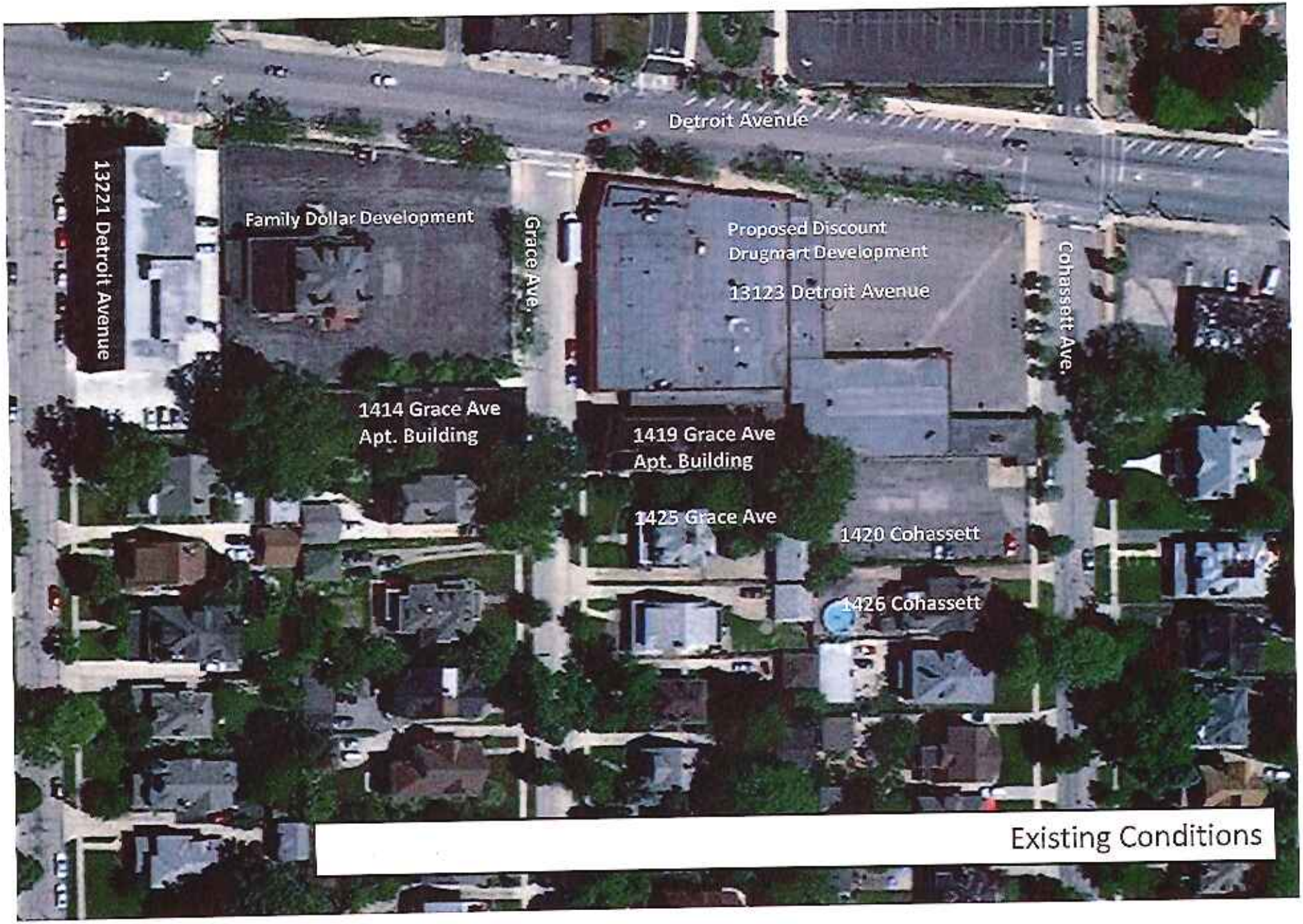
Item 2: Conditional Use for Accessory Parking

Proposal requesting approval of a conditional use of a R1H zoned parcel for parking

Item 3: Conditional Use for a Drive-thru

Proposal requesting approval of a drive-thru pharmacy


Detroit Avenue
Grace Ave.
Proposed Discount
Drugmart Development
13123 Detroit Avenue
Cohassett Ave.
Existing Conditions


Detroit Avenue
13221 Detroit Avenue
Family Dollar Development
Grace Ave.
Proposed Discount
Drugmart Development
13123 Detroit Avenue
Cohassett Ave.
1414 Grace Ave
Apt. Building
1419 Grace Ave
Apt. Building
1425 Grace Ave
1420 Cohassett
1426 Cohassett
Existing Conditions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13221 Detroit Avenue
Family Dollar Development
Grace Ave.
Proposed Discount
Drugmart Development
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Cohassett Ave.
1414 Grace Ave
Apt. Building
1419 Grace Ave
Apt. Building
1425 Grace Ave
1420 Cohassett
1426 Cohassett
C3 Commercial
R1H Residential
Existing Zoning


Detroit Avenue
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Family Dollar Development
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Apt. Building
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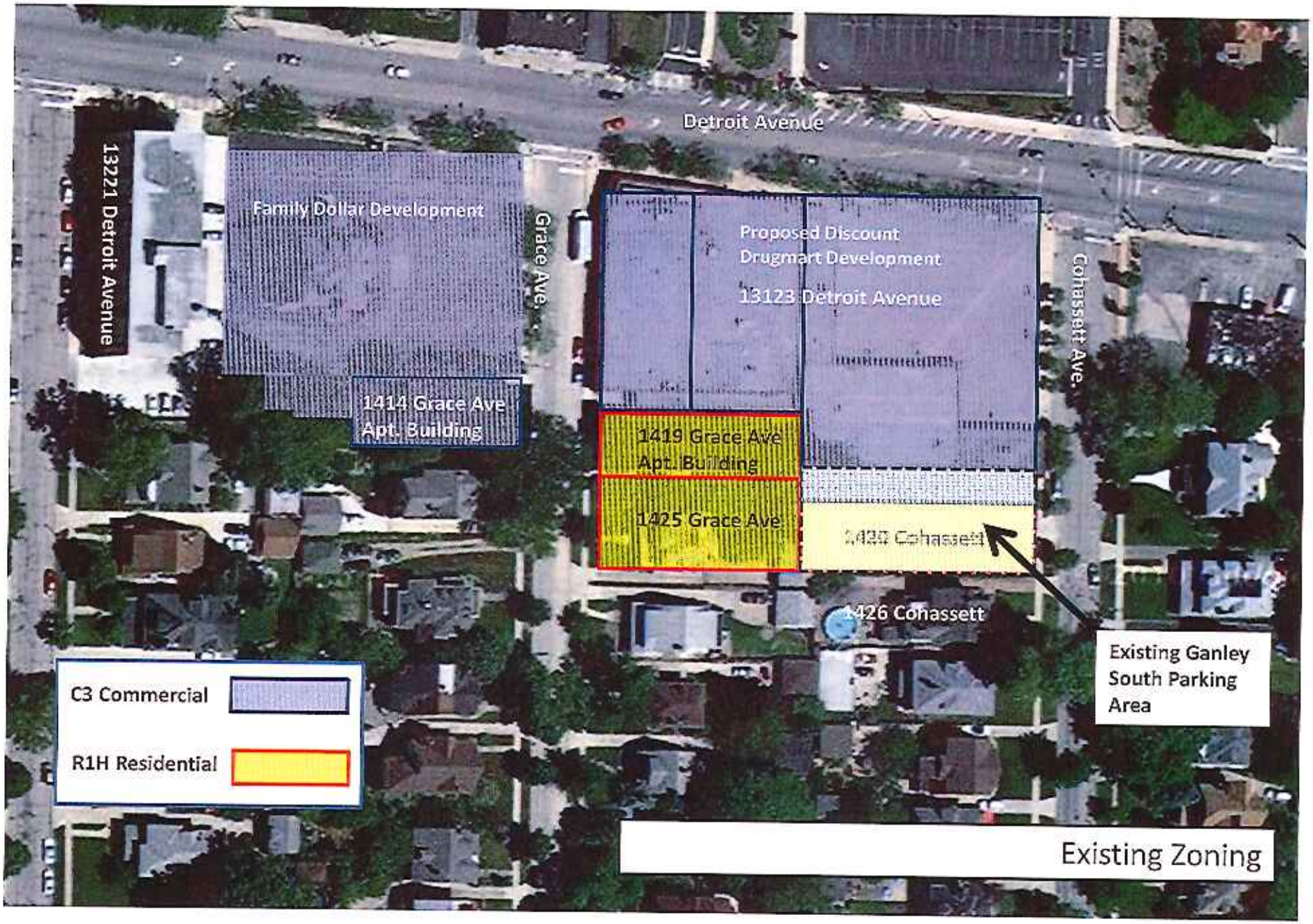
Apt. Building
1425 Grace Ave
1420 Cohassett
1426 Cohassett
C3 Commercial
R1H Residential
Existing Zoning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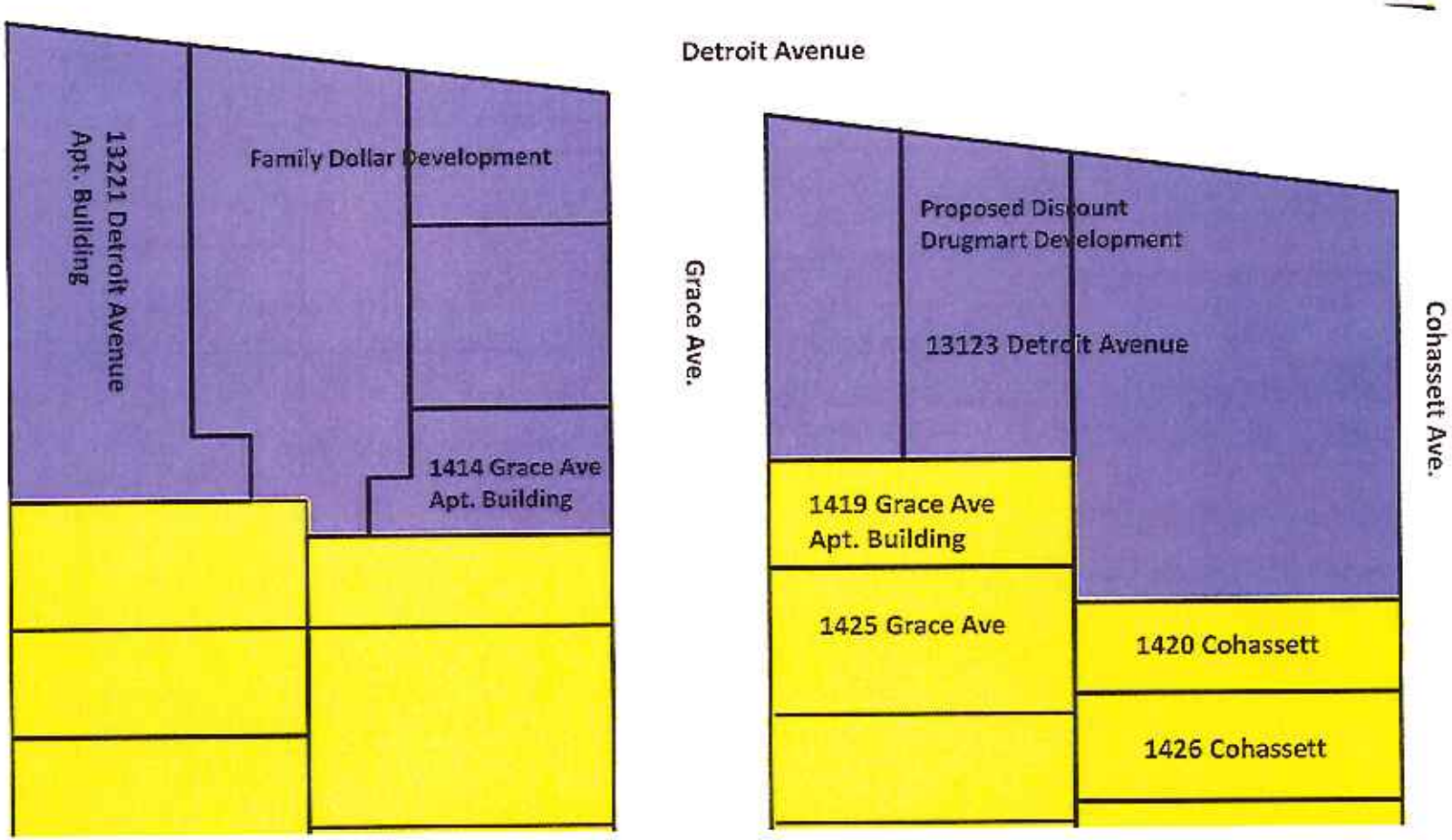
Cohassett Ave.
1414 Grace Ave
Apt. Building
1419 Grace Ave
Apt. Building
1425 Grace Ave
1426 Cohassett
C3 Commercial
R1H Residential
Existing Ganley
South Parking
Area
Existing Zoning


Detroit Avenue
13221 Detroit Avenue
Apt. Building
Family Dollar Development
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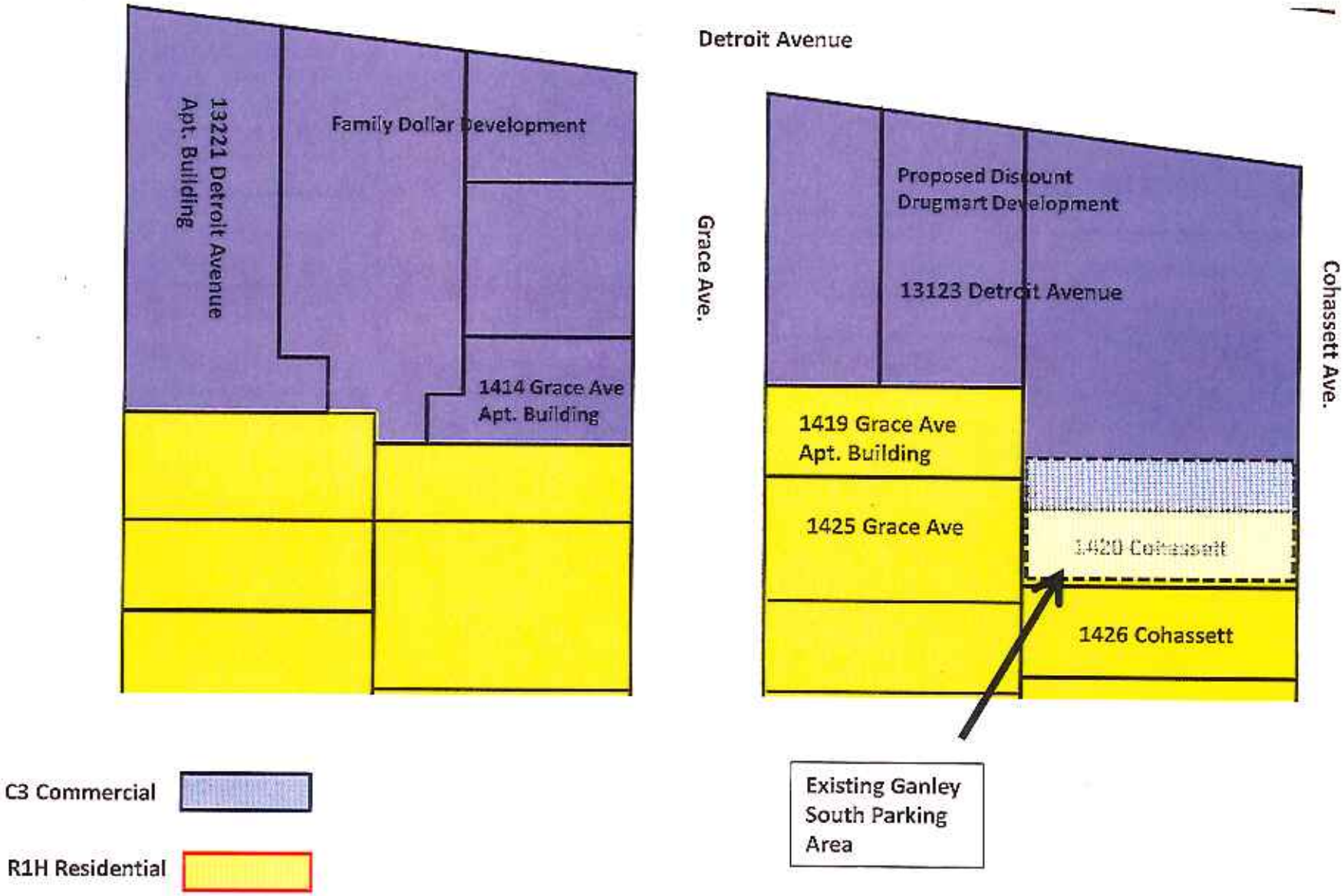
Apt. Building
Grace Ave.
Proposed Discount
Drugmart Development
13123 Detroit Avenue
Cohassett Ave.
1419 Grace Ave
Apt. Building
1425 Grace Ave
1420 Cohassett
1426 Cohassett
C3 Commercial
R1H Residential
Existing Zoning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Apt. Building
Family Dollar Development
1414 Grace Ave
Apt. Building
Detroit Avenue
Grace Ave.
Proposed Discount
Drugmart Development
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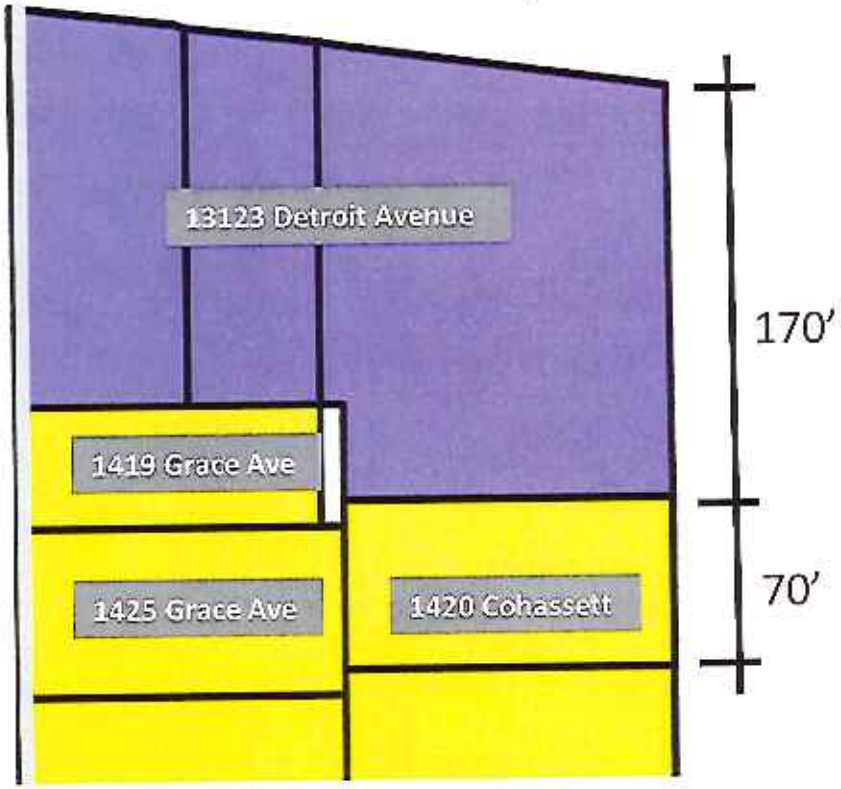
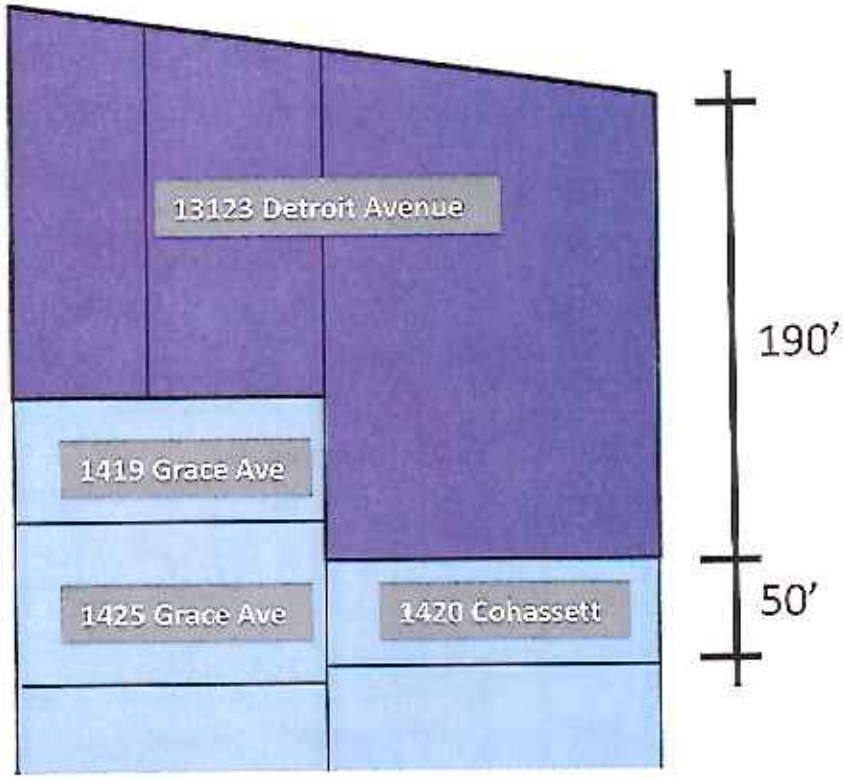
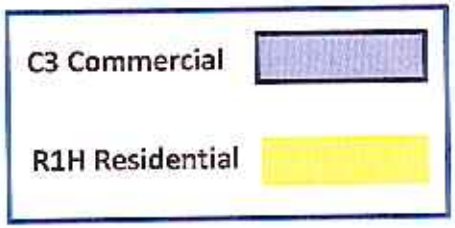
Cohassett Ave.
1419 Grace Ave
Apt. Building
1425 Grace Ave
1420 Cohassett
1426 Cohassett
C3 Commercial
R1H Residential
Existing Ganley
South Parking
Area

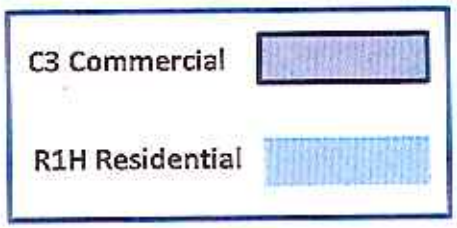


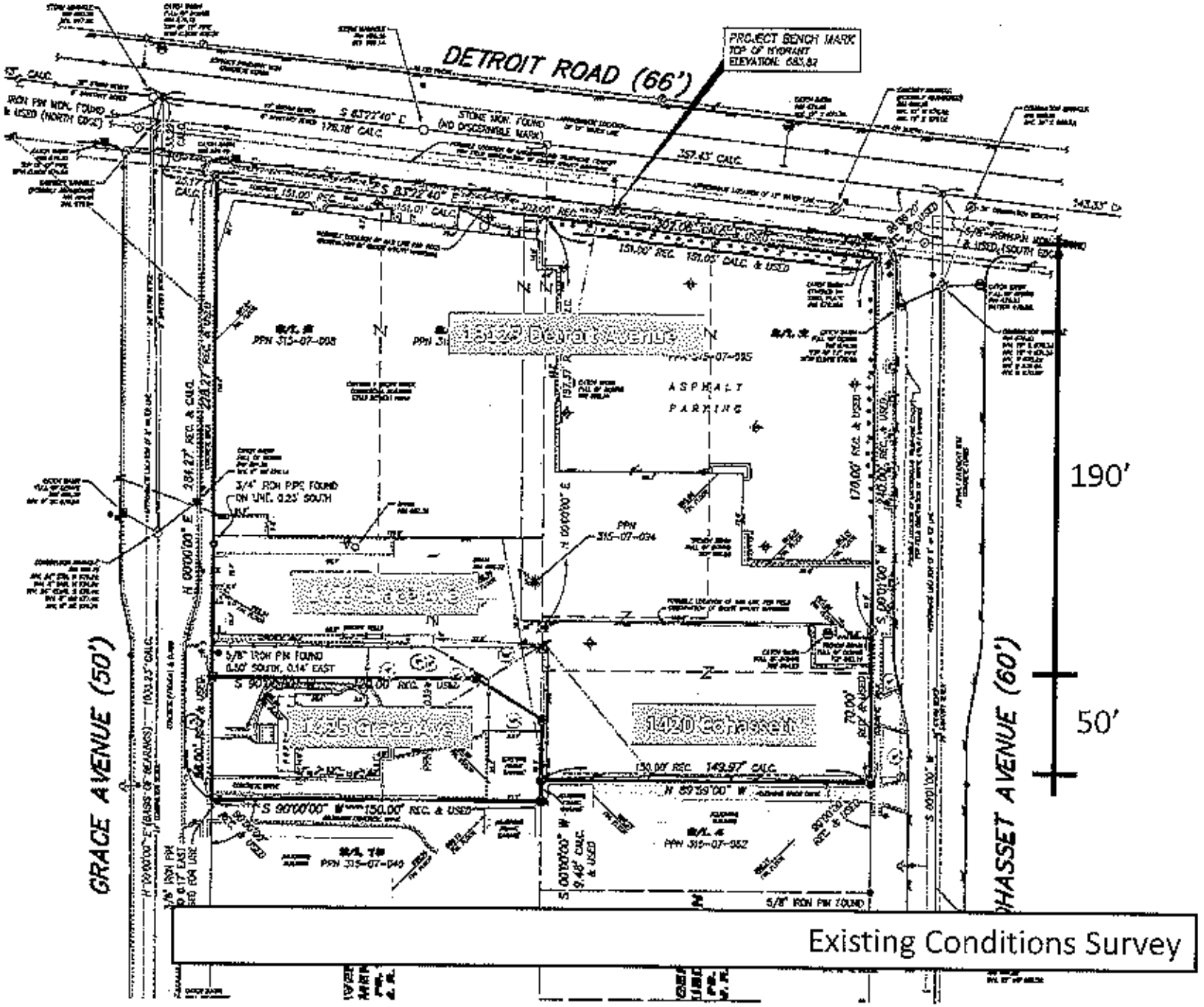
2009 Zoning Map Online



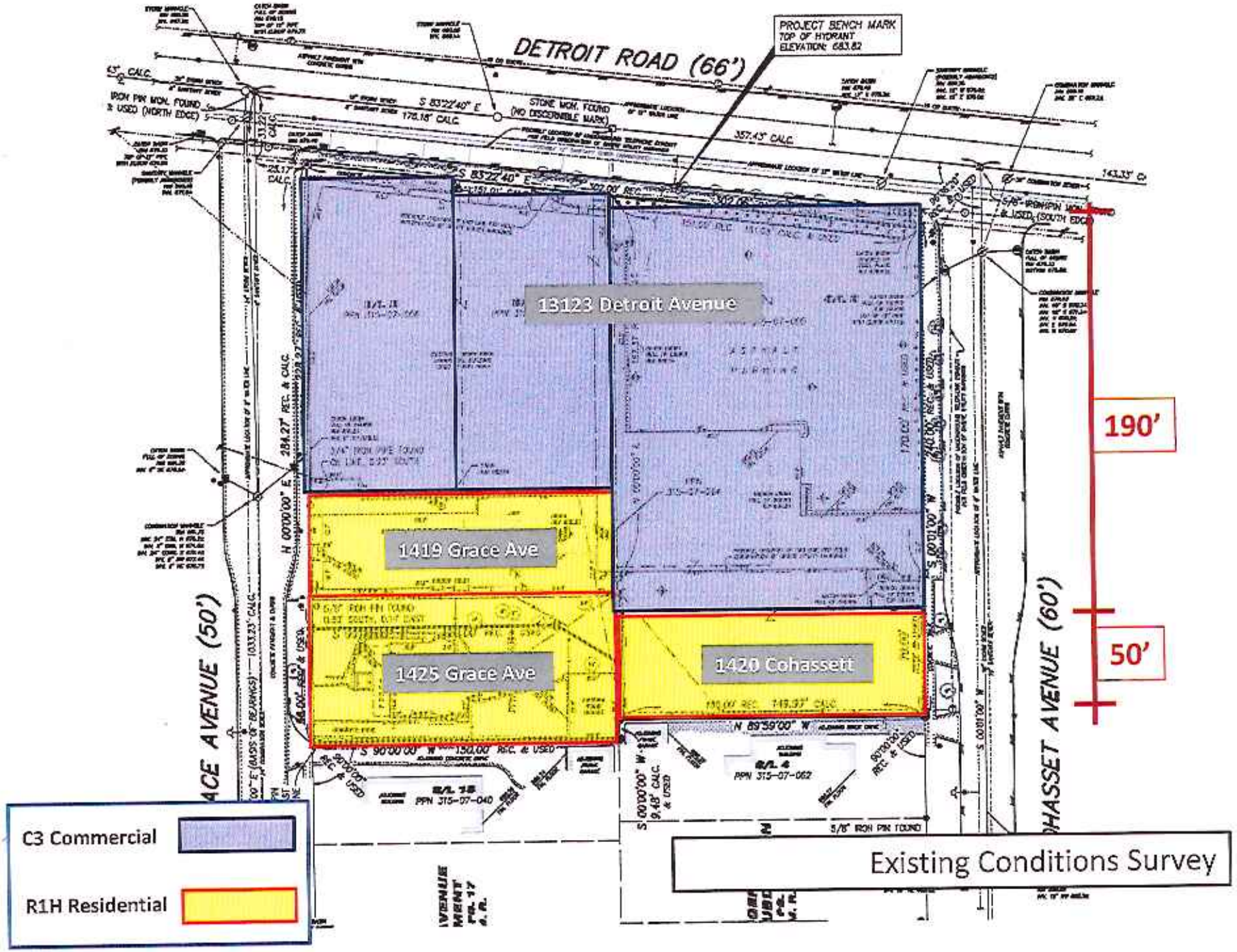
1999 - 2008 Zoning Map

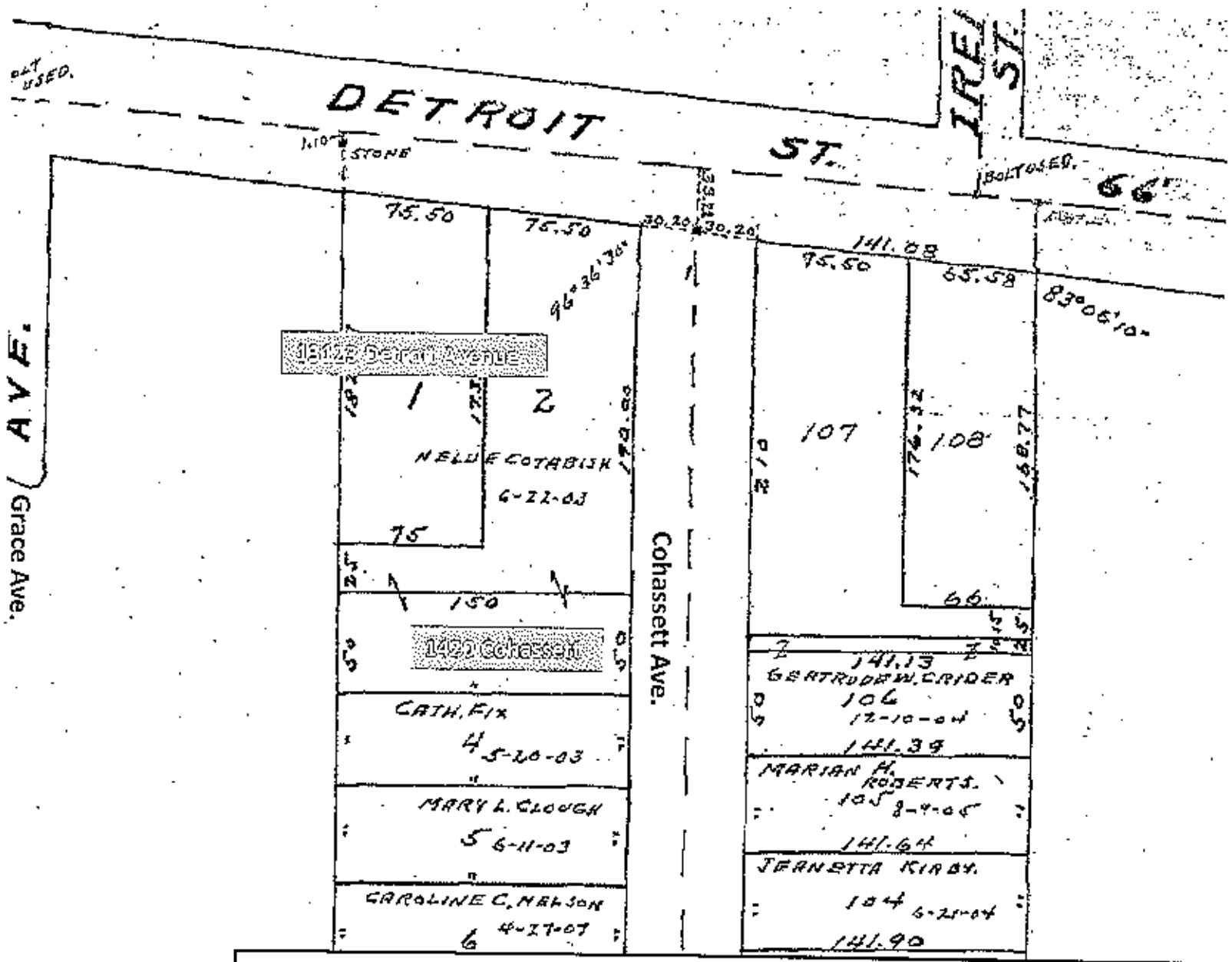




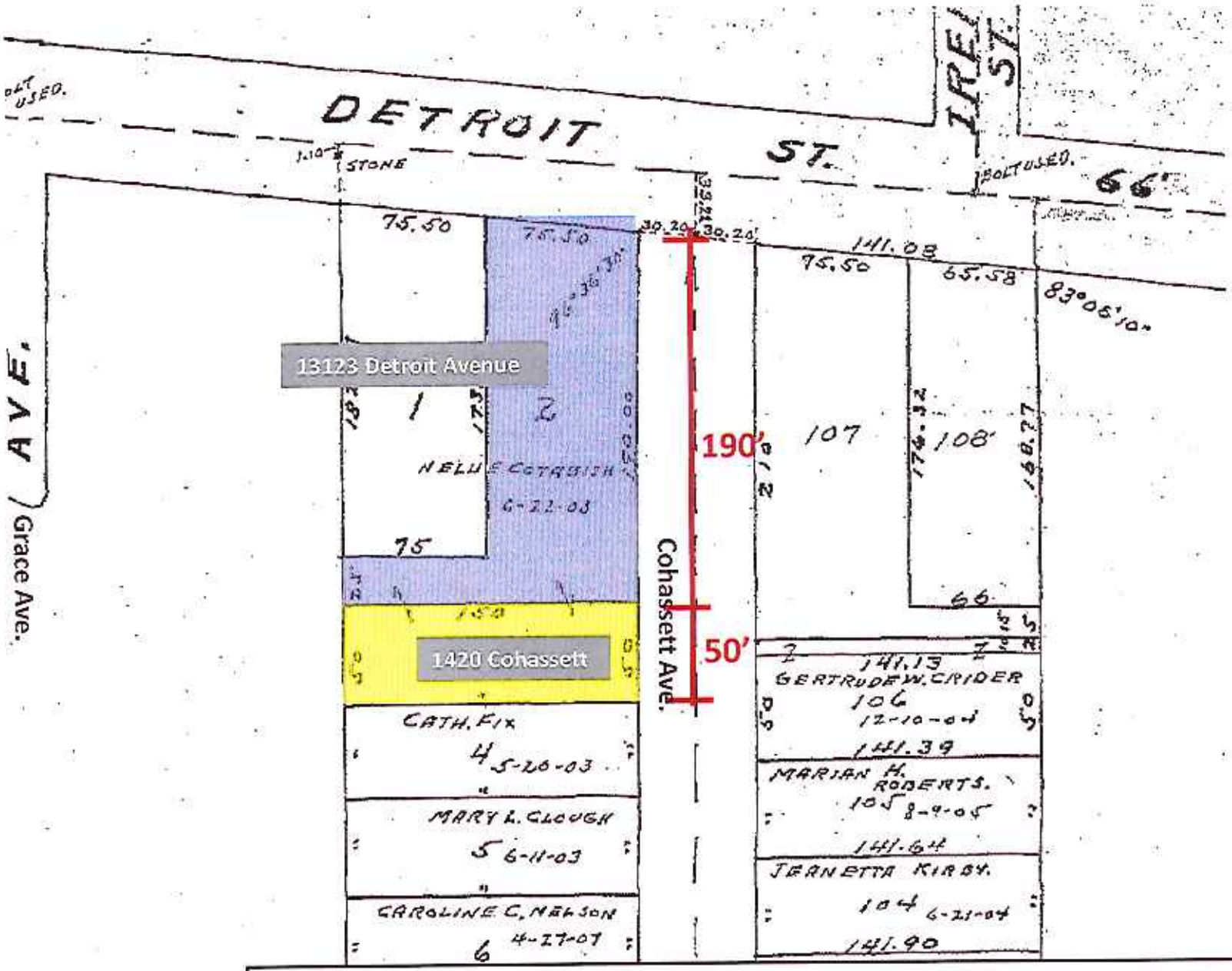


Existing Conditions Survey

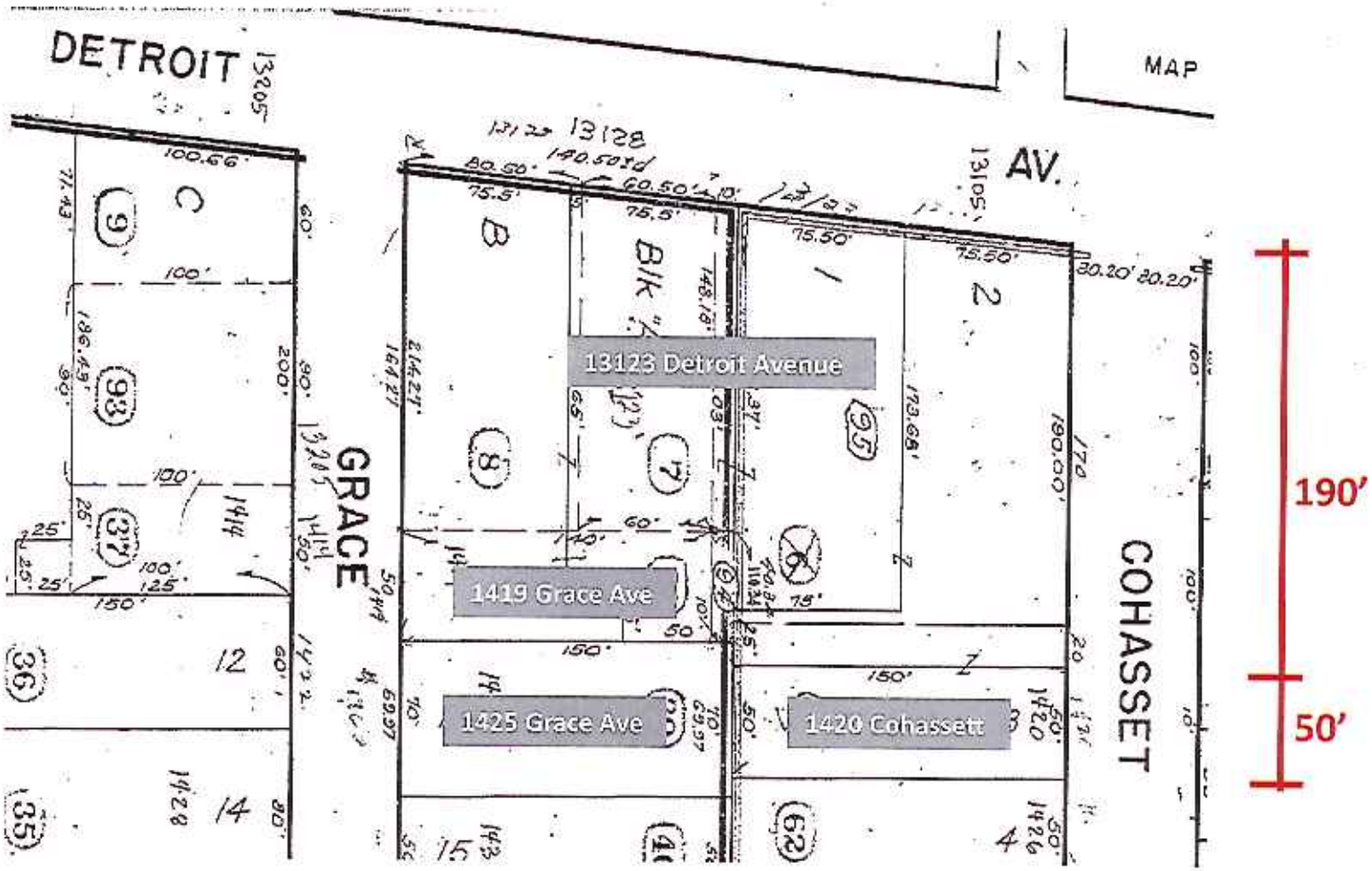

DETROIT ROAD (66')
PROJECT BENCH MARK
TOP OF HYDRANT
ELEVATION: 683.82
13123 Detroit Avenue
1419 Grace Ave
1425 Grace Ave
1420 Cohassett
190'
50'
ACE AVENUE (50')
HASSET AVENUE (60')
C3 Commercial
R1H Residential
Existing Conditions Survey



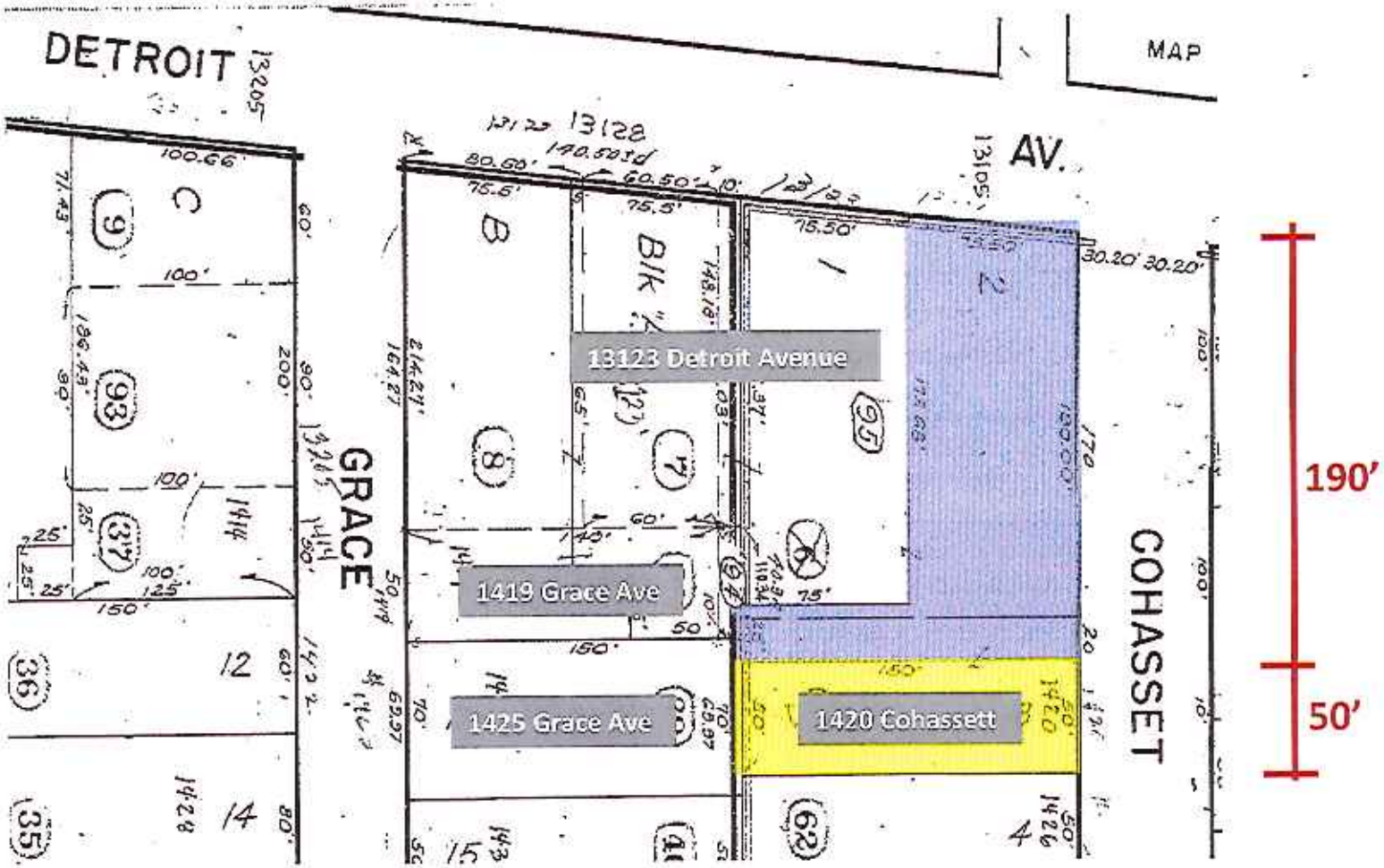
1907 Plat Map – Cotabish Property – Detroit and Cohassett



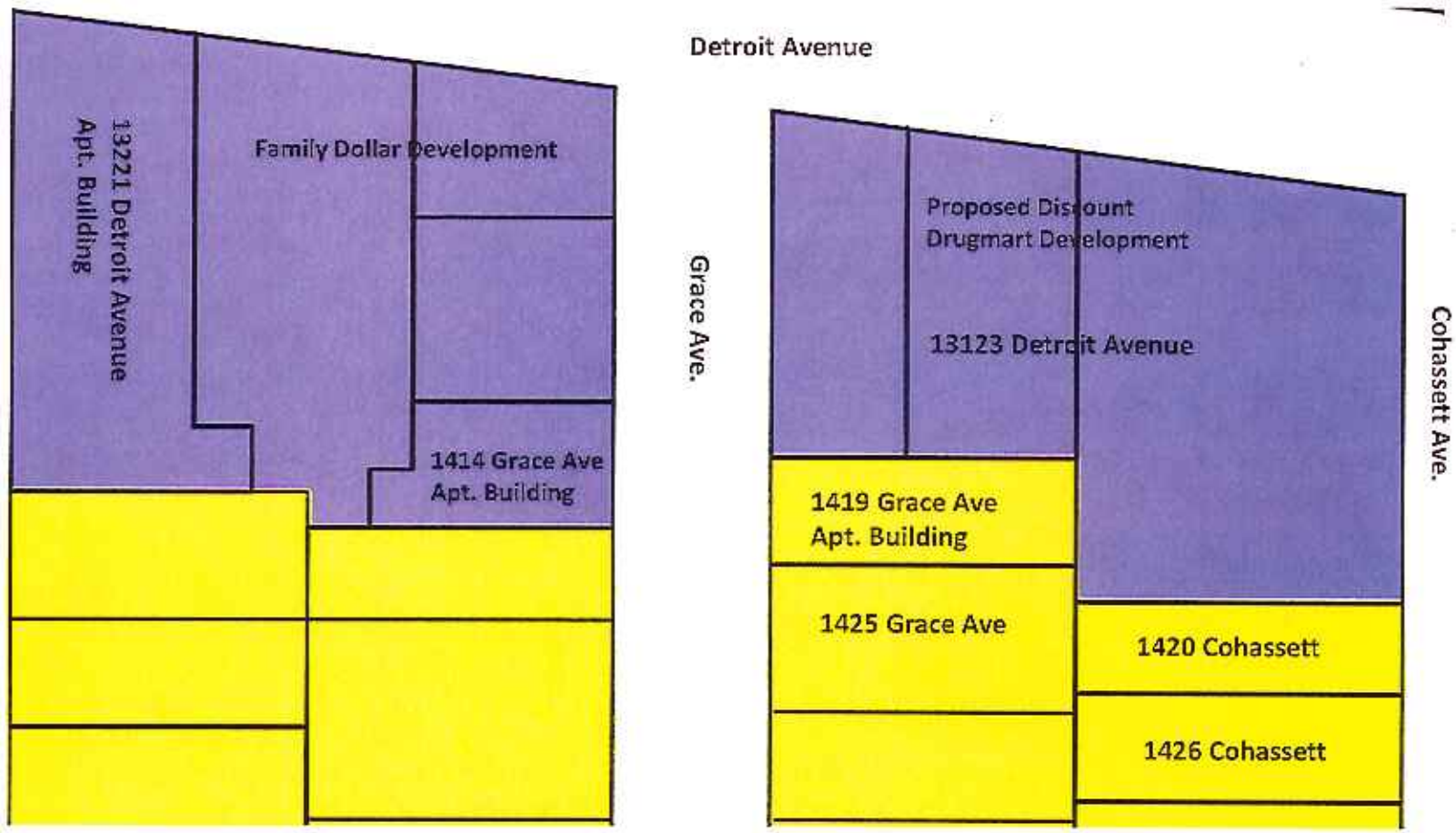
1907 Plat Map – Cotabish Property – Detroit and Cohassett



1949 Lakewood City Plat Map – Map 315 Page 7



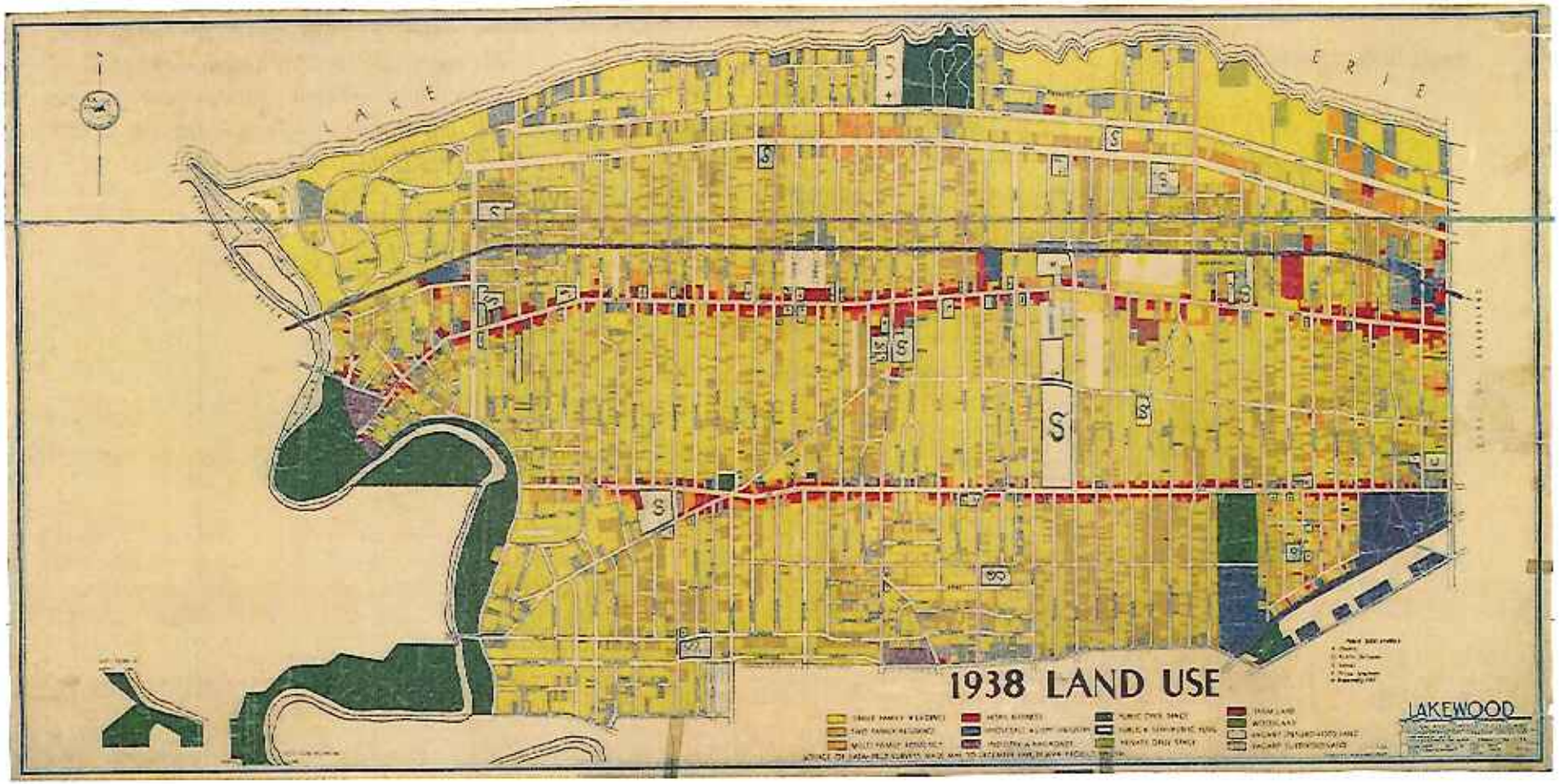
1949 Lakewood City Plat Map – Map 315 Page 7



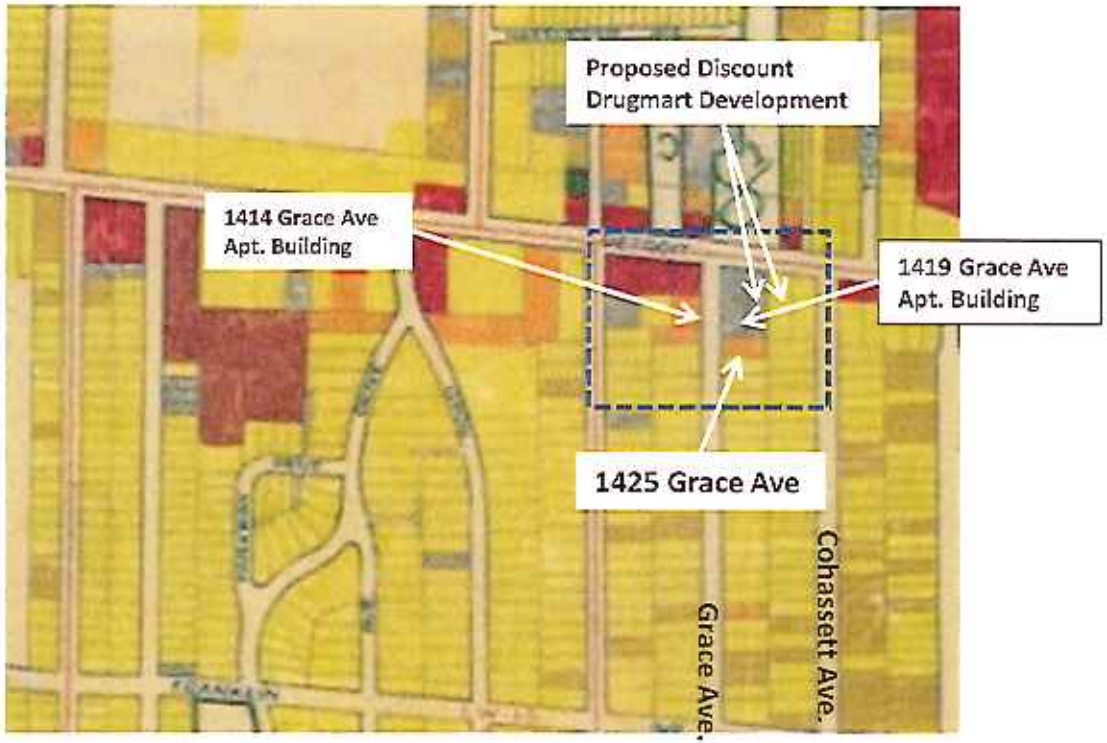
C3 Commercial

R1H Residential

Existing Zoning

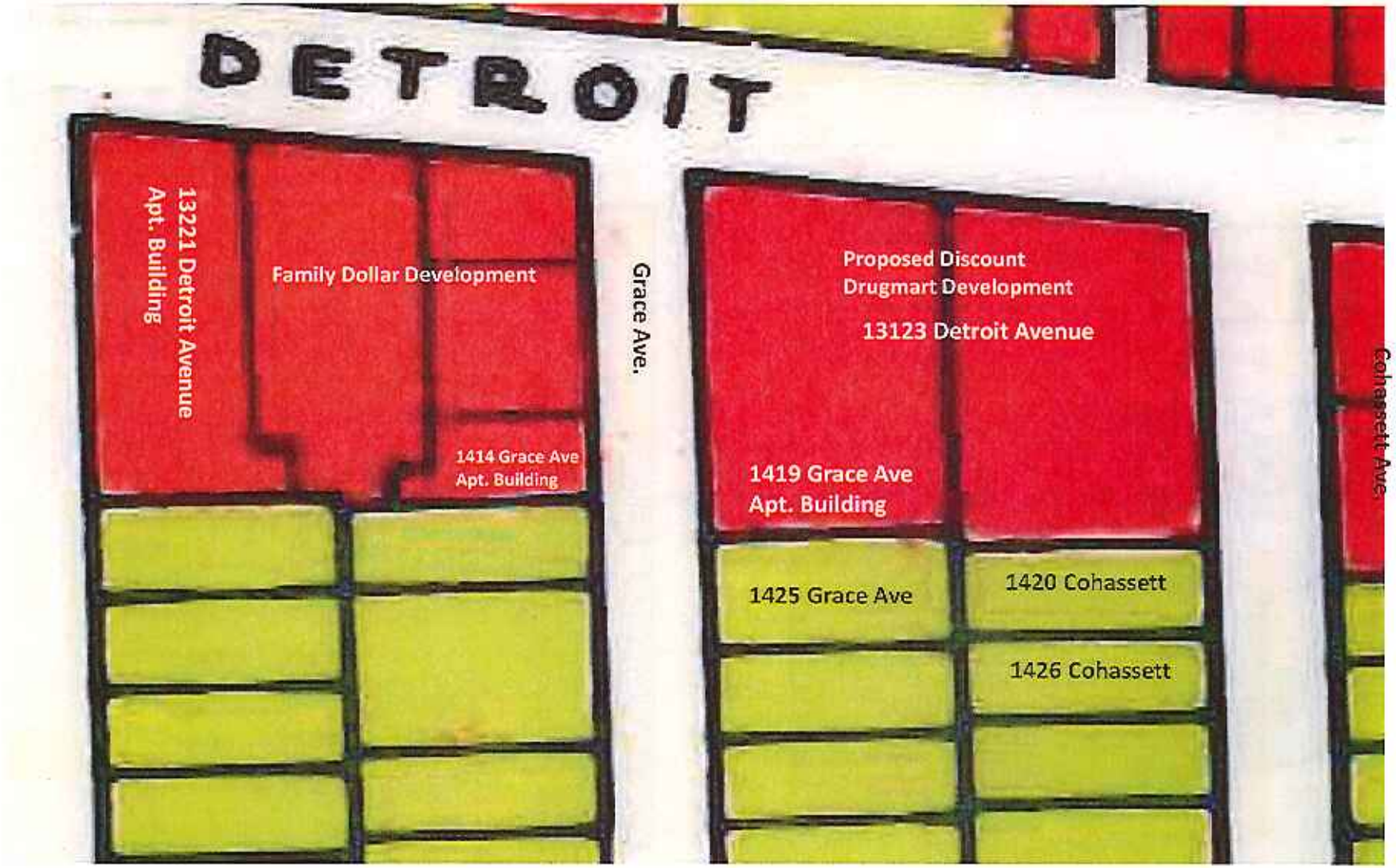


1938 Land Use Map



13123 Detroit - ½ Whole Sale &Light Industry ½ Single Family Residential
1414 Grace – Multi Family Residence
1419 Grace – Wholesale & Light Industry
1422 Grace - Multi Family Residence
1425 Grace - Multi Family Residence

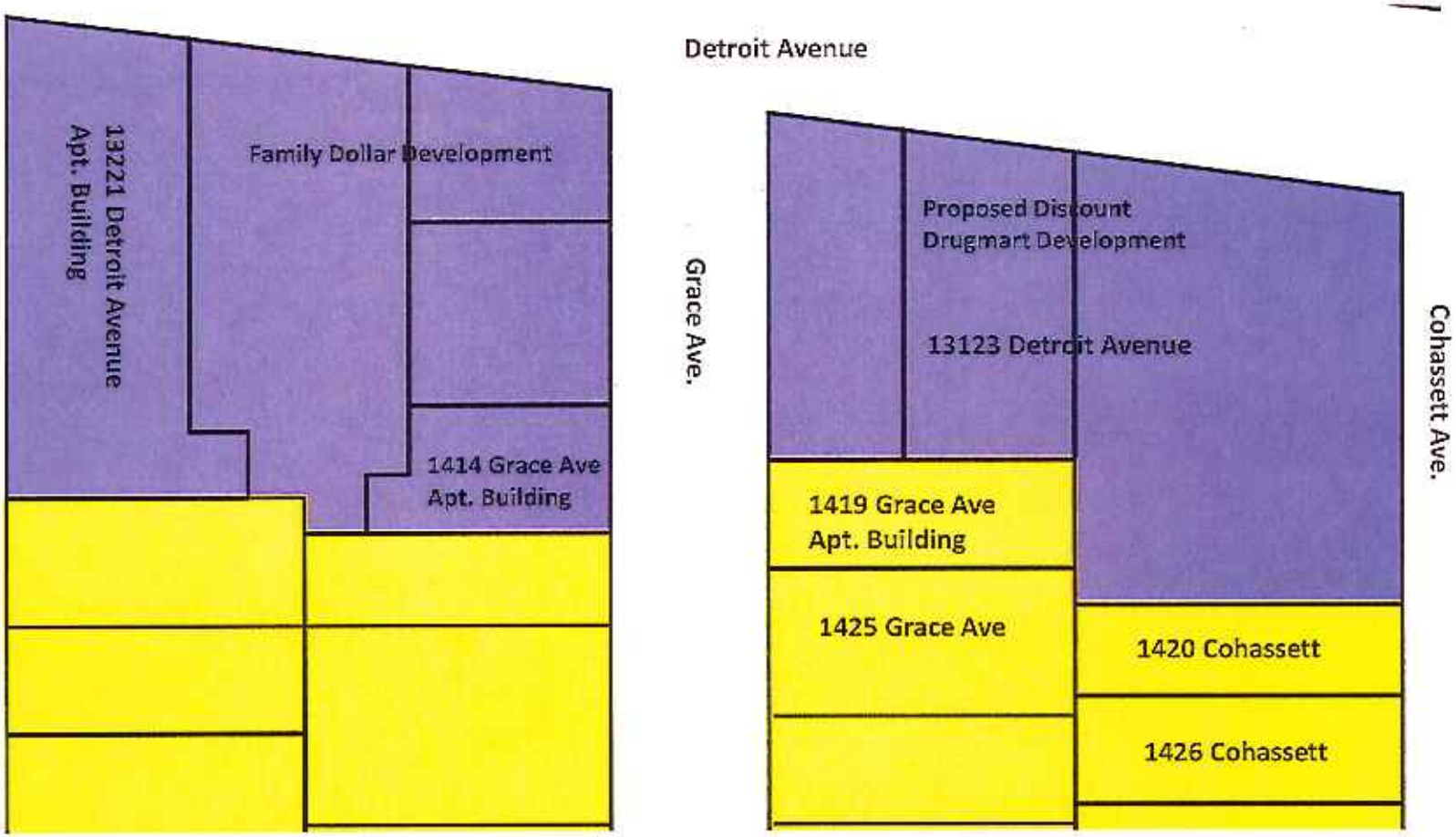
1938 Zoning Map

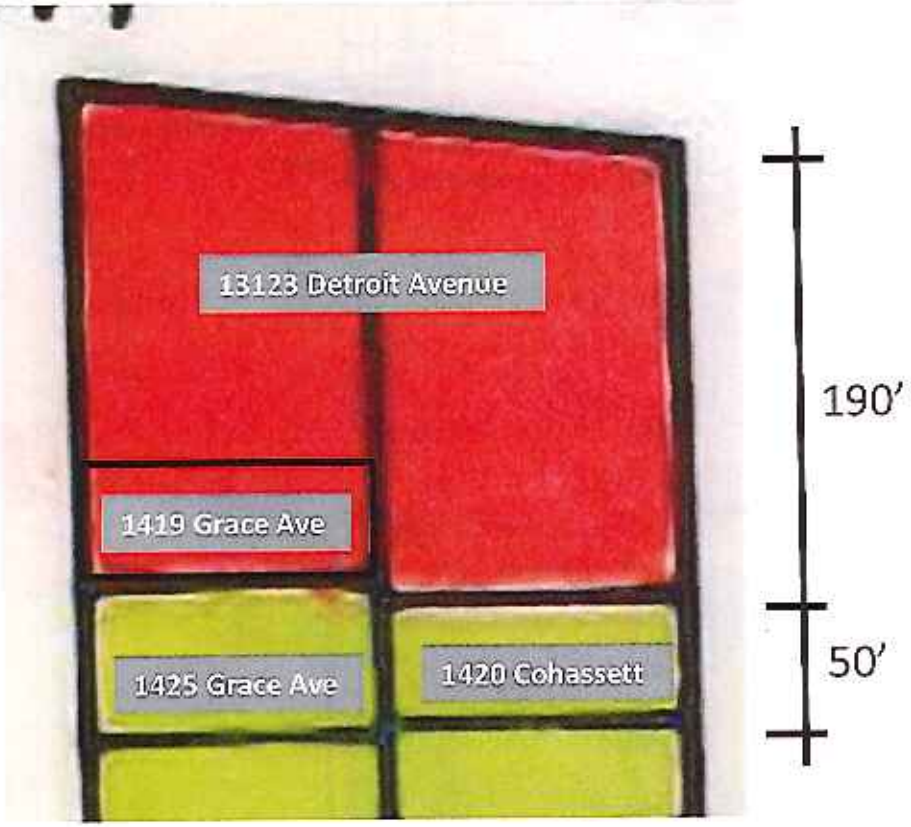


BR Business Residential

R1 Residential

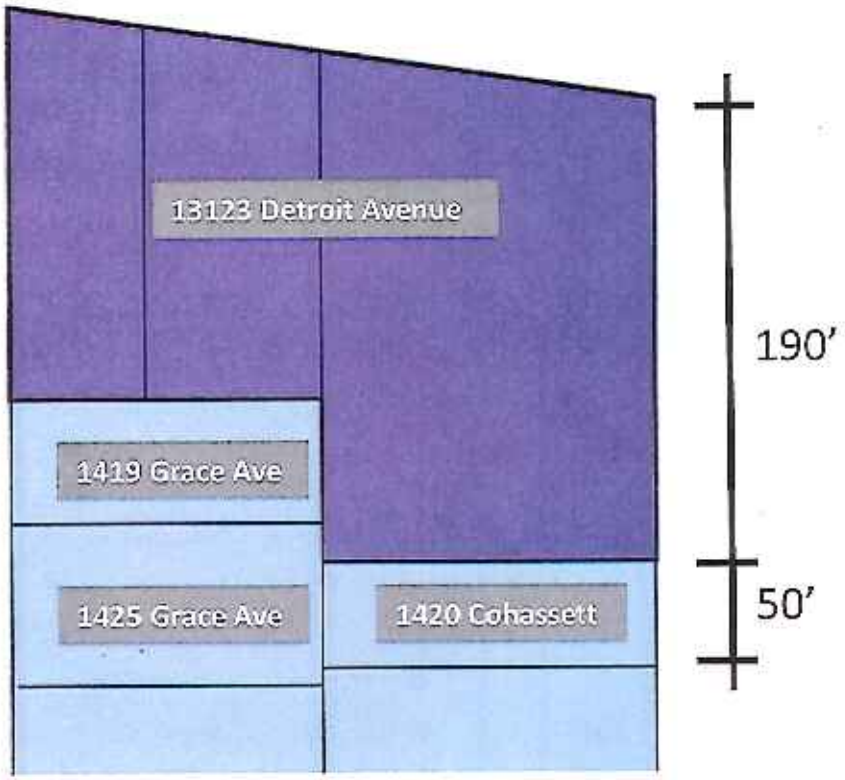
1983 Zoning Map


Detroit Avenue
13221 Detroit Avenue
Apt. Building
Family Dollar Development
1414 Grace Ave
Apt. Building
Grace Ave.
Proposed Discount
Drugmart Development
13123 Detroit Avenue
Cohassett Ave.
1419 Grace Ave
Apt. Building
1425 Grace Ave
1420 Cohassett
1426 Cohassett
C3 Commercial
R1H Residential



1983 Zoning Map

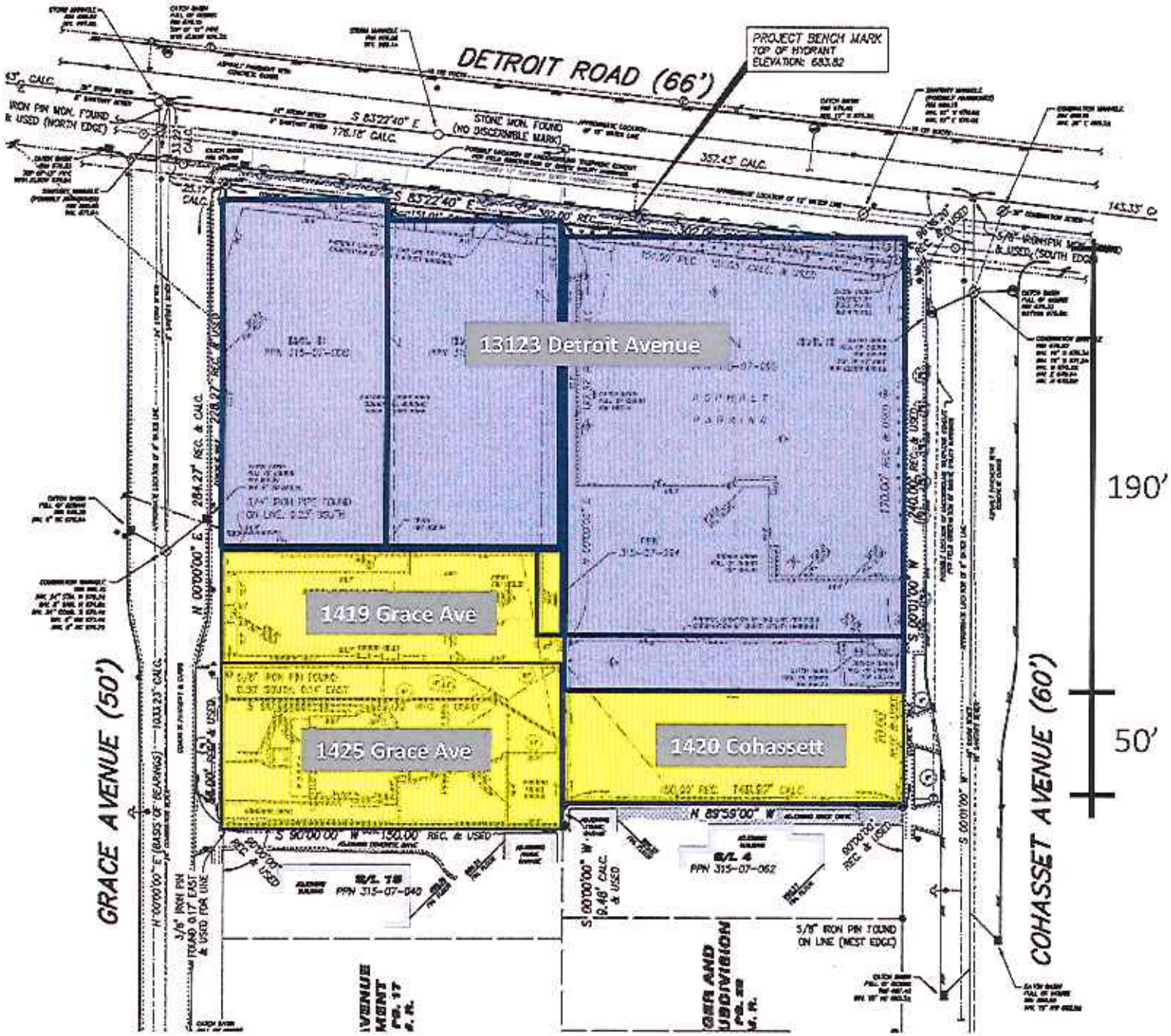
DISTRICTS	CLASSIFICATION		LOT SIZE SQ. FT.
I FAMILY		R1	14,000
I & 2 FAMILY		R2	5,000
MULTIPLE FAMILY		M1	15,000
MULTIPLE FAMILY		M2	10,000
BUSINESS	RESIDENTIAL	BR	5,000
OFFICE		B1	6,000
INDUSTRIAL		X	5,000

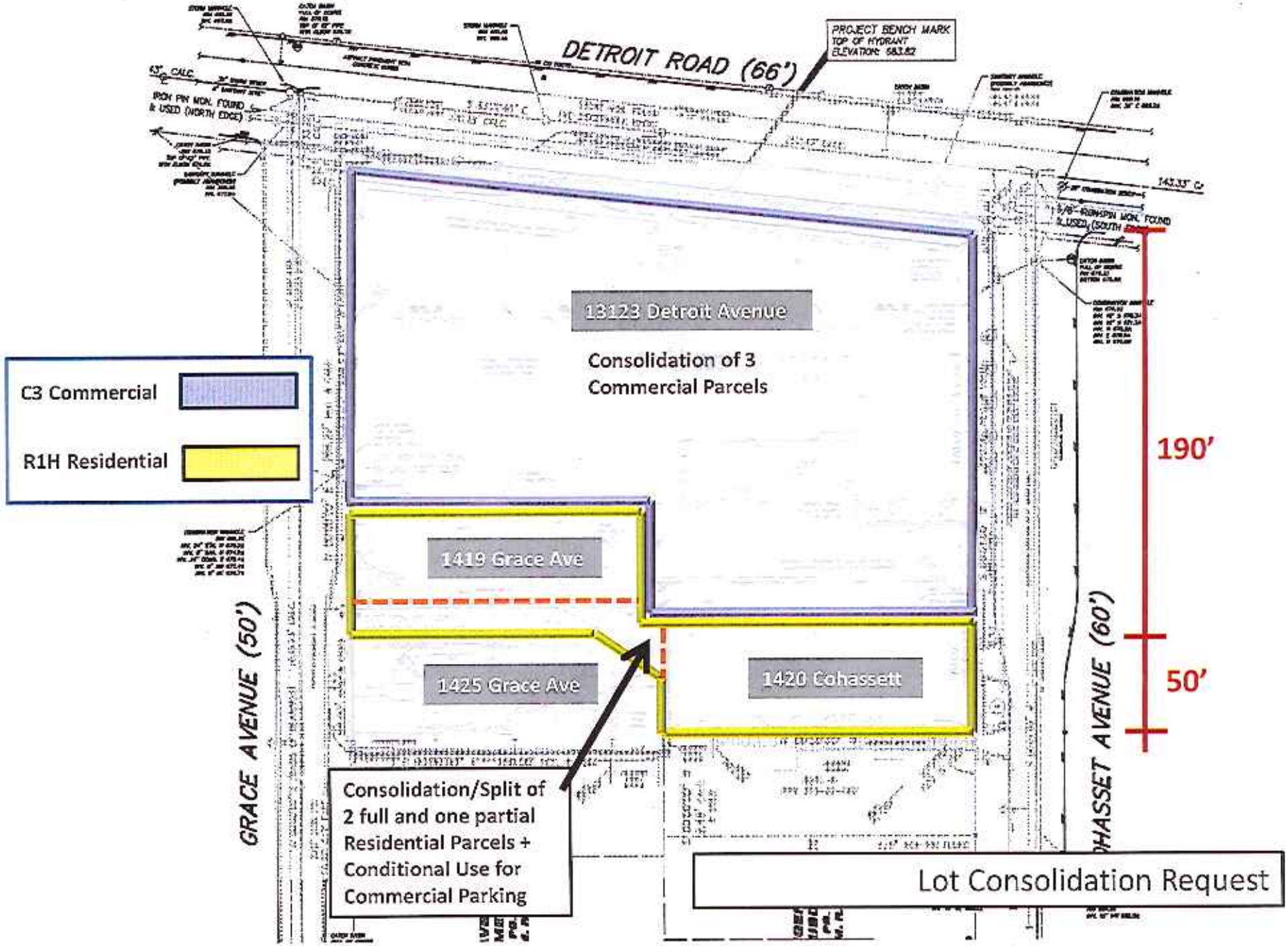


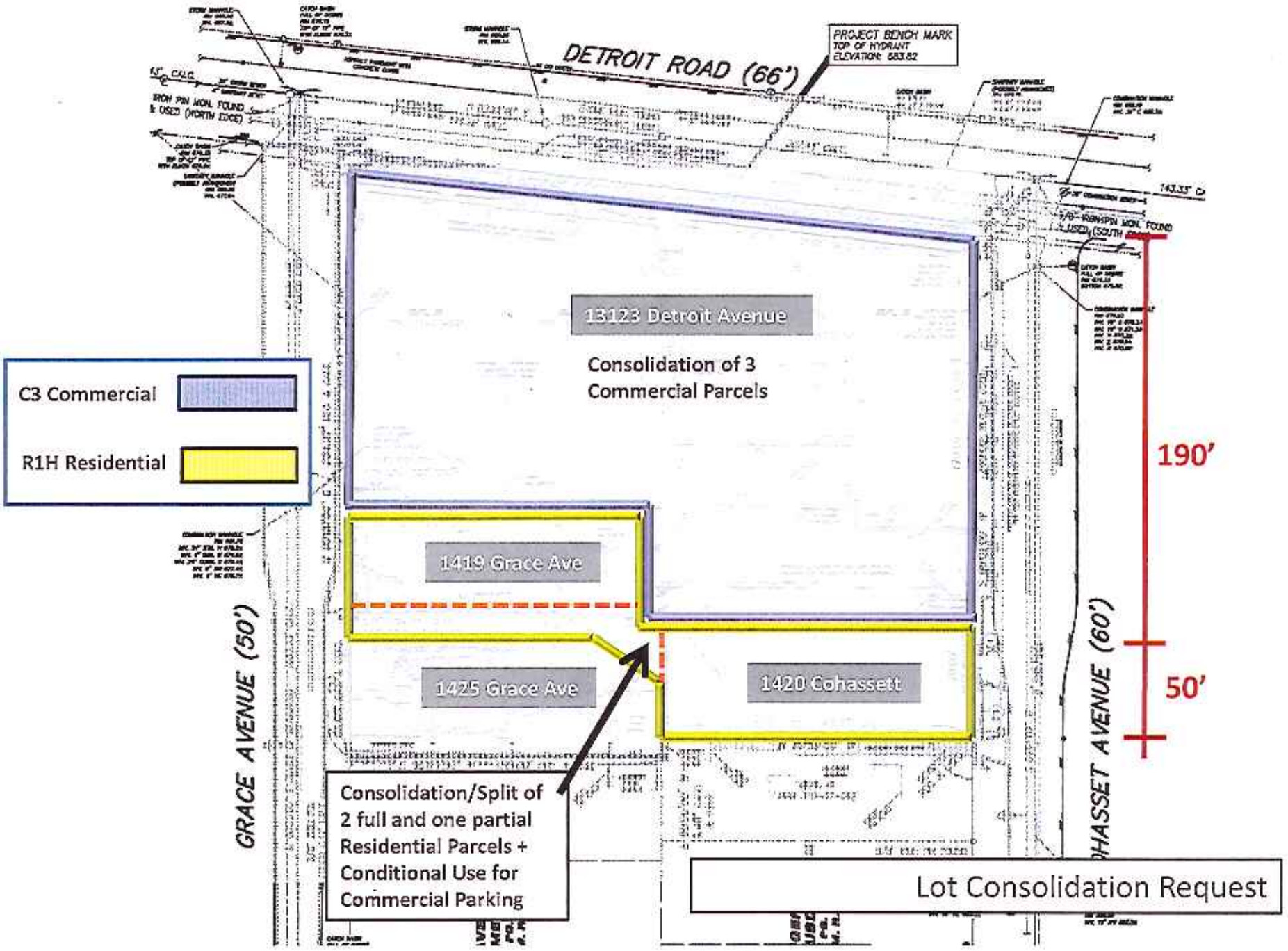
1995 - 2008 Zoning Map
(New Zoning Code Adopted 1995)

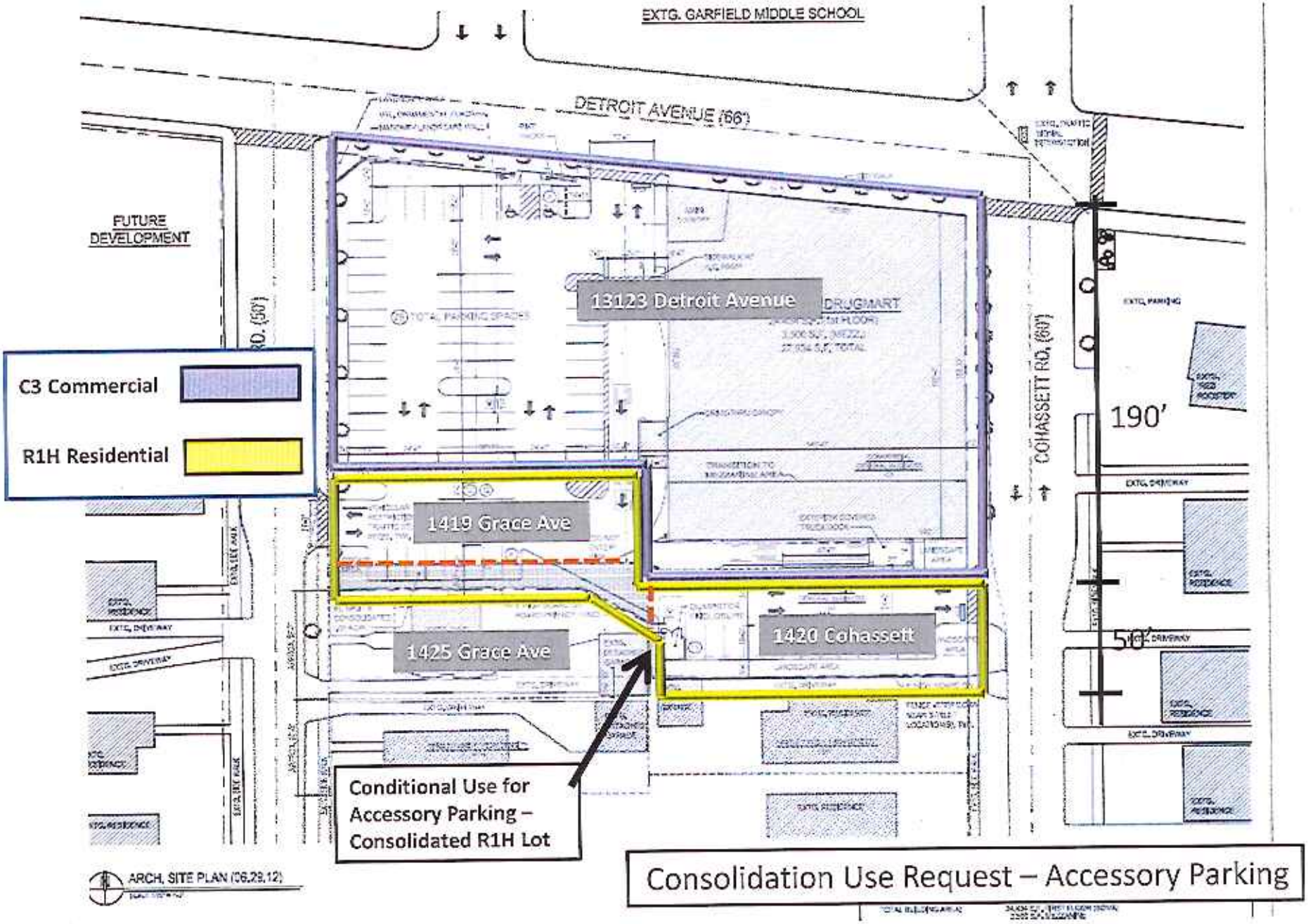
C3 Commercial

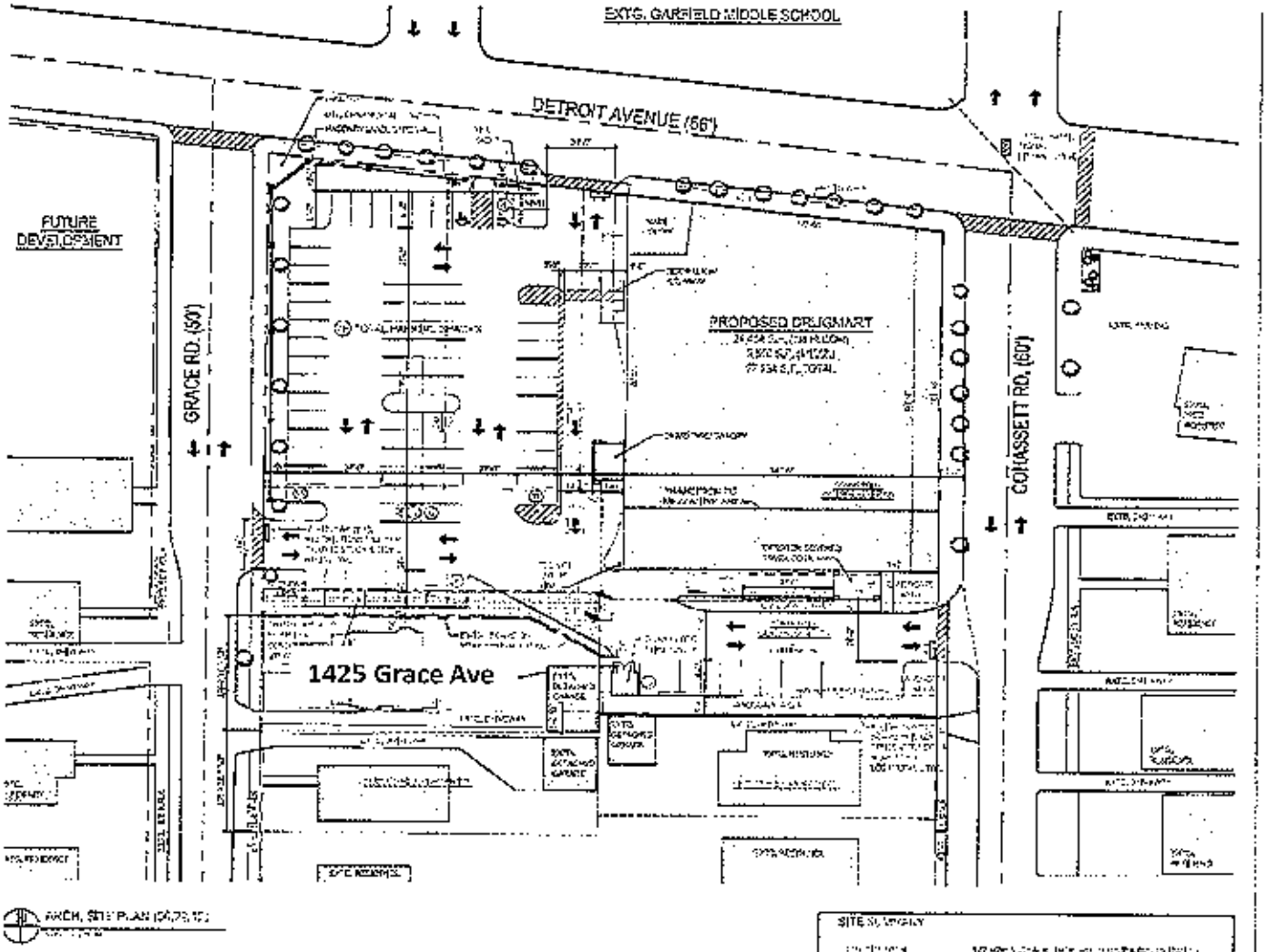
R1H Residential


DETROIT ROAD (66')
PROJECT BENCH MARK
TOP OF HYDRANT
ELEVATION: 683.82
13123 Detroit Avenue
1419 Grace Ave
1425 Grace Ave
1420 Cohassett
GRACE AVENUE (50')
COHASSET AVENUE (60')
190'
50'

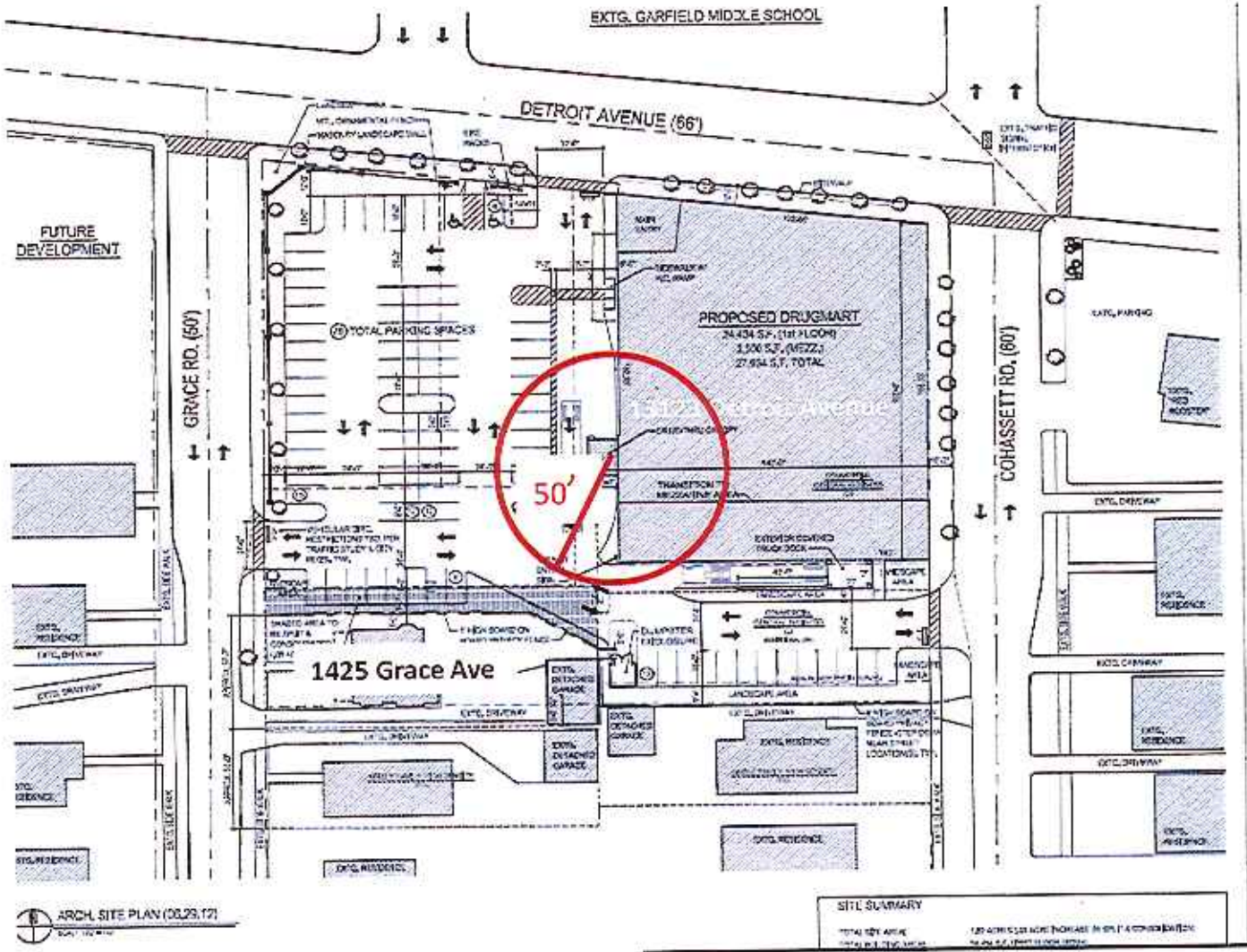

DETROIT ROAD (66')
PROJECT BENCH MARK
TOP OF HYDRANT
ELEVATION: 583.82
13123 Detroit Avenue
Consolidation of 3
Commercial Parcels
C3 Commercial
R1H Residential
1419 Grace Ave
1425 Grace Ave
1420 Cohassett
190'
50'
GRACE AVENUE (50')
COHASSET AVENUE (60')
Consolidation/Split of
2 full and one partial
Residential Parcels +
Conditional Use for
Commercial Parking
Lot Consolidation Request


DETROIT ROAD (66')
PROJECT BENCH MARK
TOP OF HYDRANT
ELEVATION: 683.82
C3 Commercial
R1H Residential
13123 Detroit Avenue
Consolidation of 3
Commercial Parcels
1419 Grace Ave
1425 Grace Ave
1420 Cohassett
190'
50'
GRACE AVENUE (50')
COHASSET AVENUE (60')
Consolidation/Split of
2 full and one partial
Residential Parcels +
Conditional Use for
Commercial Parking
Lot Consolidation Request


EXTG. GARFIELD MIDDLE SCHOOL
DETROIT AVENUE (66')
FUTURE DEVELOPMENT
COHASSETT RD. (60')
13123 Detroit Avenue
DRUGMART
1419 Grace Ave
1425 Grace Ave
1420 Cohassett
190'
50'
C3 Commercial
R1H Residential
Conditional Use for Accessory Parking – Consolidated R1H Lot
ARCH. SITE PLAN (06.29.12)
Consolidation Use Request – Accessory Parking



Conditional Use Request – Drive-thru



Conditional Use Request – Drive-thru

Planning Commission Hearing
July 5th, 2012

Discount Drugmart Redevelopment

13123 Detroit Avenue
Former Ganley Dealership

Item 1: Lot Split & Consolidation

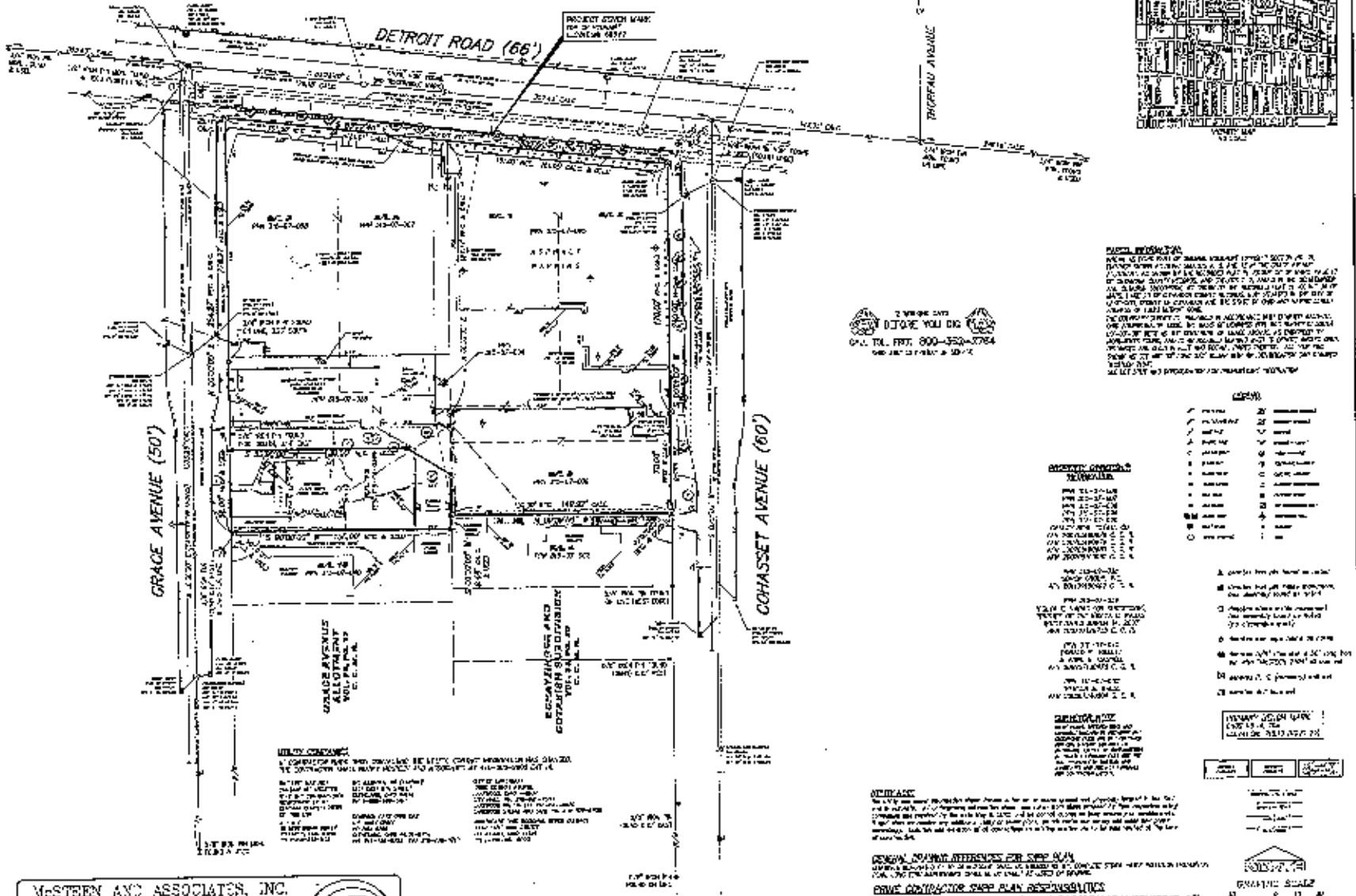
Proposal to Split and Consolidation to create 1 commercial parcel zoned C3
Proposal to Split and Consolidation to create 1 residential parcel zoned R1H

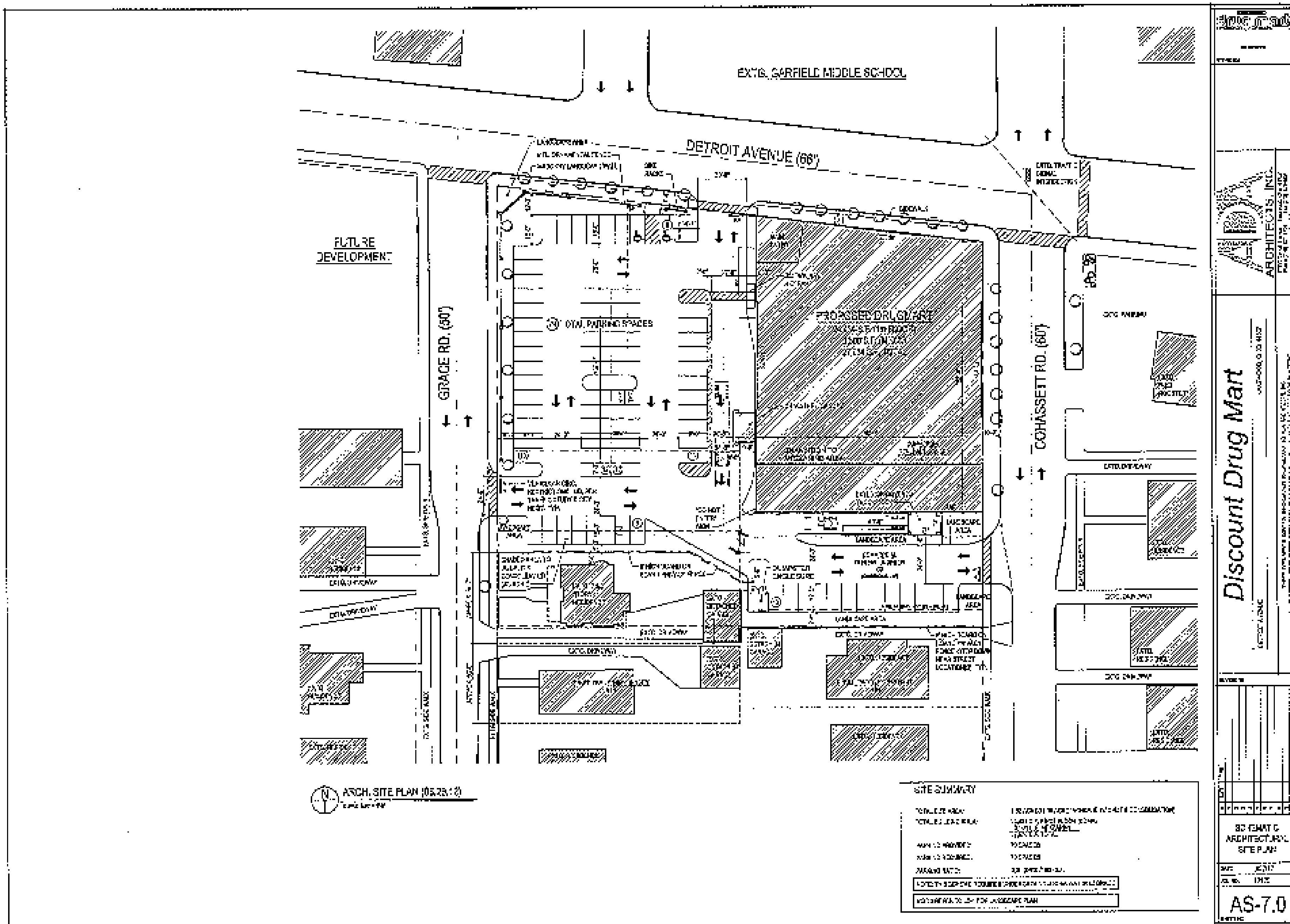
Item 2: Conditional Use for Accessory Parking

Proposal requesting approval of a conditional use of a R1H zoned parcel for parking

Item 3: Conditional Use for a Drive-thru

Proposal requesting approval of a drive-thru pharmacy


DETROIT ROAD (66')
GRACE AVENUE (50')
COHASSET AVENUE (60')
TROPICAL AVENUE
PROPOSED
DISCOUNT DRUGMART
LAKEWOOD, OHIO
EXISTING CONDITION SURVEY
ARCHITECTS, INC.
McSTEEN AND ASSOCIATES, INC.
ENGINEERS & SURVEYORS
C-1


EXTG. GARFIELD MIDDLE SCHOOL
DETROIT AVENUE (66')
FUTURE DEVELOPMENT
GRACE RD. (50')
COHASSETT RD. (60')
PROPOSED DRUG MART
TOTAL PARKING SPACES
ARCH. SITE PLAN (05.25.12)
SITE SUMMARY
ARCHITECTS, INC.
Discount Drug Mart
SCHEMATIC ARCHITECTURAL SITE PLAN
AS-7.0

Residents of Cohassett and Grace Avenue Residents
Issues of Concern and Ideas for Improvement
6/26/12

1. **Store should be Smaller**
   As currently designed, this store is too big for this neighborhood. The oversized design results in 83 parking spots, traffic increase, and proposed taking of residential lots for a commercial purpose.

2. **Limit the number of parking spots**
   Even for the current size, the city code requires only 70 spots. The design has 83.

3. **Keep to the commercial space**
   As currently designed, this store is too big for this site. Moving into the residential lots encroaches into the residential neighborhood, significantly and detrimentally.

4. **The 13 – 20 feet that is part of 1425 Grace should stay part of that yard**
   The portion of 1425 Grace the develop proposes taking adds a few parking spaces for the store, but seriously impacts that house and any future owners of that house. Having parking on that lot also brings the commercial space even closer to the houses – increasing the encroachment.

5. **Apartment building should stay**
   The Grace Apartments building is a viable, historic building. Until Drug Mart bought it, it was occupied by good neighbors. The structure provides a transition for Grace residents between commercial and the single family homes. The 2 buildings on either side of Grace create entrance to the neighborhood and buffering from the Detroit corridor. It should stay.

6. **Add more green space and improve the landscaping**
   As the store is currently designed, the neighborhood is faced with either brick walls or parking lot. Add more green space, especially on the Cohassett side (assuming the Grace apartment building stays).

7. **Limit truck traffic to Detroit**
   Any truck traffic onto Grace or Cohassett is an inappropriate encroachment onto these residential streets.

8. **Flip the loading dock**
   If the trucks enter the loading dock from the West side of the building, then trucks can enter from Detroit, turn around in the lot, back into the loading dock, and then exit onto Detroit. This would also provide more of a barrier between Cohassett residents and pedestrians, and trucks.

9. **Limit store hours and delivery hours**
   Store hours should be limited to 9 am – 10 pm. Delivery and trash removal hours should be limited to 9 am to 2 pm to ensure children are not coming to or going from school when deliveries are made.

10. Move the dumpster and loading dock further from the houses

The dumpster and loading dock are located very close to houses on Cohassett and Grace. They should be moved further away so that the noise and smell that will emanate from them will not impact the residents as much.

11. Increase set-back on Cohassett

The current design has the building wall up against the sidewalk. Cohassett has no tree lawn on that section of the road. Setting the building back from the sidewalk will increase green space and improve safety for pedestrians and cars.

12. Move the Drive-thru to Cohasset side, facing north

By moving the drive-thru, traffic will flow more easily, there will be more space on the Cohassett side, and the cars will face north so their lights will not shine into yards.

13. Rotate the building 90 degrees

Rotating the building (but keeping its current shape) will help to address many of these concerns (although the structure remains over-sized for the site).

14. Design the building to fit with this neighborhood

This store is part of an historic neighborhood, across from a recently rebuilt school with historic architecture. This should not look like a store in a suburban shopping mall. It should be designed to fit in the neighborhood, picking up architectural elements from the surrounding structures.

15. Engage the neighborhood as you develop details along the way

Many decisions are left to be made as the store design is finalized and as operations begin. The neighborhood can be helpful in this process. We ask to be engaged in it. For example, we welcome the opportunity to help you on the following issues: placement and number of trash cans outside the store; the signage and corner decorative elements of the corner on Grace; the specific plants chosen; the type and appearance of the fencing; and the plans to ensure that school children are kept safe.

2010 ADA Standards for Accessible Design

Department of Justice

September 15, 2010

Sec. 3.65.

208 Parking Spaces

208.1 General. Where parking *spaces* are provided, parking *spaces* shall be provided in accordance with 208.

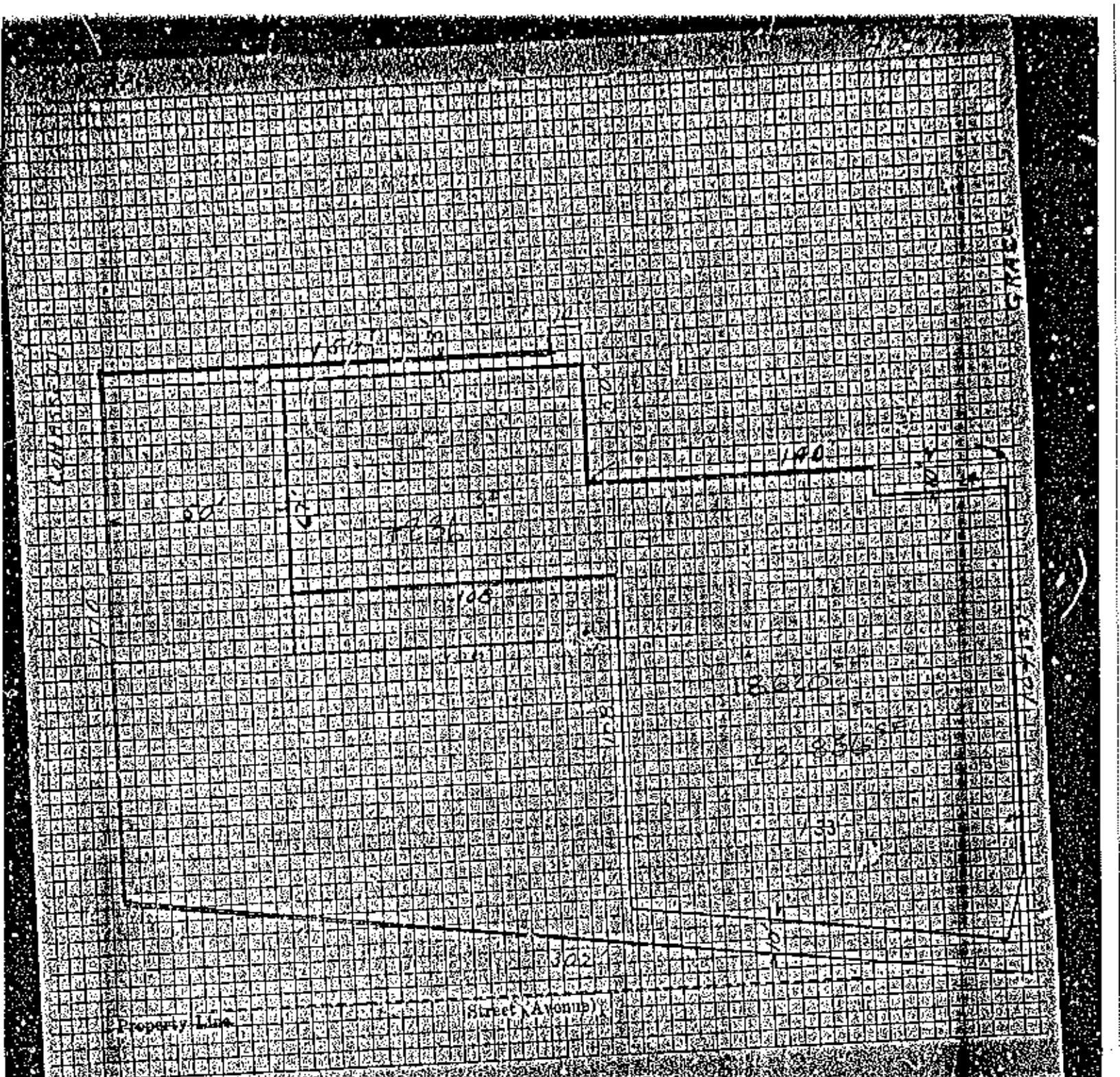
EXCEPTION: Parking *spaces* used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles, or vehicular impound shall not be required to comply with 208 provided that lots accessed by the public are provided with a passenger loading zone complying with 503.

208.2 Minimum Number. Parking *spaces* complying with 502 shall be provided in accordance with Table 208.2 except as required by 208.2.1, 208.2.2, and 208.2.3. Where more than one parking *facility* is provided on a *site*, the number of *accessible spaces* provided on the *site* shall be calculated according to the number of *spaces* required for each parking *facility*.

Table 208.2 Parking Spaces

Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

Advisory 208.2 Minimum Number. The term "parking facility" is used Section 208.2 instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply with this section. The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.



SUBDIVISION OF PARCEL

	Date Filed	File No.	Hearing Date	ACTION TAKEN & COMMENTS
Council				
Plang. Comm.				
Bd. of Z. A.				
Dept.				

THE CITY OF LAKEWOOD, OHIO

DIVISION OF BUILDING INSPECTION

OF THE
DEPARTMENT OF PUBLIC SAFETY
(USE INK)

Fee $ 5 — Date of Application July 1-1965 No. 1709

APPLICATION FOR PERMIT—NEW STRUCTURE—ADDITIONS AND/OR REPAIRS

To the Commissioner of Buildings:—

Application is hereby made for a permit to perform building operations in accordance with the requirements of the provisions of the Statutes of the State of Ohio and the ordinances of the City of Lakewood. The plans and/or specifications are to be considered a part of this application as if hereto attached.

DATA REQUIRED ALL STRUCTURES

Street and No. 13723 Detroit Sublot Size
Present use of site Used Auto Sales Bldgs. 1 Intended use Same
Ground dimensions Alterations Oil Storage Tks. Height Undg Stories
Has permit been issued for this site within last six months? Yes
If so, for what? Addn to Garage [illegible] and type of structure? Masonry
Materials for construction (this structure) Steel Grade
Roofing Exist Heating System Exist
Is sewer installed and connection in street? Yes Public Yes Private
Size of water connection Exist
Give intended occupancy of all stories— Undg Oil Storage Tks

Will any part of structure encroach on public property? No
Distances set back Exist
If so, how much? Sides Exist Rear Exist
Shortest distance from building same lot Undg Address
Architect Address 4219 W 150 St
Builder Fleming Petroleum Maint Address 13723 Detroit
Owner Pelenes Auto Sales Address
Estimated Cost $900

REMARKS
Replace existing oil storage tanks
with 2-2K Units

Signed A. D. Pelimis Owner

Notice—The granting of this Permit carries with it no authority to change conditions or deed restrictions or records. Be sure to read your abstract and deed before starting building operations.

NOTE—Permit includes only such work as detailed herein and on Plan and/or Specifications.

By Charles A. [illegible]

Date Issued July 1-1965

[illegible signature]
Building Commissioner

DRAW SITUATION PLAN REVERSE SIDE

CITY OF LAKEWOOD

Division of Building Inspection
Department of Public Safety

INSPECTION REQUEST AND/OR REPORT

DATE 10-20-99

13123 Detroit
(Address to be inspected)

(Owner)

(Owner's address)

TYPE OF INSPECTION: Oil Storage tank in Bldg.
See Fire Inspector Birkby

(Complainant and/or Contractor's Name)

(Address) (Telephone number)

INSPECTION REQUEST TAKEN BY:

TIME:

ASSIGNED TO: INSPECTOR Fitzgerald DATE: 10-20-99 BY:

WAS A VIOLATION NOTICE SENT? ___ YES ___ NO DATE SENT: BY:

FINDINGS: 10-20-99 - From all appearances the 2 (two) underground Storage Tanks are under structural members of the Bldg.

Revised 8-26-94

November 2, 1999

Mr. Jim Birkley
Fire Inspector
City of Lakewood Fire Department
14601 Madison Avenue
Lakewood, Ohio 44107-4303

RE: Proposed UST Closure and Sampling Activities
Ganley Subaru
13123 Detroit Avenue, Lakewood, Ohio

Dear Mr. Birkley:

Per your request of October 28, 1999, Partners Environmental Consulting, Inc., (Partners) is submitting this correspondence to document proposed underground storage tank (UST) closure and sampling activities at the above referenced site in Lakewood, Ohio (subject site). UST closure activities will be conducted on two 1,500-gallon USTs containing waste oil located beneath the concrete floor of the Ganley Subaru parts department in accordance with Bureau of Underground Storage Tank Regulations (BUSTR). Partners is proposing that the two USTs be permanently abandoned in-place due to the tanks being located inside the building. The location of the tanks beneath the automobile dealership building is depicted on **Figure 2** (attached).

On October 20, 1999, Partners conducted a site walkover with you and Mr. Ed Fitzgerald (City of Lakewood Building Department) to observe and discuss various options for conducting UST closure activities. The City of Lakewood Fire Department (Fire Department) has delegated authority from BUSTR for all USTs located within the city limits. Observations made during the site walkover indicated that removing the two USTs is not feasible due to the location and the engineering requirements that would be necessary to excavate and remove the tanks. The two USTs are located directly beneath support columns and metal shelves that structurally support a second story mezzanine that contains additional shelves for parts storage. Mr. Fitzgerald indicated that attempting to access the two tanks through the concrete floor would seriously endanger the structural integrity of the building. An enlarged portion of the automobile dealership building showing the location of the two tanks is depicted on **Figure 3**.

On October 20, 1999, Mr. Charles E. Barrett (Acting Building Commissioner) indicated that accessing the two tanks through the floor may result in compromising the structural integrity of the building. Mr. Barrett stated that he would permit abandoning the two tanks in-place as proposed.

UST CLOSURE ACTIVITIES

UST closure activities will be conducted in accordance with BUSTR Rule 1301:7-9-12(H) of the Ohio Administrative Code, effective March 31, 1999. According to Rule 1301:7-9-12(H), USTs can be permanently abandoned in-place.

33140 Aurora Road • Suite 16 • Solon, Ohio 44139 • (440) 248-6005 • Fax (440) 248-6374

Prior to implementing tank closure activities, an underground storage tank permit will be obtained from the Fire Department. Partners will coordinate all tank closure activities with the Fire Department. Permanently abandoning the two tanks in-place will consist of:

1. removing as much product (waste oil) from the two tanks as possible,
2. washing the two tanks with a bio-degradable, non-hazardous degreaser and water (estimated volume of up to 3,000-gallons) to decontaminate the two tanks,
3. removing the wash fluids (and remaining waste oil) from the two tanks by utilizing a vacuum tanker,
4. transporting the wash water to an approved facility for disposal, and
5. completely filling both tanks with a low strength slurry (LSM 50 type 2).

SOIL SAMPLING ACTIVITIES

Soil sampling activities in accordance with BUSTR Rule 1301:7-9-12 (under the two tanks) is not feasible due to the location of the USTs (beneath the concrete floor) and the possibility of structural damage to the building if the integrity of the concrete floor is compromised. In accordance with BUSTR Rule 1301:7-9-12(K)(f), alternative sampling protocols during tank closure activities are permitted.

In lieu of drilling through the concrete floor of the building to collect soil samples, Partners will collect soil samples for UST closure purposes from three soil boreholes installed outside the building footprint and from one borehole installed near the UST fill port. Proposed soil borehole locations are depicted on **Figure 3**. The proposed borehole locations are based on an inferred groundwater flow direction to the north-northwest.

Soil boreholes installed outside the building footprint (SB-2, SB-3 and SB-4) will be installed to approximately 15 feet below ground surface. The one soil borehole (SB-1) adjacent to the fill port will be installed by hand augering to a maximum depth of five feet below ground surface (BGS). Soil samples will be continuously collected with a split-spoon sampler (except for SB-1) and screened in the field for the presence of organic vapors with a photoionization detector (PID). The soil sample with the highest PID reading from each borehole and the sample immediately above the soil/groundwater interface (estimated to be 12 feet BGS) will be submitted to GeoAnalytical Laboratory, Inc. (GeoAnalytical) for Methyl Tert Butyl Ether (MTBE), benzene, toluene, ethylbenzene and total xylenes (BTEX) and volatile organic compound (VOC) analysis by EPA Method 8260, and Polynuclear Aromatic Hydrocarbon (PAH) analysis by EPA Method 8270.

To evaluate whether shallow groundwater (previously identified at the site) has been adversely impacted by petroleum hydrocarbons, Partners will convert the three soil boreholes (SB-2, SB-3 and SB-4) installed by the low-clearance drilling equipment into groundwater monitoring wells.

Monitoring wells will be constructed of two-inch diameter polyvinyl chloride (PVC) screen and riser. The screen length will be up to 10 feet long and positioned across the soil/water interface. Monitoring wells will be completed at the surface with a flush-mounted steel protective casing set in a concrete pad. Groundwater samples will be collected from the three groundwater monitoring wells and submitted to GeoAnalytical laboratory for VOC (including MTBE and BTEX) analysis by EPA Method 8260, and PAH analysis by EPA Method 8270.

To determine groundwater flow direction, the groundwater monitoring wells will be surveyed and the top of the PVC wells casing elevations will be tied into a datum point established at the site.

Excess soil cuttings and wastewater (groundwater and decontamination fluids) generated during these activities will be drummed and temporarily staged on-site pending waste characterization activities. Partners will coordinate disposal of the materials at an approved facility.

Upon completion of the tank closure and soil sampling activities, Partners will prepare and submit a report to the Fire Department and to BUSTR (as required) approximately four to six weeks after completing field activities. The report will include a description of field activities and the results obtained. Partners can also provide the Building Department a copy of the report, if requested.

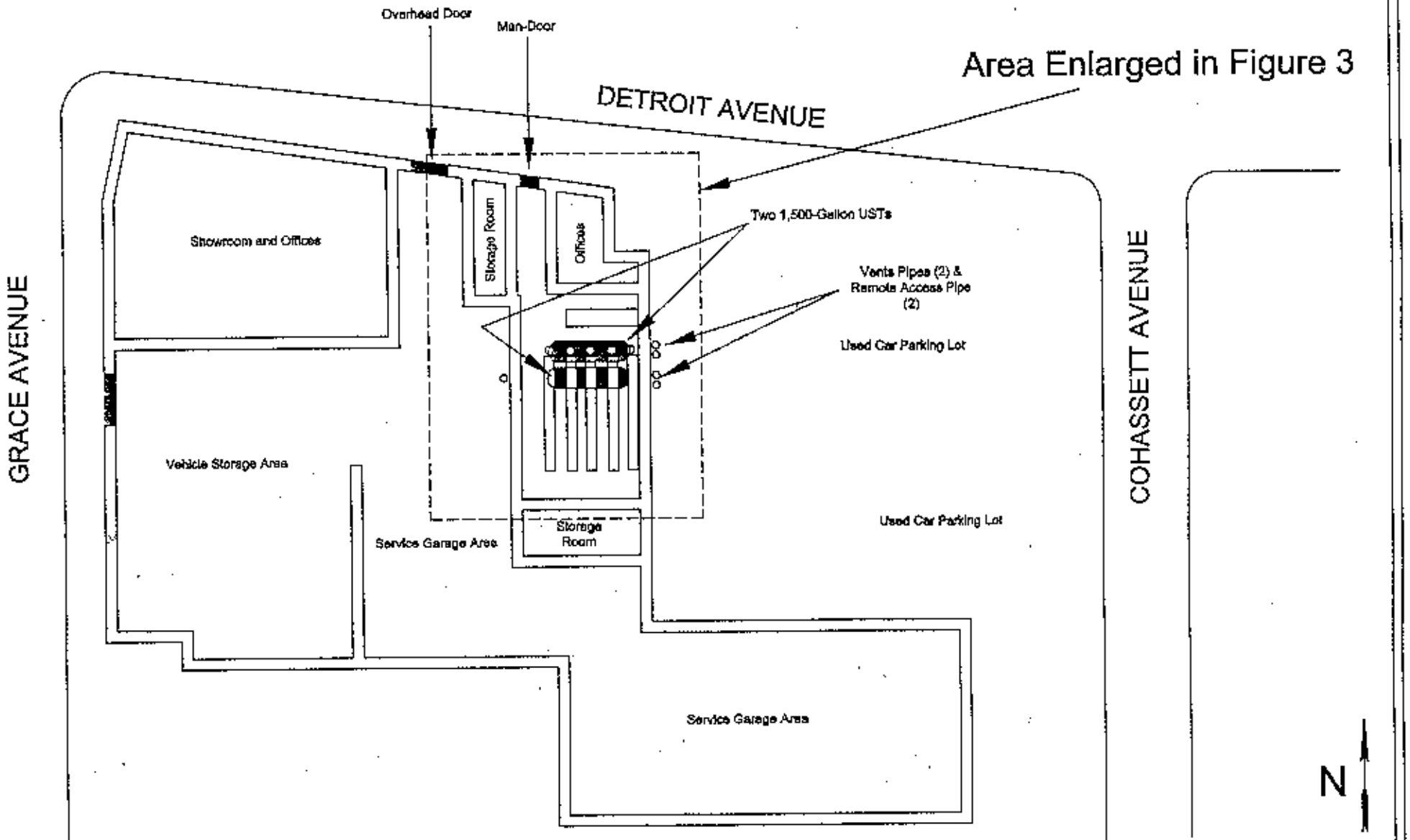
Please call our office at (440) 248-6005 if you have any questions or need additional information.

Sincerely
Partners Environmental Consulting, Inc.

John B. Chapman, CPG
Senior Project Manager

Dan B. Brown, CPG
President

Cc: Mr. Ed Meyers, Arter & Hadden
Mr. David Robinson, Ganley Management Co.
File (136.02)

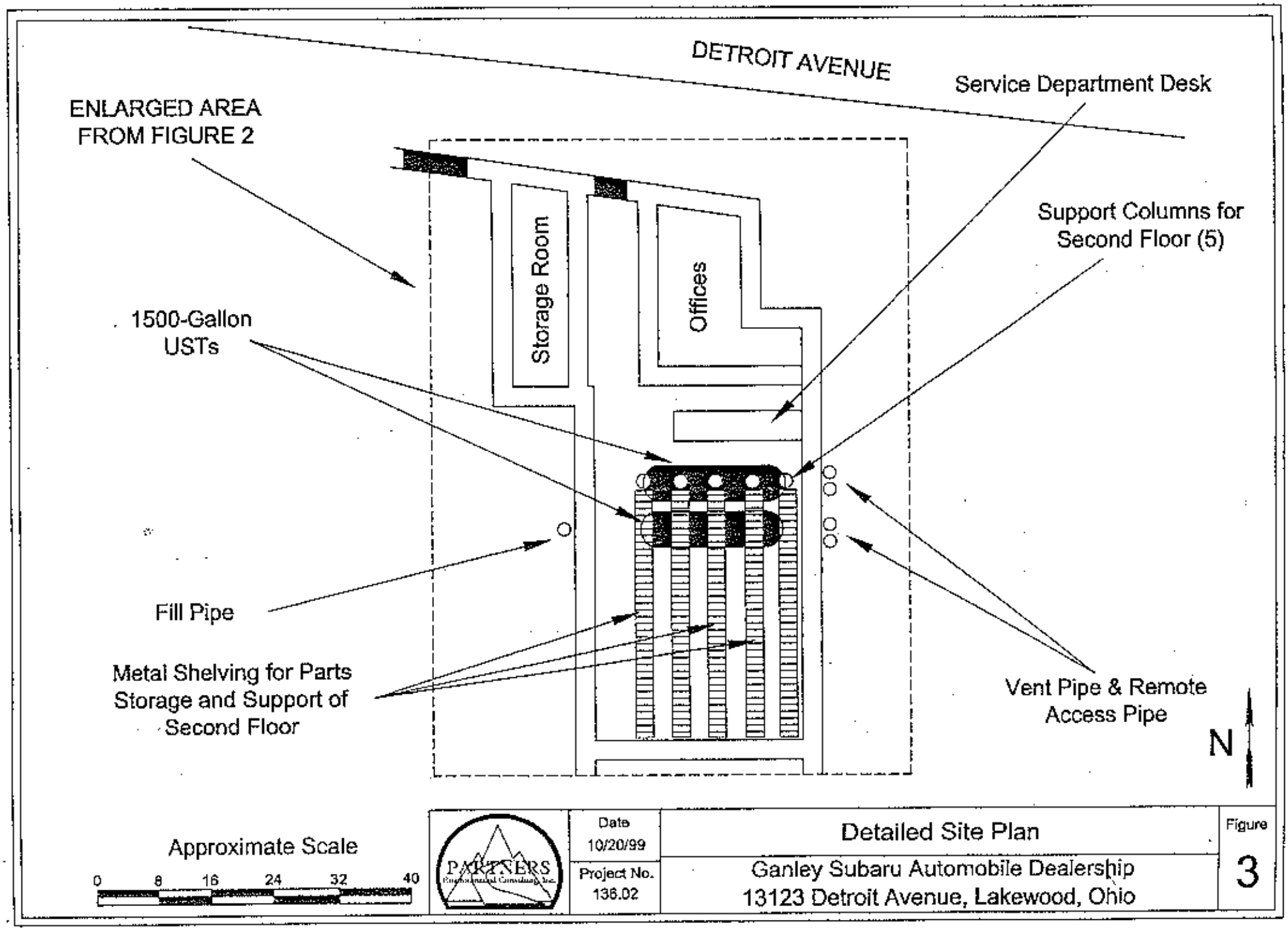


Approximate Scale

0 20 40 60 80 100

PARTNERS

Date 10/20/99	Site Plan	Figure 2
Project No. 136.02	Ganley Subaru Automobile Dealership 13123 Detroit Avenue, Lakewood, Ohio	


DETROIT AVENUE
Service Department Desk
ENLARGED AREA FROM FIGURE 2
Storage Room
Offices
Support Columns for Second Floor (5)
1500-Gallon USTs
Fill Pipe
Metal Shelving for Parts Storage and Support of Second Floor
Vent Pipe & Remote Access Pipe
N
Approximate Scale
0 8 16 24 32 40
PARTNERS
Date 10/20/99
Project No. 136.02
Detailed Site Plan
Ganley Subaru Automobile Dealership
13123 Detroit Avenue, Lakewood, Ohio
Figure 3

DO NOT FORWARD TO NEXT DEPARTMENT -- RETURN TO BUILDING DEPARTMENT

PLEASE RETURN WITH COMMENTS WITHIN FIVE WORKING DAYS

SUBMITTAL DATE: 11-17-99

APPLICANT: HAR-TAL SERVICE INC.

ADDRESS: 13123 DETROIT AVE.

PROJECT: NEW 500 GALLON OIL TANK

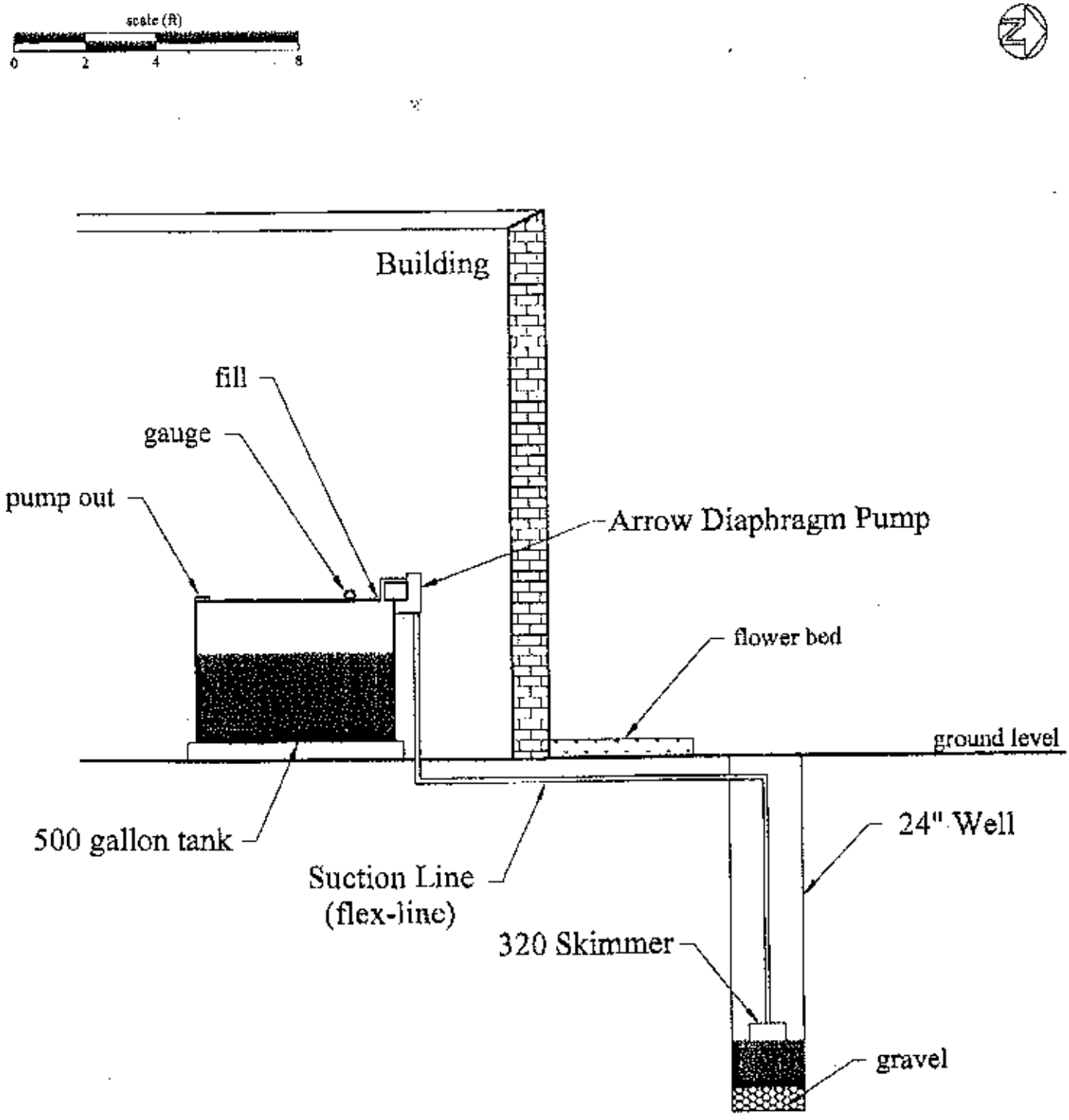
ATTACHMENTS: LOCATION & TANK SPEC.

DATE OF PLANS:

BUDGET

DEPARTMENT	COMMENTS	REVIEWED BY (INITIALS)	DENIAL/ APPROVAL DATE
POLICE ROUTED: _____ RETURNED: _____			
FIRE ROUTED: 11-17-99 RETURNED: _____	Tank shall be inspected by Lakewood Fire Department Fire Prevention personnel prior to use. 48 hours notice is required for inspections. DH 11/23/99		11/23/99
WATER ROUTED: _____ RETURNED: _____			
HEALTH ROUTED: _____ RETURNED: _____			
DIRECTOR OF PUBLIC WORKS - ENGR/STREET ROUTED: _____ RETURNED: _____			

(10/96)



key:

= oil

= water

RP Consultants Inc. 8500 Station Street Mentor, OH 44060 (440) 946-5888	**Site Map** Ganley Auto Dealership 13123 Detroit Avenue Lakewood, Ohio 44107	Job No. RP-2185 Drawn by EPE Date 7/27/05

14601 MADISON AVENUE • LAKEWOOD, OHIO 44107-4303 ••• 216/529-6655 • FAX 216/226-9963

LAWRENCE E. MROZ
FIRE CHIEF

DEPARTMENTAL CORRESPONDENCE

Date 1/11/2000

Subject: 13123 Detroit Avenue

From: Jim Birkley

To: Mr. Fitzgerald

Two underground oil storage tanks located inside the building at Ganley Oldsmobile 13123 Detroit Avenue have been slurried in place. On January 7,2000 John Chapman of Partner Environmental contacted the fire department to report that free product had been recovered from the monitoring well. A complete closure report has not been provided at this time.

13123 DETROIT

PARTNERS
ENVIRONMENTAL

DATE: October 17, 2011

TO:	Bob Apanasewicz	FROM:	Lindsey Raab
COMPANY:	Lakewood Building/Housing Dept	COMPANY:	Partners Environmental Consulting, Inc.
TELEPHONE:	(216) 529-6630	TELEPHONE:	(440) 248-6005
FAX:	(216) 529-5930	FAX:	(440) 248-6374

PAGES ATTACHED TO THIS FAX (INCLUDING COVER) 2

MESSAGE:

Mr. Apanasewicz,

Pursuant to the Ohio Open Records Law, we are submitting a request for information regarding an automobile sales and service facility located at 13123 Detroit Avenue and an apartment building located at 1419 Grace Avenue in the City of Lakewood, Ohio (the "Property"). The Property is further defined as Permanent Parcel Numbers 315-07-006 and 315-07-038.

Partners respectfully requests to review any information that the department may have regarding the above-listed properties, specifically, information regarding current/historic occupancy/uses, underground/aboveground storage tank permits, and hazardous chemical storage activity, as shown in building permits, and/or inspection reports.

Please fill out the enclosed Information Request Form and fax back to our office, or contact me with a time to conduct a file review. Do not hesitate to contact me should you need additional information/clarification or have questions. Thank you in advance for your cooperation.

Sincerely,

Lindsey C. Raab
lraab@partnersenv.com
Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, Ohio 44139

DATE: October 17, 2011

TO: Lakewood Building/Housing Department

FROM: Partners Environmental Consulting, Inc.
Lindsey C. Raab
31100 Solon Road, Suite G
Solon, OH 44139
Phone: (440) 248-6005
Fax: (440) 248-6374

SUBJECT: Information Request

Please provido our office with any information that you have on file concerning current/historic occupancy/uses, underground/aboveground storage tank permits, and hazardous chemical storage activity, as shown in building permits, and/or inspection reports on or around the properties listed below. Please check the appropriate box, provide information in the space provided, attach all appropriate documents/records, and fax back to our office. Your help in this matter is greatly appreciated!

Facility	Address
Auto Sales and Service	13123 Detroit Avenue
Apartment Building	1419 Grace Avenue

☐ Our office has no information on file concerning the above referenced properties.

☐ Our office had the following information on file concerning the above referenced properties:

_____

_____

_____

_____

_____

_____

Name and Title:_____

Signature: _____ Date:_____

REQUEST TO REVIEW THE STREET FILE FOR

ADDRESS: 13123 Detroit Ave
1419 Grace Ave.

PLEASE PRINT:

YOUR NAME: Lindsey C. Raab

ADDRESS: 31100 Solon Rd, Ste G Solon, OH 44139
NO./STREET CITY STATE ZIP CODE

PHONE NO.: 440-248-6005

SIGNATURE: Lindsey C. Raab

APPROVED BY:
(BLDG. COMM. ASST. BLDG. COMM. BLDG. INSP.)

ON THIS DATE: 10/19/11

(Revised 7/04)

Proposed Drug Mart Development Project
Lakewood Planning Commission Meeting
June 7, 2012

Submitted by Michael and Kazuyo Ciccarello
1519 Grace Avenue
chicimoto@sbcglobal.net

For Submission into Public Record:

In support of Grace, Cohassett and Clarence Avenue residents, we would like to voice our concerns and strong opposition to *any* project development that would exceed the current commercially zoned footprint between Grace, Cohassett and Clarence Avenues. The proposed acquisition of residential parcels by Drug Mart (Grace Avenue), and rezoning for commercial use (providing additional parking spaces and a water retention barrier) is not warranted and seriously impacts and erodes our residential neighborhood.

Additionally, it is paramount that *any* redevelopment of the existing commercial footprint be completed in a manner that is sensitive to lighting, noise and hours of operation that can impact residential property adjacent to the development site and the residential neighborhood (traffic).

Traffic patterns should emphasize the use of Detroit Ave. and mitigate patron travel on Grace, Cohassett and Clarence Avenues. A traffic study, made available for public review and comment, is strongly recommended to assess the potential impact on adjacent residential streets and existing school year traffic patterns at Garfield Middle School.

Public review and comment should and must be concurrent throughout the planning continuum, not to impede development but to ensure that any proposed development will allow maximum and mutual benefit to all parties (residents, business and City).

Questions that we would like formally answered and entered into the record:

1. Do underground storage tanks (UST) currently exist on the development site?
2. If yes, how many and will the UST be removed?
3. If no, please cite the section of 40 CFR Part 280, U.S. EPA Regulations Pertaining to Underground Storage Tanks, which permits the UST to remain on site.
4. Will any public dollars (Federal, State or Local) be used for any aspect of site development (from the point of property acquisition to project completion including landscaping)?
5. If yes, please identify the source and amount of any public funding received for project development.

In closing, we strongly support continued commercial development in Lakewood that enhances goods and services available to Lakewood residents, successful business ventures that residents will frequent and support, and increased (property and sales tax) revenue for the City of Lakewood. But it is also critically important that the City of Lakewood, through its land use and planning efforts, exercises its due diligence to review and consider any potential negative impact on residential neighborhoods.

Respectfully Submitted for Lakewood City Planning Commission review and response,
Michael and Kazuyo Ciccarello
June 6, 2012

June 5, 2012

To: Planning Commission, City of Lakewood

CC: Mary Louise Madigan

Re: Proposed conditional use zoning for the Ganley property, purchased by Drug Mart – upcoming June 7, 2012 meeting

Dear members of the Planning Commission,

I am unable to attend Thursday night's meeting, so I wanted to write to you to voice my concerns over the proposed conditional use changes surrounding Drug Mart's plan to redevelop the Ganley auto dealership property at the end of Grace Ave. and Cohassett Ave., facing Detroit Rd.

My greatest concern over this conditional use proposal is the encroachment of Drug Mart onto the residential streets, and beyond the scope of the zoned commercial property that they have purchased. As with any commercial development, I am concerned over the impact that the development will have on the neighborhood, and whether or not the business going into that space will be a "good" corporate neighbor. I know many of my neighbors plan to attend this meeting and will be speaking about the many issues that we've discussed on the impact a large commercial operation will have on our respective streets. We are all very concerned over the impact that the increased traffic will bring (and the restricted traffic flows during the school hours that are designed to protect children walking to and from Garfield), the increased light and noise pollution, the placement of a trash dumpster right next to a residential property, inadequate green space, the environmental uncertainty and impact surrounding the cleanup and abatement of a property that has been an auto lot for more than 50 years, and the proposed hours of operations not fitting within the residential setting.

Drug Mart's plan to purchase the apartment building and the house on Grace Avenue, in my opinion, violates the line between commercial and residential use on these streets. I understand that Drug Mart is revising its plan to no longer include the house on Grace Ave, but merely taking 13 feet of that property, beyond the apartment building. That is still encroaching onto the residential portion of the street and creating a lot size that will lead to a structure that is out of scale for the neighborhood. With the house not being part of the development plan for Drug Mart, taking 13 feet of its current property, if I were the homeowner, I would be apoplectic and would not give up 13 feet of my property willingly.

Beyond the encroachment of Drug Mart onto the zoned residential lots it seeks to acquire, I am also concerned that the proposed development is vastly out of scale to the rest of the neighborhood. The original plan called for Drug Mart to have 120 parking spots (which has now been scaled back to 90 or some such) – this is still entirely too large for the scale of the neighborhood. If you go to any existing Drug Mart in Lakewood, Cleveland or surrounding areas now and have trouble finding a place to park, I would be surprised.

I would like to urge the Planning Commission to:

- Deny the conditional use permit and keep the Drug Mart development to the existing zoned commercial lot that they have purchased.
- Enforce the lines between residential and commercial use of a property.
- Make this decision **CAREFULLY and DELIBERATELY**, including the residents of this neighborhood in this process, as we have a vested interest in how this development impacts our homes, our property values and the quality of life that we seek in Lakewood.

I don't think any of my neighbors are opposed to development on that site – no one wants to see a crumbling, abandoned property that would attract critters and other problems. However, I think it is the responsibility of the planning commission to ensure that whatever is developed on that site 1) fits the scope and scale of the neighborhood; 2) does not detract from the residential component of these two historic streets; 3) does not grant carte blanche to Drug Mart to raze residential properties in favor of parking lots and a structure and operation that does not fit within the residential setting in which it will reside.

As with many of my neighbors, we purchased our properties on these two gorgeous streets of Lakewood. We love living here and we love what Lakewood has to offer to its many diverse residents. We want a voice in how the property that impacts each of our streets is developed, as we will have to bear the brunt of the impact of that property. I understand this is just the first step, but when you are looking at expanding out an existing commercial lot (which, by the way, hasn't really been done with other similar developments in Lakewood in recent years), I think the Planning Commission needs to pause, and very carefully consider the precedent they set.

Please include us in this conversation. We all want to see the property developed responsibly, but not at the expense of residential lots already existing on those streets. There was a commercial property for sale at the end of Grace Ave. and Cohassett Ave. which Ganley has sold to Drug Mart. I am asking that Drug Mart rescale their plans to fit the lot they purchased. Taking residential property for this purpose is unnecessary and once again, I urge the Planning Commission to not allow that to happen. There are many other issues that surround this property that we will want to discuss in the future, but the first step is to hold Drug Mart to the commercial lot that they have purchased, and not allow them to encroach on the residential properties beyond that line.

Respectfully,

Cathy Spicer
1519 Cohassett Ave.
Lakewood, OH

MEMO

To: **City of Lakewood Planning Commission**

From: **Concerned Residents of Cohassett and Grace Avenues**

Date: **June 6, 2012**

RE: **Proposed Plans for Commercial Encroachment on Grace and Cohassett Avenues**

Introduction

Lakewood is a diverse city which benefits from a vibrant residential community closely connected with a vibrant commercial community. In order for Lakewood to continue to be such a desirable place to live and do business, the city must maintain an appropriate balance between residential and commercial. The city must encourage new development while at the same time ensuring that its neighborhoods are not overly compromised. The proposed Drug Mart would convert three (3) residential lots or portions of those lots (one on Cohassett Avenue and two on Grace Avenue) to commercial use. The initial proposal involved demolishing two viable residential properties -- an apartment building and a house built in 1899. The current proposal calls for demolishing the apartment building but not the house.

The development as proposed would not only result in the destruction of viable housing, it would also result in a commercial development that is of a scale that is beyond the neighborhood's capacity to absorb. The size of the development would inappropriately push commercial use and impact down Cohassett and Grace – well beyond the lots involved. These streets are not designed to absorb the traffic, light, and noise that will result from a store of this size.

These requests should be denied, as they are not in Lakewood's best interests. This would allow inappropriate commercial encroachment onto historical residential streets and is

contrary to the stated purposes of the City's Zoning Code which encourages the preservation of residential neighborhoods:

> Lakewood consists of very distinctive neighborhoods that were settled at different times during its development each with its own distinctive housing patterns, which are reflective of the time period during which these neighborhoods were nurtured during the growth of the city. Many of these residential neighborhoods are easily recognizable by their consistency of characteristics. . . . The City encourages conservation, preservation, redevelopment, and revitalization of residential neighborhoods to preserve their unique environments and for the public welfare of the City. ***The City acknowledges as a matter of public policy that the preservation and protection of residential neighborhoods is required for the health, safety and welfare of the people.***

City of Lakewood's Planning and Zoning Code Section 1133.09(a) (emphasis added).

The Grace / Cohassett neighborhood is indeed easily recognizable and special. These streets and their homes, most built around the turn of the 20th Century, are often featured in the city's own promotional materials. Each house is unique, yet they all fit together, creating a neighborhood which should be nurtured, protected and preserved.

It is against Lakewood's best interests to allow commercial development to encroach on residential streets in this manner. Lakewood's unique character must be maintained by adherence to Lakewood's Zoning Code, the intent of which is, in part, to "protect the character and value of residential, business, industrial, institutional, and public uses and to insure the orderly and beneficial development of same." Code Section 1101.04.

The Planning Commission should comply with the vision of Lakewood as described in the Lakewood Community Vision (1993) and the Planning and Zoning Code and protect the integrity of Lakewood's unique residential streets, while at the same time encouraging responsible development.

The group of residents who present this memorandum live on Cohassett and Grace. We are not against commercial development on Detroit. We are not against Drug Mart. We

welcome appropriate commercial development that is appropriate in scale, placement and design. We are against a commercial development that encroaches on our residential streets and will result in a store too large for our neighborhood, whose impacts will bleed well beyond property lines. A store that fits within the currently zoned commercial property would be appropriate for this location.

Procedure: Lack of Appropriate Notice

On May 31 some residents of Cohassett and Grace were informed by Dru Siley, Director of the Department of Planning and Development, that the Discount Drug Mart proposal will no longer include a request to demolish the historic home at 1425 Grace. We are so pleased by this.

However, we have not been given time to fully consider and respond to this new plan. In fact, we have not received a copy of the new design. This memo was drafted using the old design. Some of the concerns we raise in this memo have been resolved by this change, but many have not. We are unable to discern which of our concerns have been addressed, because we have not been provided with any new plan, other than a very rudimentary lot drawing. In order to consider a request for Conditional Use Permit, the Planning Commission must be able to fully understand the conditional use proposed for the lots involved. While details of the development may be resolved by the Architectural Review Board, the Planning Commission needs considerably more information than it has as of today (the day before the meeting) to determine whether the standards required for granting conditional use have been met.

We respectfully request that given the lack of time to study and consider the new request, the Planning Commission not consider the conditional use or lot consolidation at the June 7 meeting. In order to be considered at the June 7 meeting, the Drug Mart developers were to submit their application by May 23. This new application should not be considered an amendment to their earlier application. This is not a slight or even moderate change. It will require an entirely new plan. In fact, it will require a split of the lot at 1425 Grace, which should require an entirely new application.

The residents of Grace and Cohassett would appreciate the opportunity to fully engage in and contribute to process. We therefore respectfully request that the Planning Commission not take any action on the Drug Mart development request until a later meeting at which the neighbors have had advance notice of the proposed plans with an opportunity to examine, consider and respond.

Impact of the Proposed Development

There have recently been six (6) drug stores built or renovated in Lakewood. While a new Drug Mart may be of some benefit to the city, it will not bring any unique or exceptional benefits that outweigh the negative impact this encroachment will have on the neighborhood. In addition, there are other locations which are already commercial which could accommodate this or a similar store. And, the current commercial lot could accommodate a Drug Mart, just not of the size proposed. Therefore, given the balance of the benefit of the store compared to the impact on the city, the developer should not be given permission for conditional use, lot consolidation, or lot split.

The negative impacts of this development as proposed will include:

- **Blurring the line between residential and commercial.**

Lakewood's design is such that commercial and residential are close to each other, and in many circumstances, right next to each other. Currently on Grace there is a very appropriate transition from commercial to residential based on the current zoning. Commercial properties are located on the corner at Detroit. Then, apartment buildings flank each side of the street. Then single-family houses begin, with a few doubles in the mix. Cohassett does not benefit from this transition, but this is an opportunity to correct that. On Cohassett, a commercial property is on the corner, then a zoned residential lot that is currently empty and previously had conditional use granted.

By allowing the developer to take two residential properties on Grace, there is no longer any transition between residential and commercial. The character of Grace Avenue would be

significantly altered. The current situation on Cohassett is an example of the negative impact that conditional use can have on a neighborhood. The lot on Cohassett was granted conditional use for the old Ganley dealership. Rather than creating a buffer between commercial and residential, it has been a lot for old cars. It is an eyesore – not kept clean or maintained, even when Ganley was in full operation. This lot should be returned to its intended use – residential.

If the use of these lots goes to commercial, new homeowners would be left wondering whether the residential street they are considering in Lakewood will change significantly in the near future. The zoning code would lose its impact and certainty, because on any street, residential lots, even two lots in, could be changed to commercial. The consistent pattern of permitting commercial uses only on Detroit and other main thoroughfares and preserving residential uses on most north/south streets would be lost. Permitting a super-sized Drug Mart to alter that pattern of commercial use on the main east/west streets and extending it into a residential neighborhood would have serious long term effects on our neighborhood and set a precedent for further super size developments that are inconsistent with residential uses. The proposed development is simply inappropriate in its size and scope.

- **Increased traffic on residential streets**

The traffic on Grace and Cohassett is already more than many residential streets because of the location of Garfield School. These are not wide streets – Grace is even more narrow than Cohassett. They are not designed to accommodate much traffic.

With the addition of a Family Dollar Store at the southwest corner of Grace and Detroit, the traffic on Grace will already be increasing. The proposed Drug Mart has an entrance/exit onto Grace, close to the Family Dollar exit/entrance onto Grace. The addition of a 28,000 square

foot store with 92 parking spaces will increase traffic on Grace and Cohassett considerably, disrupting the character of the neighborhood.

The traffic problems will be exacerbated if delivery trucks are allowed to enter the lot from Grace or Cohassett. On Grace this will mean that trucks will compete with trucks entering the Family Dollar lot for deliveries there. Trucks may well find themselves idling on Grace or Cohassett while they wait to enter into the lot, creating air quality, noise and safety issues.

Traffic from the Drug Mart should enter and exit off Detroit in order to keep traffic on Grace and Cohassett to a minimum.

To date no traffic study has been conducted. Such a study would need to be conducted (while school was in session) in order to obtain baseline information and to fully appreciate the potential impact the traffic associated with this sized store would have on the neighborhood. In addition, the anticipated increase in traffic due to the Family Dollar Store would need to be considered in making a final determination about the traffic increase in which this proposal would result.

- **Light and Noise Pollution**

The proximity of this development to the houses on Grace and Cohassett will result in noise and light pollution for the residents of these streets. A 92 car parking lot will require considerable lighting, with no apartment building between the lights and the houses. The headlights from the 92 cars anticipated will also negatively impact the houses on Grace and Cohassett. In fact, the entrance/exit on Grace would put car headlights aimed directly at the windows of a house and apartment building on Grace.

The noise from the air conditioning and heating units for the building, the traffic, delivery trucks, and trash removal trucks will also impact these streets. The proposed size of this store increases greatly the noise and light impact on the neighborhood. A smaller store would not generate this level of noise and light pollution.

- **Impact of Drive Thru**

The original drawing of this development included a drive thru in which cars would line up on the west side of the building, facing south. This would mean that the lights from cars in line would shine into the houses on Grace and Cohassett. If there is to be a drive thru it should be designed to have the least possible impact on the neighborhood. Cars should line up facing north, not south, away from any residences. In addition, without a traffic study it is impossible to determine the most appropriate design for the proposed drive thru.

- **Noise and Exhaust from Delivery Trucks**

The proposed Drug Mart will receive regular deliveries from its vendors. This will increase traffic as noted above, and will result in idling of these vehicles. Some deliveries will be of food, shipped in refrigerated trucks, increasing the likelihood of idling trucks in this residential neighborhood. Refrigerated trucks may arrive before the store opens, resulting in idling trucks on Grace or Cohassett – perhaps overnight. Finally, these trucks will emit exhaust, further deteriorating the quality of life in this neighborhood.

- **Commercial Dumpster located next to family residence**

The proposed design places the dumpster right next to a home, with only a 6 foot high fence and a few feet between the dumpster and the home. This will result in noise and exhaust from the waste removal trucks. It will also result in a chronic smell from the garbage that is awaiting pickup. This will greatly impact this house.

- **Environmental Uncertainty**

We have been told that an environmental study has been completed and there are plans for clean-up of environmental issues left from the auto dealer and repair at this site. However, before this development moves forward it will be important for the neighbors to have access to the environmental tests that have been done and to understand the plans for clean-up. The neighbors request copies of those environmental test results and clean-up plans.

In addition, the neighbors request information about how the environmental clean-up itself will be done to limit impact on the neighborhood.

- **Storm Detention Area**

While storm detention areas are a benefit to our environment when they are necessary to catch storm run-off, it is not clear why such an area would be necessary in this plan. Grace and Cohassett slope down from Franklin to Detroit. Storm run-off from the Drug Mart parking lot will run downhill to Detroit, not uphill to the storm detention area. Proposing a storm detention area where it is not needed will limit the landscaping and other barriers that could be placed in this area.

- **Limit Hours to fit a residential street**

The developers propose to encroach onto a residential street by converting three lots from residential use to commercial use. Such a design requires limited hours to limit the impact on the residential street. Hours past 9:00 p.m. or before 8:00 a.m. will exacerbate the problems described above relating to light and noise pollution and traffic.

- **Inadequate Green Space**

The proposed design includes a small amount of green space, which is mostly devoted to the storm detention area. This small area does not create an adequate buffer between the residential houses and the commercial use. There are no trees or tall shrubs along most of the green space, providing little barrier for the light and noise that will result from this development. The proposed fence is only six feet tall, also creating little barrier. The proposed green space does not run the length of the property, from Grace to Cohassett.

- **Impact of lot split on the value of 1425 Grace**

The new proposal calls for the development to use 13 ½ feet of the property at 1425 Grace. Without an actual drawing of the development it is difficult to tell how far into the property that 13 ½ feet penetrate. Such a split of a residential lot for a house built in 1899 will surely have a negative impact on the viability of that house and therefore on its value. That will, in turn, have a negative impact on the value of the other houses in the neighborhood.

- **Fitting in for the long-term**

Whatever is built on this site must be of size, scope, style, and construction quality to fit into this unique neighborhood. Most of the houses on Grace and Cohassett are more than a century old. As city representatives are often quoted as saying: well-built wood houses should last 300 years. Our houses will be here for another 200 years. Whatever decisions are made now must have that longevity in mind, including guarantees of care and maintenance into the future.

A smaller store would not have this great an impact on the neighborhood. A smaller store would not have 92 parking spaces, would not generate the traffic, noise or light that this store would. A smaller store that would not require the conversion of three residential sites into commercial would be a much better fit for the neighborhood and for Lakewood. A smaller store, using less property, would fit this neighborhood for the long-term.

Issues Presented

1. **A Lot Consolidation request is not in Lakewood's best interests and should be denied.**

The developers propose to consolidate several separate lots into one lot for one commercial purpose. Pursuant to the Zoning Code the "Commission may disapprove the plan where it finds that the proposed use is not consistent with the [Lakewood Community] *Vision*. Code Section 1155.06(c)(2). The consolidation of these lots and corresponding Conditional Use Permit would allow commercial use to encroach onto established residential streets. Such proposed consolidation is not consistent with the Lakewood Community Vision, which highlights the need to "protect neighborhood character" of Lakewood. (*Lakewood Community Vision,* Approved 1993, page 18).

The former Ganley site is a large site even before the addition of historically residential lots. Lakewood will be well served with a business that is limited in size to the current commercially-zoned site. Any development of the site should be limited to its current commercial footprint and should not be allowed to encroach further onto Grace Avenue or to regain the lot on Cohassett previously granted conditional use.

As described below, the lot consolidation is not consistent with the goals set out in the Lakewood Zoning Code, which was established to implement the city's vision.

2. **An Application for a Lot Split has not been submitted**

The new plan would require a lot split. The developers have not submitted an application for a lot split. While the application form has one check box for "lot split/consolidation", the explanation on their application references only a lot consolidation, not a lot split. Therefore, a lot split should not be considered at this time, as an application was not timely submitted.

A full analysis of the impact of a lot split cannot be completed with this short notice. However, the impact on the viability and value of the house left at 1425 would clearly be considerable. That concern alone should be enough to delay any decision on a lot split so that the full impact of this proposal can be determined.

3. **Neither the house at 1425 nor any part of its property meets the definition of property that can be used as Accessory Parking, and therefore a Conditional Use Permit should be denied.**

A Conditional Use Permit for the single-family home lot in whole or part should not be granted using the Accessory Parking section because that lot does not meet the requirements set forth in the Code for such use.

In order for the Accessory Parking use to apply, the "lot on which the proposed use is to be located abuts the commercial lot to which it is accessory". In addition, "the parking lot shall be used only for the parking of non-commercial passenger motor vehicles." Code Section 1161.03(a). The proposed lot ***does not abut*** commercial property. Instead, it abuts the apartment building, which is zoned residential. If the accessory parking ordinance is interpreted in this manner, any single-family home on Grace and on Cohassett, or for that matter on any street in Lakewood, could be granted a conditional use as Accessory Parking. The purpose of this specific conditional use is clearly to allow for the possibility that a commercial interest could expand parking into one lot, not more.

Therefore, conditional use cannot be granted for the single family home at 1425 Grace or any portion of its property to be used as Accessory Parking.

4. **The Conditional Use Permit request related to both the apartment building lot and the single-family home do not meet the general standards for conditional use and therefore should be denied.**

The proposed use of the two residential properties on Grace does not meet the general standards for conditional uses, as described in Code Sections 1161.02 and 1173.02.

This plan is not "consistent with the general objectives" of the residential zoned street, "as set forth in this Code and the Vision". Code Section 1161.02(a). As noted above, one very clear goal of both the Code and the Vision is to protect the character of Lakewood's unique residential streets. As described above, this encroachment would fly in the face of this vision of Lakewood.

This plan would also "change the essential character of the general vicinity in which it is located". Code Section 1161.02(c). This plan would indeed change the essential character of Grace. The houses on Grace were mostly built between 1890 and 1930. They are mostly in the Victorian style. The entire street is residential, mostly single-family homes, except for the Ganley site. This proposal would bring a parking lot, traffic, light and noise onto Grace. It would remove the apartment building which is a natural transition from commercial to residential. It would indeed change the essential character of the street.

The proposed plan would also prove to be "injurious to the uses permitted . . . in the immediate vicinity", as described above. Code Section 1161.02(d). In addition, as noted above, this proposed use will increase traffic on Grace and Cohassett, although how much is unknown as no traffic study or projection has been conducted. It seems apparent that "the proposed use will interfere substantially with vehicular and pedestrian traffic on surrounding public rights-of-way". Code Section 1173.02(b)(5). Because no traffic study has been conducted, precisely how great an impact this will have is unfortunately unknown. However, the impact should not be

given the benefit of the doubt, and this factor should weigh against granting conditional use. Certainly, the Planning Commission cannot be assured that "adequate measures have been taken to minimize traffic congestion on public streets", as the Commission is required to find if it is to grant this request. Code Section 1161.02(g).

In addition, the proposed design will have a considerable negative impact on the neighborhood, as described above, and therefore cannot be found to be "designed, constructed, operated and maintained so as to be harmonious with existing and/or intended adjacent uses", a factor the Commission is required to consider. Code Section 1173.02(b)(2).

If conditional use was granted for either property, such use should be limited to only green space or at the most to green space and parking for cars – not dumpsters, space for trucks or for a drive-thru.

Another factor that must be considered is "whether the proposed use will result in the destruction, loss, or damage to a property listed on the federal, state, or local register of historic places". Neither the apartment building nor the single-family home is on these lists. However, the single family home was built in 1899 and is an important part of its historic street.

Finally, among the factors to be considered is "whether the proposed use will have a substantially detrimental impact on the public health, safety, and welfare." Code Section 1173.02(b)(4). As noted in the section of the Code that governs the destruction of buildings:

> The City encourages conservation, preservation, redevelopment, and revitalization of residential neighborhoods to preserve their unique environments and for the public welfare of the City. ***The City acknowledges as a matter of public policy that the preservation and protection of residential neighborhoods is required for the health, safety and welfare of the people.***

Code Section 1133.09(a).

The destruction of these two buildings and the conversion of these lots from residential to commercial would indeed have a detrimental impact on the public health, safety and welfare.

5. Conditional use should not be granted for the lot on Cohassett

The lot proposed for conditional use on Cohassett admittedly has different circumstances. Unlike the two (2) lots on Grace, it is not currently used for a residential purpose. However, it is zoned residential and should be allowed to revert to that status. In order to meet the standards of conditional use, the developer must overcome the issues described above, most of which also relate to the Cohassett property. The only differences are that there is no structure on the lot currently, and its most recent use has been commercial. However, just because conditional use was granted in the past does not mean it should be granted for the future.

In fact, the conditional use granted for the Ganley dealership was not used well. The lot was not well kept and has had a negative impact on the neighborhood. At one point a house probably stood on that lot. Our community made a mistake and allowed a house to be torn down and the use to become commercial. That commercial use was not "designed, constructed, operated and maintained so as to be harmonious with existing and/or intended adjacent uses", as required by Code Section 1173.02(b)(2). This mistake should not be repeated.

Allowing a conditional use of this property will allow the Drug Mart scale to go beyond the capacity of the neighborhood to absorb, as discussed earlier. Keeping the development within the true commercial footprint is the appropriate sized development for this neighborhood.

Conclusion – Petition

We are also not a small group. With this memorandum we present a petition signed by dozens of Lakewood citizens. Many live on Grace and Cohassett; many do not. All share our concern about the impact this encroachment would have on our city.

We present these concerns to our neighbors, the members of the Planning Commission. We do so not as obstructionists, but as engaged citizens of Lakewood. We are not against development, nor are we against commercial use in the current zoned commercial space. But we do believe in responsible development, and appropriate placement of commercial use. We want the best for our neighborhood and our city.

PETITION

Coalition to Save Grace and Cohassett Avenues

We, the undersigned residents of Lakewood, OH, oppose the expansion of the Drug Mart property at 13123 Detroit Ave at the North end of Grace and Cohassett Avenues, which includes razing of the apartment building at 1419 Grace and the single family home built in 1899 at 1425 Grace. This will lower the value of our homes in this historic area and be a serious traffic burden with Garfield Middle School across the street. It will harm the character of our neighborhood and will reduce our quality of life for many years to come.

Print Name	Address	Email	Signature
Jeffery A Weber	1095 Homewood	jkweber@cox.net	
Michael Lojo	18159 Clifton Rd	Michaellojo@Yahoo.com	
Jim O'Brien	1569 Riverside		
Nadhal Eadon	1487 Elmwood	nadhal@lobc.org	
Stacey Rivinus	1427 Newman Ave		
Crystal Mitchell	1435 Newman Ave		
Mick Cain	1461 Newman Ave	mickes2@gmail.com	
Jennie Jenkins	1485 Newman Ave		
Jo Ann Hudson	1493 Newman Ave		
ED Pollock	1509 NEWMAN AVE		
Sheri Hila	1502 Newman Ave	sherihila@yahoo.com	
Judith Hila	1502 Newman Ave		
Ron Hila	1502 Newman Ave		
Jeremy Hila	1502 Newman		
SHAVKATOV	1458 NEWMAN		

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Print Name	Address	Email	Signature
Vanessa Ackley	11838 S. Lake Dr #1 Lakewood, OH 44107	Vanessa_ackley@hotmail.com	Vanessa Ackley
Ellen Bauer	11834 Clifton Blvd Apt 3 Lakewood, OH 44102	ellenbauer@gmail.com	
Michele Maynard	1208 Nicholson Lakewood, OH 44107	mmaynard29@yahoo.com	

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Print Name	Address	Email	Signature
DAWN Crawford	1434 Newman	PCJDAWN@ATT.NET	
JASON WARD	1430 NEWMAN	jakecat23@yahoo.com	
BRUCE D. WALL	1414 NEWMAN		

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Print Name	Address	Email	Signature
KATHERINE M CORRIDONI	1507 GRACE AVE.		Katherine M. Corridoni
Megan Donnamiller	1469 Grace Ave		Megan L. Donnamiller
[illegible] WIGNER	1545 GRACE		Cindy Wigner
Tom Perrone	1469 Grace Ave.		T. P.
COLLEEN SCHMID	1451 GRACE AVE		Colleen Schmid
Annie Caswell	1431 Grace Ave	anniecaswell331@gmail.com	Annie Caswell

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Print Name	Address	Email	Signature
MARK BUCKLEY	1437 GRACE AVE		[signature]
Carl Roloff	1438 Grace Ave	carlroloffoutscape.net	[signature]
Debby Roloff	1438 GRACE AVE		[signature]
Amanda Regli	1460 Grace Ave		[signature]
K. Benco	1466 Grace		[signature]
Colleen Thorpe	1490 GRACE		[signature]
PETER VITBERG	1472 GRACE	VEEPAKOH@GMAIL.COM	[signature]
Sabrina Miskovic	1481 Grace Ave	Sabrina77mis@gmail.com	[signature]
[illegible]	1478 Grace Ave	—	[signature]
ROBERT MCKEE	[illegible] GRACE AVE	BOB_MCKEE@HOTMAIL.COM	[signature]
[illegible]	1504 Grace		DAVID W. BLISS
Joan Groth	1504 Grace	joangroth@cox.net	Joan Groth
Brian Favor	1516 Grace	bpfesq@gmail	[signature]
MICHAEL MALLOY	1524 GRACE	MALLOY.MIKE@AOL.COM	[signature]
Michael Gray	1537 Grace	wellsburg@prodigy.net	[signature]

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Print Name	Address	Email	Signature
Janet Kody	1531 Grace Ave	Janetkody@sbcglobal.net	
Paul Kody	1531 Grace Ave	lcmansrv@sbcglobal.net	
April Georgius	1520 Grace Ave	AprilRGeorgius@yahoo.com	
Kazuyo Ciccarello	1519 Grace Ave	chicimoto@sbcglobal.net	
Jeff Hanson	1501 Grace Ave	jeffjeffhanson@gmail.com	
LARRY Corridoni	1507 Grace Ave	Lcorridoni@YAHOO.com	
Carol Gould	1491 Grace Ave		
Stacy Tucker	1487 Grace Ave		
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Maridell Couture	1457 Grace Ave.	maridellc@cox.net	
Marlene Entle	1445 Grace Ave	MARSENTLE@cox.net	
Mary Grodek	1441 Grace	M.grodek@cuohic.edu	
Annie Caswell	1431 Grace Ave	anniecaswell331@gmail.com	
STEPHEN CHAPPS	1441 GRACE	STEPHEN CHAPPS@EARTHLINK.NET	

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Print Name	Address	Email	Signature
Colleen Cotter	1437 Grace	cmcotter@sbcglobal.net	
HARRY SCHMID	1457 GRACE		
WILLIAM T. BIRT	1515 GRACE	WILLIAMBIRT@	
CATHERINE BIRT	" "	SBCGLOBAL.NET	
~~LIAM BIRT~~	" "	2162215415	
Jean Birt	1515 GRACE AVE		~~Jean~~ Birt
Carlos d Cerda de Groote	1446 Grace Avenue	cdc@ameritech.net	Carlos d Cerda de Groote
ROBERT WOLF	1555 GRACE AVE	robert.wolf@dfas.mil	
JENNIFER WOLF	1555 GRACE AVE	jennifer.wolf@dfas.mil	
Chryssa Alexis	1575 Grace Ave	chryssanicole@gmail	
Daniel J. Quellos Jr.	1561 Grace Ave.	bowlinnut290@yahoo	Daniel J. Quellos Jr
Mike Alexis	1575 Grace Ave	Hurricane2@yahoo.com	
Julius Farkas	1550 Grace Ave		
MARTHA FARKAS	1550 GRACE AVE		
Vinka Comer	1581 Grace Ave		

PETITION

Coalition to Save Grace and Cohassett Avenues

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Print Name	Address	Email	Signature
ORLANDO MELENDEZ	1551 GRACE		Orlando Melendez
Mae Helmuth	1611 Grace		Mae A. Helmuth
MARK WIEMER	1645 GRACE		Mark C Wiemer
Kathryn Woolfolk	1643 Grace	ktwoolfolk@gmail.com	Kathryn Woolfolk
JOHN KOTALAC	1632 Grace		John Kotalac
Elizabeth Tomin	1632 Grace Ave.		
Jeanne Gallagher	1620 Grace Ave		Jeanne Gallagher
Brandon Hoffman	1600 Grace Ave		
MARY MURRAY	1596 Grace Ave		Mary Ellen Murray
Mike Tomaschin	1584 GRACE AVE		
TROY MATTHEWS	1560 GRACE AVE		
ALICE ARMBRUSTER	1565 GRACE AVE		Alice Armbruster
Joseph Armbruster	1565 Grace Ave		
STEVE ARMBRUSTER	1565 GRACE		
MICHAEL CICCARELLO	1519 GRACE		

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Signature	Print Name	Address	Email
Penny Seko	Penny Seko	1477 Wyandotte. Lkwd	Penny0089@cox.net
[illegible]	Jonathan P. Cannon	1633 Grace Ave	—
[illegible]	Russell Powers	2065 Lewis	—
[illegible]	Brad Bo[illegible]	1415 Blossom [illegible]	brad bear[illegible]@[illegible]
[illegible]	Parker Delaney	11850 Edgewater	—
[illegible]	Chris Shestina	2032 Waterbury	
[illegible]	Bob Donnelly	1462 Wyandotte	
[illegible]	David S. Woike	18722 Sloane Ave	—
James Butch	[illegible]	13386 Madison	—
Cheryl Dean	Cheryl Dean	1504 Roycroft	
Patricia Ferrell	Patricia Ferrell	1587 Lakeland	
D. Buxton	David Buxton	14312 Garfield Ave. Lkwd., Ohio 44107	
[illegible]	Matt Lee	2138 Lewis	
[illegible]	Leigh Carson	13620 Detroit #302	—
[illegible]	Kendall Hoffman	1058 Cliffdale Ave.	
[illegible]	Ruby Bristow	1325 Nelson	—

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Print Name	Address	Email	Signature
Nadine Sadeckas	1423 Cohassett	nssadeckas@yahoo.com	
Samira Salti	1467 Cohassett		
ALI FARUQI	1473 Cohassett		
Katherine Cooper	1483 Cohassett	cooperak@sbcglobal.net	
Susie Hirsch	1583 Winchester	Susiepchef@aol.com	
AARON ZIMMERMAN	1506 COHASSETT	AZIMM4@GMAIL.COM	
Anna Zimmerman	1506 Cohassett Ave.	E.Anna@yahoo.com	
DENISE EVERT	1425 COHASSETT AVE.	dme723@col.net	
FRED WYSS	1435 COHASSETT AVE	fdenning wyss@ymail.com	
JOE HOLLINGSWORTH	1440 COHASSETT AVE	DEN-DOLLY@...	
Bruce Schreiber	1428 Grace Avenue	BSchre8445@aol.com	
Marie-France Schreiber	1428 Grace Avenue	mfscorx08@att.net	

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Print Name	Address	Email	Signature
Steve LaDue	1607 Parkwood	steve-ladue@sbcglobal	
Ellen G. Cormier	1616 Robinwood	LNTRUY2@gmail.com	
Catherine Vainisi	14313 Bayes	KtVainisi@hotmail.com	

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Print Name	Address	Email	Signature
Karen Mears	1592 Northland Ave		Karen T. Mears
DANIEL W. MEARS SR	1592 NORTHLAND AVE		Daniel W Mears Jr
Robin Swann	1357 Ethel Ave		[illegible]
Steve Sullivan	1353 Ethel Ave		Steven Sullivan
Amanda Bura	1349 Bonnieview		Amanda M. Bura
Ryan Winkler	1574 Wayne Ave		Ryan Winkler
Lisa Fleming	1586 Winton ave		Lisa Fleming
Terry McDonald	1586 Winton ave		Terry McDonald
Jennifer Collins	2087 Arthur Ave		[illegible]
Kyle Hoitz	14921 Lake Ave		[illegible]
Maryellen Cudney	12550 Lake Ave		Maryellen Cudney
Cam Beck Carolinge	17660 Detroit Ave		Cam Beck
Albertha Carmeli	1288 Andrews Ave		Albertha Carmeli
Anthony Lachman	1513 Bunts Rd.		[illegible]
JEAN KOSNAC	1365 Belle		Jean Kosnac

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Signature	Print Name	Address	Email
Mary Ellen Harris	MARY ELLEN HARRIS	1255 Nicholson	
Sandra Kovach	SANDRA KOVACH	13487 LAKE AVE.	Sandyonlake@cox.net
Carole Banyas	Carole Banyas	1295 Bunts Rd	
Colin Smith	Colin Smith	2305 Ogontz Ave	
Jamie Bering	Jamie Bering	1494 Victoria	
Elizabeth Grace	Elizabeth Grace	1101 Homewood	
James Schneider	James Schneider	11846 Lake	
Peter Hampton	Peter Hampton	11866 Clifton Blvd. #403	
Mary Kiley	MARY Kiley	1552 ELMWOOD	
Steve Kaelin	STEVE KAELIN	15011 ELMWOOD RD.	
Bill Klaser	BILL KLASER	1494 CLARENCE	
Margaret Rooney	MARGARET GAEL ROONEY	1439 COMMERCE	
M. Bmoore	Mary Beth Moore	1435 Clarence	mmb@cox.net
Steve Straffke	Steve Straffke	1466 Clarence	
Leon Melnick	Leon Melnick	1470 Clarence	
Valerie Molinski	Valerie Molinski	1480 Clarence Ave	vmolinski@gmail.com

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Signature	Print Name	Address	Email
	Gregorg Sent	1427 Clarence	deutschmeister@hotmail.c
	Daniel J. Vanah	1427 Clarence	danvanah@gmail.com
	Cynthia Peck	1431 Clarence	
	Timothy Peck	1431 Clarence	
	Marilyn Belski	1459 Clarance	
	Lynn Orsine	1451 Clarence	LYNN_TS_LAW@HOTMAIL.COM
	Laura J. Murray	1451 Clarence Ave	ljmurray@hotmail.a
	Brian G. Moran	1481 Clarence	BMORANGEE GMAIL.COM
	Jeff Piatz	1485 Clarence	JP@yahoo.com.
	Patrick Burns	1497 Clarence	
	Arsen Gjika	14120 Fairwood	Arsen.gjika @yahoo.com
	Denise Novack	13455 Lake	teamnovack@cox.net
	Marsha Paul	17211 Edgewater OR	

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Signature	Print Name	Address	Email
[signature]	Tim Hampton	1410 Clarence	
[signature]	Ginny Schiros	1516 Clarence	
[signature]	MARY ANN PELOT	1520 Clarence	
[signature]	DARRIN GAKING	1483 GRACE AVE.	
[signature]	KATIE NORMAN	1533 Clarence Ave	
[signature]	JIM NORMAN	1533 Clarence	
[signature]	SAM O'LEARY	1517 CLARENCE	
[signature]	JEFFREY J. STEWART	1511 CLARENCE	
[signature]	Anna Tuttle	1501 Clarence Ave.	
[signature]	Alida H Strunz	1623 Cohasset Ave	
[signature]	Tom Banyas	1295 Bunts	
[signature]	MICHAEL S. KOVICH	13437 LAKE	
[signature]	Glenda Molovich	1129 Forest	

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Signature	Print Name	Address	Email
Joan Schmitz	JOAN SCHMITZ	1478 Rosedale	
Heather O'Malley	Heather O'Malley	1426 Grace Ave	rowrow@cox.net
	KEVIN McDONOUGH	1422 GRACE	THICMICK@CK.NET
Linda M	LINDA McDONOUGH	1422 Grace	
	Deanna F.	1435 Rud	
	Mackenzie Siren	1237 Harmon Ave	
Ande Crote	ANDE CROTE	805 ST. CHARLES	

10/20/12

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Signature	Print Name	Address	Email
[signature]	Andrew Fousek	1570 Cohasset Ave	
[signature]	Anthony Lima	1525 Cohassett Ave.	lima0227@hotmail
[signature]	Cathy Spicer	1519 Cohassett Ave.	cathyspicer1897@gmail.com
[signature]	FRED WYSS	1433 COHASSETT	fred.wyss@willoughbyhills-oh.gov
[signature]	michael D. Kolodny	1417 Cohassett	Kmon.Kolodny@yahoo.com
[signature]	RUTH COFFEY	1847 Grace	ruthjcoffey@yahoo.co
[signature]	Barbara Marburger	1475 Grace Ave	barbmarburger@aol.c
[signature]	MARLENE NOTTAGE	1489 Cohassett	mnnottage@hotmail.com
[signature]	Linda Kolodny	1417 Cohassett	l.kolodny@yahoo.c

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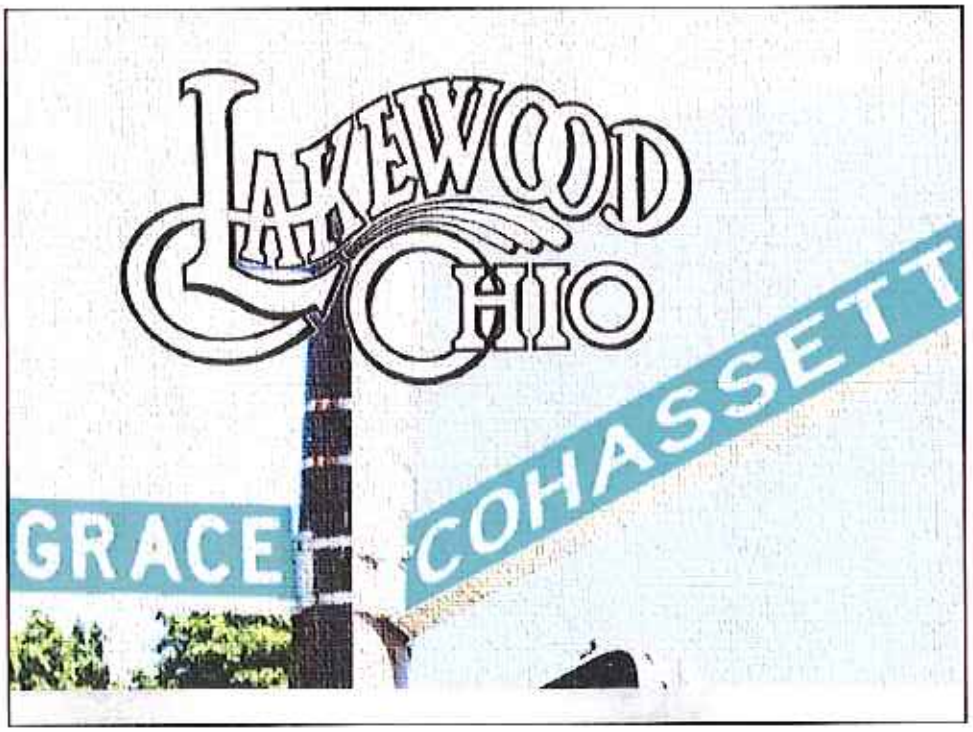
Signature	Print Name	Address	Email
Anne Conez	Anne Conez	1589 Content Ave	anneecgnez@yahoo.com
Christina Ward	Christina Ward	1430 Newman Ave	tiggiepoo7@yahoo.com
Laura Jaissle	Laura Jaissle	1447 Arthur	pastorlk10@gmail.com
Michael Jaissle	Michael Jaissle	1447 Arthur Ave.	mfjaissle@yahoo.com
Alissa Neal	Alissa Neal	1583 Chesterland Ave.	Kevinlisse@yahoo.com



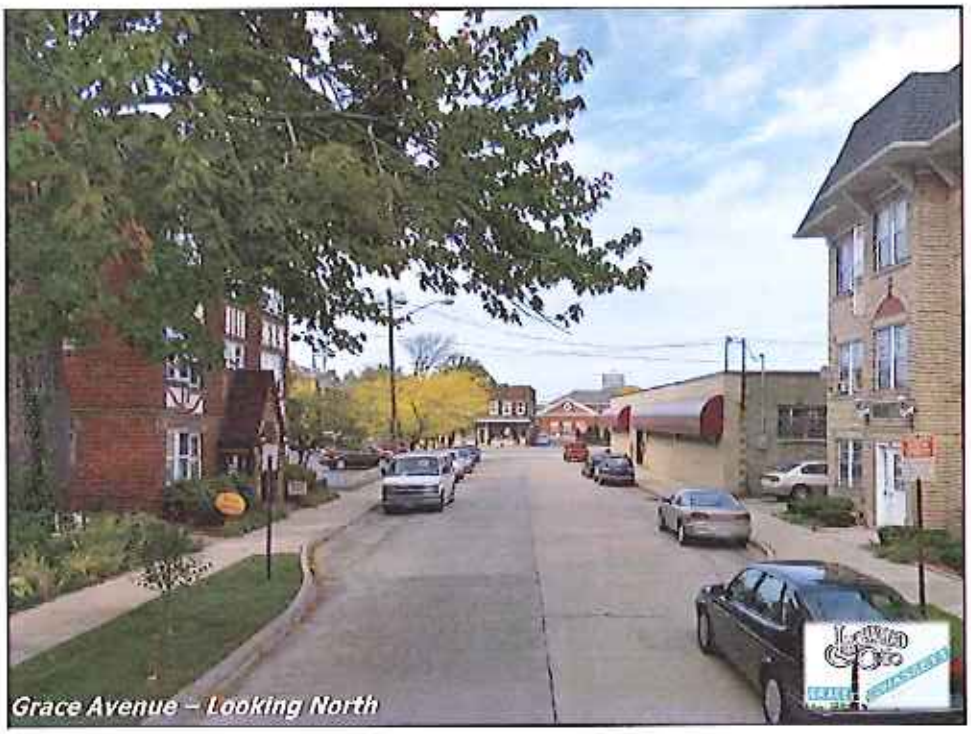
We are residents of
Cohassett and Grace

who support development and support Lakewood

Lakewood's Community Vision

Lakewood's vision is brought to life here.


Grace Avenue – Looking South


Grace Avenue – Looking North


Porch View- Kevin/Linda's, looking East on Grace


Cohassett, looking south from Detroit


Cohassett– Looking North


Cohassett – Porch View, looking West


Cohassett, looking east from DDM property


Detroit Road– Looking Northeast
Garfield Middle School

The Law is Black and White

Our zoning code includes important standards for conditional use. (1161.02)

The Discount DrugMart plan does NOT meet these basic standards.

"...not be detrimental to public health, safety and welfare..."

"...will not change the essential character..."

"...will not be injurious..."

"…adequate measures to minimize traffic…"

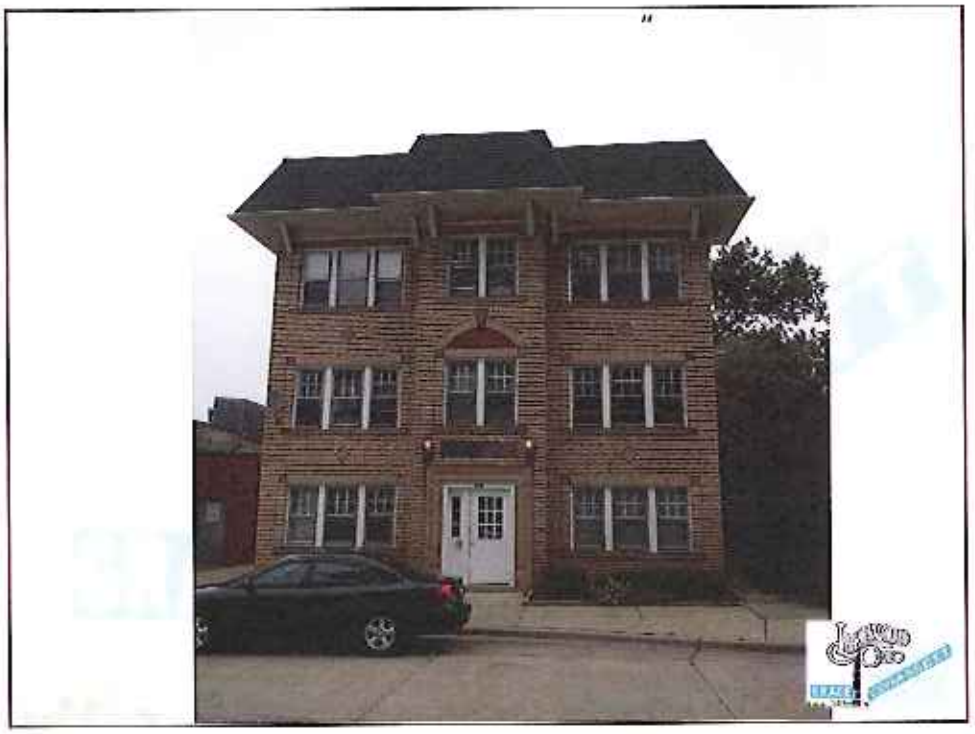
"…consistent with community vision…"

"...harmonious with existing uses..."

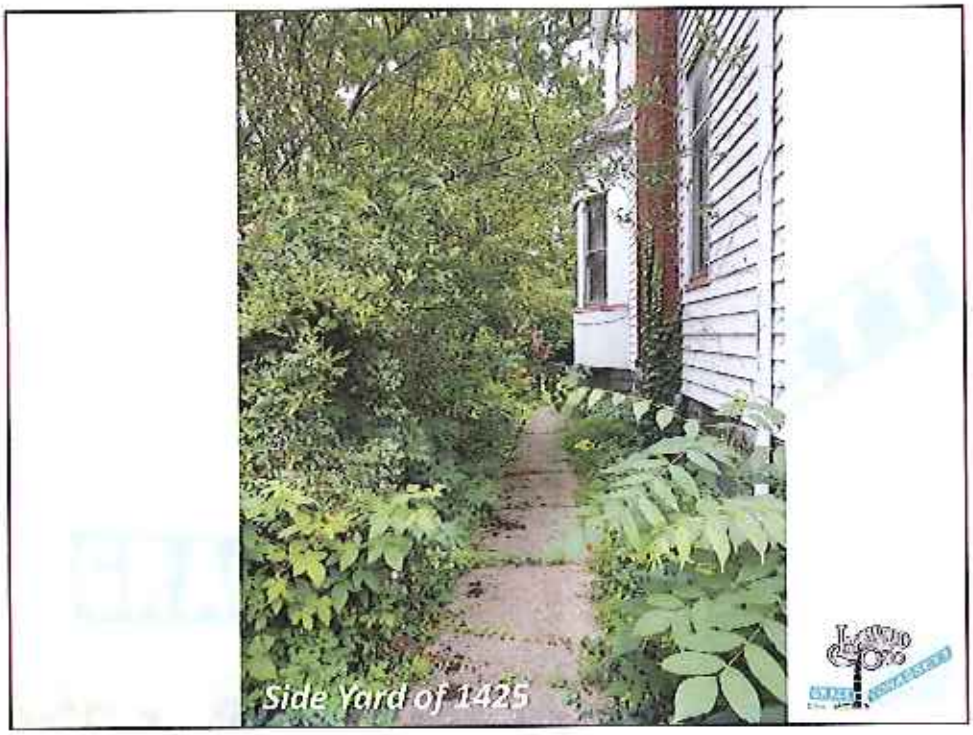
"...will not interfere with vehicular and pedestrian traffic..."

Oversized design does not fit neighborhood

Destroying a beautiful building



Splitting the property belonging to 1425


Side Yard of 1425

Sea of asphalt

Noise, lights, exhaust…

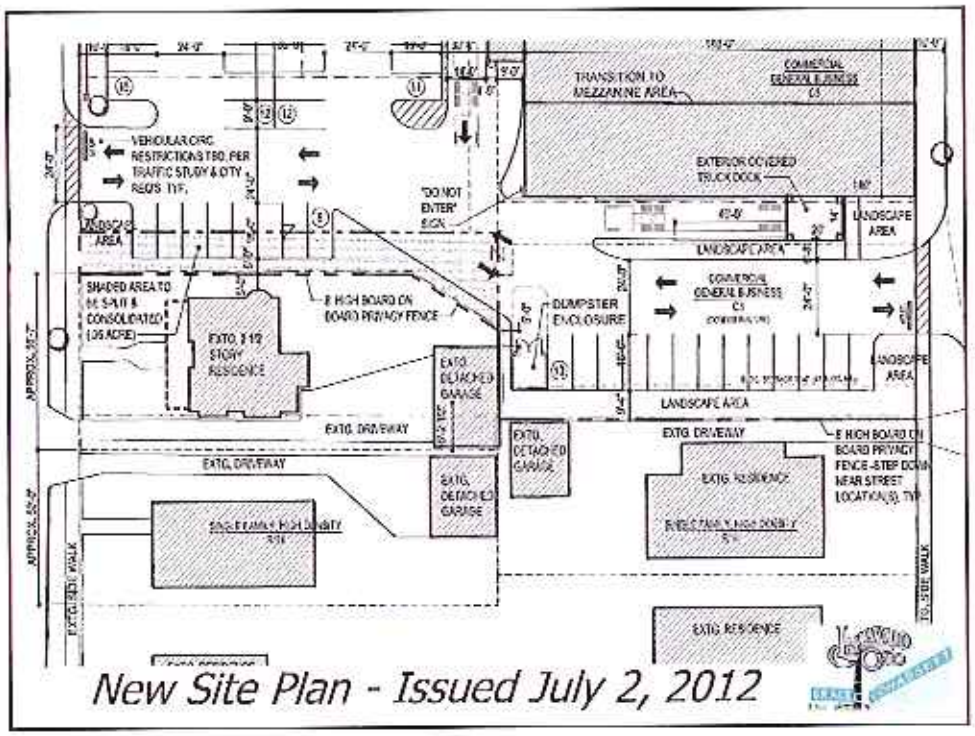
Potentially hazardous materials

Traffic

Our zoning code is specific about Conditional Use for Accessory Parking (1103.2 (a))

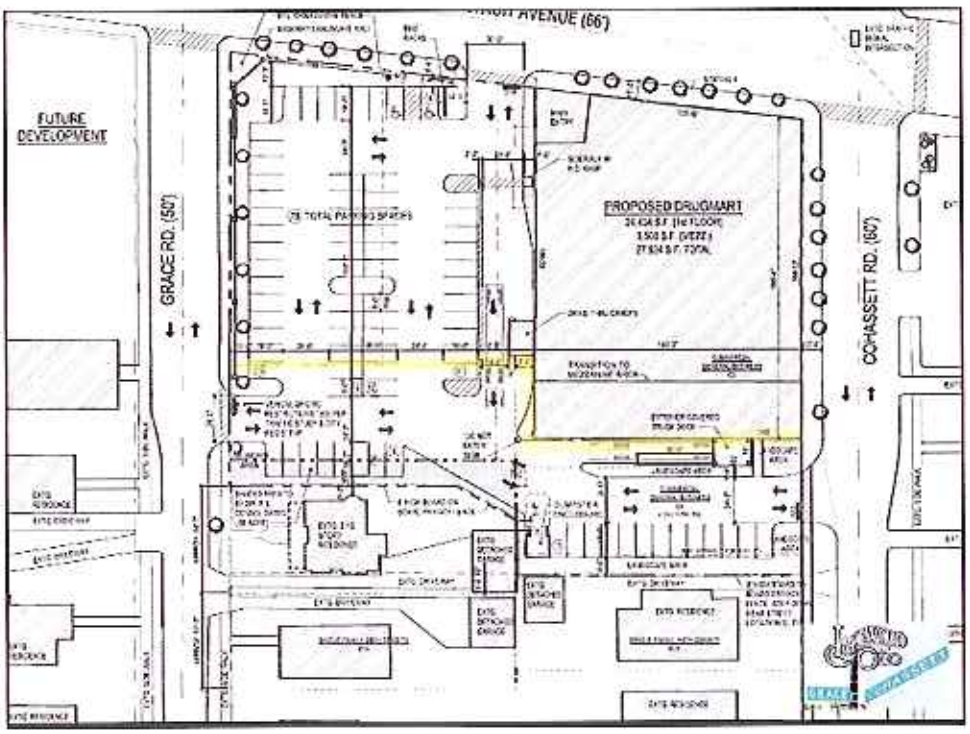
The proposal is NOT permitted under the code.

Parking means parking



Poor site layout
forces inappropriate use
of accessory parking
and
ignores 5 ft set back
requirement

Abuts



Proposed Consolidation and Lot Split are inappropriate

WHAT MUST BE DONE?

If you approve this proposal:

You will ignore city ordinances.

You will not be holding developers accountable.

You will not be protecting our neighborhoods.

If you deny this proposal:

You are upholding the city ordinances.

You are supporting the city's Vision.

You are supporting quality commercial development in Lakewood.

You are encouraging smart growth.

You are listening to your neighbors.

To: Lakewood Planning Dept.

From: Denise Evert

Re: Drug Mart - Comments to be considered for planning commission meeting 7/5/2012

•Currently, no setback exists on the Cohassett side; per planning and zoning code 1129.06, side yard should be 5 ft. on a commercial corner lot.

•Per 1143.05, 2.5 parking spaces per 1000 s.f. (70 spaces); DDM still has excess parking shown. Addressing the setback accordingly would still allow more than the parking allotment and better buffering to the residential properties.

•Consideration of alternate fencing other than what is currently proposed on south side (as was considered at Grace/Detroit) – ornamental fencing, masonry (with or without planters), evergreen shrubs, etc. to be more in keeping with the historic residential neighborhood and act as more of an <u>appropriate</u> transition on the Cohassett side. Reference planning & zoning code 1141.01 and the "purpose" of such landscaping/screening specifically stated "contribute to improved community appearance and property values and preserve and enhance the residential properties." A board on board fence does not contribute to or enhance these properties.

•Consideration of more mature trees for the proposed landscaping plan, especially due to the loss of some significant trees that currently exist on the site.

•Consideration of additional variety of evergreens on the plan (hemlock, boxwood, etc.).

•Consideration to a green roof (benefit to the neighbors at the north ends of the street that utilize third floor living spaces and what we will be potentially looking at).

•My understanding is that if the conditional use for parking and the lot consolidation is approved, that the zoning of these lots <u>will</u> <u>not</u> be changed; the zoning should remain intact so that future redevelopment (after DDM) would not further encroach into what is currently residentially zoned areas. Protect the residential lots as they exist, regardless of approval for conditional use for THIS redevelopment project.

•We encourage good redevelopment of the site. The bar shouldn't necessarily exist with the former Ganley site and the thought that anything taking it's place would be better. We still should be cognizant of the wonderful historic architecture that is adjacent to DDM and require that new development lend itself to that and be better than just what used to be there. This is an opportunity to develop this site nicely and to do it better than it had been done previously.

July 5, 2012

Dear Planning Commission and Board of Building Standards/Architectural Board of Review/Sign Review:

My name is Marie-France Schreiber, presently residing at 1428 Grace Avenue and former tenant at 1509 Cohassett.

I would like to present my comments and concerns for upcoming meetings regarding Drug Mart redevelopment of Ganley site.

To the Planning Commission:

I am not in favor of granting conditional use for parking, nor slicing off apportionments of property at 1425 Grace as it sets a precedence for other potential developments in the city to follow suit. However, should this conditional use permit be in line with city zoning guidelines, I would like Drug Mart to build the best looking facility and the most LEED certified building possible with as much green space and sound barriers to residential neighborhood allowable. Drug Mart needs to be an upstanding corporate citizen and take into account the historic character of the neighborhood as well as the 600+ students attending Garfield Middle School; this includes CityEdge Christian Church on Sundays and the many events held there throughout the year. I demand they improve their corporate image from their present East side location, which has a bad reputation overall in the community.

Also, the conditional use for parking should in no way shape or form become a permanent consolidation into C3 commercial use should Dru Mart disappear in the future and another business decide to develop that property.

To Board of Building Standards/Architectural Board of Review/Sign Review:

First, I would like to stress these drawings submitted by Dru Siley to neighbors on 7/3/12 are an improvement on the latter.

Here are some of the items **I LIKE**:

1) Store has been scaled down for the third time to accommodate flipping the loading dock to provide a barrier for Cohassett residents.
2) Parking spaces have been reduced to 79 from 83. I am glad DM chose to heed to the city's request to delete entrance parking space on both Grace & Cohassett, thus preventing possible accidents when pulling your car out of parking spaces and providing more green space on those corners. If you need more parking, you might consider

buying Red Rooster. What business could possibly thrive there after implementation of two big box stores.
3) Limiting truck traffic to Detroit and backing into dock from parking lot are a definite plus.
4) Widening the entrance on Detroit and into the parking lot to the immediate right is also a plus.
5) Inset on southwest side of building to prevent car lights from shining into properties when exiting drive-thru is an improvement.

I DISLIKE:

1) Board on board 8 ft fence along residential perimeter. I would prefer ornamental fencing between parking lot and residential neighborhood with a sound barrier in mind and modular so it can easily be replaced over time when wear & tear takes effect. For example: http://www.concretefence.com/brick.aspx in rustic red to match GMS.
2) The lack of green space on Cohasselt side. How can you make the sidewalk more pleasing to the eye for the immediate neighbor across the street. They have a porch they sit on. What could they feasibly look at that would improve on windows and trees.
3) The flow of traffic in/off Cohassett and Grace. Anyway to make this one way traffic. Come in on Cohassett and leave on Grace or vice-verso.
4) Handicap parking spaces are no where near the sidewalk with H.C. ramp. Are you expecting wheelchairs to cross the most heavily used entrance of parking lot? Move those near sidewalk with H.C. ramp.
5) Dumpster location is near garages of adjacent properties. How will enclosure be built to keep smell and varmint away from properties?

IMPROVEMENTS:
1) LEED certified building and grounds:
    a) The greener the parking lot and sidewalks on residential streets, the better.
    b) Mature trees only on residential sides to block view of high structure and parking lot.
    b) Green roof for residents on Cohassett/Grace that use third floor space or are located in apartment building and view DM roof from their windows.
2) Increase set back on Cohassett. Building is right on sidewalk.
3) Limit store hours to current ones (9 am to 10 pm).
4) Limit delivery trucks/vans and trash removal to after school starts and before school ends (9 am to 2 pm).
5) Design building with historic features that blend more with the historic feel of the neighborhood: i.e. windows, lights, signage.
6) Historical Society should partner with Drug Mart to put a plaque commemorating former mayor of Lakewood, Nelson Cotabash and his vision of Cohassett (http://lakewoodobserver.com/read/2009/02/10/historical-highlightsby-maggie-fraley) similar to GetGo development on Bunts/Detroit.
7) A covered bus stop at corner of Detroit/Cohassett

A MUST:
Please GRANT Mr. Walters, principal of Garfield Middle School, request for a police officer presence when school lets out. Lakewood High School has one, Garfield Middle School will definitely need one once Dollar General and Drug Mart are fully operational.

FINALLY:
Traffic study does not take into account the impact of Dollar General on the Northwest side of Grace. Truck and vehicle traffic will also be moving in and out of that facility concurrently with Drug Mart. A stop sign will not suffice on Grace to move traffic along swiftly onto Detroit, especially if commercial vehicles enter into Drug Mart from Detroit right before a light.

I hope you will consider my comments when making your final decisions.

Marie-France Schreiber

July 5, 2012

The City of Lakewood
Planning Commission
Lakewood, Ohio 44107

RE: Against the Proposed Development of an Expanded Drug Mart on Cohassett and Grace Avenues

Dear Planning Commission:

I am a homeowner at 1472 Cohassett Ave. At this point, **I am against the proposed development for the following reasons:**

1) The plan, as currently known and the daily operational needs of the store demonstrate a **lack of understanding of the impact on the housing values of this historic neighborhood;**

2) do not address the **traffic and safety of residents and of the nearly 600 students** of the newly-built middle school, let alone the noise & air pollution issues from delivery trucks, and patrons;

3) **Drug Mart is currently a poor Community Partner, as demonstrated by their current store on Detroit Avenue. The company does not add value to our neighborhood.** This particular store is dirty and not well-maintained neither inside nor outside. There are existing on-going security concerns which will move with this company and its clientele.

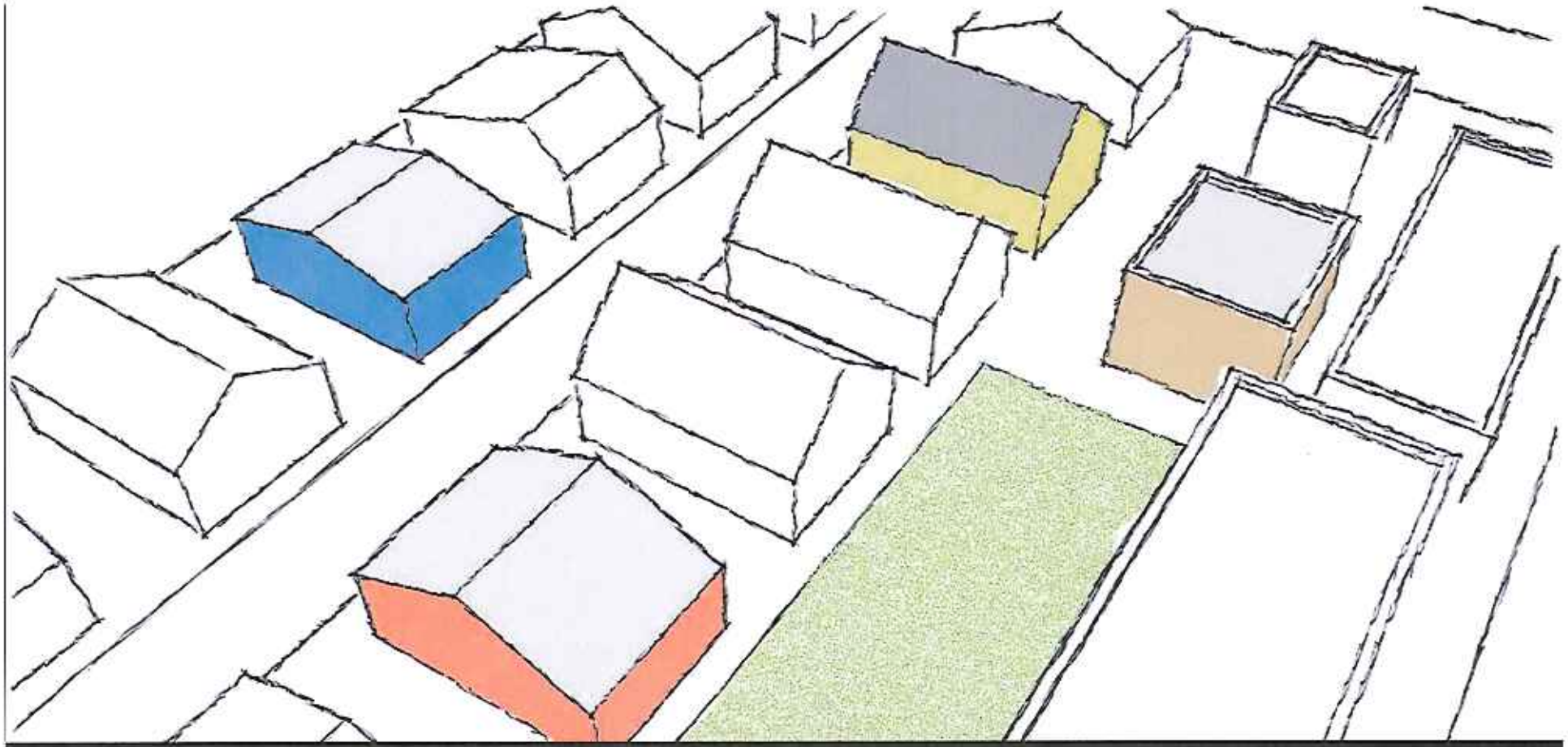
The current safety and eye-sore issues of the former Ganley Dealership need to be dealt with separately, but this is not the company to contribute to the growth of the City of Lakewood on this property in a historic district. I am also for the increasing businesses in the city, but this an unacceptable option.

Sincerely,

MCZ RBB

Mary Callaghan Zunt and R. Brooke Baker
1472 Cohassett Ave.
Lakewood, Ohio 44107

Cc: Mayor, City of Lakewood
Councilman Mary Louise Madigan



Planning Commission

July 2012

1413 Wagar Avenue
Handley-Boyt Gallery

Planning Commission
July 2012

1413 Wagar Avenue
Handley-Boyt Gallery

Planning Commission
July 2012









1413 Wagar Avenue
Handley-Boyt Gallery

Planning Comerission
July 2012

13215 Detroit Avenue
Family Dollar

Planning Commission
July 2012

13215 Detroit Avenue
Family Dollar

Planning Commission
July 2012

13215 Detroit Avenue
Family Dollar

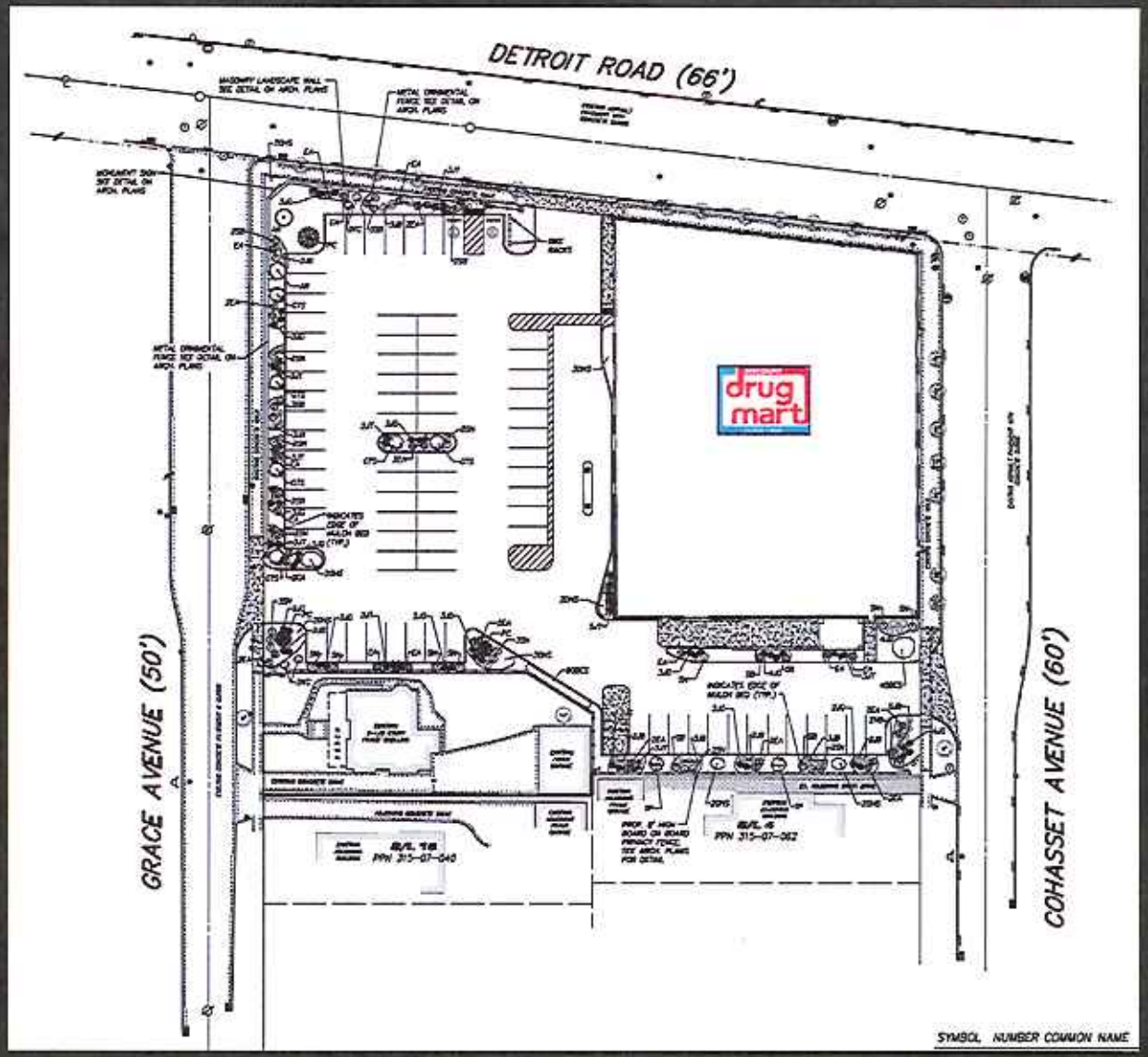
Planning Commission
July 2012

13123 Detroit Avenue
Discount Drug Mart

Planning Commission
July 2012

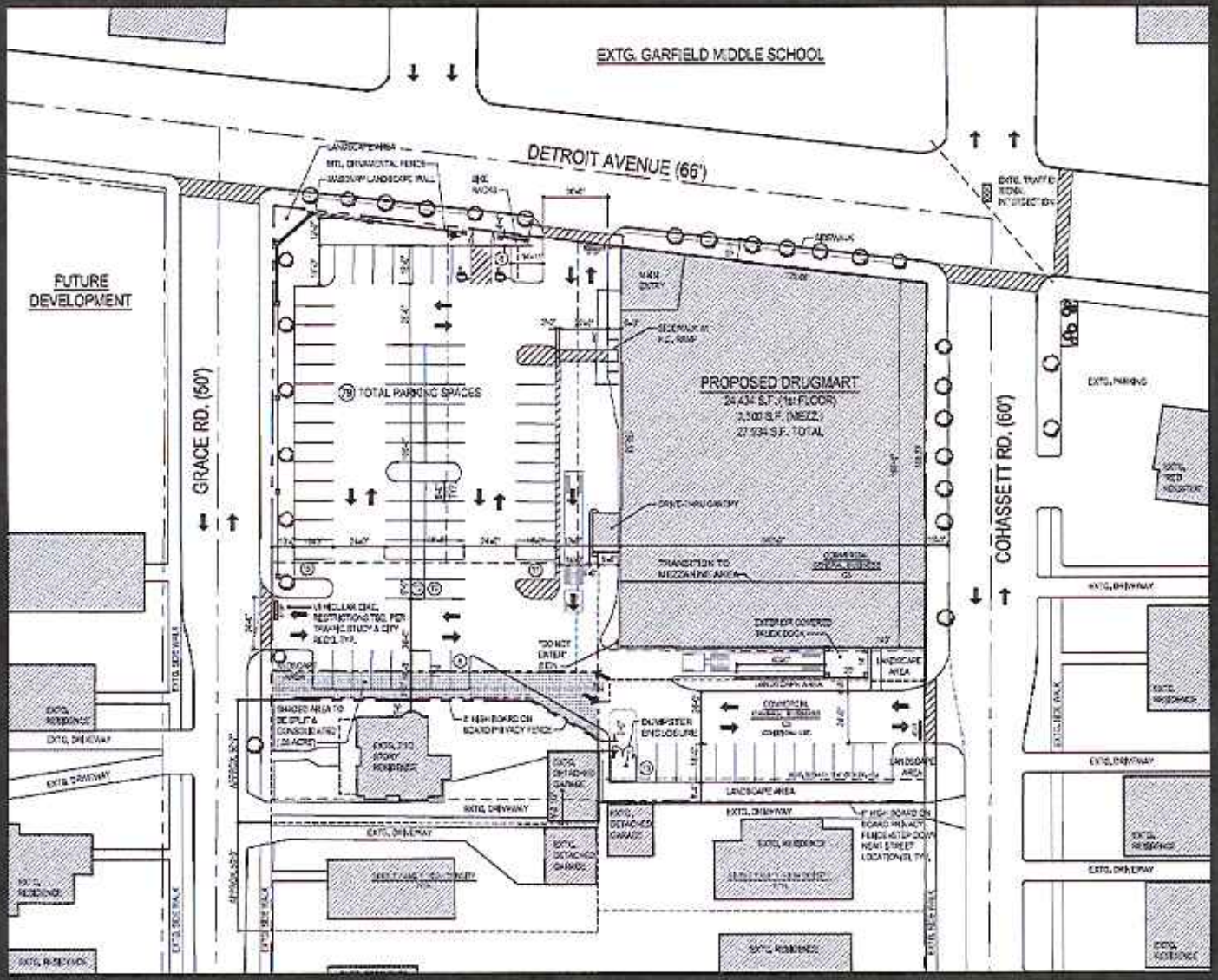
Planning Commission
July 2013

13123 Detroit Avenue
Discount Drug Mart



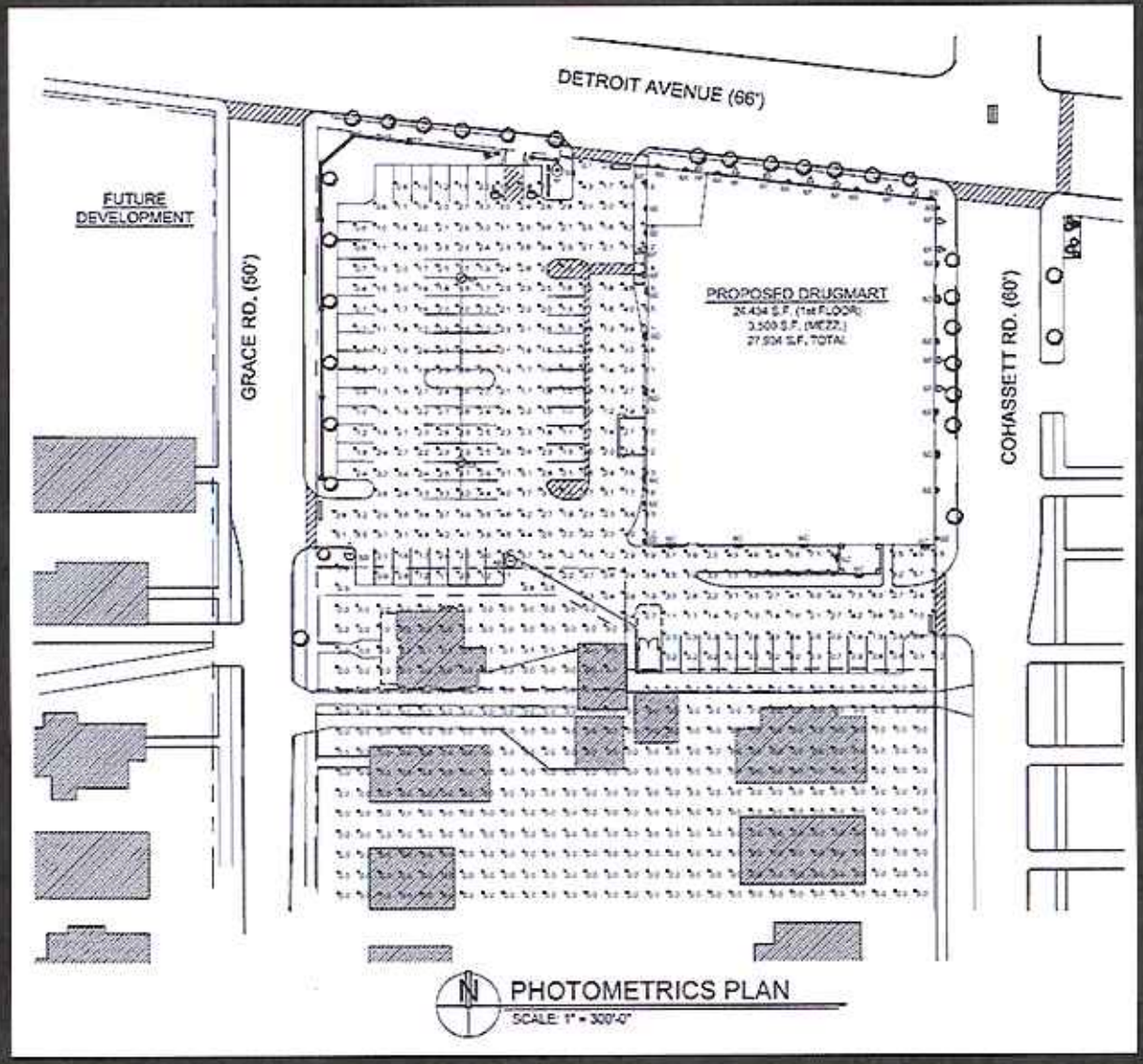
13123 Detroit Avenue
Discount Drug Mart

Planning Commission
July 2012



13123 Detroit Avenue
Discount Drug Mart

Planning Commission
July 2012



13123 Detroit Avenue
Discount Drug Mart

Planning Comcission
July 2012

Planning Commission
July 2012

13123 Detroit Avenue
Discount Drug Mart

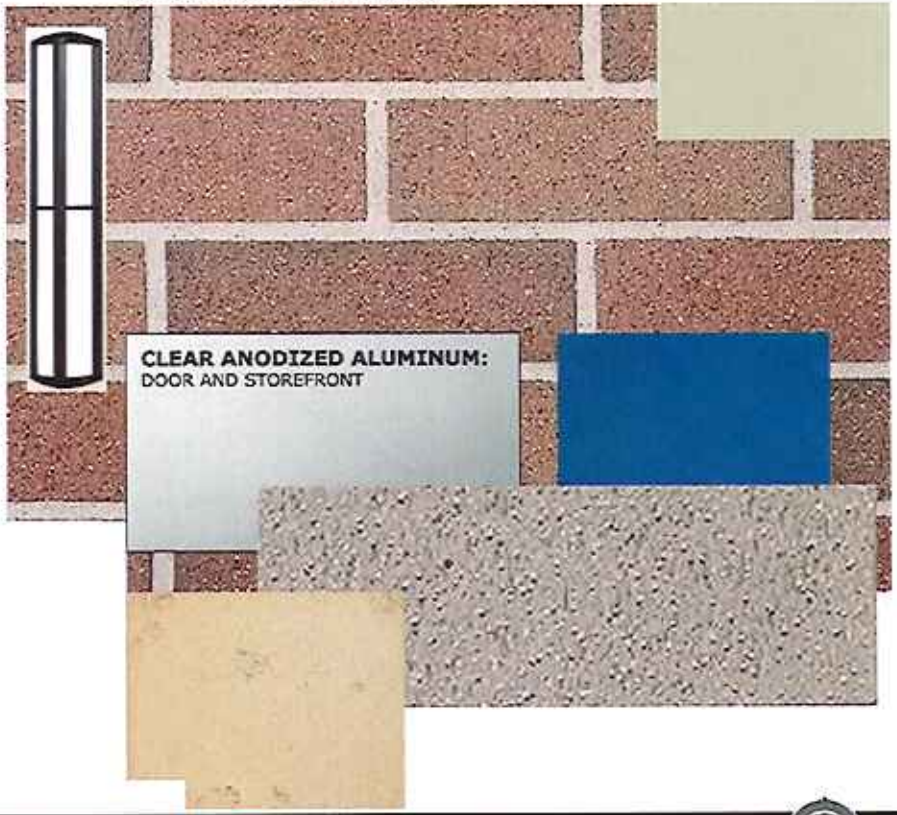
DOUBLE LOOP BIKE RACK:
AS MANUFACTURED BY "PARK IT"
WWW.PARKITBIKERACKS.COM

PARKING LOT LIGHT FIXTURE:
RVT SERIES LIGHT W/20'POLE
AS MANUFACTURED BY "WLS LIGHTING"
COLOR "BLACK"

EXTERIOR WALL LIGHT FIXTURE:
WMI HORIZONTAL LAMP SERIES
AS MANUFACTURED BY "WLS LIGHTING"
COLOR "BLACK" (NO ALUM. BAND)

40" HAIKU ARCH HANGING BLADE SIGN BRACKET
36" ROUND PREMIER CELLULAR PVC SIGN BLANK
BY "HOOKS AND LATTTICE"

AWNING FIXTURE:
SIGN 1: AS MANUF. BY TMS LIGHTING
COLOR: BLACK



CLEAR ANODIZED ALUMINUM:
DOOR AND STOREFRONT

FENCING:
CEDAR PRIVACY FENCE AND
ALUM. ORNAMENTAL FENCE

ADA ARCHITECTS, INC.

The images and design intent shown in this rendering are general in nature. Schematic representations indicated here are for illustration purposes only, and do not indicate final forms, shapes and colors. The actual built project may vary from this rendering.

Discount DrugMart
Lakewood, Ohio
05.08.12

Materials and Fixtures

Planning Commission
July 2012

13123 Detroit Avenue
Discount Drug Mart

13123 Detroit Avenue
Discount Drug Mart

Planning Commission
July 2012

13123 Detroit Avenue
Discount Drug Mart

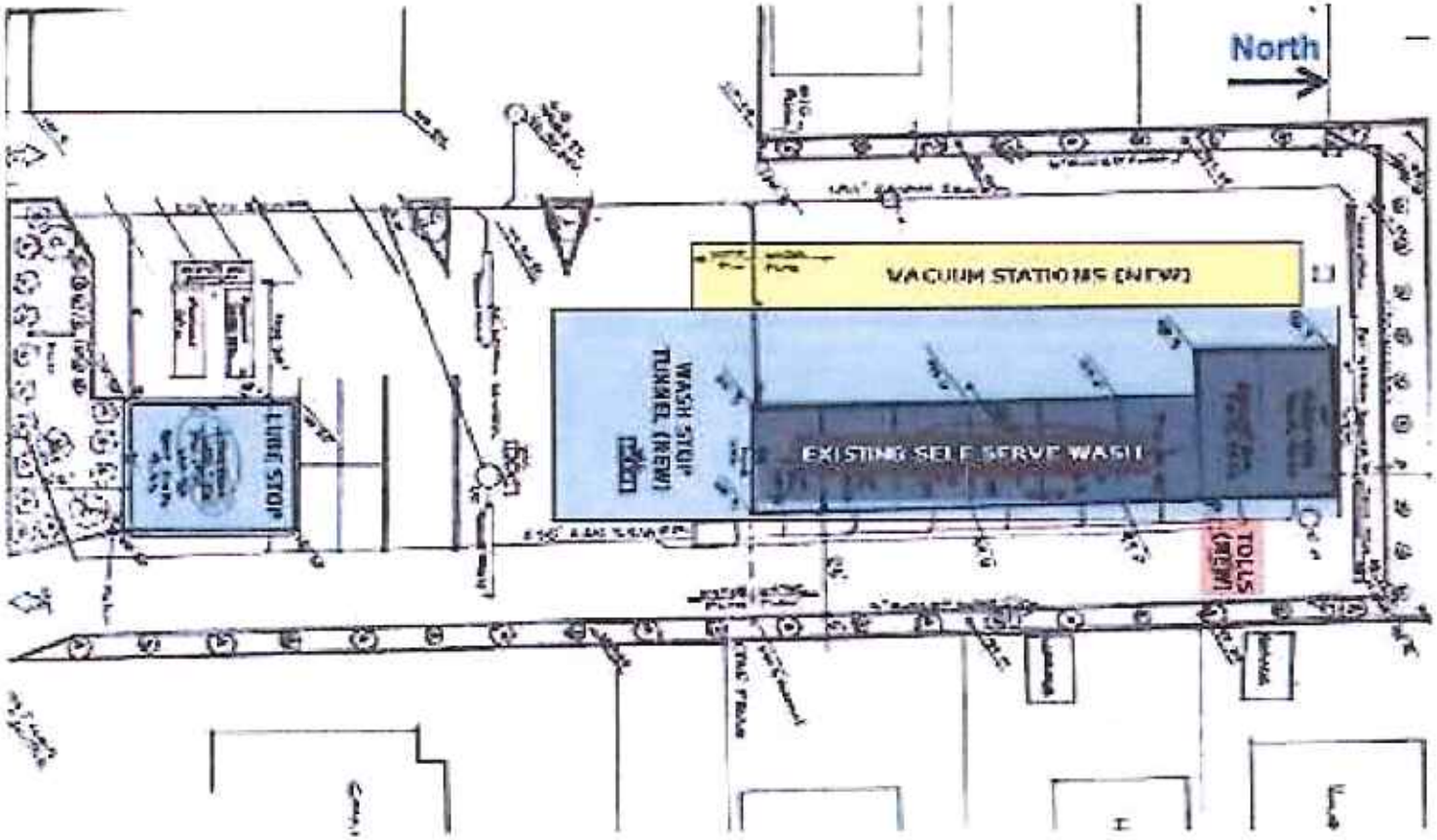
Planning Commission
July 2012

16910 Detroit Avenue

Wash Stop/Lube Stop

Planning Commission
July 2012

Wash Stop



Planning Commission
July 2012

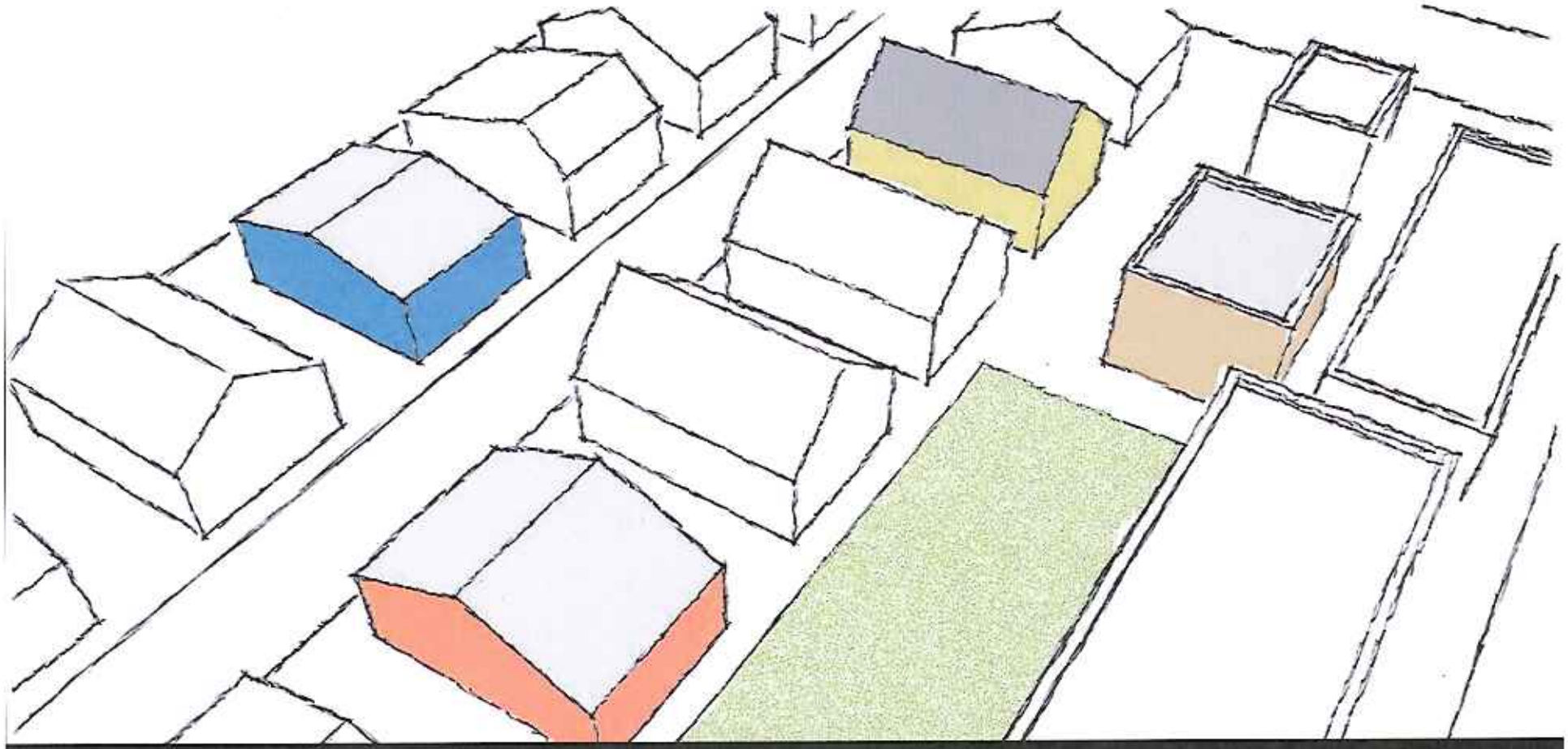
16910 Detroit Avenue
Wash Stop/Lube Stop

16910 Detroit Avenue
Wash Stop/Lube Stop

Planning Commission
July 2012

16910 Detroit Avenue
Wash Stop/Lube Stop

Planning Commission
July 2012



Planning Commission

July 2012