500 West Big Beaver
Troy, MI 48084
troymi.gov

CITY COUNCIL AGENDA ITEM

Date: March 11, 2024

To: Honorable Mayor and Members of the Troy City Council

From: Lori Grigg Bluhm, City Attorney
Julie Quinlan Dufrane, Assistant City Attorney

Subject: Ashton Parc of Troy Preservation Easement

On September 23, 2019, City Council approved a 29-unit detached single family condominium cluster development proposed by Wolverine Building Company for property located on the southeast corner of East Square Lake and Willow Grove side of Long Lake Road, which is zoned R-1C, one family residential. Thereafter, interest in the property was transferred to Glen Arbor Building who is in the process of completing the development project. Under the City's Zoning Ordinance and as a condition of final site plan approval, a Developer who chooses to use the Cluster Option must permanently set aside dedicated open space through an irrevocable conveyance (Troy Zoning Ordinance 10.04.D.7).

For this project, the Developer proposes to preserve thirty percent (30%) of the 8.69 acres it owns. In addition, the Resolution passed by Council stipulated that the homes as constructed could not exceed 1500 square feet total and the master bedroom and bathroom must be on the first floor of each unit. The City's Zoning Ordinance provides that the irrevocable conveyance must be perpetually maintained by those with an ownership interest in the open space, delineated in the landscape plan and the proposed open space agreement. It further provides that if the owners fail to maintain the open space such that it becomes a public nuisance, then the City may undertake maintenance and annually assess costs. Finally, the open space must forever remain open space as approved on the Final Site Plan, except that accessory structures are permitted as long as they do not exceed one percent (1%) of the total open space area. Troy's Zoning Ordinance also specifically requires that the recorded document preserving open space shall prohibit dumping or storing of material or refuse, activity that causes soil erosion, cutting live plant material except for dying or diseased vegetation, and the use of motorized vehicles on the property.

As the development project nears completion, the Developer must have an approved Open Space Preservation Easement so that it can be recorded with the Oakland County Register of Deeds.

Recommendation

The City Attorney's office has reviewed the attached Open Space Preservation Easement and determined that it satisfies the criteria.

Attachments:
City Council Minutes September 23, 2019
Open Space Preservation Easement with Exhibits

OPEN SPACE PRESERVATION EASEMENT

THIS OPEN SPACE PRESERVATION EASEMENT made this _____ day of _____, 2024, by and between Glen Arbor Building, LLC, a Michigan limited liability company, whose address is 5232 – 22 Mile Road, Shelby Township, Michigan 48317, (hereinafter the "Developer"), and the City of Troy, and its successors or assigns, whose address is 500 West Big Beaver Road, Troy, Michigan 48084 (hereinafter the "City").

RECITALS

A. Developer owns a certain parcel of land situated in the City of Troy, Oakland County, Michigan, as described in Exhibit A, attached hereto and made a part hereof (the “Property"). Developer has received final site plan approval for construction of a single family residential site condominium on the Property using the One-Family Cluster Option pursuant to Troy’s Zoning Ordinance, Chapter 39, Section 10.04 which requires that certain portions of the Property be permanently preserved as open space areas. Developer desires to grant such an easement in order to preserve the required open space areas.

B. The designated open space areas (hereinafter the "Easement Areas") situated on the Property are more particularly described on Exhibit B, attached hereto and made a part hereof, the second page of which contains a drawing depicting the Easement Areas.

C. The designated Easement Areas fulfill the following open space benefit consistent with Chapter 39, Section 10.04(D)(4):

a. Significant Natural Features. Preservation of significant natural features contained on the site, as long as it is in the best interest of the City to preserve the natural features that might be negatively impacted by conventional residential development. The determination

of whether the site has significant natural features shall be made by the City Council, after review of a Natural Features Analysis, prepared by the applicant that inventories these features. The Natural Features include the Open Space Areas and Tree Preservation Areas, as depicted on Exhibit C – Natural Features Plan, attached hereto.

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00), the receipt and adequacy of which are hereby acknowledged, Developer hereby reserves, conveys and grants the following perpetual Open Space Preservation Easement, which shall be binding upon the Developer, and its respective heirs, successors, assigns and/or transferees and shall be for the benefit of the City, all Developers and purchasers of the Property and their respective heirs, successors, assigns and/or transferees.

1. The purpose of this Open Space Preservation Easement is to preserve the Easement Areas as identified and depicted in the final site plan approved by the City of Troy and as areas that qualify as “open space” in accordance with Chapter 39, Section 10.04(D) of the One-Family Cluster Option. The designated Easement Areas shall be perpetually preserved as open space, and uses of the open space are limited to landscaping along Square Lake Road, the project entrance sign, parks, playgrounds, fields, walking trails, nature areas and other approved uses as permitted in accordance with the One-Family Cluster Option.

2. The following uses and activities are expressly prohibited in the Easement Areas;

a. dumping or storing any material or refuse,

b. any activity that may cause risk of soil erosion or threaten any living plant material,

c. cutting or removing live plant material except for the removal of dying or diseased vegetation,

d. using motorized off-road vehicles,

3. The dedicated open space shall be perpetually maintained by any party or parties that have an ownership interest in the open space. Initially, the responsible party shall be Developer and thereafter the responsible party shall be any association of co-owners responsible for the

portion of the Property in which the one or more of the Easement Areas are located (each an “Association”). The Easement Areas shall be maintained and repaired in the condition required by the final approved site plan, including but not limited to maintenance of landscaped areas and amenities, if any, therein. Once the master deed for the condominium project is recorded and the association of co-owners is incorporated to own and operate the condominium project including the dedicated Easement Areas, and it shall also be the association’s responsibility to maintain and repair the Easement Areas

4. This Open Space Preservation Easement does not grant or convey to City, or any member of the general public, any right of ownership, possession or use of the Easement Area, except that, upon reasonable written notice to Developer, City and its authorized employees and agents (collectively, "City's Representatives") may enter upon and inspect the Easement Area to determine whether the Easement Area is being maintained in compliance with the terms of this Open Space Preservation Easement.

5. The Easement Areas consist mainly of undeveloped wooded areas, lawn areas, utilities, and storm sewer. The wetland areas (except the utilities, and storm sewer) shall remain perpetually in their natural undeveloped state. The Easement Areas shall be carefully inspected on a weekly basis by the Association. The Association shall immediately remove any garbage and debris that is found in the Easement Areas. The Association shall hire a professional landscaping company to mow the lawn areas. The lawn shall be maintained in accordance with all City Ordinances and shall be cut at a minimum on a weekly basis (or more often if necessary) during the appropriate seasons when the lawn will be growing.

6. In the event that the Developer or the successor Association shall at any time fail to carry out the responsibilities specified within this Open Space Preservation Easement and/or fail to preserve and/or maintain the open space areas in reasonable order and condition or such that it becomes a public nuisance, the City may serve written notice upon the responsible Developer or Association setting forth the deficiencies in maintenance and/or preservation. Notice shall also set forth a demand that the deficiencies be cured within a stated reasonable time period. If the identified deficiencies

are not timely cured administratively, the City may issue citations for violation of any City Code. If the deficiency concerns any provision of this Open Space Preservation Easement then, after a reasonable time allowed for curing any deficiencies, a hearing may be held before the City Council, or such other Council, body or official delegated by the City Council, for the purpose of allowing the responsible Developer or Association to be heard as to why the City should not proceed with the maintenance and/or preservation which has not been undertaken. At the hearing, the time for curing the deficiencies and the hearing itself may be extended and/or continued to a date certain. If, following the hearing, the City Council, or other body or official, designated to conduct the hearing, shall determine that maintenance and/or preservation have not been undertaken within the time specified in the notice, the City shall have the power and authority but not the obligation to enter upon the Property, or cause its agents or contractors to enter upon the Property and perform such maintenance and/or preservation as reasonably found by the City to be appropriate. The cost and expense of making and financing such maintenance and/or preservation including the cost of notices by the City and reasonable legal fees incurred by the City, plus an administrative fee in the amount of 25% of the total of all costs and expenses incurred, shall be paid by the responsible Developer or Association, and such amount shall constitute a lien on an equal pro rata basis as to all of the units of the condominium within which the Easement Areas are located. In the event one or more of the affected Easement Areas are not located within a condominium, the lien shall be against the portion of the Property in which the Easement Area is located. The City may require the payment of such monies prior to the commencement of work. If Developer or Association has not paid the billed costs and expenses within 30 days all unpaid amounts may be placed on the delinquent tax roll of the City, pro rata, as to each unit, and shall accrue interest and penalties, and shall be collected as, and shall be deemed delinquent real property taxes, according to the laws made and provided for the collection of delinquent real property taxes. In the discretion of the City, such costs and expenses may be collected by suit initiated against the responsible Developer/Association, and, in such event, the responsible Developer/Association shall pay all court costs and reasonable attorney fees incurred by the City in connection with such suit.

7. This Open Space Preservation Easement has been made and given for a consideration of a value less than One Hundred ($100.00) Dollars, and, accordingly, is (i) exempt from the State Transfer Tax, pursuant to MCL 207.526(6)(a); MSA 7.456(26)(2) and (ii) exempt from the County Transfer Tax, pursuant to MCL 207.505(a); MSA 7.456(5)(a).

8. This Open Space Preservation Easement shall be recorded with the Oakland County Register of Deeds. Glen Arbor Building, LLC, shall be responsible for recordation of this Agreement including all costs and applicable fees.

DEVELOPER

GLEN ARBOR BUILDING, LLC,
a Michigan limited liability company

By: _____
Zef Berisaj, Member

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ___ day of _____, 2024, by Zef Berisaj, Member of Glen Arbor Building, LLC, a Michigan limited liability company, on its behalf.

_____
Notary Public
Acting in _____ County, Michigan
My Commission Expires: _____

[SIGNATURES CONTINUE ON NEXT PAGE]

CITY OF TROY,
a Michigan municipality

By: _____
Ethan Baker
Its: Mayor

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by Ethan Baker, Mayor of the City of Troy, a Michigan municipal corporation, on behalf of the Corporation.

_____
Notary Public
Acting in _____ County, Michigan
My Commission Expires: _____

By: _____
M. Aileen Dickson
Its: Clerk

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by M. Aileen Dickson, City Clerk of the City of Troy, a Michigan municipal corporation, on behalf of the Corporation.

_____
Notary Public
Acting in _____ County, Michigan
My Commission Expires: _____

When Recorded Return To:

Mark J. Abdo, Esq.
12900 Hall Road, Suite 403
Sterling Heights, Michigan 48313
Office Telephone number: (586) 412-1900

EXHIBIT A - LEGAL DESCRIPTIONS

LEGAL DESCRIPTION
(PER PEA GROUP)

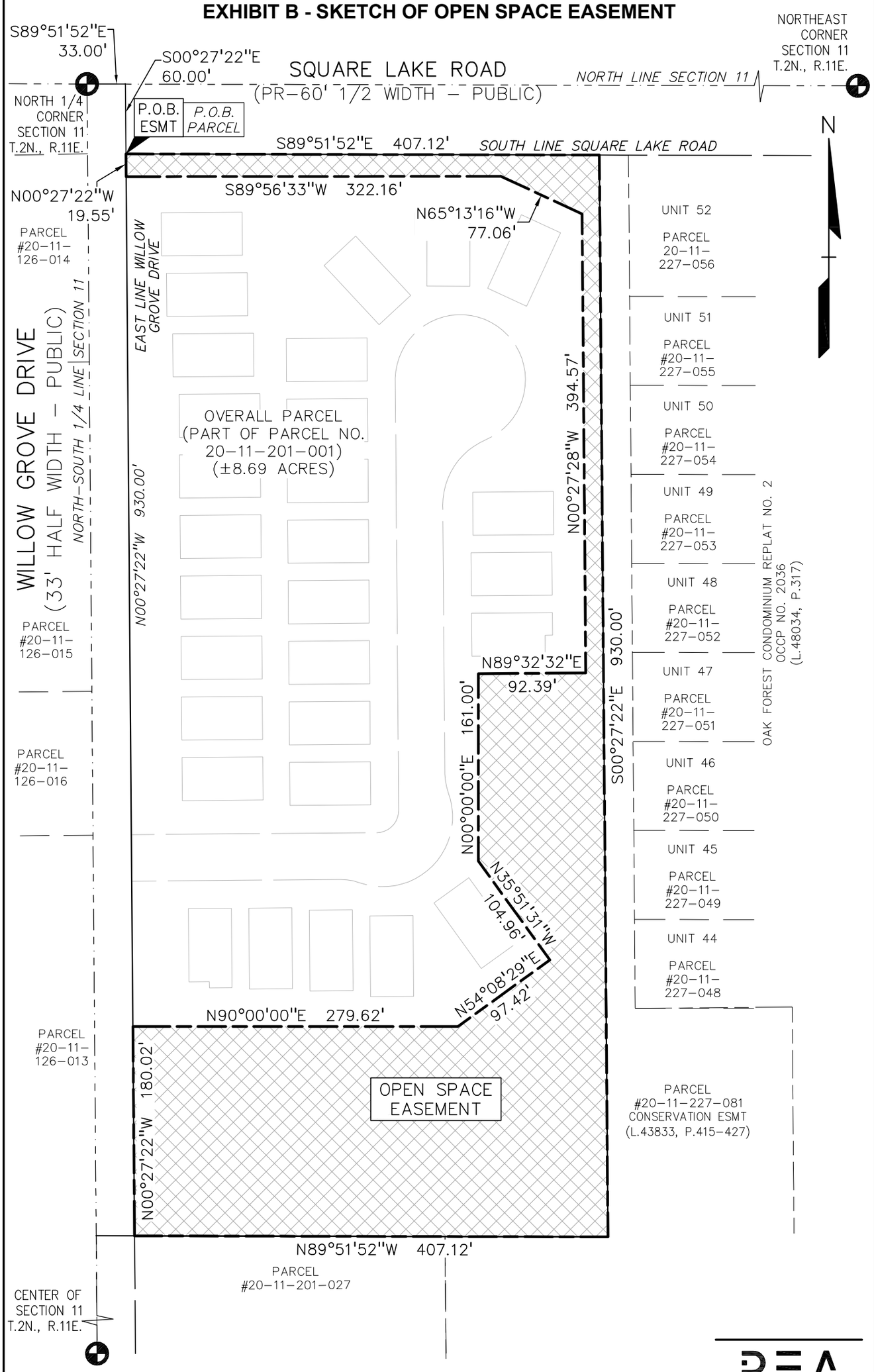
OVERALL PARCEL – PART OF PARCEL NO. 20–11–201–001

A parcel of land over part of the Northeast 1/4 of Section 11, Town 2 North, Range 11 East, City of Troy, Oakland County, Michigan, being more particularly described as:

Commencing at the North 1/4 corner of said Section 11; thence along the north line of said Section 11, S89°51'52"E, 33.00 feet; thence S00°27'22"E, 60.00 feet to the south line of Square Lake Road (60 foot half width) and the POINT OF BEGINNING;
thence along said north line, S89°51'52"E, 407.12 feet to the westerly line of "Oak Forest Condominium", OCCP No. 2036, as recorded in Liber 48034, Page 317, Oakland Count Records; thence along said westerly line, S00°27'22"E, 930.00 feet to a northerly line of said condominium; thence along said northerly line and the extension thereof, N89°51'52"W, 407.12 feet to the east line of Willow Grove Drive (33 foot half width); thence along said east line, N00°27'22"W, 930.00 feet to the aforementioned south line of Square Lake and the POINT OF BEGINNING.
Containing 8.69 acres of land, more or less.

PEA GROUP
t: 844.813.2949
www.peagroup.com

EXHIBIT B - SKETCH OF OPEN SPACE EASEMENT



GLEN ARBOR BUILDING, LLC
5232 22 MILE ROAD
SHELBY TWP., MICHIGAN

0 50 100
SCALE: 1" = 100'

SHEET 2 OF 4
SEPTEMBER 7, 2023
2017-0214

PEA GROUP
t: 844.813.2949
www.peagroup.com

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY - JBT\SURVEY-DEPT\17214ESMT\DWG\EASEMENTS\17214-ESMT-OPEN SPACE.dwg KMB

EXHIBIT B -LEGAL DESCRIPTION

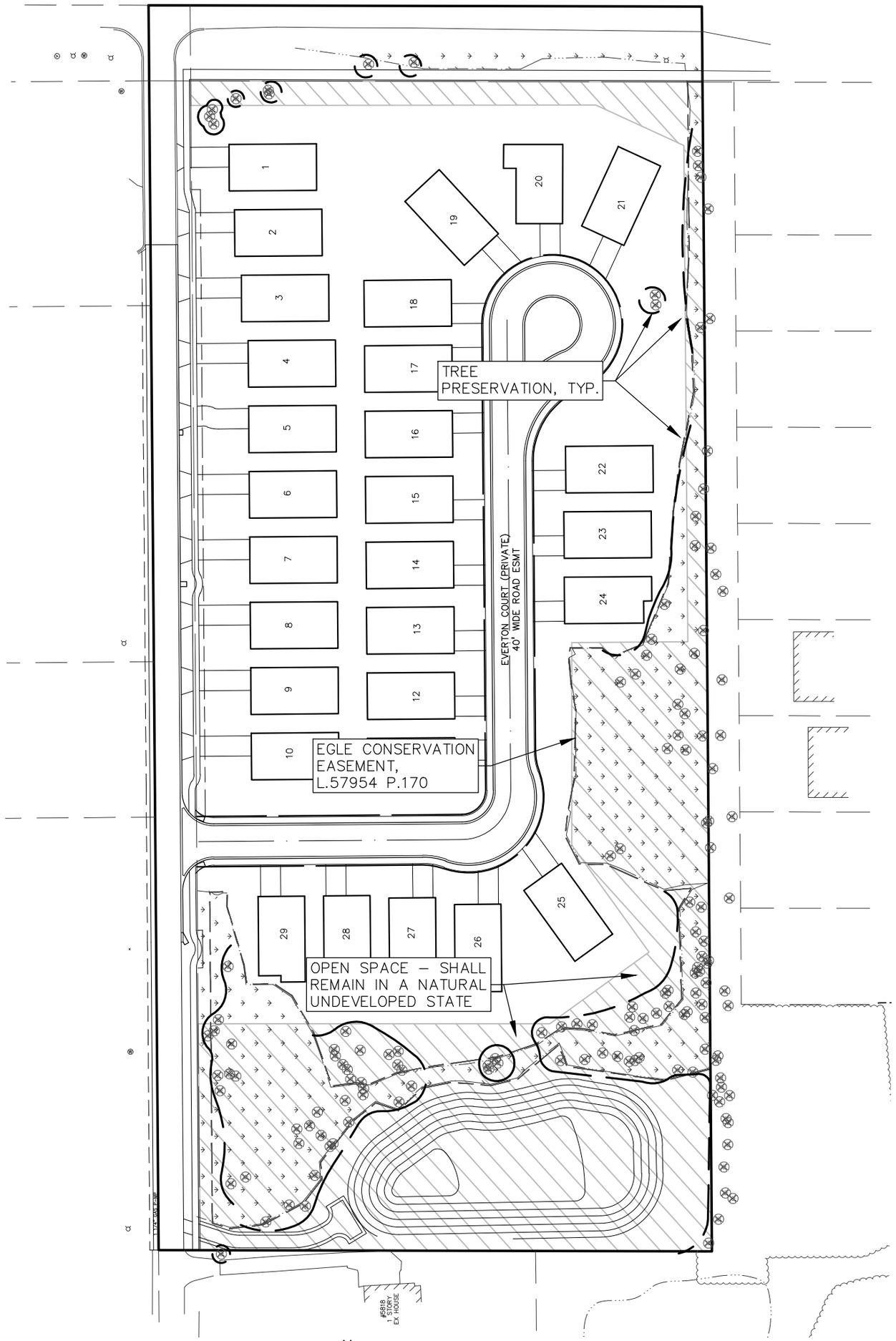
LEGAL DESCRIPTION
(PER PEA GROUP)

VARIABLE WIDTH OPEN SPACE EASEMENT

A variable width open space easement over part of the Northeast 1/4 of Section 11, Town 2 North, Range 11 East, City of Troy, Oakland County, Michigan, said easement being more particularly described as:

Commencing at the North 1/4 corner of said Section 11; thence along the north line of said Section 11, S89°51'52"E, 33.00 feet; thence S00°27'22"E, 60.00 feet to the south line of Square Lake Road (60 foot half width) and the POINT OF BEGINNING;
thence along said north line, S89°51'52"E, 407.12 feet to the westerly line of "Oak Forest Condominium", OCCP No. 2036, as recorded in Liber 48034, Page 317, Oakland Count Records;
thence along said westerly line, S00°27'22"E, 930.00 feet to a northerly line of said condominium;
thence along said northerly line and the extension thereof, N89°51'52"W, 407.12 feet to the east line of Willow Grove Drive (33 foot half width);
thence along said east line, N00°27'22"W, 180.02 feet;
thence N90°00'00"E, 279.62 feet;
thence N54°08'29"E, 97.42 feet;
thence N35°51'31"W, 104.96 feet;
thence N00°00'00"E, 161.00 feet;
thence N89°32'32"E, 92.39 feet;
thence N00°27'28"W, 394.57 feet;
thence N65°13'16"W, 77.06 feet;
thence S89°56'33"W, 322.16 feet to the aforementioned east line of Willow Grove Drive;
thence along said east line, N00°27'22"W, 19.55 feet to the aforementioned south line of Square Lake and the POINT OF BEGINNING.
Containing 2.71 acres of land, more or less.

EXHIBIT C - NATURAL FEATURES PLAN



N

0 50 100

SCALE: 1" = 100'

GLEN ARBOR BUILDING, LLC
5232 22 MILE ROAD
SHELBY TWP., MICHIGAN

SHEET 4 OF 4
SEPTEMBER 7, 2023
2017-0214

PEA GROUP
t: 844.813.2949
www.peagroup.com

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY - JBT\DWG\CONSTRUCTION\EASEMENTS\EXHIBIT C-17214.dwg PLOT DATE:9/7/2023 BY:Kyle Buchner

500 West Big Beaver
Troy, MI 48084
troymi.gov

E-02

CITY COUNCIL AGENDA ITEM

Date: September 11, 2019

To: Mark F. Miller, City Manager

From: Bob Bruner, Assistant City Manager
R. Brent Savidant, Community Development Director

Subject: PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN 2019-0013) – Proposed Ashton Parc One-Family Cluster Development, Southeast corner of East Square Lake and Willow Grove (parcel 88-20-11-201-001), Section 11, Currently zoned R-1C (One Family) District.

The applicant Wolverine Building Company seeks Preliminary Site Plan Approval for a 29-unit cluster development on an 8.69 acre parcel. The applicant proposes detached homes that do not exceed 1,500 square feet in area.

A summary of the project was prepared by the Planning Consultant and is included in the attached agenda item from the July 9, 2019 Planning Commission regular meeting.

The Planning Commission held a public hearing on the application on July 9, 2019 and recommended approval 9-0, with the following conditions:

1. Submission of open space preservation covenant and detailed narrative that indicates a specific method for protecting significant natural features including tree preservation and wetland preservation.
2. Add one additional street tree to private road.

A City Council public hearing has been scheduled for September 23, 2019.

City Attorney's Review as to Form and Legality

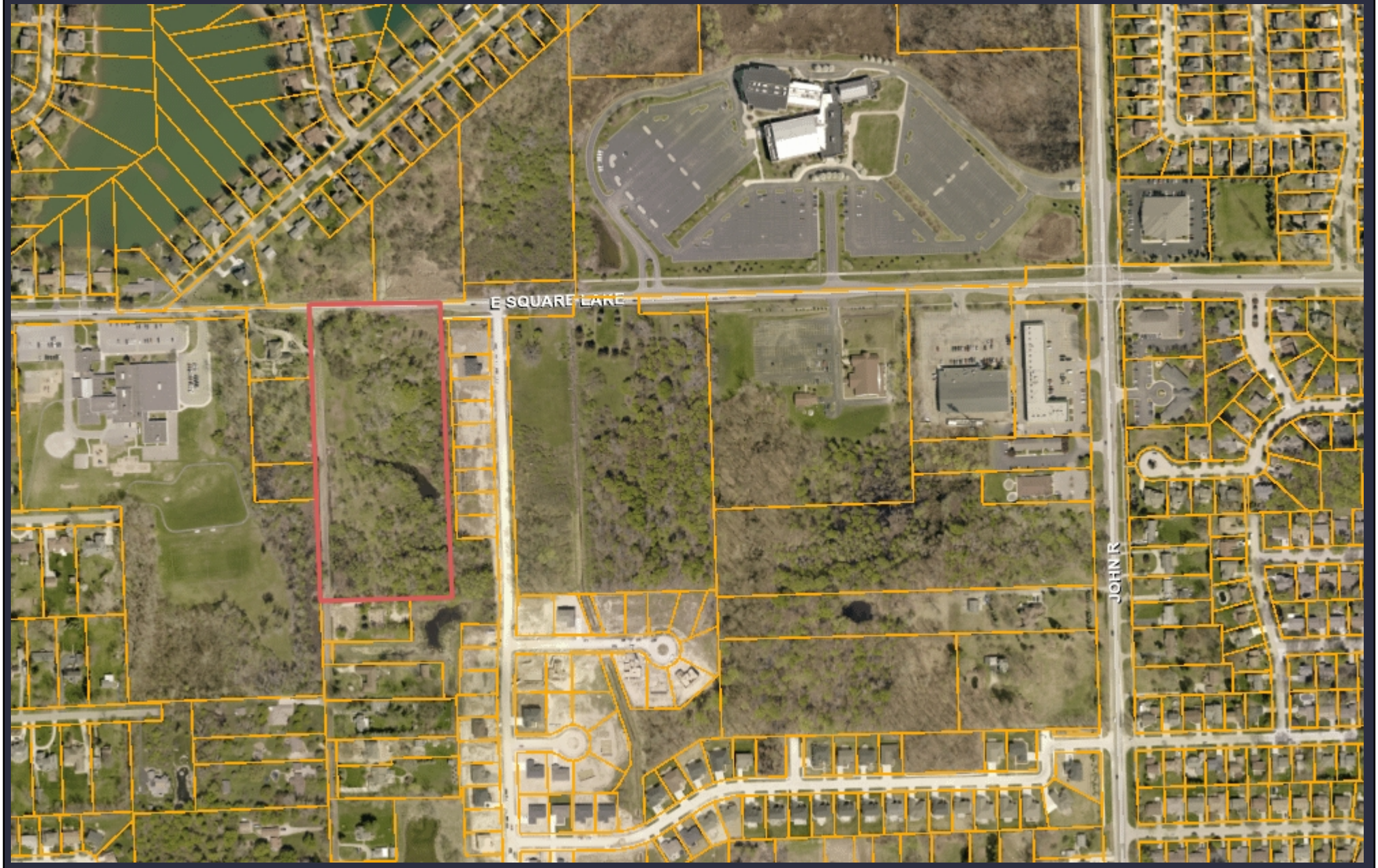
_____ _____
Lori Grigg Bluhm, City Attorney Date

Attachments:
1. Maps
2. Proposed site plan
3. Report prepared by Carlisle/Wortman Associates, Inc. dated February 5, 2019

4. Minutes from July 9, 2019 Planning Commission Regular meeting (excerpt)
5. Anticipated Traffic Impacts, prepared by OHM, dated June 14, 2019
6. Public comment

RBS, G:\SITE PLANS\SP JPLN2019-0013 ASHTON PARC CONDOMINIUMS\CC Memo_Public Hearing 09 23 2019.docx

GIS Online



1,189 0 595 1,189 Feet

Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

GIS Online

1,189 0 595 1,189 Feet

Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

PRELIMINARY SITE CONDOMINIUM PLANS FOR

ASHTON PARC CONDOMINIUMS

PART OF THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T.2N., R.11E.

CITY OF TROY, OAKLAND COUNTY, MICHIGAN

OWNER/APPLICANT/DEVELOPER:

WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DRIVE
SHELBY TWP., MICHIGAN 48315
CONTACT: MARK GESUALE
PHONE: (248) 219-2212
EMAIL: MARK@WOLVERINEBUILDINGCOMPANY.COM

CIVIL ENGINEER:

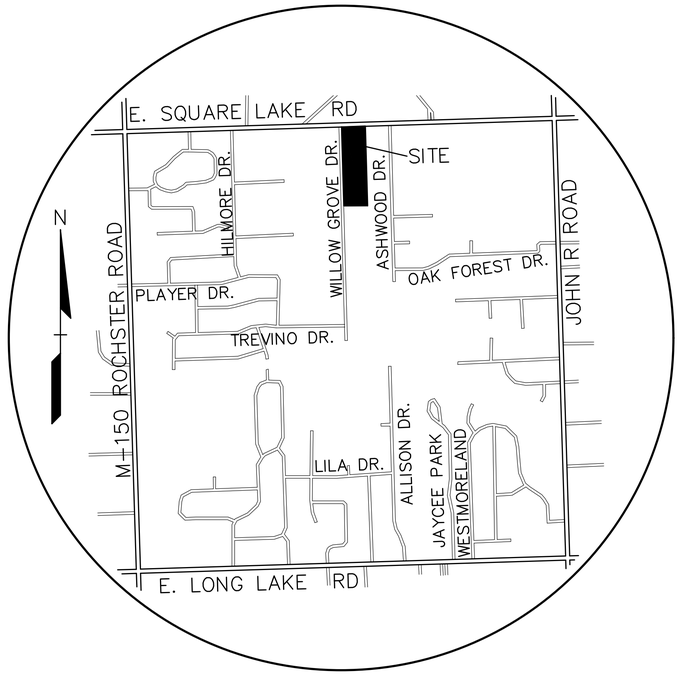
PEA, INC.
2430 ROCHESTER CT, SUITE 100
TROY, MI 48083
CONTACT: JOHN B. THOMPSON, PE
PHONE: (248) 689-9090 EXT. 109
FAX: (248) 689-1044
EMAIL: JTHOMPSON@PEAINC.COM

LANDSCAPE ARCHITECT:

PEA, INC.
7927 NEMCO WAY, SUITE 115
BRIGHTON, MI 48116
CONTACT: JEFF SMITH, R.L.A., LEED AP
PHONE: (517) 546-8583
FAX: (517) 546-8973
EMAIL: JSMITH@PEAINC.COM

LAND SURVEYOR:

D'ANNA ASSOCIATES, LTD
1055 SOUTH BLVD, STE 200
ROCHESTER HILLS, MI 48307
CONTACT: SALVATORE D'ANNA
PHONE: (248)852-7702
EMAIL: SAL@DANNAASSOC.COM



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS:

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2017\2017214\DWG\17214-TOPOBASE.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-BASE-17214.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-TBLK-17214.DWG

REVISIONS

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

PEA, Inc.
2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com

WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DR.
SHELBY TWP., MICHIGAN 48315

COVER SHEET
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY - JBT\DWG\SITE PLANS\[P-1] COVER-17214.DWG

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: N.T.S.

DRAWING NUMBER:
P-1

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0551F, DATED SEPTEMBER 29, 2006.

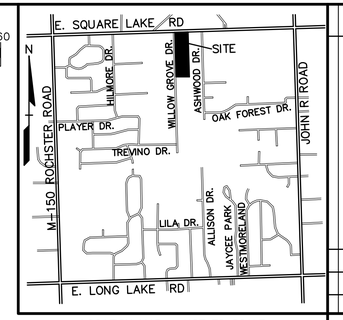
BENCHMARKS
(BY OTHERS)

SITE BENCHMARK
ARROW ON HYDRANT LOCATED AT THE NORTHEAST CORNER OF SAID PARCEL ON SOUTH SIDE OF ROAD
ELEV. = 670.50 NAVD88

LEGAL DESCRIPTION

A PARCEL OF LAND BEING THE WEST 10 ACRES OF THE NORTH 30 ACRES OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 11, T.2N., R.11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 11; THENCE S.89°43'24"E., 440.12 FT. ALONG THE NORTH LINE OF SAID SECTION 11 ANDF THE CENTERLINE OF SQUARE LAKE ROAD; THENCE S.00°19'00"E., 990.01 FT.; THENCE N.89°43'20"W., 440.12 FT. TO A POINT ON THE NORTH-SOUTH 1/4 LINE OF SECTION 11 AND THE CENTERLINE OF WILLOW GROVE ROAD; THENCE N.00°19'00"W., 990.01 FT. ALONG THE NORTH-SOUTH 1/4 LINE OF SECTION 11 AND THE CENTERLINE OF WILLOW GROVE ROAD TO THE POINT OF BEGINNING. CONTAINING 10.0023 ACRES OF LAND. SUBJECT TO THE RIGHTS OF THE PUBLIC OVER SQUARE LAKE ROAD AND WILLOW GROVE RIGHT-OF-WAY AND ANY OTHER EASEMENTS, RESTRICTIONS AND/OR RIGHT-OF-WAYS OF RECORD, IF ANY.

GRAPHIC SCALE
−40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.



LOCATION MAP – NOT TO SCALE

No.	BY	DESCRIPTION	DATE
1	TMK	JBT SINGLE FAMILY UNITS	5-30-19

REVISIONS

LEGEND

NORTH 1/4 CORNER SECTION 11 T.2N., R.11E.

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING
- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- 816.06 SPOT ELEVATION
- 670 CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR VERIFYING THE LOCATIONS, DEPTHS, CONDITIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; CONSTRUCTION CONTRACTOR SHALL AGREE TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL 811
Know what's below Call before you dig
MISS DIG System, Inc.
1-800-482-7171 www.missdig.org
(OHIO ONLY)

TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:

TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY D'ANNA ASSOCIATES.

PEA, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2017\2017214\DWG\17214-TOPOBASE.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-BASE-17214.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-TBLK-17214.DWG

PEA, Inc.
2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com

WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DR.
SHELBY TWP., MICHIGAN 48315

TOPOGRAPHIC SURVEY
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY – JBT\DWG\SITE PLANS\JP-2 TOPO-17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1"=40'

DRAWING NUMBER:
P-2

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0551F, DATED SEPTEMBER 29, 2006.

BENCHMARKS
(BY OTHERS)

SITE BENCHMARK
ARROW ON HYDRANT LOCATED AT THE NORTHEAST CORNER OF SAID PARCEL ON SOUTH SIDE OF ROAD
ELEV. = 670.50 NAVD88

PROJECT AND SITE DESCRIPTION:
PROPOSED CONSTRUCTION OF A 29-UNIT SINGLE FAMILY SITE CONDOMINIUM PROJECT AT THE SOUTHEAST CORNER OF SQUARE LAKE ROAD AND WILLOW GROVE. ACCESS TO ALL UNITS WILL BE VIA A NEW CONNECTION TO WILLOW GROVE. THE PROPOSED RESIDENTIAL USE IS PERMITTED BY-RIGHT IN THE R-1C DISTRICT. THE SITE IS CURRENTLY WOODED WITH WETLANDS.

SITE ARRANGEMENT:
THE PROPOSED SITE CONDOMINIUM CONSISTS OF 29 UNITS. ALL UNITS FRONT EITHER WILLOW GROVE OR THE NEW PRIVATE STREET CONNECTION. THE PROPOSED UNITS ALLOW FOR ADEQUATE SETBACKS, AND PERMIT SUFFICIENT SPACE FOR THE HOMES AND INGRESS AND EGRESS FOR EACH UNIT ACCORDING TO THE CLUSTER OPTION. A MINIMUM OF 30% OPEN SPACE HAS BEEN PROVIDED.

NATURAL RESOURCES:
THE SITE IS CURRENTLY HAS SIGNIFICANT WETLAND AND TREE COVER.

FLOODPLAIN:
THE PROPERTY IN NOT LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) NO. 26125C0551F DATED: SEPTEMBER 29, 2006 (ZONE X).

ACCESS AND CIRCULATION:

VEHICULAR ACCESS AND CIRCULATION:
VEHICULAR ACCESS TO ALL UNITS WILL BE VIA A NEW PRIVATE STREET OFF OF WILLOW GROVE. THE NEW ROAD WILL HAVE A FORTY (40) FOOT ROAD EASEMENT.

PEDESTRIAN ACCESS AND CIRCULATION:
A 5-FOOT WIDE SIDEWALK IS PROVIDED AT BOTH SIDES OF THE NEW ROAD.

UTILITIES:
UTILITIES ARE PLACED WITHIN STREET EASEMENT, OR WITHIN EASEMENTS APPROVED AS TO SIZE AND LOCATION BY THE CITY ENGINEER.

ALL SITES ARE SERVED BY PUBLIC WATER, SANITARY SEWER, STORM WATER AND DETENTION/RETENTION SYSTEMS CONSTRUCTED TO CITY STANDARDS, AT THE EXPENSE OF THE DEVELOPER. EASEMENTS OVER THESE SYSTEMS SHALL BE CONVEYED AND RECORDED BEFORE OCCUPANCY PERMITS ARE ISSUED FOR DWELLING UNITS.

A 25-YEAR DETENTION BASIN IS PROPOSED WITH A RESTRICTED OUTLET.

SITE DATA:

LOCATION OF PROJECT:
SOUTHEAST CORNER OF SQUARE LAKE ROAD AND WILLOW GROVE.

SIZE OF PROPERTY: GROSS: 10.00 ACRES, NET: 8.69 ACRES

PROPOSED USE OF PROPERTY: TWENTY-NINE (29) SINGLE FAMILY HOMES

CURRENT ZONING: R-1C, ONE-FAMILY RESIDENTIAL DISTRICT
PROPOSED ZONING: R-1C, CLUSTER OPTION

SURROUNDING PROPERTY DETAILS:

DIRECTION	ZONING	USE
NORTH	R-1D, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
SOUTH	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
EAST	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
WEST	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES, SCHOOL

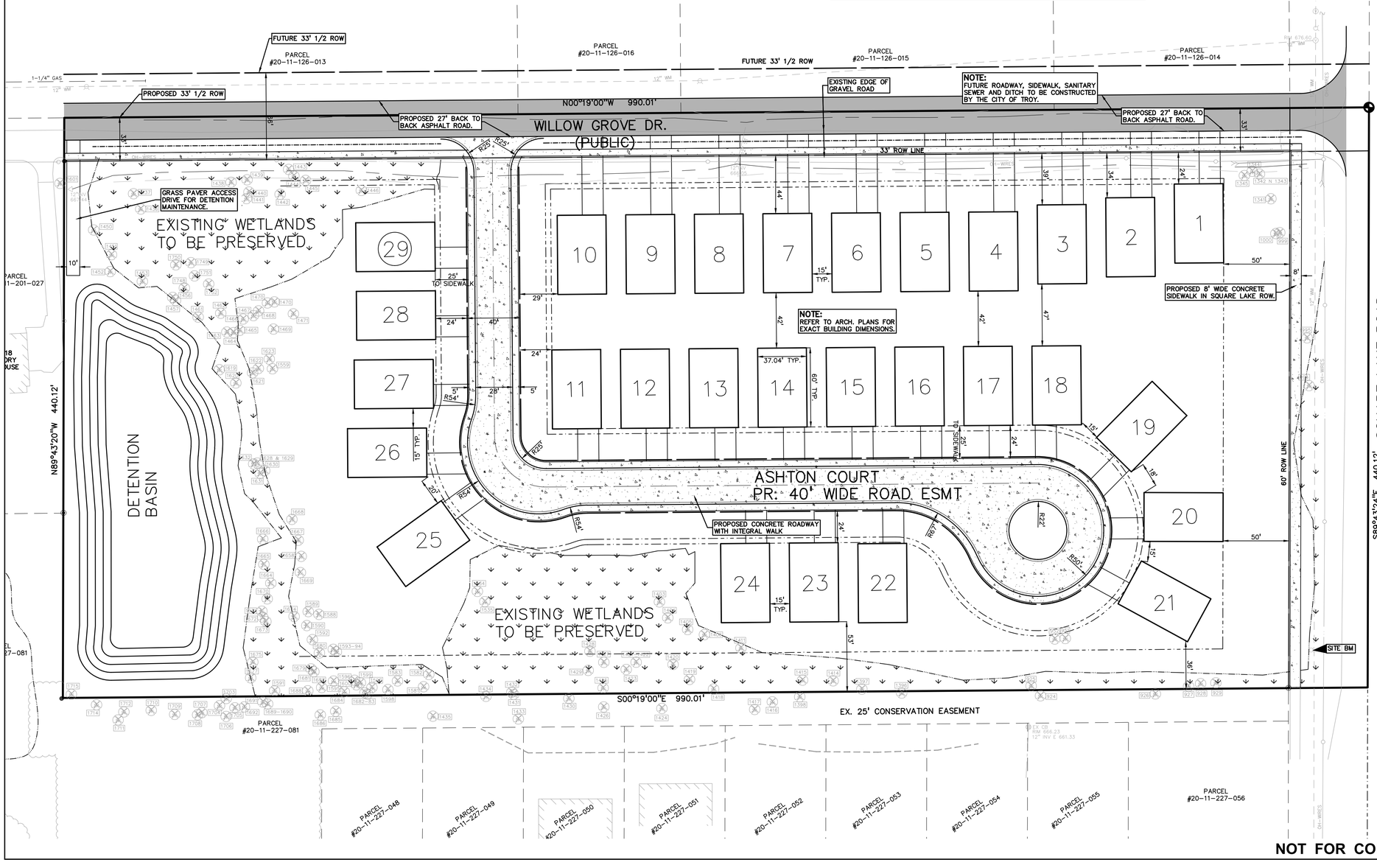
REQUIRED AND PROVIDED LOT DIMENSIONS:

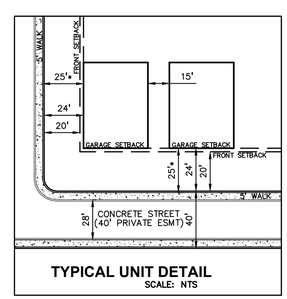
	REQUIRED (R-1C):	PROVIDED (CLUSTER):
FRONT	30 FOOT SETBACK	20 FOOT SETBACK 25 FOOT GARAGE TO WALK
REAR	40 FOOT SETBACK	25 FOOT SETBACK 45 FOOT AGAINST ADJAC.
SIDES	10 FOOT MIN. (ONE), 20 FOOT TOTAL	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL
MAXIMUM HEIGHT	30 FEET, 2.5 STORY	30 FEET, 2 STORY
LOT WIDTH	85 FEET	70 FEET MIN.
OPEN SPACE	30%	>30%

CLUSTER OPTION BONUSES ALLOWED:

PARALLEL PLAN = 17 UNITS
CLUSTER OPTION: 20% BONUS OVER PARALLEL PLAN
OPEN SPACE > 30%, 10% BONUS
<1,500 SF UNITS: 2x PARALLEL PLAN BONUS
SUSTAINABLE DESIGN: 10% BONUS
TOTAL UNITS ALLOWED = 40 UNITS

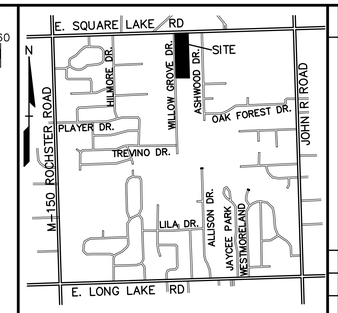
GRAPHIC SCALE
-40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.
N





TYPICAL UNIT DETAIL
SCALE: NTS

* DISTANCE TO SIDEWALK



LOCATION MAP - NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING	PROPOSED	
-OH-ELEC-		ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
-UG-CATV-		UNDERGROUND CABLE TV, CATV PEDESTAL
-UG-PHONE-		TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
-UG-ELEC-		ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
		GAS MAIN, VALVE & GAS LINE MARKER
		WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
		SANITARY SEWER, CLEANOUT & MANHOLE
		STORM SEWER, CLEANOUT & MANHOLE
		COMBINED SEWER & MANHOLE
		SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
		POST INDICATOR VALVE
		WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
		MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
		UNIDENTIFIED STRUCTURE
816.06		SPOT ELEVATION
670	671	CONTOUR LINE
		FENCE
		GUARD RAIL
		STREET LIGHT
		SIGN
CONC.		CONCRETE
ASPH.		ASPHALT
GRAVEL		GRAVEL SHOULDER
		WETLAND

STD DUTY / HEAVY DUTY / R.O.W. DUTY ONLY
STD DUTY / HEAVY DUTY / DEEP STRENGTH

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

REVISIONS

CAUTION!!
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WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DR.
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PRELIMINARY SITE PLAN
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY - 4BT\DWG\SITE PLANS\(P-3) SITE-17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1" = 40'

DRAWING NUMBER:
P-3

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2017\2017214\DWG\17214-TOPOBASE.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-BASE-17214.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-TBLK-17214.DWG

FLOODPLAIN NOTE:
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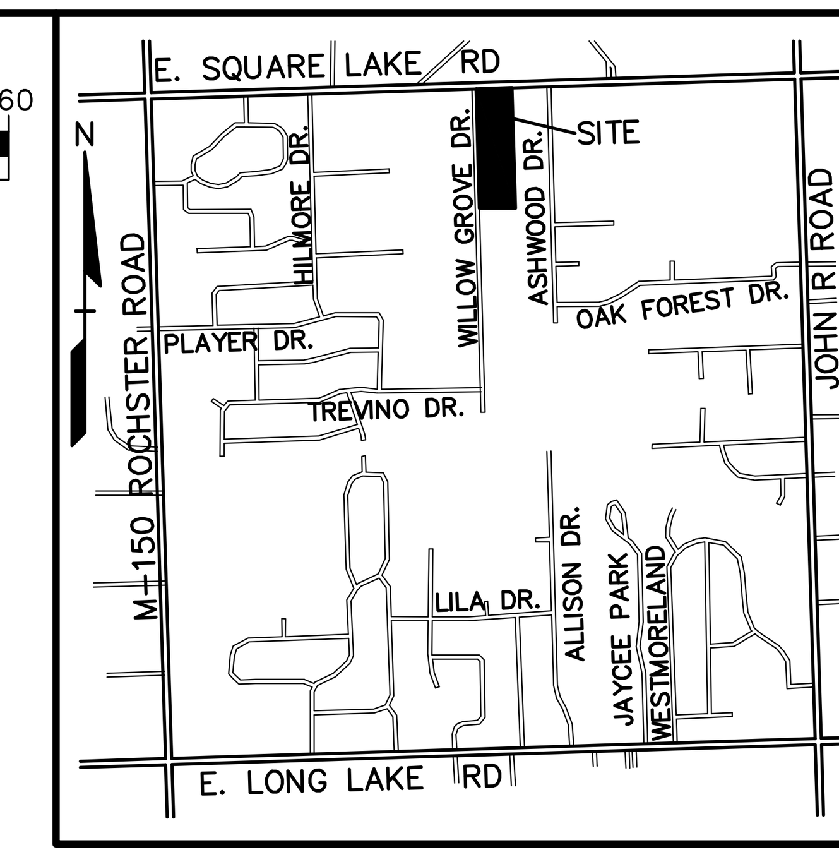
BENCHMARKS
(BY OTHERS)

SITE BENCHMARK
ARROW ON HYDRANT LOCATED AT THE NORTHEAST CORNER OF SAID PARCEL ON SOUTH SIDE OF ROAD
ELEV. – 670.50 NAVD88

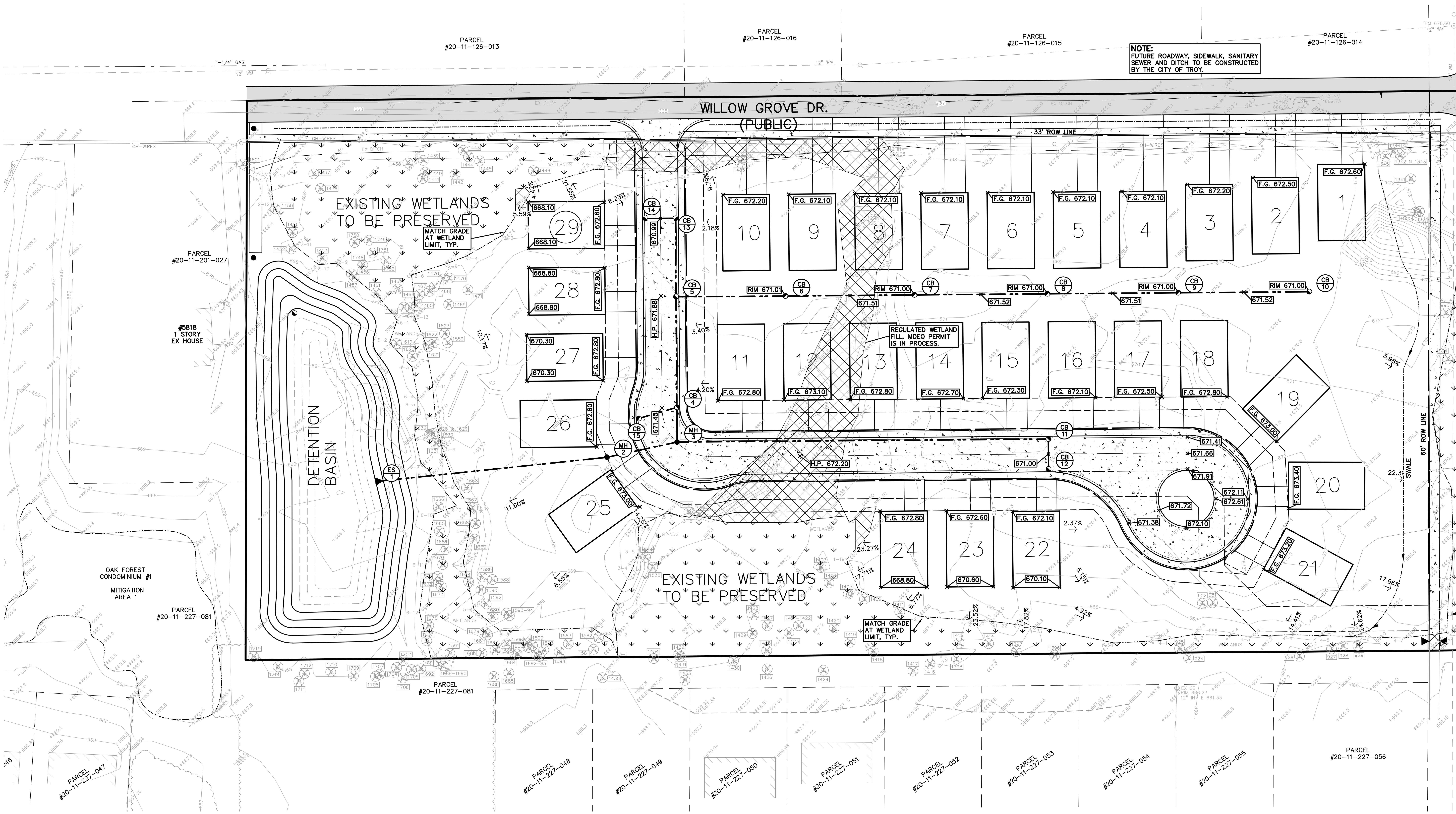
GRAPHIC SCALE
−40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.



LOCATION MAP – NOT TO SCALE

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

REVISIONS



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PRELIMINARY GRADING PLAN
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY – JBT\DWG\SITE PLANS\(P-4) GRADE-17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1" = 40'

DRAWING NUMBER:
P-4

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2017\2017214\DWG\17214–TOPOBASE.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–BASE–17214.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–TBLK–17214.DWG

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BENCHMARKS
(BY OTHERS)

SITE BENCHMARK
ARROW ON HYDRANT LOCATED AT THE NORTHEAST CORNER OF SAID PARCEL ON SOUTH SIDE OF ROAD
ELEV. – 670.50 NAVD88

STORM WATER MANAGEMENT:
FRONT YARDS & ROADWAY TO DISCHARGE TO DETENTION BASIN AND OUTLET TO NEW SYSTEM IN WILLOW GROVE.
WHERE APPLICABLE, REAR YARDS AND SUMP LEADS WILL DISCHARGE AT GRADE TO CONTINUE TO PROVIDE WATER TO EXISTING PERIMETER WETLANDS.

Project No: 2017-214

25 YEAR STORM DETENTION DESIGN (OAKLAND COUNTY DESIGN METHOD)

Total Contributing Area (A):	8.69	AC.
Allowable Discharge (Qa)	1.74	C.F.S. (= 0.2 CFS/AC.)
Coefficient of Runoff (Cr):	0.50	

Calculation of Required Discharge/Acre

Qo = ((Qa)/(A)(Cr): 0.40

T = -25 + ((8062.5/Qo))0.5: 116.97

Storage Volume Required:

Vs = (12900(T)/(T+25)) - 40Qo(T): 8756.87

Vt = (Vs)(A)(Cr): 38,049 C.F.

Storage Volume Provided:

Elev.	Area	Volume	Cumulative Volume
668.2	18,619		0
669	21,862	16,192	16,192
670	26,022	23,942	40,134
Total	40,134 C.F.		

670.68 25 yr. elev.

GRAPHIC SCALE
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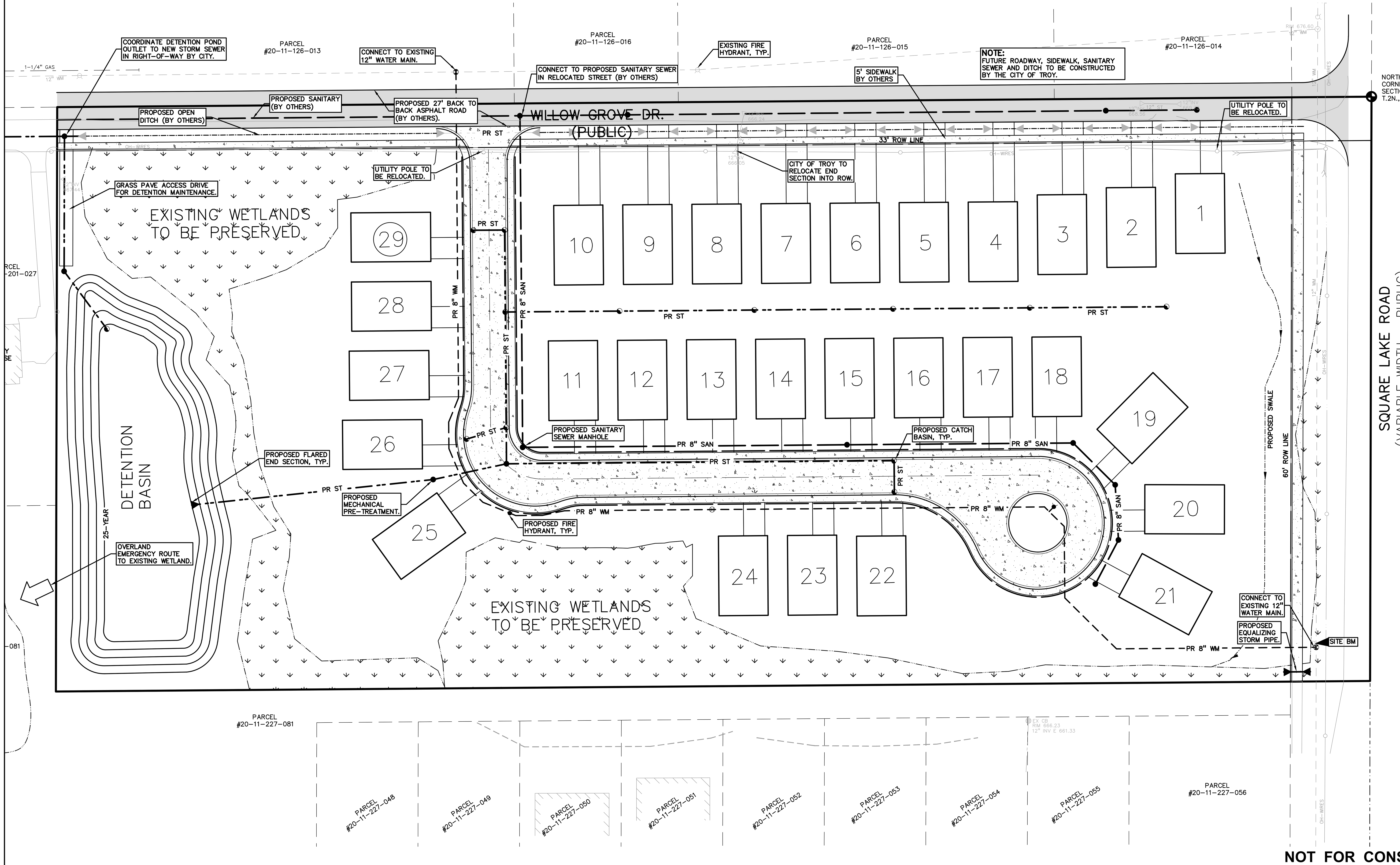
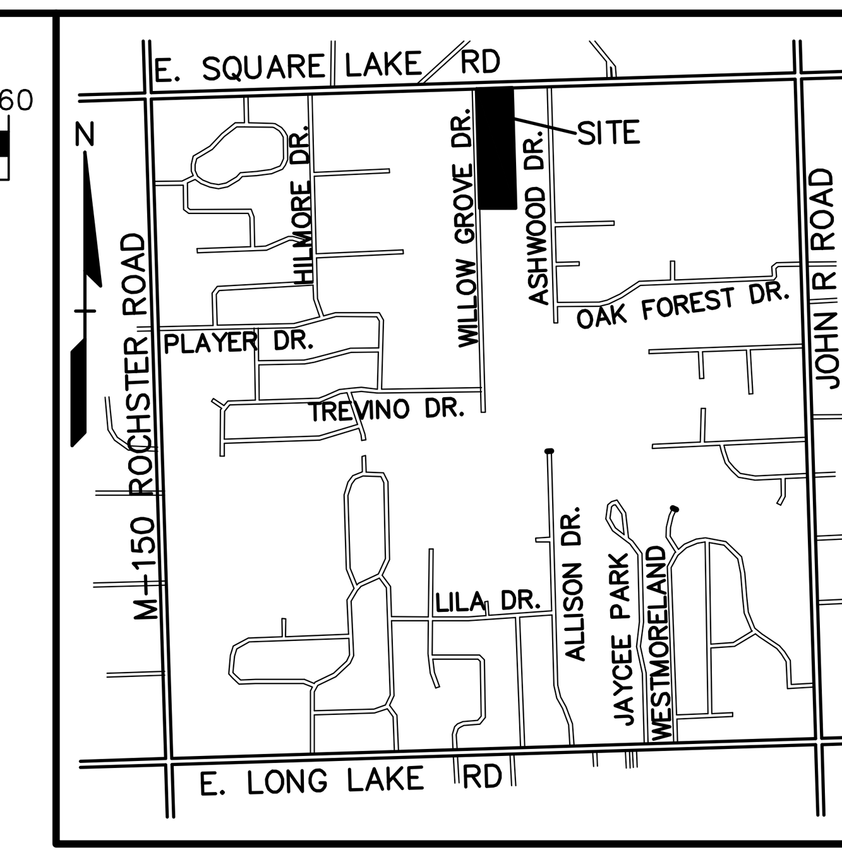
(IN FEET)
1 inch = 40 ft.





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND; IRON SET; NAIL FOUND; NAIL & CAP SET; BRASS PLUG SET; MONUMENT FOUND; MONUMENT SET; SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
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UNIDENTIFIED STRUCTURE
SPOT ELEVATION (816.06 / 671.21)
CONTOUR LINE (670 / 671)
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONC. — CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
ASPH. — ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
GRAVEL — GRAVEL SHOULDER
WETLAND

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

REVISIONS

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PRELIMINARY UTILITY PLAN
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY – JBT\DWG\SITE PLANS\(P-5) UTIL-17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1" = 40'

DRAWING NUMBER:
P-5

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2017\2017214\DWG\17214–TOPOBASE.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–BASE–17214.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–TBLK–17214.DWG

PARALLEL PLAN SITE DATA:

ZONING:

CURRENT ZONING: R-1C ONE FAMILY RESIDENTIAL DISTRICT

UNIT DIMENSION REQUIREMENTS:

- MINIMUM UNIT AREA = 10,500 SQUARE FEET
- MINIMUM UNIT WIDTH = 85'
- FRONT YARD SETBACK = 30'
- SIDE YARD SETBACK = 10' (ONE); 20' TOTAL
- REAR YARD SETBACK = 40'

UNIT DIMENSION REQUIREMENTS: (UNIT AVERAGING)

- MINIMUM UNIT AREA REQUIRED = 13,500 SQUARE FEET
- MINIMUM UNIT WIDTH AT BLDG. SETBACK REQUIRED = 90'
- AVERAGE WIDTH = 97.59'

UNIT SIZE REQUIREMENTS:

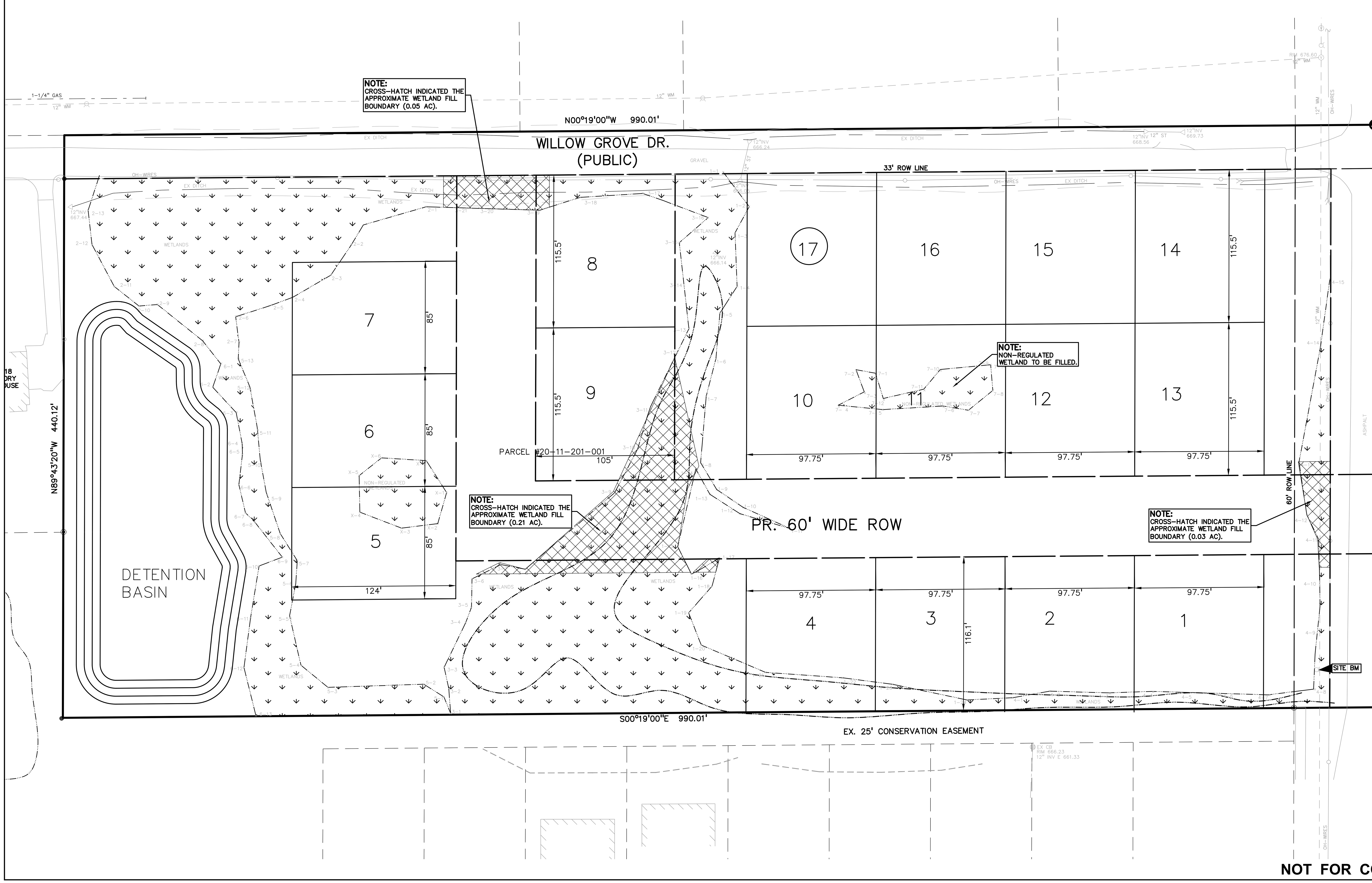
- MINIMUM FLOOR PLAN AREA = 1,200 SQUARE FEET
- MAXIMUM % OF UNIT AREA COVER BY BUILDINGS = 30%

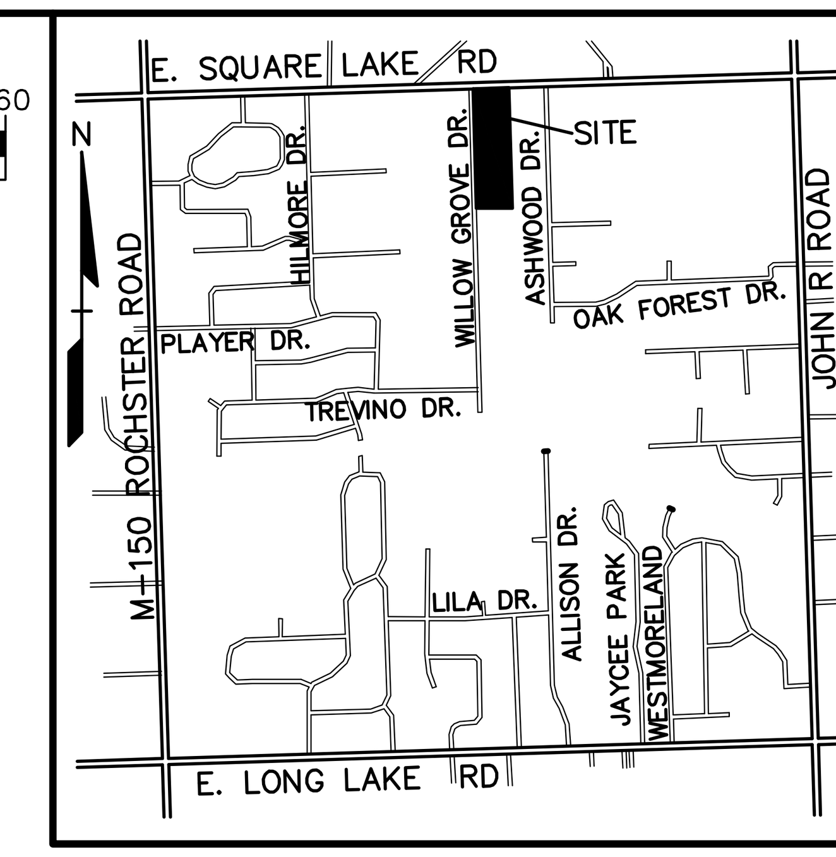
UNIT SIZE PROVIDED:

- MINIMUM UNIT AREA PROVIDED = 10,540 SQUARE FEET
- AVERAGE UNIT AREA PROVIDED = 11,270 SQUARE FEET
- SINGLE-FAMILY UNITS PROVIDED = 1.9 UNITS/ACRE

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.





LOCATION MAP – NOT TO SCALE

LEGEND

- ● IRON FOUND
- ⊠ IRON SET
- NAIL FOUND
- ⌀ NAIL & CAP SET
- BRASS PLUG SET
- ◉ MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
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EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
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- SPOT ELEVATION (816.06 / 671.21)
- CONTOUR LINE (670 / 671)
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE (CONC.) — STD DUTY, HEAVY DUTY, R.O.W. ONLY
- ASPHALT (ASPH.) — STD DUTY, HEAVY DUTY, DEEP STRENGTH
- GRAVEL SHOULDER (GRAVEL)
- WETLAND

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

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DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY – JBT\DWG\SITE PLANS\(P-6) PARALLEL-17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1" = 40'

DRAWING NUMBER:
P-6

NOT FOR CONSTRUCTION

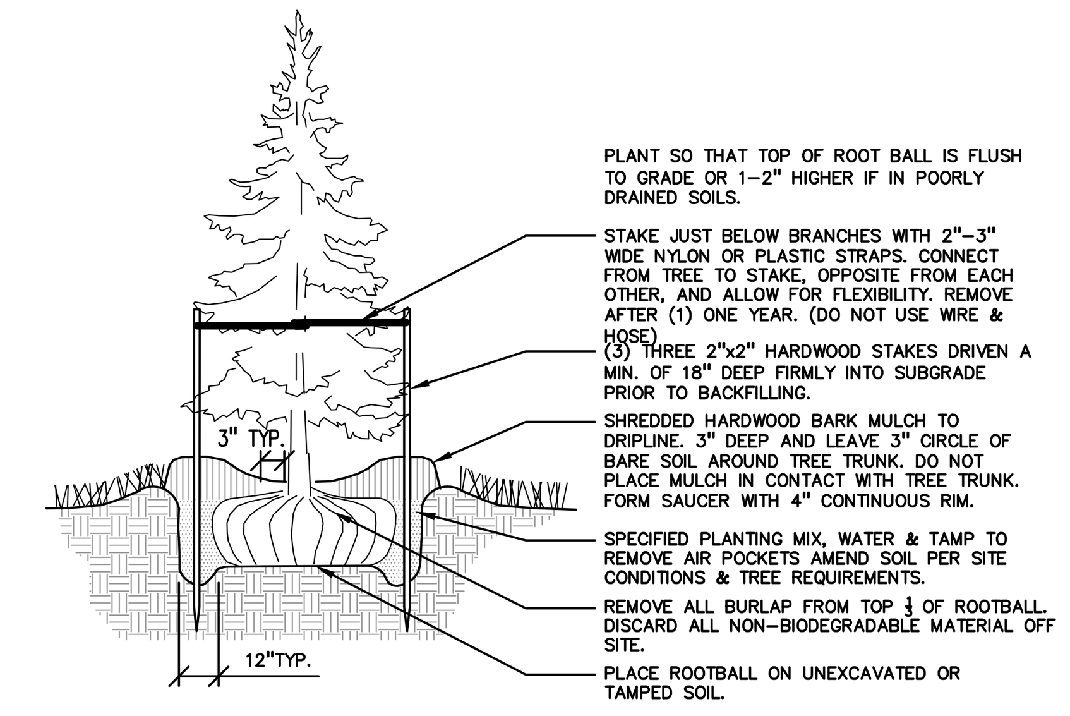
XREF: S:PROJECTS\2017\2017214\DWG\17214-TOPOBASE.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-BASE-17214.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-TBLK-17214.DWG

Stormwater Seed Mix
CARDNO 574-586-2412
cardnonativeplantnursery.com

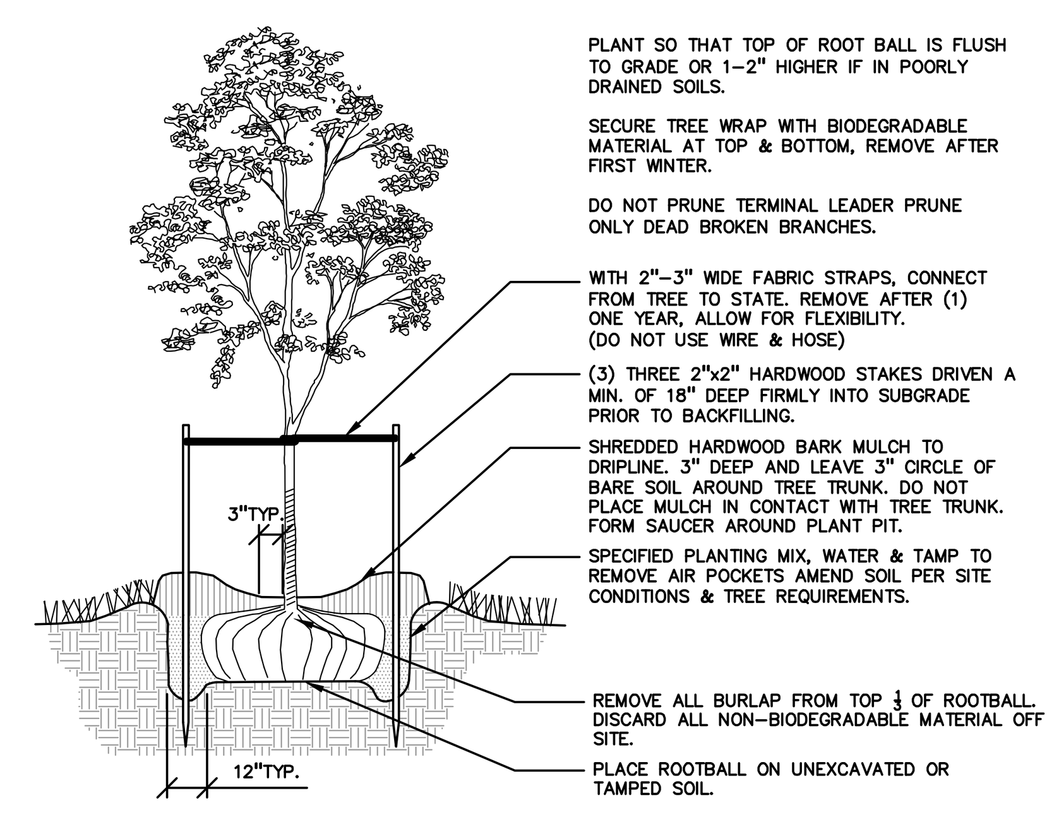
Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
Bolboschoenus fluviatilis	River Bulrush
Carex cristatella	Crested Oval Sedge
Carex lurida	Bottlebrush Sedge
Carex vulpinoidea	Brown Fox Sedge
Elymus virginicus	Virginia Wild Rye
Glyceria striata	Fowl Manna Grass
Juncus effusus	Common Rush
Leersia oryzoides	Rice Cut Grass
Panicum virgatum	Switch Grass
Schoenoplectus tabernaemontani	Softstem Bulrush
Scirpus atrovirens	Dark Green Rush
Scirpus cyperinus	Wool Grass
Temporary Cover:	
Avena sativa	Common Oat
Lolium multiflorum	Annual Rye
Forbs & Shrubs:	
Alisma spp.	Water Plantain (Various Mix)
Asclepias incarnata	Swamp Milkweed
Bidens spp.	Bidens (Various Mix)
Helenium autumnale	Sneezeweed
Iris virginica	Blue Flag
Lycopus americanus	Common Water Horehound
Mimulus ringens	Monkey Flower
Oligoneuron riddellii	Riddell's Goldenrod
Penthorum sedoides	Ditch Stonecrop
Polygonum spp.	Pinkweed (Various Mix)
Rudbeckia subtomentosa	Sweet Black-Eyed Susan
Rudbeckia triloba	Brown-Eyed Susan
Sagittaria latifolia	Common Arrowhead
Senna hebecarpa	Wild Senna
Symphyotrichum novae-angliae	New England Aster
Thalictrum dasycarpum	Purple Meadow Rue

Economy Prairie Seed Mix
CARDNO 574-586-2412
cardnonativeplantnursery.com

Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
Andropogon gerardii	Big Bluestem
Bouteloua curtipendula	Side Oats Grama
Carex spp.	Prairie Sedge Mix
Elymus canadensis	Canada Wild Rye
Panicum virgatum	Switch Grass
Schizachyrium scoparium	Little Bluestem
Sorghastrum nutans	Indian Grass
Temporary Cover:	
Avena sativa	Common Oat
Lolium multiflorum	Annual Rye
Forbs & Shrubs:	
Asclepias syriaca	Common Milkweed
Asclepias tuberosa	Butterfly Weed
Chamaecrista fasciculata	Partridge Pea
Coreopsis lanceolata	Sand Coreopsis
Echinacea purpurea	Broad-leaved Purple Coneflower
Heliopsis helianthoides	False Sunflower
Lupinus perennis	Wild Lupine
Monarda fistulosa	Wild Bergamot
Penstemon digitalis	Foxglove Beard Tongue
Pycnanthemum virginianum	Common Mountain Mint
Ratibida pinnata	Yellow Coneflower
Rudbeckia hirta	Black-Eyed Susan
Solidago speciosa	Showy Goldenrod
Symphyotrichum laeve	Smooth Blue Aster
Symphyotrichum novae-angliae	New England Aster



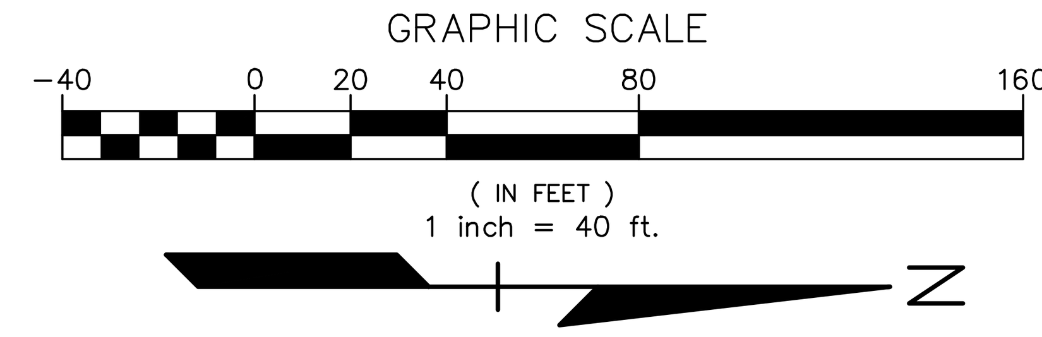
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

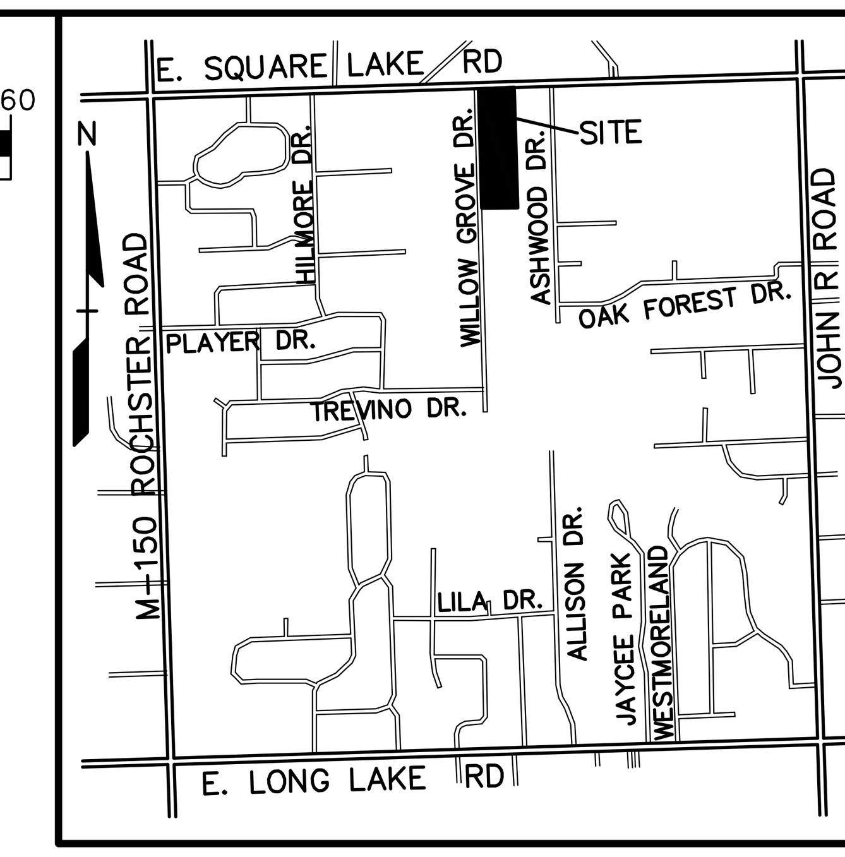
KEY:

⊕	= GREENBELT TREES
⊕	= BASIN TREES
⊙	= INTERNAL STREET TREES
▨	= NON- IRRIGATED SEED LAWN
▭	= STORM WATER SEED MIX BY: CARDNO NATIVE PLANT NURSERY: 5 74-586-2412 PROVIDE EROSION MAT ON SLOPES
▨	= ECONOMY PRAIRIE SEED MIX BY: CARDNO NATIVE PLANT NURSERY 574-586-2412 PROVIDE EROSION MAT ON SLOPES
1586	= EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE



NOTE:
TREES SHALL BE PLACED AT A MINIMUM 5' AWAY FROM UTILITY LEADS.

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
DECIDUOUS TREE PLANT LIST:					
8	AL2.5	Serviceberry	*Amelanchier laevis*	2.5" Cal.	B&B
12	AR2.5	Red Maple	*Acer rubrum*	2.5" Cal.	B&B
3	CC2.5	Eastern Redbud	*Cercis canadensis*	2.5" Cal.	B&B
7	CO2.5	Common Hackberry	*Celtis occidentalis*	2.5" Cal.	B&B
7	GT2.5	Skyline Honeylocust	*Gleditsia triacanthos 'Skyline'*	2.5" Cal.	B&B
8	PC2.5	Cleveland Select Pear	*Pyrus calleryana 'Cleveland Select'*	2.5" Cal.	B&B
8	QB2.5	Swamp White Oak	*Quercus bicolor*	2.5" Cal.	B&B
11	QR2.5	Red Oak	*Quercus rubra*	2.5" Cal.	B&B
12	TC2.5	Greenspire Linden	*Tilia cordata 'Greenspire'*	2.5" Cal.	B&B
5	UF2.5	Frontier Elm	*Ulmus 'Frontier'*	2.5" Cal.	B&B
81	TOTAL DEC.				
EVERGREEN TREE PLANT LIST:					
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
6	PN8	Austrian Pine	*Pinus nigra*	8' Ht.	B&B



LOCATION MAP – NOT TO SCALE

LANDSCAPE CALCULATIONS:
PER CITY OF TROY ZONING ORDINANCE; R–1C

INTERNAL PUBLIC ROADS STREET TREES
REQUIRED: 1 TREE / 50 LF (BOTH SIDES RD.)
1,463 LF / 50 LF = 29 TREES

PROVIDED: 29 TREES

SQUARE LAKE ROAD GREENBELT
REQUIRED: 1 TREE / 30 LF (BOTH SIDES RD.)
440 LF / 30 LF = 15 TREES

PROVIDED: 14 PROPOSED TREES AND 1 EXISTING TREE.

WILLOW GROVE ROAD GREENBELT
REQUIRED: 1 TREE / 30 LF (BOTH SIDES RD.)
990 LF / 30 LF = 33 TREES

PROVIDED: 30 PROPOSED TREES AND 3 EXISTING TREES.

LANDMARK AND WOODLAND TREE REPLACEMENT

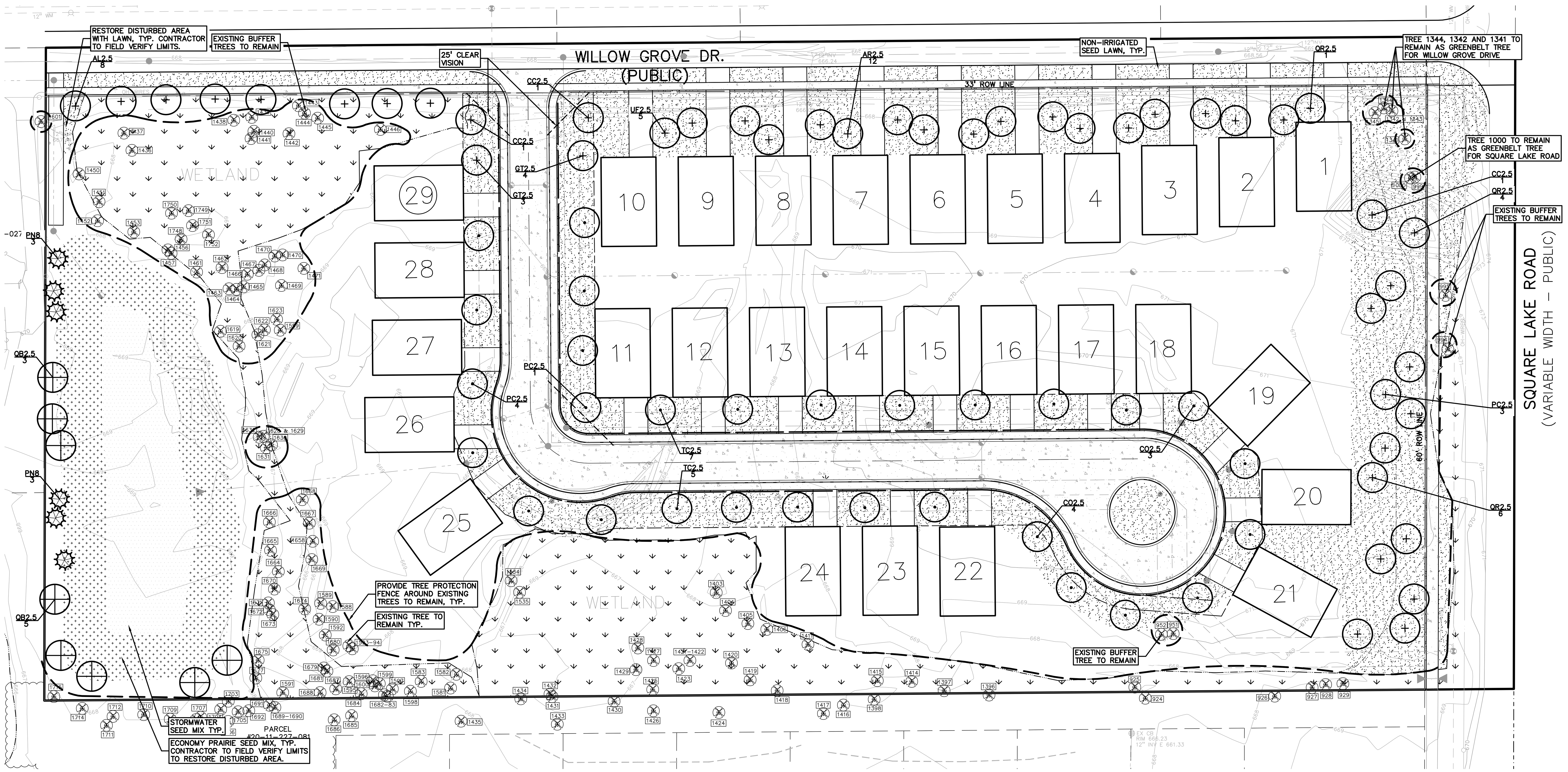
REQUIRED: WOODLAND TREE REPLACEMENT: 31 TREES REMOVED AT 275" * .5 = 138". 9 TREES SAVED AT 85" * 2 = 170". REMOVED – SAVED DBH = –33.

LANDMARK TREE REPLACEMENT: 3 TREES REMOVED AT 60". 2 TREES SAVED AT 54" * 2 = 108". REMOVED – SAVED DBH = –48.

PROVIDED: NO REPLACEMENT TREES REQUIRED.
SEE SHEET T–1 FOR MORE CALCULATIONS

DETENTION BASIN LANDSCAPE:
REQUIRED: TREES AND PLANT MATERIAL TO SCREEN AND MAINTAIN A NATURAL LOOK

PROVIDED: 14 TREES AND SHRUBS AROUND BASINS



GENERAL PLANTING NOTES:

1. LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1–800–482–7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
3. ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1. GRADE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
5. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
7. ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
8. ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
9. ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
11. NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
12. ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
13. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
14. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
15. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
16. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
17. FOR NON–LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.

NOT FOR CONSTRUCTION
XREF: S:PROJECTS\2017\2017214\DWG\17214–TOPOBASE.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–BASE–17214.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–TBLK–17214.DWG

REVISIONS

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

STATE OF MICHIGAN
JEFFREY T. SMITH
LANDSCAPE ARCHITECT
No. 1328
REGISTERED LANDSCAPE ARCHITECT

PEA
PEA, Inc.
2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com

WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DR.
SHELBY TWP., MICHIGAN 48315

PRELIMINARY LANDSCAPE PLAN
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	JTS	DN.	KAD	SUR.	RS	P.M.	JBT

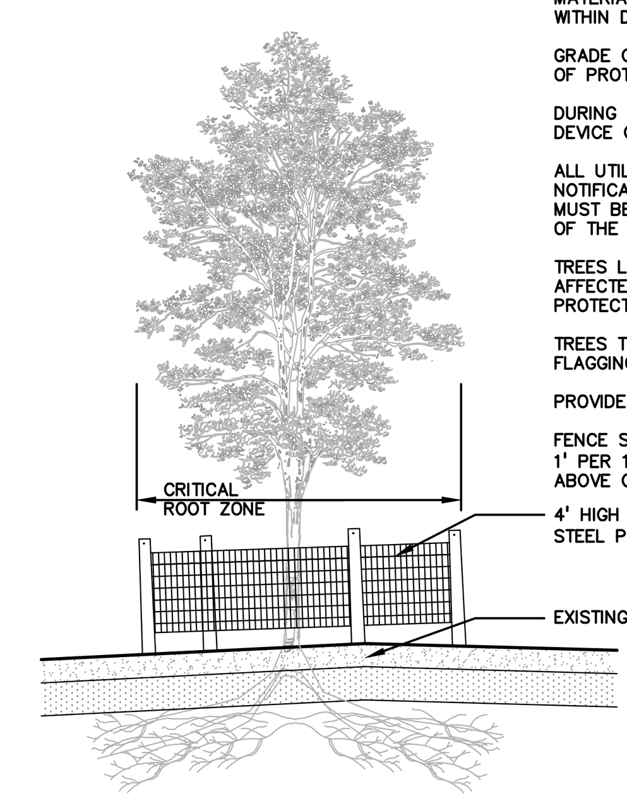
S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY – JBT\DWG\LANDSCAPE\SITE PLANS\(L-1) LandscapePlan-17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1" = 40'

DRAWING NUMBER:
L-1



TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN;INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN DRIP LINES.

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES.

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE.

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.

TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.

TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH FLAGGING PRIOR TO THE TREE CLEARING OPERATIONS.

PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE.

FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND.

TREE PROTECTION DETAIL

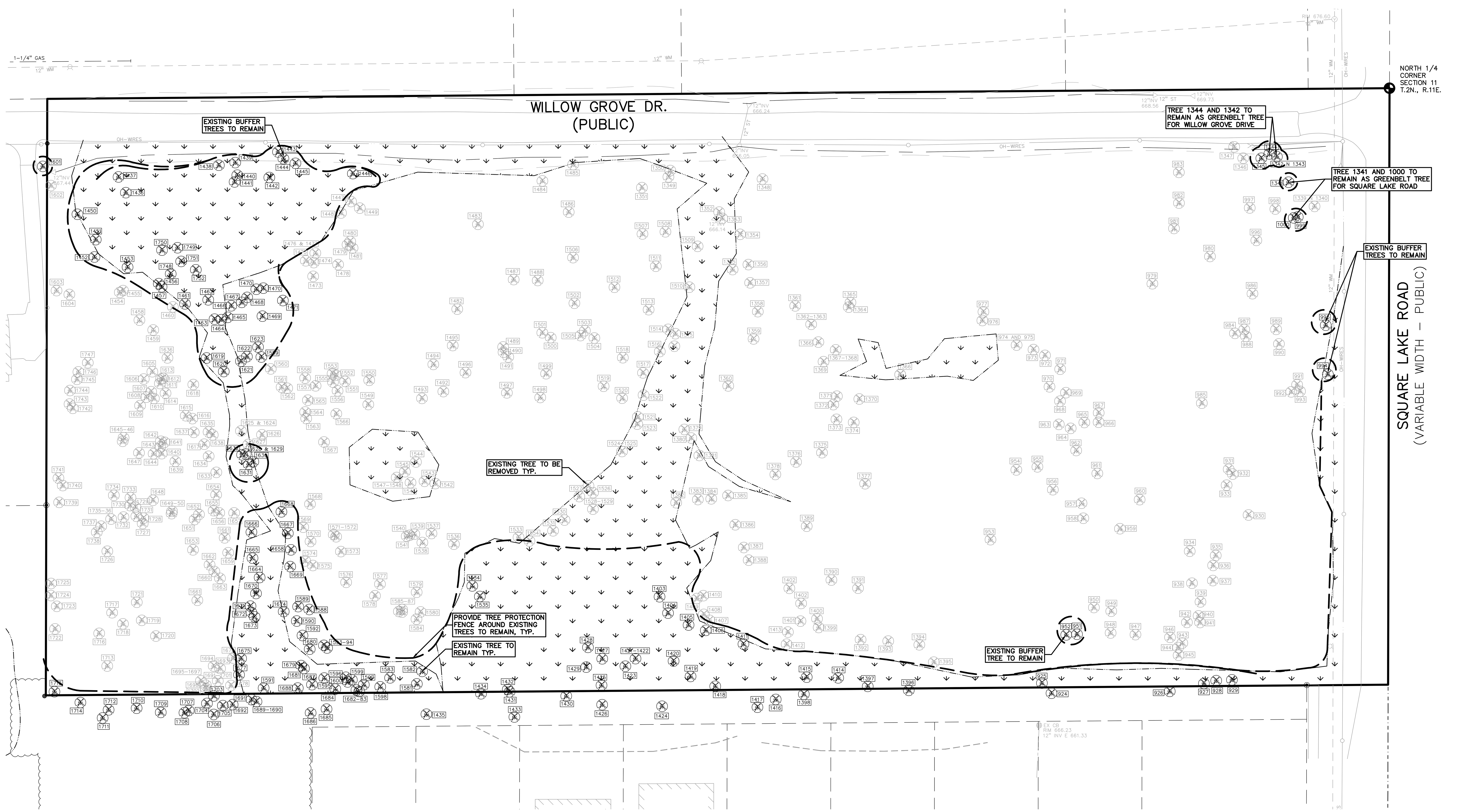
NOT TO SCALE

KEY:

TREE REPLACEMENT CALCULATIONS: PER CITY OF TROY ZONING ORDINANCE
34 PROTECTED TREES TO BE REMOVED; NO REPLACEMENT NEEDED 11 PROTECTED TREES TO BE SAVED REFER TO SHEET T–1.1 FOR CALCULATIONS.

KEY:

1586 ⊗	= EXISTING TREES TO BE REMOVED
1586 ◌	= EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE



NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2017\2017214\DWG\17214–TOPOBASE.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–BASE–17214.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X–TBLK–17214.DWG

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

REVISIONS

STATE OF MICHIGAN
JEFFREY T. SMITH
LANDSCAPE ARCHITECT
No. 1328
REGISTERED LANDSCAPE ARCHITECT

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

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WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DR.
SHELBY TWP., MICHIGAN 48315

TREE INVENTORY PLAN
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY – JBT\DWG\LANDSCAPE\SITE PLANS\(T-1) Tree Inventory –17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: 1" = 40'

DRAWING NUMBER:
T-1.0

Tree ID #	D.B.H. in Inches	Species Name (Common - Scientific)	Health Condition^	Crown Spread*	Status Notes	Save / Remove	Required Replacements	On-Site	Class	REPLACE
924	6	Swamp White Oak - *Quercus bicolor*	Fair	10		S	-	N	WOODLAND	-
925	12	Swamp White Oak - *Quercus bicolor*	Good	15		S	-	Y	WOODLAND	-
926	9	Siberian Elm - *Ulmus pumila*	Good	15	EX - 1	S	-	N	INVASIVE	-
927	13,12	Cottonwood - *Populus deltoides*	Good	20		S	-	Y	INVASIVE	-
928	13	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
929	8,7	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
930	11	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
931	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
932	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
933	9,6	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
934	7	Siberian Elm - *Ulmus pumila*	Good	15	EX - 1	R	-	Y	INVASIVE	-
935	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
936	11,8	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
937	12	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
938	11	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
939	12	Siberian Elm - *Ulmus pumila*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
940	7	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
941	10,9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
942	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
943	8	Cottonwood - *Populus deltoides*	Fair	10		R	-	Y	INVASIVE	-
944	7,6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
945	7	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
946	13	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
947	7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
948	12	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
949	13	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
950	6	Eastern Red Cedar - *Juniperus virginiana*	Fair	10		R	-	Y	INVASIVE	-
951	8,6	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
952	11	Cottonwood - *Populus deltoides*	Good	20		S	-	Y	INVASIVE	-
953	25	Boxelder - *Acer negundo*	Fair	45	Landmark	R	-	Y	INVASIVE	-
954	6,6	Boxelder - *Acer negundo*	Good	15		R	-	Y	INVASIVE	-
955	19	Cottonwood - *Populus deltoides*	Good	30		R	-	Y	INVASIVE	-
956	9	Boxelder - *Acer negundo*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
957	6	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
958	13,12,11	Cottonwood - *Populus deltoides*	Fair	30		R	-	Y	INVASIVE	-
959	18	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
960	16	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
961	8	Siberian Elm - *Ulmus pumila*	Good	15	EX - 1	R	-	Y	INVASIVE	-
962	7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
963	21	Cottonwood - *Populus deltoides*	Good	30		R	-	Y	INVASIVE	-
964	13	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
965	12	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
966	14	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
967	7	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
968	8	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
969	13	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
970	17	Cottonwood - *Populus deltoides*	Fair	30		R	-	Y	INVASIVE	-
971	11,11	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
972	15,8	Siberian Elm - *Ulmus pumila*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
973	10	Siberian Elm - *Ulmus pumila*	Very Poor	15	EX - 1	R	-	Y	INVASIVE	-
974	12	Siberian Elm - *Ulmus pumila*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
975	13	Siberian Elm - *Ulmus pumila*	Fair	25	EX - 1	R	-	Y	INVASIVE	-
976	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
977	8,7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
978	7	Buckthorn - *Rhamnus spp.*	Poor	10	EX - 1	S	-	Y	INVASIVE	-
979	14	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
980	12	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
981	7	American Elm - *Ulmus americana*	Good	10		R	-	Y	INVASIVE	-
982	11,10	Russian Olive - *Elaeagnus angustifolia*	Poor	25	EX - 1	R	-	Y	INVASIVE	-
983	6	Boxelder - *Acer negundo*	Fair	10		R	-	Y	INVASIVE	-
984	10,8	Black Locust - *Robinia pseudoacacia*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
985	6	Cottonwood - *Populus deltoides*	Fair	10		R	-	Y	INVASIVE	-
986	8	Apple - *Malus spp.*	Good	15		R	4	Y	WOODLAND	REPLACE
987	15	Siberian Elm - *Ulmus pumila*	Good	25	EX - 1	R	-	Y	INVASIVE	-
988	6	Siberian Elm - *Ulmus pumila*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
989	6	Siberian Elm - *Ulmus pumila*	Poor	10	EX - 1	R	-	Y	INVASIVE	-
990	15,12	Black Locust - *Robinia pseudoacacia*	Good	25	EX - 1	R	-	Y	INVASIVE	-
991	10	Siberian Elm - *Ulmus pumila*	Good	15	EX - 1	R	-	Y	INVASIVE	-
992	6	Siberian Elm - *Ulmus pumila*	Very Poor	10	EX - 1	R	-	Y	INVASIVE	-
993	6	Eastern Red Cedar - *Juniperus virginiana*	Fair	10		R	-	Y	INVASIVE	-
994	11	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
995	32,9,8,8,7	Weeping Willow - *Salix babylonica*	Very Poor	50	EX - 1	S	-	Y	INVASIVE	-
996	19	American Elm - *Ulmus americana*	Good	35		R	-	Y	INVASIVE	-
997	6	White Ash - *Fraxinus americana*	Fair	10		R	-	Y	INVASIVE	-
998	16	American Elm - *Ulmus americana*	Good	30		R	-	Y	INVASIVE	-
999	11,9,7	Black Willow - *Salix nigra*	Fair	25		S	-	Y	INVASIVE	-
1000	6	Apple - *Malus spp.*	Poor	15	EX - 2	S	-	Y	WOODLAND	-
1339	6	Apple - *Malus spp.*	Fair	15		R	3	Y	WOODLAND	REPLACE
1340	16,13,9	Black Willow - *Salix nigra*	Fair	30		R	-	Y	INVASIVE	-
1341	9	Apple - *Malus spp.*	Fair	15		S	-	Y	WOODLAND	-
1342	9	Apple - *Malus spp.*	Fair	15		S	-	Y	WOODLAND	-
1343	13,12	Black Willow - *Salix nigra*	Poor	25	EX - 2	S	-	Y	INVASIVE	-
1344	7	Apple - *Malus spp.*	Fair	15		S	-	Y	WOODLAND	-
1345	12,11,11	Black Willow - *Salix nigra*	Fair	25		S	-	Y	INVASIVE	-
1346	13,9	Black Willow - *Salix nigra*	Fair	20		R	-	Y	INVASIVE	-
1347	13,8	Black Willow - *Salix nigra*	Poor	25	EX - 2	R	-	Y	INVASIVE	-
1348	11	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1349	6	Siberian Elm - *Ulmus pumila*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1350	6	White Ash - *Fraxinus americana*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1351	13	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1352	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1353	12	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1354	6	Cottonwood - *Populus deltoides*	Fair	10		R	-	Y	INVASIVE	-
1355	7	Apple - *Malus spp.*	Good	15		R	3.5	Y	WOODLAND	REPLACE
1356	14	American Elm - *Ulmus americana*	Good	20		R	-	Y	INVASIVE	-
1357	10	Siberian Elm - *Ulmus pumila*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
1358	7	American Elm - *Ulmus americana*	Good	15		R	-	Y	INVASIVE	-
1359	10	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1360	23	Cottonwood - *Populus deltoides*	Good	45		R	-	Y	INVASIVE	-
1361	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1362	14	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1363	8	Siberian Elm - *Ulmus pumila*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1364	7,6	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1365	12	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1366	12	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1367	8	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1368	20	Cottonwood - *Populus deltoides*	Good	40		R	-	Y	INVASIVE	-
1369	8	Siberian Elm - *Ulmus pumila*	Very Poor	10	EX - 1	R	-	Y	INVASIVE	-
1370	21	Cottonwood - *Populus deltoides*	Good	35		R	-	Y	INVASIVE	-
1371	9	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
1372	17,17,16	Cottonwood - *Populus deltoides*	Good	40		R	-	Y	INVASIVE	-
1373	9	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1374	22	Cottonwood - *Populus deltoides*	Fair	35		R	-	Y	INVASIVE	-
1375	13,9	Boxelder - *Acer negundo*	Fair	25		R	-	Y	INVASIVE	-
1376	7,6	Boxelder - *Acer negundo*	Good	15		R	-	Y	INVASIVE	-
1377	7	Boxelder - *Acer negundo*	Fair	10		R	-	Y	INVASIVE	-
1378	12	White Ash - *Fraxinus americana*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1379	7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1380	7	Boxelder - *Acer negundo*	Fair	15		R	-	Y	INVASIVE	-
1381	10,10	White Ash - *Fraxinus americana*	Very Poor	20	EX - 2	R	-	Y	INVASIVE	-
1382	6	Buckthorn - *Rhamnus spp.*	Fair	10	EX - 1	R	-	Y	INVASIVE	-
1383	8	Apple - *Malus spp.*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1384	10	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-

Tree ID #	D.B.H. in Inches	Species Name (Common - Scientific)	Health Condition^	Crown Spread*	Status Notes	Save / Remove	Required Replacements	On-Site	Class	REPLACE
1385	12	White Ash - *Fraxinus americana*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1386	7,6	Pear - *Pyrus spp.*	Fair	15		R	3.5	Y	WOODLAND	REPLACE
1387	12	Russian Olive - *Elaeagnus angustifolia*	Poor	25	EX - 1	R	-	Y	INVASIVE	-
1388	6	White Ash - *Fraxinus americana*	Fair	10		R	-	Y	INVASIVE	-
1389	6	Apple - *Malus spp.*	Fair	15		R	3	Y	WOODLAND	REPLACE
1390	8,6,6	Apple - *Malus spp.*	Good	20		R	4	Y	WOODLAND	REPLACE
1391	7,6	Apple - *Malus spp.*	Good	20		R	3.5	Y	WOODLAND	REPLACE
1392	22	Cottonwood - *Populus deltoides*	Good	45		R	-	Y	INVASIVE	-
1393	11,7	Boxelder - *Acer negundo*	Good	20		R	-	Y	INVASIVE	-
1394	10	Pear - *Pyrus spp.*	Good	15		R	5	Y	WOODLAND	REPLACE
1395	7	Apple - *Malus spp.*	Good	15		R	3.5	Y	WOODLAND	REPLACE
1396	10	Bur Oak - *Quercus macrocarpa*	Good	15		S	-	N	WOODLAND	-
1397	13	Cottonwood - *Populus deltoides*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1398	29	Bur Oak - *Quercus macrocarpa*	Very Poor	40	Ldmk-EX	S	-	N	LANDMARK	-
1399	7	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1400	14	Boxelder - *Acer negundo*	Good	20		R	-	Y	INVASIVE	-
1401	8	American Elm - *Ulmus americana*	Good	15		R	-	Y	INVASIVE	-
1402	22	Cottonwood - *Populus deltoides*	Good	35		R	-	Y	INVASIVE	-
1403	17	Cottonwood - *Populus deltoides*	Good	25		S	-	Y	INVASIVE	-
1404	11	American Elm - *Ulmus americana*	Good	15		S	-	Y	INVASIVE	-
1405	8	American Elm - *Ulmus americana*	Good	15		S	-	Y	INVASIVE	-
1406	7	White Ash - *Fraxinus americana*	Fair	15		S	-	Y	INVASIVE	-
1407	6	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1408	8	Apple - *Malus spp.*	Fair	15		R	4	Y	WOODLAND	REPLACE
1409	11	American Elm - *Ulmus americana*	Good	20		R	-	Y	INVASIVE	-
1410	9	Pear - *Pyrus spp.*	Good	15		R	4.5	Y	WOODLAND	REPLACE
1411	6	American Elm - *Ulmus americana*	Good	15		S	-	Y	INVASIVE	-
1412	12	Siberian Elm - *Ulmus pumila*	Good	20	EX - 1	R	-	Y	INVASIVE	-
1413	9	American Elm - *Ulmus americana*	Fair	10		R	-	Y	INVASIVE	-
1414	7	White Ash - *Fraxinus americana*	Fair	15		S	-	Y	INVASIVE	-
1415	7	American Elm - *Ulmus americana*	Fair	10		S	-	Y	INVASIVE	-
1416	10	American Elm - *Ulmus americana*	Good	15		S	-	N	INVASIVE	-
1417	41	Weeping Willow - *Salix babylonica*	Poor	45	EX - 1	S	-	N	INVASIVE	-
1418	9	Weeping Willow - *Salix babylonica*	Very Poor	30	EX - 1	S	-	Y	INVASIVE	-
1419	12	Black Willow - *Salix nigra*	Good	20		S	-	Y	INVASIVE	-
1420	8	White Ash - *Fraxinus americana*	Fair	15		S	-	Y	INVASIVE	-
1421	14	Swamp White Oak - *Quercus bicolor*	Poor	20	EX - 2	S	-	Y	WOODLAND	-
1422	8	American Elm - *Ulmus americana*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1423	18	Bur Oak - *Quercus macrocarpa*	Good	35	Landmark	S	-	Y	LANDMARK	-
1424	6	American Elm - *Ulmus americana*	Fair	15		S	-	N	INVASIVE	-
1425	8,6	White Ash - *Fraxinus americana*	Poor	20	EX - 2	S	-	Y	INVASIVE	-
1426	25	Cottonwood - *Populus deltoides*	Dead	25	Ldmk-EX	S	-	N	INVASIVE	-
1427	6	White Ash - *Fraxinus americana*	Fair	10		S	-	Y	INVASIVE	-
1428	19	Weeping Willow - *Salix babylonica*	Poor	35	EX - 1	S	-	Y	INVASIVE	-
1429	9,7	White Ash - *Fraxinus americana*	Fair	15		S	-	Y	INVASIVE	-
1430	8	Swamp White Oak - *Quercus bicolor*	Fair	15		S	-	N	WOODLAND	-
1431	10	Swamp White Oak - *Quercus bicolor*	Good	15		S	-	N	WOODLAND	-
1432	10	White Ash - *Fraxinus americana*	Dead	15	EX - 2	S	-	Y	INVASIVE	-
1433	7	Apple - *Malus spp.*	Good	15		S	-	N	WOODLAND	-
1434	9	Cottonwood - *Populus deltoides*	Fair	15		S	-	N	INVASIVE	-
1435	7	Swamp White Oak - *Quercus bicolor*	Fair	15		S	-	N	WOODLAND	-
1436	10	White Ash - *Fraxinus americana*	Dead	15	EX - 2	S	-	Y	INVASIVE	-
1437	8,7,7	American Elm - *Ulmus americana*	Very Poor	20	EX - 2	S	-	Y	INVASIVE	-
1438	15,13,11,7	Black Willow - *Salix nigra*	Poor	40	EX - 2	S	-	Y	INVASIVE	-
1439	13,10,9	Black Willow - *Salix nigra*	Very Poor	25	EX - 2	S	-	Y	INVASIVE	-
1440	10,8	Black Willow - *Salix nigra*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1441	11,7	Black Willow - *Salix nigra*	Poor	30	EX - 2	S	-	Y	INVASIVE	-
1442	8,8	Black Willow - *Salix nigra*	Very Poor	30	EX - 2	S	-	Y	INVASIVE	-
1443	9	Black Willow - *Salix nigra*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1444	12	Black Willow - *Salix nigra*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1445	15,14,10	Black Willow - *Salix nigra*	Fair	40		S	-	Y	INVASIVE	-
1446	17	Black Willow - *Salix nigra*	Poor	40	EX - 2	S	-	Y	INVASIVE	-
1447	6	White Ash - *Fraxinus americana*	Fair	10		R	-	Y	INVASIVE	-
1448	6	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1449	9,8,7,7	Black Willow - *Salix nigra*	Fair	30		R	-	Y	INVASIVE	-
1450	7	White Ash - *Fraxinus americana*	Fair	15		S	-	Y	INVASIVE	-
1451	29	Cottonwood - *Populus deltoides*	Good	35	Landmark	S	-	Y	INVASIVE	-
1452	7	White Ash - *Fraxinus americana*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1453	7	White Ash - *Fraxinus americana*	Fair	10		S	-	Y	INVASIVE	-
1454	11,9	Black Willow - *Salix nigra*	Fair	20		R	-	Y	INVASIVE	-
1455	7,7,7	Black Willow - *Salix nigra*	Fair	20		R	-	Y	INVASIVE	-
1456	7	White Mulberry - *Morus alba*	Poor	15	EX - 1	S	-	Y	INVASIVE	-
1457	15,14	Black Willow - *Salix nigra*	Fair	30		S	-	Y	INVASIVE	-
1458	6	Swamp White Oak - *Quercus bicolor*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1459	6	White Ash - *Fraxinus americana*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1460	6	Tree of Heaven - *Ailanthus altissima*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1461	17,12	Black Willow - *Salix nigra*	Fair	30		S	-	Y	INVASIVE	-
1462	6	Boxelder - *Acer negundo*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1463	10	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1464	8	Red Maple - *Acer rubrum*	Fair	15		S	-	Y	WOODLAND	-
1465	6	White Ash - *Fraxinus americana*	Fair	10		S	-	Y	INVASIVE	-
1466	6	Boxelder - *Acer negundo*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1467	16	Cottonwood - *Populus deltoides*	Good	25		S	-	Y	INVASIVE	-
1468	16	Cottonwood - *Populus deltoides*	Very Poor	20	EX - 2	S	-	Y	INVASIVE	-
1469	6	White Ash - *Fraxinus americana*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1470	6	Boxelder - *Acer negundo*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1471	6	Siberian Elm - *Ulmus pumila*	Very Poor	20	EX - 1	S	-	Y	INVASIVE	-
1472	15	Boxelder - *Acer negundo*	Poor	25	EX - 2	S	-	Y	INVASIVE	-
1473	18	American Elm - *Ulmus americana*	Good	25		R	-	Y	INVASIVE	-
1474	13	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1475	13	Siberian Elm - *Ulmus pumila*	Poor	20	EX - 1	R	-	Y	INVASIVE	-
1476	14,9,9	Cottonwood - *Populus deltoides*	Fair	30		R	-	Y	INVASIVE	-
1477	6	Siberian Elm - *Ulmus pumila*	Very Poor	15	EX - 1	R	-	Y	INVASIVE	-
1478	15	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1479	10	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1480	6	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1481	6	Black Willow - *Salix nigra*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1482	16,9	Boxelder - *Acer negundo*	Good	35		R	-	Y	INVASIVE	-
1483	14	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1484	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1485	12	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1486	8	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1487	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1488	12,10	Cottonwood - *Populus deltoides*	Good	30		R	-	Y	INVASIVE	-
1489	9	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1490	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1491	15	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1492	7	Boxelder - *Acer negundo*	Good	15		R	-	Y	INVASIVE	-
1493	8	White Mulberry - *Morus alba*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1494	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1495	14	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1496	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1497	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1498	14	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1499	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1500	8	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1501	8	Cottonwood - *Populus deltoides*	Fair	10		R	-	Y	INVASIVE	-
1502	12	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1503	7	Cottonwood - *Populus deltoides*	Fair	10		R	-	Y	INVASIVE	-
1504	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1505	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1506	14,10	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1507	7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-

KEY:

TREE REPLACEMENT CALCULATIONS:
PER CITY OF TROY ZONING ORDINANCE

34 PROTECTED TREES TO BE REMOVED; NO REPLACEMENT NEEDED
11 PROTECTED TREES TO BE SAVED

REFER TO SHEET T-1.1 FOR CALCULATIONS.

WOODLAND TREES				
WOODLAND TREES REMOVED:	31	(REPLACE AT 50% OF REMOVED DBH)		
275"	DBH x 0.5 =		**138"**	REPLACEMENT
WOODLAND TREES SAVED:	9	(CREDIT OF 2X DBH)		
85	DBH x 2 =		**170"**	CREDIT
137.5	-	170	=	-32.5

0 " DBH REQUIRED FOR REPLACEMENT

LANDMARK TREES				
LANDMARK TREES REMOVED:	3	(REPLACE AT 100% OF REMOVED DBH)		
60"	DBH x 1 =		**60"**	REPLACEMENT
LANDMARK TREES SAVED:	2	(CREDIT OF 2X DBH)		
54"	DBH x 2 =		**108"**	CREDIT
60	-	108	=	-48

0 " DBH REQUIRED FOR REPLACEMENT

EXEMPT TREES		
(NO REPLACEMENT REQUIRED FOR EXEMPT TREES)		
SAVED EXEMPT TREES:	58	**Trees**
EXEMPT TREES ON SITE:	254	**Trees**
TOTAL SAVED TREES 6" AND ABOVE ON SITE:	69	Trees

^	Health determined using International Society of Arboriculture (ISA) guidelines (9th Edition)
*	Crown spread visually estimated at plus or minus five (5) feet in diameter
Landmark	Landmark tree per ordinance definitions in fair or good health {Sec 13.07.C.1., Landmark Trees & Size Table}
EX - 1	Tree is considered invasive per the ISA and is recommended for replacement exemption {Sec 13.07.G.1.e., Exemptions}
EX - 2	Tree is less than 50% in health per ISA rating (poor, very poor & dead) and is recommended for exemption {Sec 13.07.G.1.d.}
Ldmk-EX	Landmark tree is less than 50% in health per ISA rating and is recommended for exemption

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2017\2017214\DWG\17214-TOPOBASE.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-BASE-17214.DWG
XREF: S:PROJECTS\2017\2017214\DWG\CONSTRUCTION\X-TBLK-17214.DWG

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

REVISIONS

STATE OF MICHIGAN · JEFFREY T. SMITH · LANDSCAPE ARCHITECT · No. 1328 · REGISTERED LANDSCAPE ARCHITECT

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL
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TREE INVENTORY LIST
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY - JBT\DWG\LANDSCAPE\SITE PLANS\(T-1) Tree Inventory -17214.dwg

ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: N.T.S.

DRAWING NUMBER:
T-1.1

Tree ID #	D.B.H. in Inches	Species Name (Common - Scientific)	Health Condition*	Crown Spread*	Status Notes	Save / Remove	Required Replacements	On-Site	Class	REPLACE
1508	6	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1509	8	Cottonwood - *Populus deltoides*	Fair	10		R	-	Y	INVASIVE	-
1510	10	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1511	34	Weeping Willow - *Salix babylonica*	Good	45	EX - 1	R	-	Y	INVASIVE	-
1512	6	Eastern Red Cedar - *Juniperus virginiana*	Good	10		R	-	Y	INVASIVE	-
1513	9	Russian Olive - *Elaeagnus angustifolia*	Poor	20	EX - 1	R	-	Y	INVASIVE	-
1514	11	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1515	12	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1516	11	Siberian Elm - *Ulmus pumila*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
1517	8	Red Maple - *Acer rubrum*	Fair	15		R	4	Y	WOODLAND	REPLACE
1518	21	Weeping Willow - *Salix babylonica*	Fair	35	EX - 1	R	-	Y	INVASIVE	-
1519	13	Weeping Willow - *Salix babylonica*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
1520	11	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1521	9	Black Cherry - *Prunus serotina*	Good	15		R	4.5	Y	WOODLAND	REPLACE
1522	7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1523	7	Boxelder - *Acer negundo*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1524	17,16	Black Willow - *Salix nigra*	Very Poor	20	EX - 2	R	-	Y	INVASIVE	-
1525	9	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1526	8	Russian Olive - *Elaeagnus angustifolia*	Very Poor	20	EX - 1	R	-	Y	INVASIVE	-
1527	12	Boxelder - *Acer negundo*	Fair	20		R	-	Y	INVASIVE	-
1528	11	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1529	17	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1530	14,8	Boxelder - *Acer negundo*	Fair	30		R	-	Y	INVASIVE	-
1531	21	Cottonwood - *Populus deltoides*	Good	35		R	-	Y	INVASIVE	-
1532	11	Boxelder - *Acer negundo*	Fair	25		S	-	Y	INVASIVE	-
1533	10,6	Apple - *Malus spp.*	Fair	15		R	5	Y	WOODLAND	REPLACE
1534	10	Boxelder - *Acer negundo*	Fair	20		S	-	Y	INVASIVE	-
1535	11	Boxelder - *Acer negundo*	Fair	20		S	-	Y	INVASIVE	-
1536	6	Boxelder - *Acer negundo*	Good	15		R	-	Y	INVASIVE	-
1537	11	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1538	7	White Ash - *Fraxinus americana*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1539	7	White Ash - *Fraxinus americana*	Dead	10	EX - 2	R	-	Y	INVASIVE	-
1540	6	White Ash - *Fraxinus americana*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1541	12	White Ash - *Fraxinus americana*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1542	7	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1543	9	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1544	9	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1545	6	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1546	8	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1547	22	Cottonwood - *Populus deltoides*	Fair	40		R	-	Y	INVASIVE	-
1548	21,18	Cottonwood - *Populus deltoides*	Good	45		R	-	Y	INVASIVE	-
1549	17,15,14,13,13	Black Willow - *Salix nigra*	Fair	50		R	-	Y	INVASIVE	-
1550	8	Red Maple - *Acer rubrum*	Fair	15		R	4	Y	WOODLAND	REPLACE
1551	14,10	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1552	8	Boxelder - *Acer negundo*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1553	8	Boxelder - *Acer negundo*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1554	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1555	9	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
1556	12	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1557	10,7	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1558	12	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1559	8	White Ash - *Fraxinus americana*	Fair	15		S	-	Y	INVASIVE	-
1560	6	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1561	17	Cottonwood - *Populus deltoides*	Good	30		R	-	Y	INVASIVE	-
1562	6	Siberian Elm - *Ulmus pumila*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1563	6	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1564	7	Siberian Elm - *Ulmus pumila*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1565	7,6	Boxelder - *Acer negundo*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1566	11	Cottonwood - *Populus deltoides*	Good	15		R	-	Y	INVASIVE	-
1567	17	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1568	16	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1569	8	White Mulberry - *Morus alba*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1570	11	Russian Olive - *Elaeagnus angustifolia*	Poor	20	EX - 1	R	-	Y	INVASIVE	-
1571	6	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1572	7	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1573	16	Swamp White Oak - *Quercus bicolor*	Good	30	Landmark	R	16	Y	LANDMARK	REPLACE
1574	7	Black Locust - *Robinia pseudoacacia*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1575	7	Black Locust - *Robinia pseudoacacia*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1576	9	Russian Olive - *Elaeagnus angustifolia*	Very Poor	20	EX - 1	R	-	Y	INVASIVE	-
1577	10	American Elm - *Ulmus americana*	Good	15		R	-	Y	INVASIVE	-
1578	6	Boxelder - *Acer negundo*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1579	7	White Ash - *Fraxinus americana*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1580	7	Boxelder - *Acer negundo*	Fair	15		R	-	Y	INVASIVE	-
1581	13	Cottonwood - *Populus deltoides*	Good	15		S	-	Y	INVASIVE	-
1582	8	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1583	11	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1584	22	Cottonwood - *Populus deltoides*	Good	40		R	-	Y	INVASIVE	-
1585	9	Boxelder - *Acer negundo*	Fair	20		R	-	Y	INVASIVE	-
1586	6	Black Locust - *Robinia pseudoacacia*	Poor	15	EX - 1	R	-	Y	INVASIVE	-
1587	10	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1588	10,9	Black Locust - *Robinia pseudoacacia*	Good	20	EX - 1	S	-	Y	INVASIVE	-
1589	6	Black Locust - *Robinia pseudoacacia*	Fair	15	EX - 1	S	-	Y	INVASIVE	-
1590	7	White Ash - *Fraxinus americana*	Poor	10	EX - 2	S	-	Y	INVASIVE	-
1591	8	Boxelder - *Acer negundo*	Poor	20	EX - 2	S	-	Y	INVASIVE	-
1592	10,6	Boxelder - *Acer negundo*	Fair	20		S	-	Y	INVASIVE	-
1593	11	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1594	13	Cottonwood - *Populus deltoides*	Fair	25		S	-	Y	INVASIVE	-
1595	20	Cottonwood - *Populus deltoides*	Good	30		S	-	Y	INVASIVE	-
1596	14	Red Maple - *Acer rubrum*	Fair	20		S	-	Y	WOODLAND	-
1597	10,8	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1598	7	White Ash - *Fraxinus americana*	Dead	10	EX - 2	S	-	Y	INVASIVE	-
1599	9	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1600	11	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1601	13	Weeping Willow - *Salix babylonica*	Fair	20	EX - 1	S	-	N	INVASIVE	-
1602	13	Weeping Willow - *Salix babylonica*	Fair	20	EX - 1	R	-	Y	INVASIVE	-
1603	9	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1604	15	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1605	8	Boxelder - *Acer negundo*	Very Poor	20	EX - 2	R	-	Y	INVASIVE	-
1606	8	Boxelder - *Acer negundo*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1607	7	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1608	11,10	Cottonwood - *Populus deltoides*	Fair	25		R	-	Y	INVASIVE	-
1609	14	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1610	14,8	Cottonwood - *Populus deltoides*	Fair	25		R	-	Y	INVASIVE	-
1611	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1612	8	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1613	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1614	11	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1615	13,6	Boxelder - *Acer negundo*	Fair	20		R	-	Y	INVASIVE	-
1616	9	Boxelder - *Acer negundo*	Poor	25	EX - 2	R	-	Y	INVASIVE	-
1617	6	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
1618	9	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1619	7	Cottonwood - *Populus deltoides*	Fair	10		S	-	Y	INVASIVE	-
1620	17,8,6	Cottonwood - *Populus deltoides*	Good	25		S	-	Y	INVASIVE	-
1621	17	Cottonwood - *Populus deltoides*	Fair	25		S	-	Y	INVASIVE	-
1622	6	Boxelder - *Acer negundo*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1623	9	Cottonwood - *Populus deltoides*	Good	15		S	-	Y	INVASIVE	-
1624	8	American Elm - *Ulmus americana*	Fair	20		S	-	Y	INVASIVE	-
1625	10	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	R	-	Y	INVASIVE	-
1626	7	Siberian Elm - *Ulmus pumila*	Fair	15	EX - 1	R	-	Y	INVASIVE	-
1627	7	Red Maple - *Acer rubrum*	Fair	15		R	3.5	Y	WOODLAND	REPLACE
1628	6	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	S	-	Y	INVASIVE	-
1629	6	Red Maple - *Acer rubrum*	Poor	15	EX - 2	S	-	Y	WOODLAND	-
1630	9	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-

Tree ID #	D.B.H. in Inches	Species Name (Common - Scientific)	Health Condition*	Crown Spread*	Status Notes	Save / Remove	Required Replacements	On-Site	Class	REPLACE
1631	6	White Ash - *Fraxinus americana*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1632	8	Red Maple - *Acer rubrum*	Fair	15		S	-	Y	WOODLAND	-
1633	19,19	Cottonwood - *Populus deltoides*	Good	35		R	-	Y	INVASIVE	-
1634	10,7	Cottonwood - *Populus deltoides*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1635	8	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
1636	12,7	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1637	12	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1638	10	Boxelder - *Acer negundo*	Fair	20		R	-	Y	INVASIVE	-
1639	15	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1640	13	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1641	13,11	Cottonwood - *Populus deltoides*	Fair	25		R	-	Y	INVASIVE	-
1642	7	Cottonwood - *Populus deltoides*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1643	9	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1644	7	Cottonwood - *Populus deltoides*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
1645	7	Cottonwood - *Populus deltoides*	Very Poor	20	EX - 2	R	-	Y	INVASIVE	-
1646	6	Boxelder - *Acer negundo*	Fair	15		R	-	Y	INVASIVE	-
1647	11,9	Boxelder - *Acer negundo*	Fair	30		R	-	Y	INVASIVE	-
1648	7	Boxelder - *Acer negundo*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1649	6	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1650	9	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1651	8	Boxelder - *Acer negundo*	Poor	25	EX - 2	R	-	Y	INVASIVE	-
1652	6	Boxelder - *Acer negundo*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1653	14	Red Maple - *Acer rubrum*	Good	30		R	7	Y	WOODLAND	REPLACE
1654	9,7	White Mulberry - *Morus alba*	Poor	20	EX - 1	R	-	Y	INVASIVE	-
1655	21	Cottonwood - *Populus deltoides*	Good	30		R	-	Y	INVASIVE	-
1656	17	Cottonwood - *Populus deltoides*	Good	25		R	-	Y	INVASIVE	-
1657	13	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1658	13	Cottonwood - *Populus deltoides*	Poor	20	EX - 2	S	-	Y	INVASIVE	-
1659	6	White Ash - *Fraxinus americana*	Very Poor	10	EX - 2	R	-	Y	INVASIVE	-
1660	9	Boxelder - *Acer negundo*	Very Poor	30	EX - 2	R	-	Y	INVASIVE	-
1661	7	Boxelder - *Acer negundo*	Good	15		R	-	Y	INVASIVE	-
1662	13	Boxelder - *Acer negundo*	Fair	25		R	-	Y	INVASIVE	-
1663	8	Black Cherry - *Prunus serotina*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1664	12	Weeping Willow - *Salix babylonica*	Good	20	EX - 1	S	-	Y	INVASIVE	-
1665	11	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1666	12	Black Willow - *Salix nigra*	Fair	25		S	-	Y	INVASIVE	-
1667	6	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	S	-	Y	INVASIVE	-
1668	9	White Ash - *Fraxinus americana*	Fair	20		S	-	Y	INVASIVE	-
1669	11	Black Willow - *Salix nigra*	Good	15		S	-	Y	INVASIVE	-
1670	8	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1671	9	Red Maple - *Acer rubrum*	Fair	15		S	-	Y	WOODLAND	-
1672	15	Cottonwood - *Populus deltoides*	Good	25		S	-	Y	INVASIVE	-
1673	8	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1674	8	Black Willow - *Salix nigra*	Fair	15		S	-	Y	INVASIVE	-
1675	8	Red Maple - *Acer rubrum*	Poor	30	EX - 2	S	-	Y	WOODLAND	-
1676	14	Siberian Elm - *Ulmus pumila*	Good	25	EX - 1	R	-	Y	INVASIVE	-
1677	11	Boxelder - *Acer negundo*	Poor	30	EX - 2	S	-	Y	INVASIVE	-
1678	10	White Mulberry - *Morus alba*	Poor	25	EX - 1	R	-	Y	INVASIVE	-
1679	7	White Ash - *Fraxinus americana*	Very Poor	15	EX - 2	S	-	Y	INVASIVE	-
1680	6	Black Locust - *Robinia pseudoacacia*	Fair	10	EX - 1	S	-	Y	INVASIVE	-
1681	6	White Ash - *Fraxinus americana*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1682	10	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	Y	INVASIVE	-
1683	12	Cottonwood - *Populus deltoides*	Fair	15		S	-	Y	INVASIVE	-
1684	9	Red Maple - *Acer rubrum*	Fair	15		S	-	Y	WOODLAND	-
1685	9	Cottonwood - *Populus deltoides*	Fair	15		S	-	N	INVASIVE	-
1686	10	Red Maple - *Acer rubrum*	Fair	15		S	-	N	WOODLAND	-
1687	16	Weeping Willow - *Salix babylonica*	Fair	25	EX - 1	S	-	Y	INVASIVE	-
1688	8,6	Cottonwood - *Populus deltoides*	Poor	15	EX - 2	S	-	N	INVASIVE	-
1689	7	Weeping Willow - *Salix babylonica*	Poor	15	EX - 1	S	-	N	INVASIVE	-
1690	11	Cottonwood - *Populus deltoides*	Fair	15		S	-	N	INVASIVE	-
1691	22	Cottonwood - *Populus deltoides*	Good	35		S	-	N	INVASIVE	-
1692	18	American Elm - *Ulmus americana*	Fair	35		R	-	N	INVASIVE	-
1693	10	Sassafras - *Sassafras albidum*	Very Poor	15	EX - 2	R	-	Y	WOODLAND	-
1694	8	Sassafras - *Sassafras albidum*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1695	7	Sassafras - *Sassafras albidum*	Very Poor	20	EX - 2	R	-	Y	WOODLAND	-
1696	8	Sassafras - *Sassafras albidum*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1697	8	Sassafras - *Sassafras albidum*	Very Poor	20	EX - 2	R	-	Y	WOODLAND	-
1698	11,8	Sassafras - *Sassafras albidum*	Fair	20		R	5.5	Y	WOODLAND	REPLACE
1699	9	Sassafras - *Sassafras albidum*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1700	8	Sassafras - *Sassafras albidum*	Poor	10	EX - 2	R	-	Y	WOODLAND	-
1701	9,9	Sassafras - *Sassafras albidum*	Fair	20		R	4.5	Y	WOODLAND	REPLACE
1702	10	Sassafras - *Sassafras albidum*	Poor	15	EX - 2	R	-	Y	WOODLAND	-
1703	10	Sassafras - *Sassafras albidum*	Poor	15	EX - 2	S	-	Y	WOODLAND	-
1704	8	Sassafras - *Sassafras albidum*	Very Poor	15	EX - 2	S	-	N	WOODLAND	-
1705	9,9,8	Sassafras - *Sassafras albidum*	Poor	20	EX - 2	S	-	N	WOODLAND	-
1706	7	Cottonwood - *Populus deltoides*	Poor	10	EX - 2	S	-	N	INVASIVE	-
1707	12,11	Cottonwood - *Populus deltoides*	Fair	25		S	-	N	INVASIVE	-
1708	17	Cottonwood - *Populus deltoides*	Good	30		S	-	N	INVASIVE	-
1709	15	Cottonwood - *Populus deltoides*	Good	20		S	-	N	INVASIVE	-
1710	10	Bur Oak - *Quercus macrocarpa*	Good	20		S	-	N	WOODLAND	-
1711	6	White Ash - *Fraxinus americana*	Poor	10	EX - 2	S	-	N	INVASIVE	-
1712	10,6	Red Maple - *Acer rubrum*	Good	20		S	-	N	WOODLAND	-
1713	11	Red Maple - *Acer rubrum*	Good	20		R	5.5	Y	WOODLAND	REPLACE
1714	19	Cottonwood - *Populus deltoides*	Good	25		S	-	N	INVASIVE	-
1715	36	Red Maple - *Acer rubrum*	Good	50	Landmark	S	-	Y	LANDMARK	-
1716	7	Red Maple - *Acer rubrum*	Good	15		R	3.5	Y	WOODLAND	REPLACE
1717	6	Swamp White Oak - *Quercus bicolor*	Good	15		R	3	Y	WOODLAND	REPLACE
1718	8	Red Maple - *Acer rubrum*	Good	15		R	4	Y	WOODLAND	REPLACE
1719	14	Red Maple - *Acer rubrum*	Good	30		R	7	Y	WOODLAND	REPLACE
1720	10	Red Maple - *Acer rubrum*	Fair	20		R	5	Y	WOODLAND	REPLACE
1721	8	Boxelder - *Acer negundo*	Fair	15		R	-	Y	INVASIVE	-
1722	19	Red Maple - *Acer rubrum*	Fair	40	Landmark	R	19	Y	LANDMARK	REPLACE
1723	25	Red Maple - *Acer rubrum*	Good	45	Landmark	R	25	Y	LANDMARK	REPLACE
1724	15	Red Maple - *Acer rubrum*	Fair	30		R	7.5	Y	WOODLAND	REPLACE
1725	12,7	Red Maple - *Acer rubrum*	Fair	25		R	6	Y	WOODLAND	REPLACE
1726	11,10	Red Maple - *Acer rubrum*	Good	30		R	5.5	Y	WOODLAND	REPLACE
1727	9	Red Maple - *Acer rubrum*	Poor	20	EX - 2	R	-	Y	WOODLAND	-
1728	15,15	Cottonwood - *Populus deltoides*	Fair	25		R	-	Y	INVASIVE	-
1729	11	Cottonwood - *Populus deltoides*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1730	6	Cottonwood - *Populus deltoides*	Very Poor	15	EX - 2	R	-	Y	INVASIVE	-
1731	12,10,7	Black Willow - *Salix nigra*	Poor	25	EX - 2	R	-	Y	INVASIVE	-
1732	15	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1733	8	Boxelder - *Acer negundo*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1734	10	Boxelder - *Acer negundo*	Poor	20	EX - 2	R	-	Y	INVASIVE	-
1735	6	Boxelder - *Acer negundo*	Very Poor	20	EX - 2	R	-	Y	INVASIVE	-
1736	20	Cottonwood - *Populus deltoides*	Good	30		R	-	Y	INVASIVE	-
1737	17	Cottonwood - *Populus deltoides*	Fair	35		R	-	Y	INVASIVE	-
1738	6	Red Maple - *Acer rubrum*	Fair	15		R	3	Y	WOODLAND	REPLACE
1739	8	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1740	7	White Ash - *Fraxinus americana*	Fair	15		R	-	Y	INVASIVE	-
1741	6	White Ash - *Fraxinus americana*	Poor	15	EX - 2	R	-	Y	INVASIVE	-
1742	10	Red Maple - *Acer rubrum*	Good	15		R	5	Y	WOODLAND	REPLACE
1743	6	Red Maple - *Acer rubrum*	Fair	10		R	3	Y	WOODLAND	REPLACE
1744	10,9	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1745	15	Cottonwood - *Populus deltoides*	Fair	20		R	-	Y	INVASIVE	-
1746	11	Cottonwood - *Populus deltoides*	Fair	15		R	-	Y	INVASIVE	-
1747	13	Cottonwood - *Populus deltoides*	Good	20		R	-	Y	INVASIVE	-
1748	20,12,9	Black Willow - *Salix nigra*	Fair	35		S	-	Y	INVASIVE	-
1749	12,7	Black Willow - *Salix nigra*	Poor	30	EX - 2	S	-	Y	INVASIVE	-
1750	7	American Elm - *Ulmus americana*	Very Poor	20	EX - 2	S	-	Y	INVASIVE	-
1751	8	Black Willow - *Salix nigra*	Poor	20	EX - 2	S	-	Y	INVASIVE	-
1752	15,15,12,7	Black Willow - *Salix nigra*	Poor	30	EX - 2	S	-	Y	INVASIVE	-

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2017\2017214\DWG\17214--TOPOBASE.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X--BASE--17214.DWG
XREF: S:\PROJECTS\2017\2017214\DWG\CONSTRUCTION\X--TBLK--17214.DWG

No.	BY	CHK	DESCRIPTION	DATE
1	TMK	JBT	SINGLE FAMILY UNITS	5-30-19

REVISIONS

STATE OF MICHIGAN
JEFFREY T. SMITH
LANDSCAPE ARCHITECT
No. 1328
REGISTERED LANDSCAPE ARCHITECT

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

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f: 248.689.1044
www.peainc.com

WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DR.
SHELBY TWP., MICHIGAN 48315

TREE INVENTORY LIST
ASHTON PARC CONDOMINIUMS
THE WEST 1/2 OF THE NE 1/4 OF SECTION 11, T. 2N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES.	TMK	DN.	TMK	SUR.	RS	P.M.	JBT

S:\PROJECTS\2017\2017-214 WILLOW GROVE TROY - JBT\DWG\LANDSCAPE\SITE PLANS\[T-1] Tree Inventory - 17214.dwg

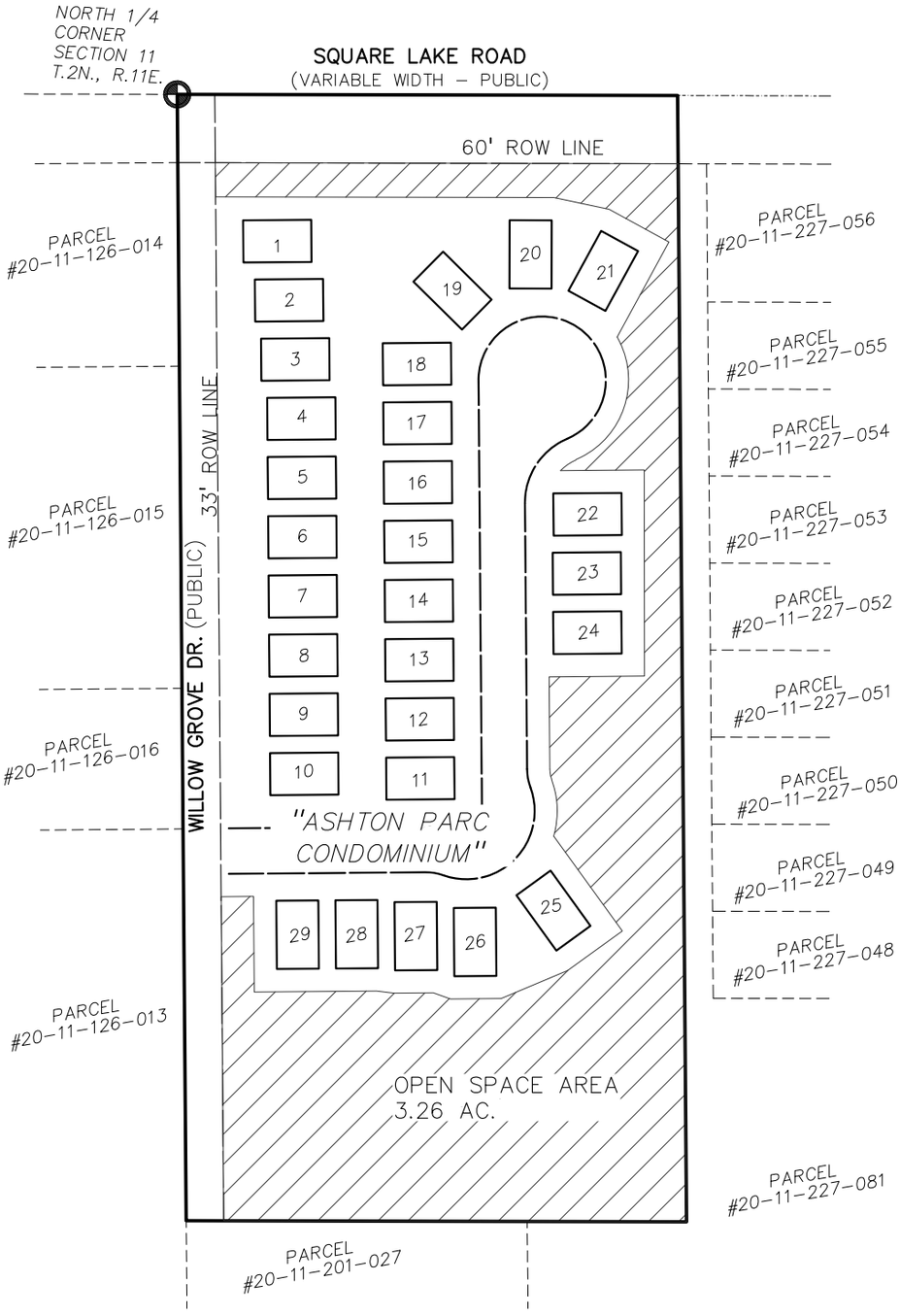
ORIGINAL ISSUE DATE:
MARCH 29, 2019

PEA JOB NO. 2017-214

SCALE: N.T.S.

DRAWING NUMBER:
T-1.2

EXHIBIT B
SKETCH OF OPEN SPACE EASEMENT



N

0 150

75 300

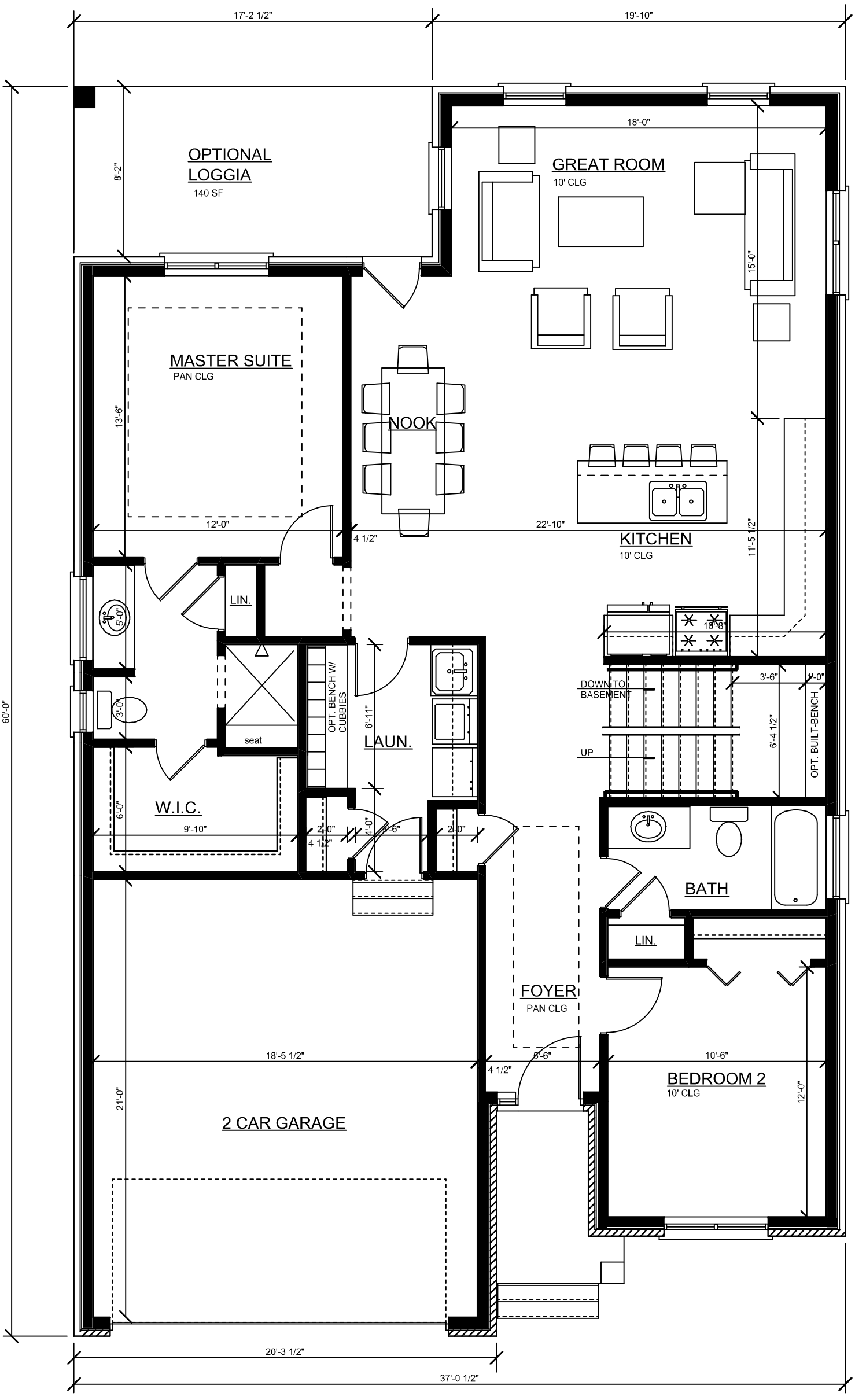
GRAPHIC SCALE
1" = 150'

CLIENT:
WOLVERINE BUILDING COMPANY
14955 TECHNOLOGY DRIVE
SHELBY TOWNSHIP, MI 48315

SCALE: 1"= 150'	JOB No: 2017214
DATE: 8–22–19	DWG. No: 1 of 2

PEA, Inc.
2430 Rochester Ct, Ste 100
Troy, MI 48083-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com

S:\PROJECTS\2017\2017–214 WILLOW GROVE TROY – JBT\DWG\SITE PLANS\17214–OPEN SPACE EASEMENT2.dwg; TMK



PRELIM 1ST FLOOR PLAN
1500 SQ FT.

dannaassoc.com

D'Anna Associates
Architecture | Engineering
1055 SOUTH BLVD. E, SUITE 200
ROCHESTER HILLS, MI 48307
P 248-852-7702 F 248-852-7707

Ashton Parc Condominiums

PROPOSED NEW CONSTRUCTION

ISSUANCE:

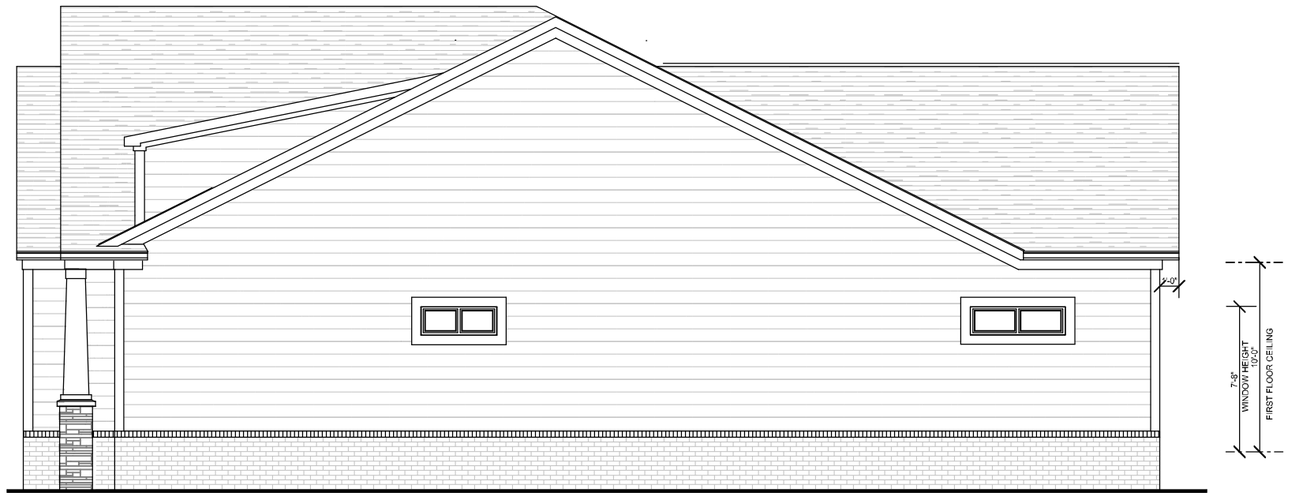
- ■SCHEMATIC
- □BIDDING
- □MUNI SUBMITTAL
- □CONSTRUCTION
- ■OTHER:

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION UNLESS INDICATED

NO.	DESC.	DATE

ISSUE DATE	5-29-19
DB	L.T.
CB	V.M.
SHEET	A101
PROJECT NO.	19022

PROPOSED FRONT ELEVATION



PROPOSED RIGHT ELEVATION

PROPOSED REAR ELEVATION

PROPOSED LEFT ELEVATION

dannaassoc.com

D'Anna Associates
Architecture | Engineering
1055 SOUTH BLVD. E, SUITE 200
ROCHESTER HILLS, MI 48307
P 248-852-7702 F 248-852-7707

Ashton Parc Condominiums

PROPOSED NEW CONSTRUCTION

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- □BIDDING
- □MUNI SUBMITTAL
- □CONSTRUCTION
- ■OTHER:

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION UNLESS INDICATED

NO.	DESC.	DATE

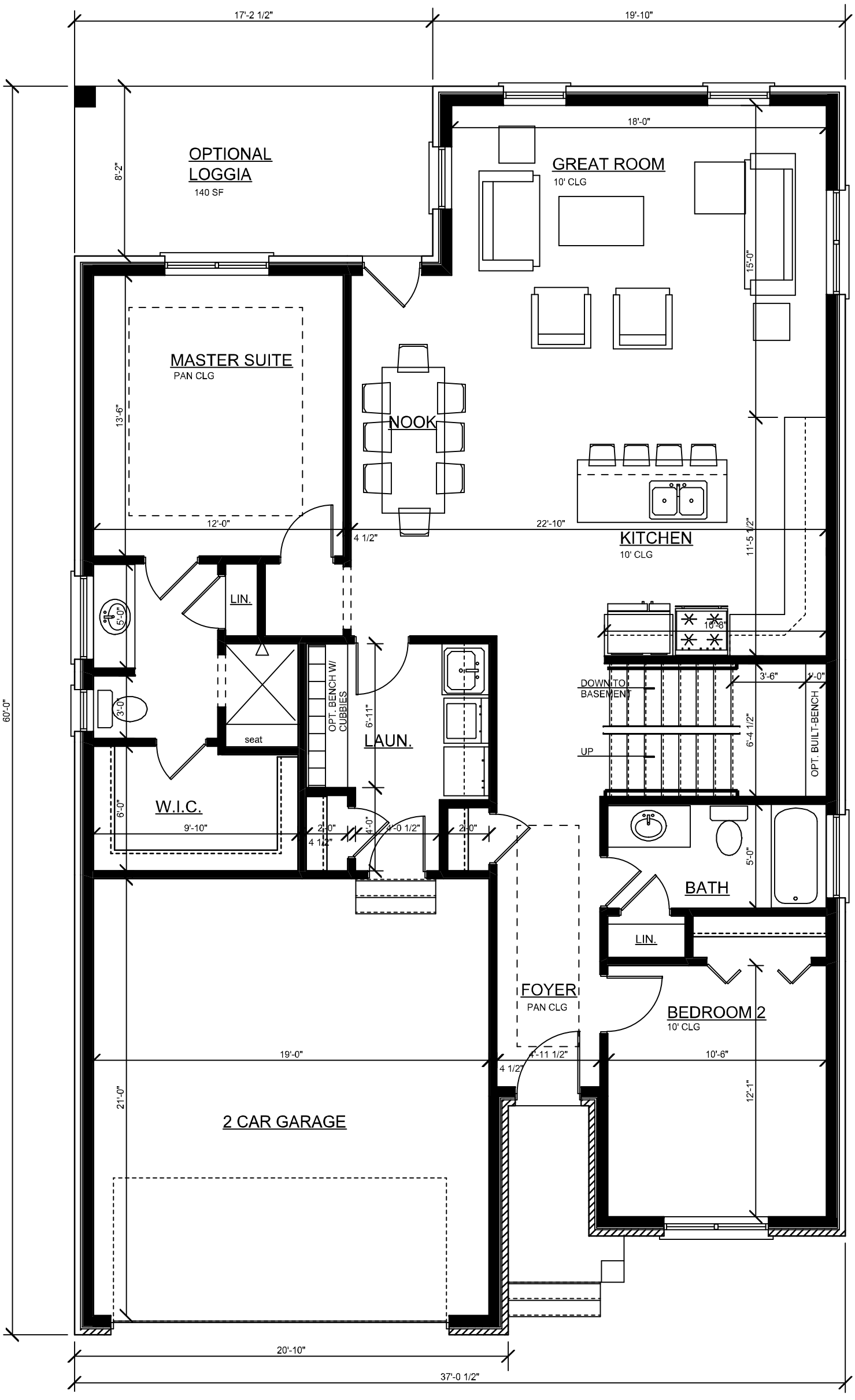
ISSUE DATE 5-29-19

DB L.T.

CB V.M.

SHEET A200

PROJECT NO. 19022



PRELIM 1ST FLOOR PLAN
1500 SQ FT.

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- □ CONSTRUCTION
- ■ OTHER:

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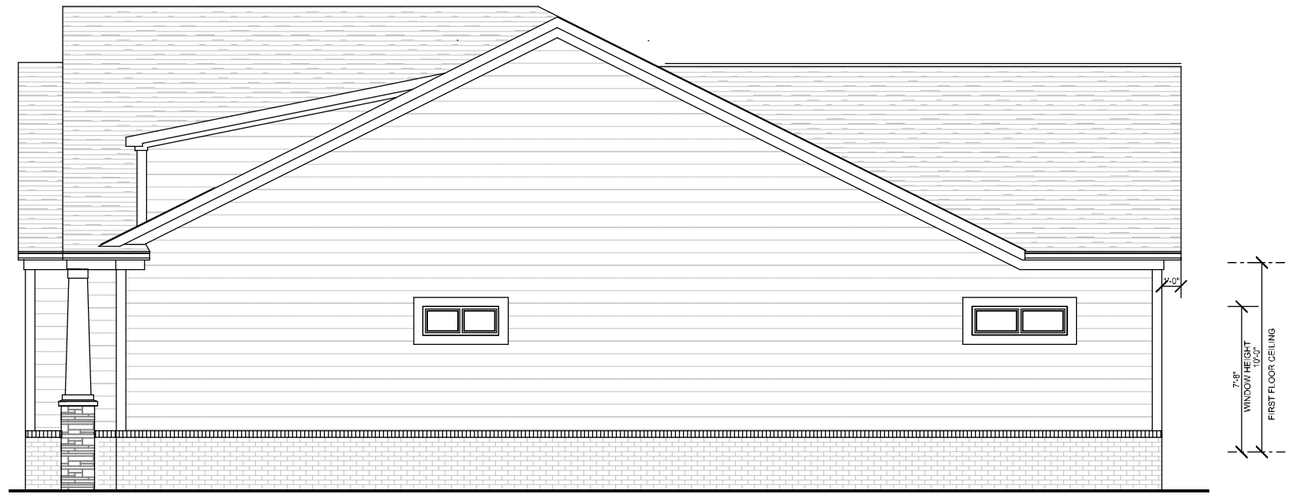
NO.	DESC.	DATE

ISSUE DATE	5-30-19
DB	L.T.
CB	V.M.
SHEET	A101
PROJECT NO.	19022

PROPOSED FRONT ELEVATION



PROPOSED RIGHT ELEVATION

PROPOSED REAR ELEVATION

PROPOSED LEFT ELEVATION

dannaassoc.com

D'Anna Associates
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1055 SOUTH BLVD. E. SUITE 200
ROCHESTER HILLS, MI 48307
P 248-852-7702 F 248-852-7707

Ashton Parc Condominiums

PROPOSED NEW CONSTRUCTION

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- □BIDDING
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- □CONSTRUCTION
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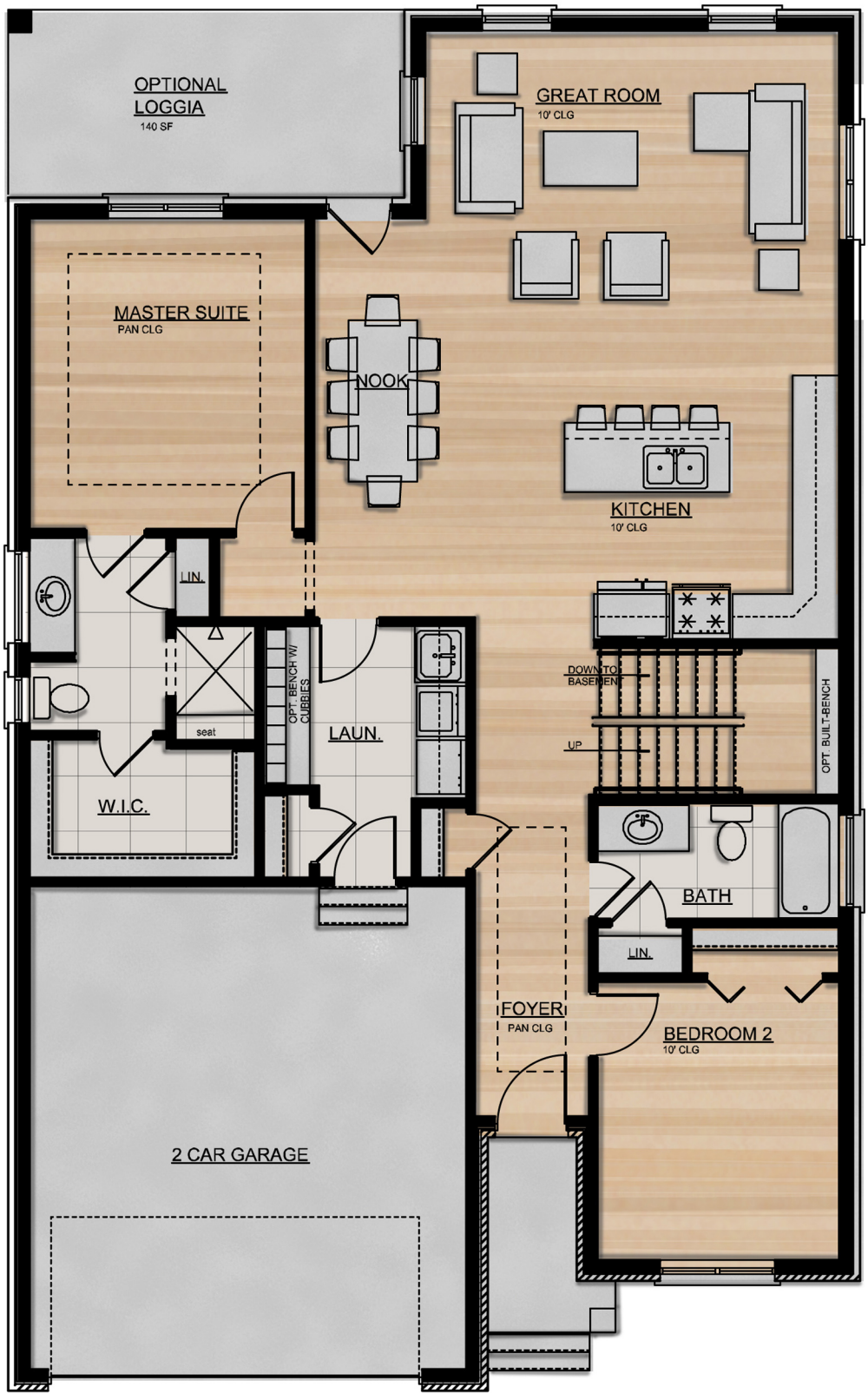
NO.	DESC.	DATE

ISSUE DATE 5-30-19
DB L.T.
CB V.M.
SHEET A200
PROJECT NO. 19022



D'Anna Associates
Architecture | Engineering

ASHTON PARC CONDOMINIUMS

FLOOR PLAN

1,500 SF / UNIT

D'Anna Associates
Architecture | Engineering

ASHTON PARC CONDOMINIUMS

FRONT ELEVATION

1,500 SF / UNIT

Carlisle | Wortman
ASSOCIATES, INC.
117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: July 2, 2019

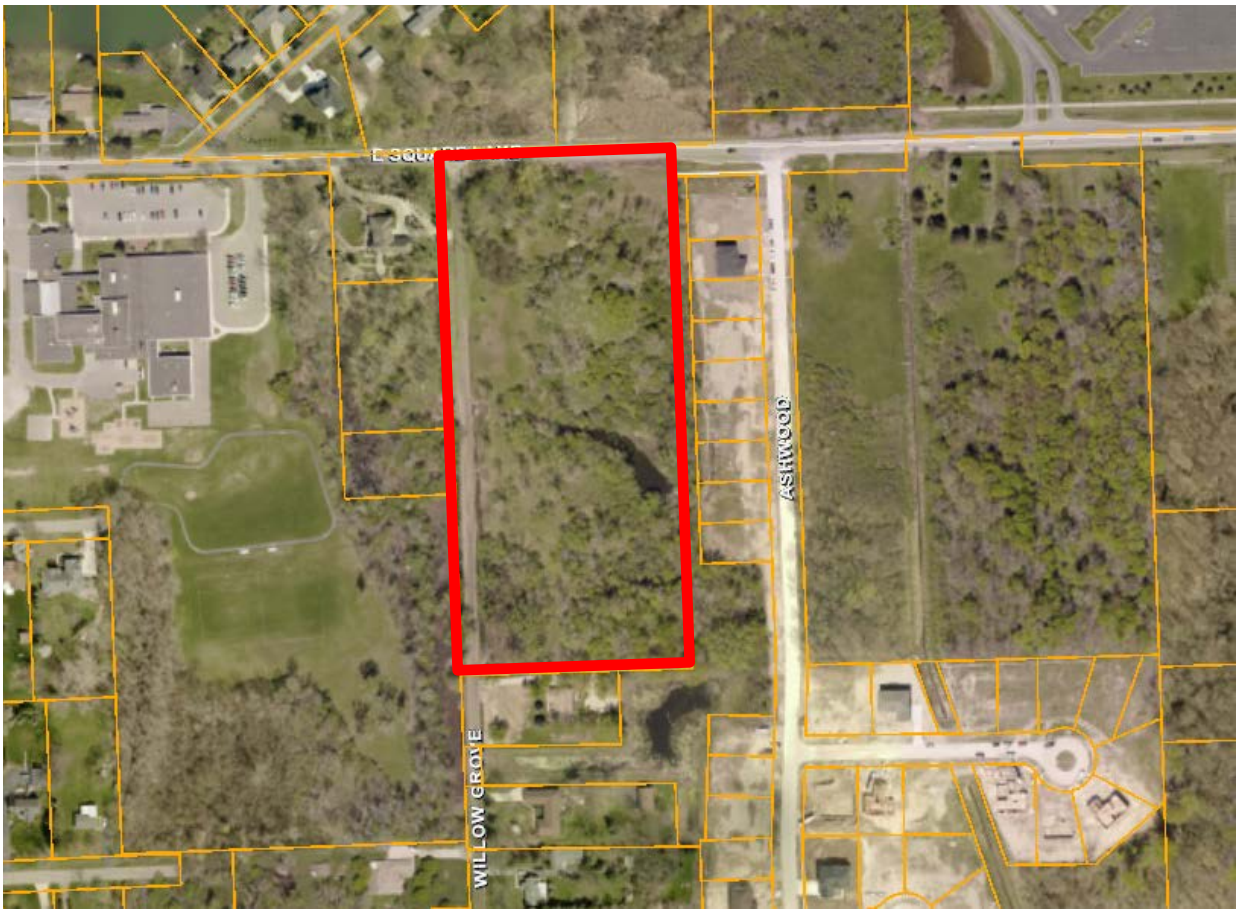
Preliminary Condominium Cluster Review
For
City of Troy, Michigan

Applicant:	Mark Gesuale, Wolverine Building Company
Project Name:	Ashton Parc Condominium
Plan Date:	May 10, 2018
Location:	Square lake Road and Willow Grove Road
Zoning:	R-1C, One-family Residential District
Action Requested:	Preliminary Site Condominium Cluster Approval

PROJECT AND SITE DESCRIPTION

We are in receipt of a preliminary site condominium cluster application for a twenty-nine (29) unit detached single-family condominium cluster development. The site 8.69-acres is located at the southeast corner of Willow Grove and Square Lake Road. Ten units will be accessed directly off Willow Grove. The remaining 19-units will be accessed off a new private road. The site is encumbered with a +/- 1.85 acres of MDEQ regulated wetlands.

The site is a proposed as condominium with building pads and the remaining area as common open space. The applicant is proposing that all 29 units are constructed at 1,500 sq/ft or smaller. This size unit, in a detached single-family type development, has been a development option that is missing from the city.



The applicant proposes a cluster development. The applicant has submitted a parallel plan that allows for a base density of 17 units. The applicant is seeking twelve (12) additional units in exchange for providing 30% open space, preservation of +/- 1.4 acres of MDEQ regulated wetland, preservation of 139 inches of protected trees, and providing that all 29 units will be less than 1,500 sq/ft with first floor master bedroom and bath.

The applicant has submitted an elevation and floor plan with first floor master.

Size of Subject Property:
The parcel is 8.69 net acres

Proposed Uses of Subject Parcel:
Twenty-nine (29) detached condominium cluster development

Current Use of Subject Property:
The subject property is currently vacant

Current Zoning:
The property is currently zoned R-1C, One-family Residential District.

Surrounding Property Details:

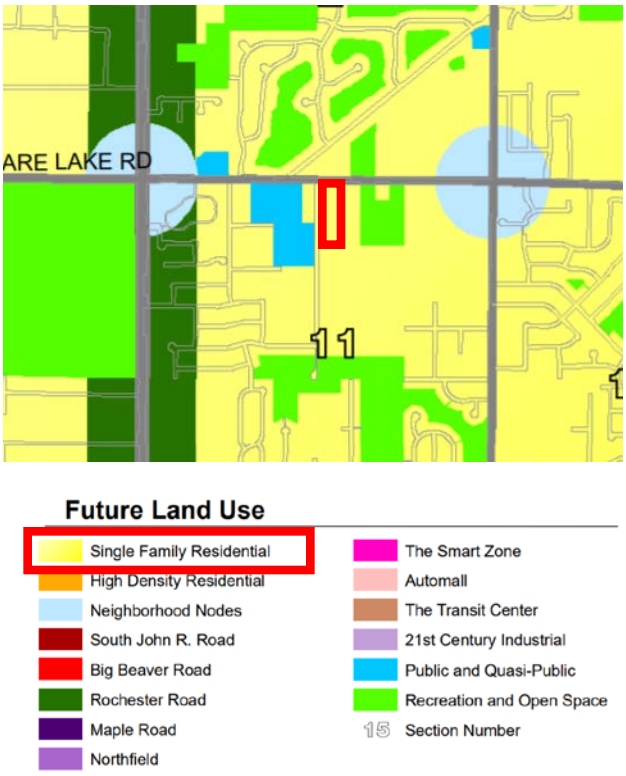
Direction	Zoning	Use
North	R-1C, One-family Residential District	Vacant
South	R-1C, One-family Residential District	Single-family Residential
East	R-1C, One-family Residential District	Single-family Residential
West	R-1C, One-family Residential District.	Single-family homes, Vacant, School

MASTER PLAN

The Site is identified as single-family residential. The development of the site as single-family residential is consistent with the Master Plan.

Additional goals of the Master Plan that are met with the proposed development:

- Providing identified underserved housing type in the form of 1,500 sq/ft homes with first floor master bedroom and bath
- Preserving 30% open space
- Preserving 1.4 acres of onsite wetland
- Preserving 139 inches of trees
- The applicant has provided adequate buffer between adjacent properties.



SITE ARRANGEMENT

The proposed one-family cluster development consists of 29-units. Ten units will be accessed directly off Willow Grove. The remaining 19-units will be accessed off a new private road.

The applicant has submitted a parallel plan to establish a base density and portray the visual difference between traditional site design versus a cluster development. The cluster option is offered as an alternative to traditional residential development. The cluster option is intended to:

1. Encourage the use of property in accordance with its natural character.
2. Assure the permanent preservation of open space and other natural features.
3. Provide recreational facilities and/or open space within a reasonable distance of all residents of the Cluster development.
4. Allow innovation and greater flexibility in the design of residential developments.

5. Facilitate the construction and maintenance of streets, utilities, and public services in a more economical and efficient manner.
6. Ensure compatibility of design and use between neighboring property.
7. Encourage a less sprawling form of development, thus preserving open space as undeveloped land.
8. Allow for design innovation to provide flexibility for land development where the normal development approach would otherwise be unnecessarily restrictive or contrary to other City goals

The applicant is seeking to develop this site as a cluster to preserve the regulated wetland, provide 30% common open space, allow for tree preservation, and providing that all 29 units will be less than 1,500 sq/ft with first floor master bedroom and bath.

Items to be addressed: *None*

AREA, WIDTH, HEIGHT, SETBACKS and REGULATORY FLEXIBILITY

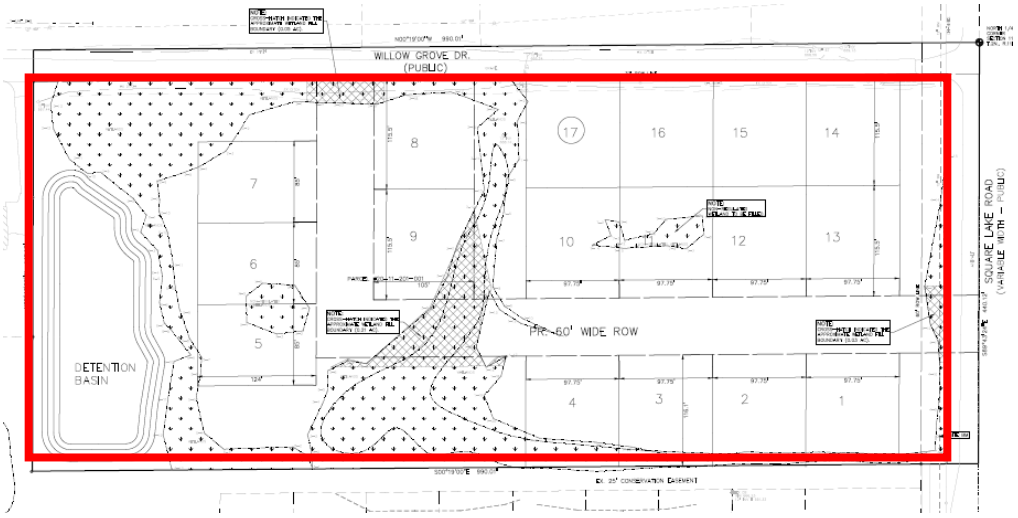
The intent of the cluster development provisions is to relax the typical R-1C district bulk requirements in order to encourage a less sprawling form of development that preserves open space and natural resources. As set forth in 10.04.E the applicant is able seek specific departures from the dimensional requirements of the Zoning Ordinance for yards and perimeter setback as a part of the approval process. The table below outlines the bulk requirements for cluster development:

	Required/Allowed	Provided	Compliance
Density	Overall density shall not exceed the number of residential cluster units as developed under a conventional site condominium, unless a density bonus has been granted by City Council. The Base Density = 17 units + Cluster bonus (20% bonus) + Open Space bonus (11% more open space in addition to required minimum) + house size bonus = 44 units. The applicant is eligible for up to 44 units.	The applicant is seeking 29 units.	29 units are permitted with approval of the cluster development.
Perimeter Setback	Equal to the rear yard setback requirement for the underlying zoning district of the property directly adjacent to each border = 40 feet perimeter setback	All lots are provided with a minimum 53-foot rear setback	Complies
Lot Size	Not Applicable	The site is a condominium with building pads and common open space. Each building pad is 37' x 60' = 2,220 sq/ft	2,200 pad includes garage, 1,500 sq/ft house, and loggia, and some area for limited common open space.
Front Setback (building)	20-foot setback, 25-foot garage	25-feet to edge of sidewalk	Complies
Rear Setback (building)	25-foot setback	53-foot minimum	Complies
Side Setback (building)	7.5-foot setback	7.5-foot minimum	Complies
Open Space Requirements: Minimum Percentage	20%	30%	Complies. Applicant must submit open space preservation covenant.

Items to be addressed: *None*

COMPARISON OF PARALLEL PLAN VS. CLUSTER PLAN

	Parallel Plan	Cluster
Density	17 units	29 units
Perimeter Setback	Equal to the rear yard setback requirement for the underlying zoning district of the property directly adjacent to each border = 45 feet perimeter setback	53-feet minimum perimeter setback
Lot Size	15,000 sq/ft minimum	NA
Front Setback (building)	40-foot setback	20-foot setback
Rear Setback (building)	45-foot setback	25-foot setback
Side Setback (building)	10-foot setback	7.5-foot setback
Wetland Preserved	+/- 1.0 acres	+/- 1.4 acres
Roads	60-foot public	40-foot private
Tree Preservation	Unknown	139 inches
Common Open Space Preserved	Unknown	30%



Parallel Plan:

17 units
+/- 1.0 acres wetlands preserved

Cluster Plan:

29 units
+/-30% Open Space (green area)
+/- 1.4 acres wetlands preserved
Providing desired housing option

OPEN SPACE REQUIREMENTS

A requirement of the Cluster Option is to provide at least one (1) of the following open space benefits:

a. Significant Natural Features. Preservation of significant natural features contained on the site, as long as it is in the best interest of the City to preserve the natural features that might be negatively impacted by conventional residential development. The determination of whether the site has significant natural features shall be made by the City Council, after review of a Natural Features Analysis, prepared by the applicant, that inventories these features; or

b. Recreation Facilities. If the site lacks significant natural features, it can qualify with the provision of usable recreation facilities to which all residents of the development shall have reasonable access. Such recreation facilities include areas such as a neighborhood park, passive recreational facilities, soccer fields, ball fields, bike paths, or similar facilities that provide a feature of community-wide significance and enhance residential development. Recreational facilities that are less pervious than natural landscape shall not comprise more than fifty (50) percent of the open space. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, that inventories these features; or

c. Preservation of Common Open Space or Creation of Natural Features. If the site lacks significant natural features, a proposed development may also qualify if the development will preserve common open space or create significant natural features such as wetlands. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, which inventories these features.

The applicant is preserving common open space and natural features. Within the common open space, the applicant is preserving trees, and preserving a regulated wetland.

The site has significant tree cover including 254 tagged trees. However, most of the trees are of low quality and species including cottonwood, ash, and elm. Of the 254 tagged trees, only 45 are protected (40 woodland and 5 landmark).

Of the 45 regulated trees, the applicant proposes to remove 31 woodland trees and preserve 9 and remove 3 landmark trees and preserve 2. Preserved trees include oak, and maple. The applicant notes that they are saving 58 unprotected trees onsite.

Replacement Details		
Protected Tree	**Inches Removed**	**Replacement Required**
Landmark	60 inches	60 inches
Woodland	275 inches	138 inches
Preservation/Mitigation	**Inches Preserved**	**Credit**
Landmark	54 inches	108 inches
Woodland	85 inches	170 inches
Protected Replacement Required	198 Inches	
Preservation Credit	278 Inches	
Total	**+ 80-inch credit**	
Total Tree Mitigation	Zero. The number of inches preserved and credited exceed the mitigation required.	

The applicant has submitted a preliminary tree preservation plan, which shows which trees are to be removed and which are to be preserved as part of site development. The preservation area is designated to the interior or site within and around the protected wetland. Preliminary tree inventory and replacement plan on sheets T-1.0 through 1.3, includes quality, size, species, location and landmark designation.

Guarantee of Open Space and Tree Preservation:

The applicant shall provide documentation to guarantee that all open space portions of the development will be preserved and maintained as approved and that all commitments for such preservation and maintenance are binding on successors and future owners of the subject property. All such documents shall be subject to approval by the City Attorney. No structures (pools, sheds) or equipment (play structures, etc) are permitted within the dedicated open space area.

The preservation of the existing natural area as shown on the Preservation Plan will be part of Site Plan approval. We find that provided and preserved natural features meet the preservation of natural features requirement as required in cluster development.

The applicant shall submit a detailed narrative that indicates a specific method for protecting significant natural features.

Items to be addressed: *Detailed narrative that indicates a specific method for protecting significant natural features.*

SITE ACCESS AND CIRCULATION

Vehicular

Ten units will be accessed directly off Willow Grove. The remaining 19-units will be accessed off a new private road.

Pedestrian

The applicant proposes a five (5) foot wide concrete sidewalk along Willow Grove and 5-foot sidewalk along both sides of the new private road.

Items to be Addressed: *None*

STORMWATER

Stormwater management is provided via a detention pond at the southeast corner of the site. Stormwater will be reviewed by the engineering department.

Items to be Addressed: *None*

LANDSCAPING

One-Family Cluster development landscaping requirements are regulated by Section 13.02.F.2.

Frontage	Required	Provided	Compliance
Square Lake Road	One (1) deciduous tree for every 30 lineal feet. 440 / 30 = 15 trees	14 proposed and 1 existing	Complaint
Proposed Private Rd.	One (1) deciduous tree for every 50 lineal feet. 1,463 / 50 = 30 trees	29 Trees	Add one (1) additional street tree
Willow Grove	One (1) deciduous tree for every 50 lineal feet. 990 / 30 = 33 trees	30 proposed and 3 existing	Compliant
Tree Preservation	None required based on amount preserved.	Not Applicable	Compliant

Site condominium landscaping requirements have been met.

Items to be Addressed: *Add one additional street tree to private road.*

ELEVATIONS AND FLOOR PLANS

The applicant has submitted floor plans and elevations of a 1,500 sq/ft home.

Items to be Addressed: *None*

CLUSTER STANDARDS

As set forth in section 10.04.I, the applicant shall demonstrate that through the use of the Cluster option, the development will accomplish a sufficient number of the following objectives, as are reasonably applicable to the site, providing:

a. Long-term protection and preservation of natural resources, natural features, and open space of a significant quantity and/or quality in need of protection or preservation, and which would otherwise be unfeasible or unlikely to be achieved absent these regulations.
b. Innovative and creative site design through flexibility in the siting of dwellings and other development features that would otherwise be unfeasible or unlikely to be achieved absent these regulations.
c. Appropriate buffer and/or land use transitions between the Cluster development and surrounding properties.
d. A compatible mixture of open space, landscaped areas, and/or pedestrian amenities.
e. Sustainable design features and techniques, such as green building, stormwater management best practices, and low impact design, which will promote and encourage energy conservation and sustainable development.
f. A means for owning common open space and for protecting it from development in perpetuity.
g. Any density bonus is commensurate with the benefit offered to achieve such bonus.
h. The cluster development shall be adequately served by essential public facilities and services, such as: streets, pedestrian or bicycle facilities, police and fire protection, drainage systems, refuse disposal, water and sewage facilities, and schools. Such services shall be provided and accommodated without an unreasonable public burden.
i. The architectural form, scale, and massing shall ensure buildings are in proportion and complementary to those of adjacent properties and the selected building materials are of high, durable quality.

The applicant is seeking to develop this site as a cluster in order to provide 30% common open space, allow for tree preservation, preserve the regulated wetland. Many of the benefits of this development would not be achievable without a cluster type development. Overall, we find:

1) The request complies with the Master Plan. The site is designated as single-family residential.
2) The cluster development better protects the sites natural resources than if the site were not developed as a cluster.
3) The cluster development better protects the adjacent properties than if the site were not developed as a cluster.
4) The cluster development is compatible with adjacent properties.
5) The site can be adequately served with municipal water and sewer.
6) Preserves 30% overall site open space, which allows for the preservation of natural resources and inclusion of site amenities.

7) Preserves +/-1.4 acres of wetland
8) Provides long-term protection and preservation of natural features, and open space.
9) Utilizes innovative and creative site design.
10) Preserves 11 trees regulated tees, which totals over 139 inches of existing landmark and woodland trees.
11) Provides a unique housing option that is not currently being provided in the market. This is a desired housing option that will serve an underserved market.

RECOMMENDATIONS

Overall we recommend that the Planning Commission recommend approval of the Cluster Plan to the City Council with the following conditions:

1. *Submission of open space preservation covenant.*
2. *Submission of a detailed narrative that indicates a specific method for protecting significant natural features including tree preservation and wetland preservation.*
3. *Add one additional street tree to private road.*

Benjamin R. Carlisle

CARLISLE/WORTMAN ASSOC., INC.
Benjamin R. Carlisle, LEED AP, AICP

5. PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2019-0013) – Proposed Ashton Parc One-Family Cluster Development, Southeast corner of East Square Lake and Willow Grove (Parcel 88-20-11-201-001), Section 11, Currently Zoned R-1C (One Family Residential) District

Mr. Carlisle reviewed the Ashton Parc Preliminary Site Plan application for a cluster development. He addressed the parallel plan versus cluster option, wetlands, open space, traffic, landscape mitigation, elevations and Cluster standards and findings. Mr. Carlisle noted the City's traffic consultant OHM concluded traffic impacts of the proposed development would be minimal and would not significantly worsen traffic conditions on Willow Grove or Square Lake.

Mr. Carlisle recommended approval of the cluster application with three conditions as identified in his report dated July 2, 2019.

Developer Jim Polyzois and Civil Engineer John Thompson of Professional Engineering Associates were present.

Mr. Polyzois said a recent market study indicates a driving force for smaller homes with luxury finishes to attract empty nesters and millennials. He addressed the elevations and floor plan and indicated the price range of the homes would be in the low $300,000. Mr. Polyzois said he is currently constructing duplex style condominiums in Rochester Hills that are approximately 1670 square feet.

There was discussion on:

- Elevations; color variety, prominence of garage, majority of garages on right.
- Floor plan; square footage, one story ranch with basement.
- Building materials; brick, stone, limestone accent, shaker siding, no vinyl.
- Basement, foundation protection from wetlands.
- Condominium designation; emphasize detached single family.
- Achieving single family home product desired by Board.

PUBLIC HEARING OPENED

Mary Bogush, 1418 Ottawa, Royal Oak; addressed wetland environment, negative impact to existing wildlife.

PUBLIC HEARING CLOSED

Resolution # PC-2019-07-049
Moved by: Lambert
Support by: Fowler

RESOLVED, The Planning Commission hereby recommends to the City Council that the proposed Ashton Parc Site Condominium, 29 units/lots, Southeast corner of Square Lake and Willow Grove (Parcel 88-20-11-201-001), Section 11, approximately 8.69 acres in size, Currently Zoned R-1C (One Family Residential) District, be approved for the following reasons:

1. The request complies with the Master Plan.
2. The cluster development better protects the sites natural resources than if the site were not developed as a cluster.
3. The cluster development better protects the adjacent properties than if the site were not developed as a cluster.
4. The cluster development is compatible with adjacent properties.
5. The site can be adequately served with municipal water and sewer.
6. Preserves 30% overall site open space, which allows for the preservation of natural resources and inclusion of site amenities.
7. Preserves +/-1.4 acres of wetland
8. Provides long-term protection and preservation of natural features and open space.
9. Utilizes innovative and creative site design.
10. Preserves 11 regulated trees, which totals over 139 inches of existing landmark and woodland trees.
11. Provides a unique housing option that is underprovided in the market.

BE IT FINALLY RESOLVED, The Planning Commission recommends the following design considerations:

1. Submission of open space preservation covenant and detailed narrative that indicates a specific method for protecting significant natural features including tree preservation and wetland preservation.
2. Add one additional street tree to private road.

Yes: All present (9)

MOTION CARRIED

memorandum

Date: June 14, 2019

To: Bill Huotari, PE
From: Sara Merrill, PE, PTOE

Re: Ashton Parc Condominiums – Cluster Development
Anticipated Traffic Impacts

The purpose of this memorandum is to provide an overview of anticipated traffic impacts resulting from Ashton Parc, a proposed cluster-option development consisting of 29 detached single-family homes. The development is located on the east side of Willow Grove Drive, south of Square Lake Road. In this area, Square Lake Road is a paved 2-lane roadway, and Willow Grove is currently a gravel road. Planned improvements to Willow Grove Drive in the vicinity of the development include a new sanitary sewer, road realignment, and paving.

The Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, provides trip generation rates for numerous land uses, based on thousands of studies throughout the United States and Canada. This data can then be used to estimate the number of vehicle trips generated by a development. For residential housing, traffic impacts are usually most noticeable during the peak hour of adjacent street traffic – that is, during morning and evening "rush hour", when traffic on the roads is most congested. In most areas, the morning (AM) peak is a one hour period that occurs between 7 am – 9 am, and the evening (PM) peak is a one hour period usually between 4 pm – 6 pm.

The table below provides the calculated number of trips generated for the proposed Ashton Parc Cluster Development, based on the ITE Trip Generation Manual for Single-Family Detached Housing (ITE Land Use Code #210).

Number of Dwelling Units	Number of Site-Generated Trips								
	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
29 Units (Cluster Option)	6	19	25	20	11	31	166	167	333
17 Units (Parallel Plan)	4	13	17	12	7	19	102	102	204

During the morning (AM) peak hour, the proposed Ashton Parc cluster development is expected to generate 25 new trips: 6 inbound (entering the site), and 19 outbound (exiting the site). This amounts to only 1 additional vehicle every 3 minutes turning from Willow Grove Drive onto Square Lake Road during the morning peak. These vehicles would then be dispersed through the road network, with some turning left (towards Rochester Road), and some turning right (towards John R Road).

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During the evening (PM) peak hour, the proposed site is expected to generate 31 new vehicle trips: 20 inbound (entering the site) trips, and 11 outbound (exiting the site). This pattern coincides with residents typically leaving in the morning for work, and returning home in the evening.

The traffic generated by the proposed development is quite minimal, adding just a handful of vehicle trips during the peak ("busiest") hour. The traffic impact of this site on the adjacent road network is negligible, and would be imperceptible to the majority of road users.

As a point of comparison, Square Lake Road (between Rochester Road and John R Road) carries approximately 1,100 vehicles during the PM peak hour, and averages around 10,000 vehicles per day. Even amongst typical weekdays, traffic volumes during the peak hours alone often vary by 5-10% from one day to the next. These day-to-day fluctuations are on orders of magnitude measuring upwards of 100+ vehicles (per hour). The proposed homes in the Ashton Parc condominiums are expected to generate only 31 new vehicle trips during the peak hour.

In conclusion, the traffic impacts as a result of the proposed development are very minimal and are not expected to significantly worsen traffic conditions on Willow Grove Drive or Square Lake Road.

From: Kelly Rivers <krivers2@yahoo.com>
Sent: Sunday, June 30, 2019 2:46 PM
To: Planning
Subject: Public hearing July 9 2019

Hello,

I will be out of town for the public hearing on July 9th in regards to zoning of Ashton Parc Condos. I live on Ashwood Drive on the other side of this proposed area. We were advised that the land was a protected wetland and couldn't be built on. I'm not sure why now this has changed. There are several animals living in there and it would be a disturbance to their homes. Please see the picture below of a beautiful bird that would be displaced.
In addition, the amount of traffic on Square Lake will increase and the road is already backed up for quite a ways in the morning as it is.

Please do not allow condos to be built at Square lake and Willow Grove. Please keep it as protected wetlands!

Thank You
Kelly Rivers