



500 West Big Beaver
Troy, MI 48084
troymi.gov

248.524.3364
planning@troymi.gov

**PLANNING COMMISSION
MEETING AGENDA
REGULAR MEETING**

David Lambert, Chairman, Marianna Perakis, Vice Chairman
Toby Buechner, Carlton Faison, Michael W. Hutson, Tom Krent,
Lakshmi Malalahalli, Sadek Rahman and John J. Tagle

May 10, 2022

7:00 P.M.

Council Chambers

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – April 26, 2022
4. PUBLIC COMMENT – For Items Not on the Agenda

PUBLIC HEARING

5. PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (SP JPLN2021-0028) - Proposed Golden Villas One Family Residential Cluster, South side of Square Lake, West of Dequindre (PIN 88-20-12-200-031 & 88-20-12-200-035), Section 12, Currently Zoned R-1C (One Family Residential) District

PRELIMINARY SITE PLAN REVIEW

6. PRELIMINARY SITE PLAN REVIEW (SP JPLN2022-0002) – Proposed Norton and Quill Site Condominium, Northwest corner of Norton Street and Quill Creek Drive (PIN 88-20-03-251-043 & 88-20-03-251-044), Section 3, Currently Zoned R-1B (One Family Residential) District.

OTHER ITEMS

7. PUBLIC COMMENTS – For Items on the Agenda
8. PLANNING COMMISSION COMMENT
9. ADJOURN

NOTICE: People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk by e-mail at clerk@troymi.gov or by calling (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations

Televised Live, Government Channel WTRY (10 WideOpenWest and 17 Comcast) Replayed Wednesdays 3:00 pm, 6:00 pm and 11:00 pm

Chair Lambert called the Regular meeting of the Troy City Planning Commission to order at 7:00 p.m. on April 26, 2022, in the Council Chamber of the Troy City Hall. Chair Lambert and Vice Chair Perakis presented opening remarks relative to the role of the Planning Commission and procedure of tonight’s meeting.

1. ROLL CALL

Present:

- Toby Buechner
- Carlton M. Faison
- Michael W. Hutson
- Tom Krent
- David Lambert
- Lakshmi Malalahalli
- Marianna Perakis
- Sadek Rahman
- John J. Tagle

Also Present:

- R. Brent Savidant, Community Development Director
- Ben Carlisle, Carlisle Wortman Associates
- Julie Quinlan Dufrane, Assistant City Attorney
- Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Resolution # PC-2022-04-023

- Moved by: Buechner
- Support by: Krent

RESOLVED, To approve the Agenda as prepared.

Yes: All present (9)

MOTION CARRIED

3. APPROVAL OF MINUTES – April 12, 2022

Resolution # PC-2022-04-024

- Moved by: Tagle
- Support by: Perakis

RESOLVED, To approve the minutes of the April 12, 2022 Regular meeting as submitted.

Yes: All present (9)

MOTION CARRIED

4. PUBLIC COMMENT – For Items Not on the Agenda

There was no one present who wished to speak.

PUBLIC HEARING

5. PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (SP JPLN2021-0023) – Proposed Eckford Oaks One Family Residential Cluster, North side of Eckford, West of Rochester (PIN 88-20-15-251-026 and 88-20-15-251-017), Section 15, Currently Zoned R-1C (One Family Residential) District

Mr. Carlisle reviewed the background of the Preliminary Site Plan application for Eckford Oaks cluster development as relates to location, adjacent zoning, parcel size, access, and natural resources encumbered by wetlands, floodplain, floodway, tree cover and Houghton drain.

Mr. Carlisle addressed the parallel plan, comparing what could be developed by right under the R-1C residential zoning district. Mr. Carlisle addressed the intent of the cluster development option, noting the applicant would achieve five (5) additional units and 45% of open space would be preserved. He stated the tree preservation study/plan notes most trees are of good quality and no mitigation is required. Mr. Carlisle said the plan provides for a 10-foot-wide public pathway through the development to connect with the existing path that starts at Daisy Knight Dog Park on Livernois through to the Department of Public Works (DPW) site to the north. He addressed the applicant's request to waive the required setbacks for construction of decks along the northern property line abutting the DPW yard and the EP (Environmental Protection) zoned property. Mr. Carlisle said the applicant proposes to build ranch style homes and asked that the applicant indicate building materials. Mr. Carlisle reviewed the Cluster Standards as set forth in Section 10.04.I.

In summary, Mr. Carlisle said the Planning Commission shall determine if requirements are met to qualify for a cluster development option, if the required Cluster Standards have been met, and if the additional number of units is commensurate with open space being preserved. He asked the Planning Commission in its deliberation to consider the impact of grading upon the onsite wetlands and floodplains, the applicant's request to seek relief of setback requirements to construct decks and to address building materials with the applicant.

A brief discussion among Board members and the administration followed, some comments relating to:

- Parallel plan versus cluster development option.
- Feasibility of building on floodplain, floodway, wetlands.
- R1-C residential zoning district regulations, as relates to lot size.
- Number of units permitted by right; 21 or 18 units, subject to buildable lots.
- Approval process of cluster development option.
- Intent of EP zoning district; similar to conservation easement.

Bruce Michael, developer for the project, said the homes are of a craftsman-style architecture constructed of stone and wood siding with a 6-foot covered front porch with columns. He shared with the Board a few samples of building materials. Mr. Michael addressed elevations and floor plans, and the intent to build ranch style homes to serve the baby boomer age group. He indicated a base price of \$500,000, plus additional costs for structural options available to purchaser. Mr. Michael addressed tying-in to a regional detention facility, providing a public pathway connection to the existing pathway, and saving as many as trees as possible with a least disturbance to the existing wetlands.

There was discussion on:

- Wood siding; engineered, maintenance-free, fade/insect resistant product, 30-year warranty.
- Elevations; three elevations based on ranch style home, garage door elements.
- Floor plans; accommodation for physical accessibility, basements.
- Waiver of setback requirements for decks; 9 of 26 units require waiver.
- Visual view of residents; existing woodlands, vegetation, seclusion.
- Distance from the road to the homes parallel on the north property line.
- Parallel plan versus cluster development option.
- Number of units permitted by right; 21 or 18, subject to buildable lots.
- Quality of trees on site; preservation of trees.
- Environmental impact; less with cluster development option.
- Detailed engineering drawings at Final Site Plan approval; assurance no negative impact to neighboring properties.
- Percentage of units that can be constructed as ranches; 60-70%.
- Grading, drainage and protection of existing tree root balls.
- Paving of road at developer expense; small portions would remain unpaved.

PUBLIC HEARING OPENED

The following residents were generally in opposition of the proposed development and expressed concerns relating to existing drainage/flooding issues, density, traffic increase, cut-through traffic, safety of residents, safety of Leonard Elementary school children, lack of sidewalks, proposed development not a fit to characteristics of neighborhood, environmental impact on wetlands and wildlife and paving of road if cost is imposed on residents.

- Anthony Kapas, 501 Eckford; referenced material submitted (petition with 28 Eckford homeowner signatures, copy of front page of purchase agreement, Eckford street lot configuration); expressed concern with being “sandwiched” between proposed developments
- Randy German, 841 Eckford; offered pictures on phone illustrating existing drainage/flooding issues
- Dave Duda, 873 Eckford
- Brad Surman, 882 Eckford
- Talal Kakos, 983 Eckford
- Bob Kage, 718 Eckford

- Lisa Ruffin, 914 Eckford
- Mitch Doepke, 870 Eckford
- Rhonda Jewell, 689 Eckford; shared flash drive of pictures illustrating character of neighborhood, existing drainage/flooding issues
- Ronald Eng, 749 Eckford; addressed noise pollution from DPW yard
- Caitlin Rider, 770 Eckford; father Jeff Rider also in audience
- Marge Kowalak, 850 Eckford
- Mo (Maurits) Winkleprins, 650 Eckford
- Tom Randazzo, 273 Eckford
- Cheryl Kapas, 501 Eckford; addressed hazardous curve in road
- Anne Warlick, 845 Eckford
- Irys German, 841 Eckford; shared pictures on phone illustrating existing drainage/flooding issues

PUBLIC HEARING CLOSED

Discussion followed on:

- Traffic study; review by Engineering did not warrant study; Planning Commission could request traffic study, if so desired.
- Paving of road; City requires developer to pave at their expense, small portion will remain unpaved.
- Concerns with existing drainage/flooding; potential for improvement with proposed development tie-in to regional detention basin.
- Parallel plan vs cluster development option, as relates to preservation of open space, environmental impact, density.
- Existing tree coverage sufficient to buffer homes on Eckford.
- Traffic concerns; safety, traffic control, no sidewalks.
- Existing characteristics of neighborhood.
- Hazardous curve in road on Eckford.
- Consideration of proposed setback requirement deviations; number of units seeking deviation.
- Property rights of both the developer/property owner and residents.
- Open space if developed by right; Mr. Michael estimated 3.5 acres.

Resolution # PC-2022-04-025

Moved by: Krent
Support by: Faison

RESOLVED, The Planning Commission hereby recommends to the City Council that the proposed Eckford Oaks Site Condominium (One Family Residential Cluster), 26 units/lots, North side of Eckford, West of Rochester (Parcels 88-20-15-275-026, 88-20-15-275-017), Section 15, approximately 8.7 acres in size, Currently Zoned R-1C (One Family Residential) District, be approved for the following reasons:

1. The cluster development better protects the site's natural resources than if the site were not developed as a cluster.

2. The cluster development better protects the adjacent properties than if the site were not developed as a cluster.
3. The cluster development is compatible with adjacent properties.
4. That the setback requirements be waived for the decks along the north side of the property because they are adjacent to environmentally protected land and the City of Troy property.
5. The site can be adequately served with municipal water and sewer.
6. The cluster development preserves 45% open space, to remain open space in perpetuity.

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

1. The applicant shall indicate limits of grading to conform impact upon onsite wetlands and floodplains, prior to Final Site Plan Approval.
2. The applicant shall provide protection of trees on properties 1 and 2 where possible by draining water in a creative way to avoid damage to root balls of some major trees.
3. The applicant shall insure 70% of the homes built on this property will be ranch style.
4. That an Open Space Preservation Agreement is provided, prior to Final Site Plan Approval.
5. That the applicant plant new trees to buffer the street for the homes to the north, should those trees be affected by the re-grading of the property.

Discussion on the motion on the floor:

Chair Lambert addressed concerns expressed by the public as relates to traffic and said attention should be given to traffic control especially near the elementary school. He said he believes the cluster plan is a better solution for the preservation of green space.

Following discussion among Board members and the administration with respect to what percentage of homes could be built as ranches, Mr. Michael said he is comfortable that 70% of the homes could be built as ranches.

Yes: Buechner, Faison, Hutson, Krent, Lambert, Perakis, Tagle
 No: Malalahalli, Rahman

MOTION CARRIED

OTHER ITEMS

6. **PUBLIC COMMENT** – For Items on the Agenda

There was no one present who wished to speak.

7. PLANNING COMMISSION COMMENT

There were general comments, some relating to:

- Open Space Agreements; sample(s) to be provided to members.
- Signage; as relates to content.

Chair Lambert thanked Board members and the audience for a mannerly public hearing this evening.

8. ADJOURN

The Regular meeting of the Planning Commission adjourned at 10:02 p.m.

Respectfully submitted,

David Lambert, Chair

Kathy L. Czarnecki, Recording Secretary

[https://d.docs.live.net/2f7ed4fe5f664ea8/Documents/Kathy/COT Planning Commission Minutes/2022/2022 04 26 Draft.docx](https://d.docs.live.net/2f7ed4fe5f664ea8/Documents/Kathy/COT%20Planning%20Commission%20Minutes/2022/2022%2004%2026%20Draft.docx)

DATE: May 6, 2022

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (SP JPLN2021-0028) - Proposed Golden Villas One Family Residential Cluster, South side of Square Lake, West of Dequindre (PIN 88-20-12-200-031 & 88-20-12-200-035), Section 12, Currently Zoned R-1C (One Family Residential) District

The petitioner Golden Homes submitted the above referenced Preliminary Site Plan application for a 12-unit One Family Residential Cluster. The development proposes to preserve 33% open space on the 3.0-acre parcel. The Planning Commission is responsible for providing a recommendation to City Council for this item.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and the recommendations included therein.

Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.
3. Preliminary Site Plan Application

G:\SITE PLANS\SP JPLN2021-0028 GOLDEN VILLAS\PC Memo 2022 05 10.docx

PROPOSED RESOLUTION

PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (SP JPLN2021-0028) - Proposed Golden Villas One Family Residential Cluster, South side of Square Lake, West of Dequindre (PIN 88-20-12-200-031 & 88-20-12-200-035), Section 12, Currently Zoned R-1C (One Family Residential) District

Resolution # PC-2022-05-

Moved by:

Support by:

RESOLVED, The Planning Commission hereby recommends to the City Council that the proposed Golden Villas Site Condominium (One Family Residential Cluster), 12 units/lots, South side of Square Lake, West of Dequindre (Parcels 88-20-12-200-031 & 88-20-12-200-035), Section 12, approximately 3.0 acres in size, Currently Zoned R-1C (One Family Residential) District, be approved for the following reasons:

1. The cluster development better protects the adjacent properties than if the site were not developed as a cluster.
2. The cluster development is compatible with adjacent properties.
3. The site can be adequately served with municipal water and sewer.
4. The cluster development preserves 33% open space, to remain open space in perpetuity.
5. The cluster development offers 1,900 square foot units with first floor master bedrooms and bath, a housing type desired in Troy.

BE IT FURTHER RESOLVED, The Planning Commission recommends approval of granting relief from the required rear yard setback and required perimeter setback as per section 10.04.E.5, as outlined in the report.

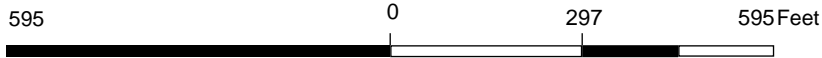
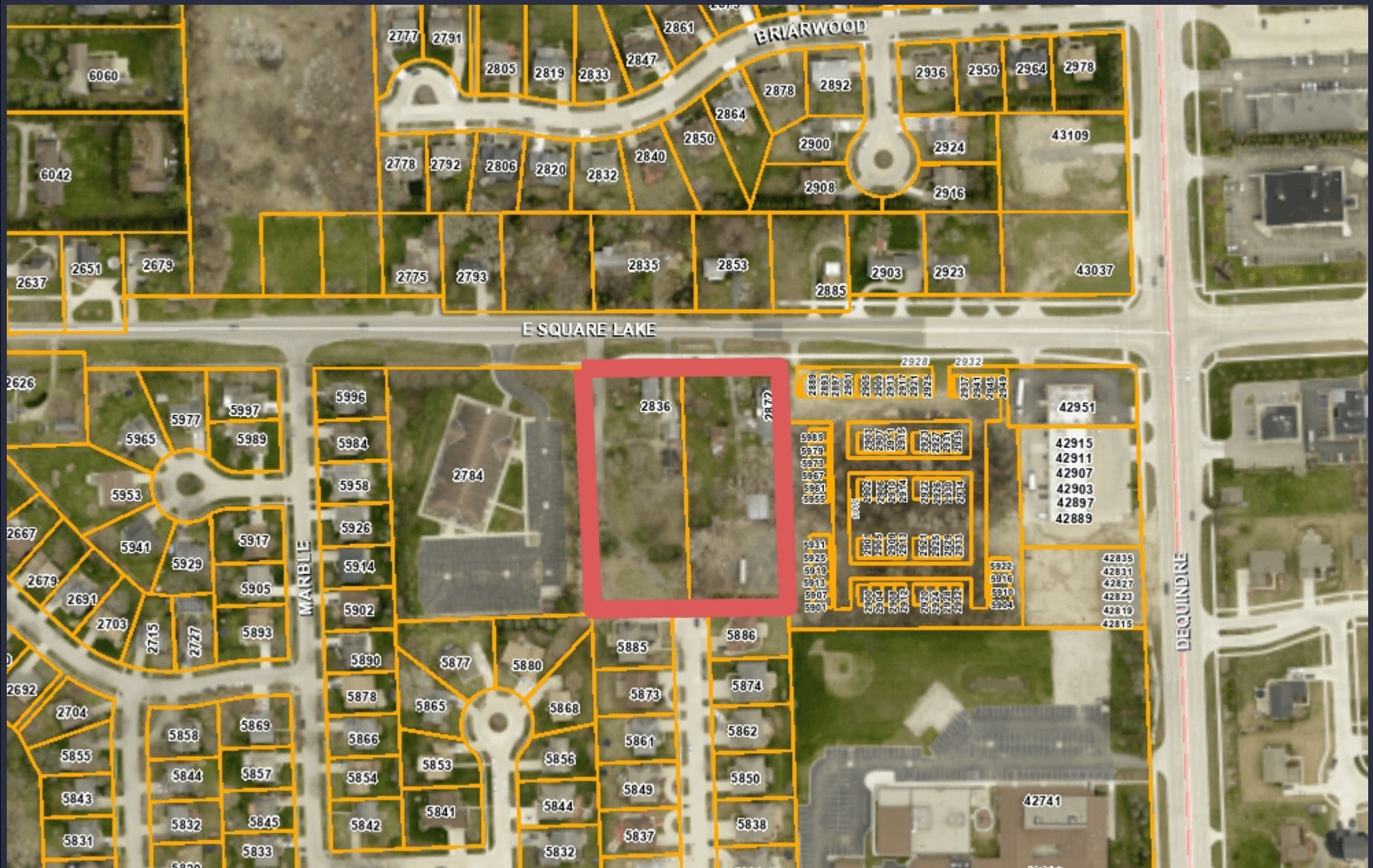
BE IT FINALLY RESOLVED, The Planning Commission offers the following design considerations:

1. Applicant shall provide additional housing elevation options.
2. Applicant shall provide twenty (20) additional trees along Square Lake Road.

Yes:

Absent:

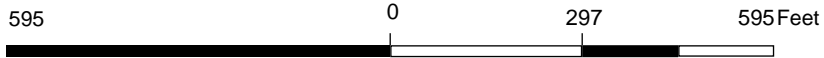
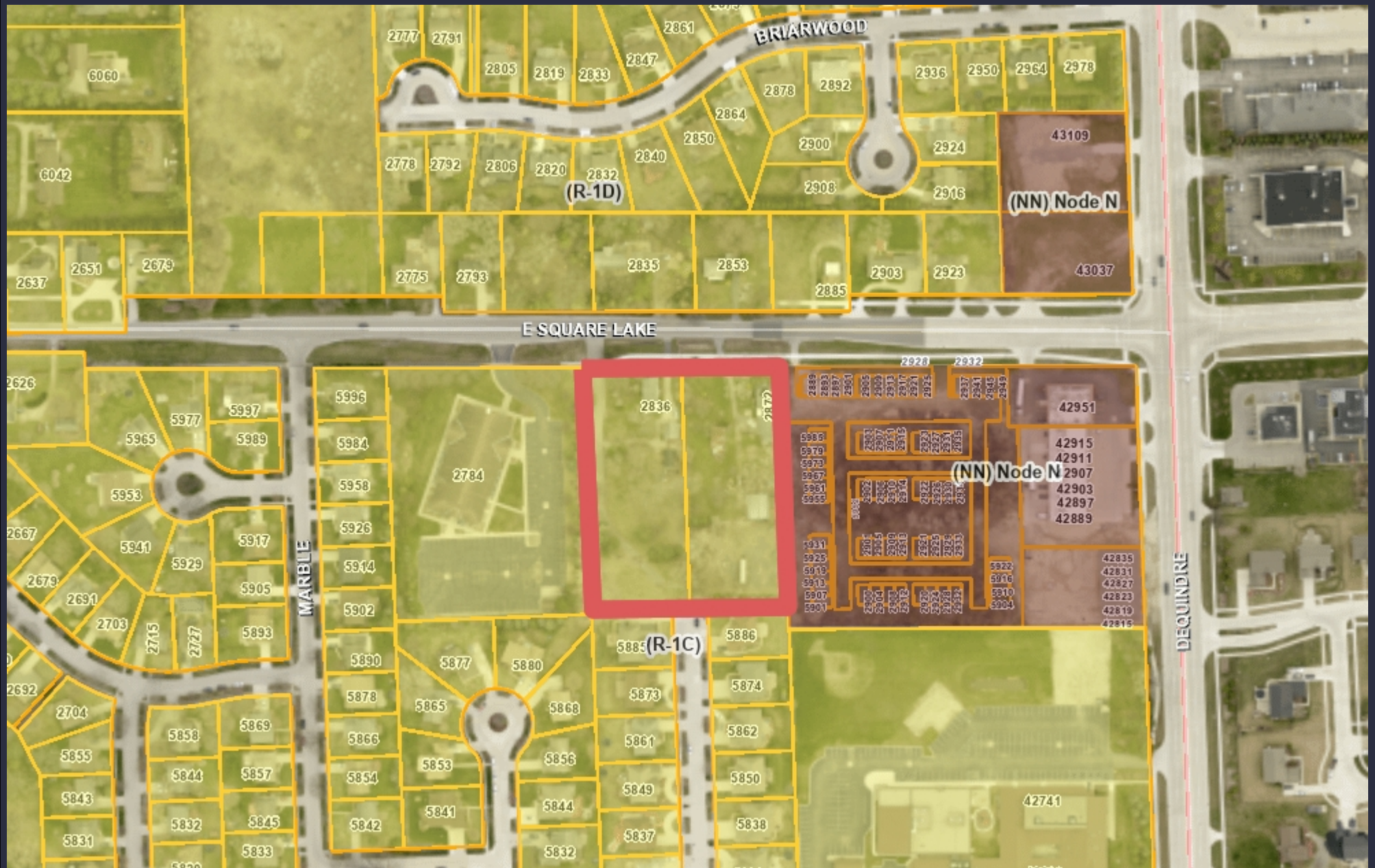
MOTION CARRIED



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



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.



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: April 26, 2022

Preliminary Site Condominium Cluster Review For City of Troy, Michigan

Project Name:	Golden Villas
Plan Date:	February 28, 2022
Location:	South of E. Square Lake, west of Dequindre
Zoning:	R-1C, One-family Residential District
Action Requested:	Preliminary Site Condominium Cluster Approval
Required Information:	Deficiencies noted.

PROJECT AND SITE DESCRIPTION

We are in receipt of a preliminary site plan application for a twelve (12) unit detached single-family condominium cluster development. The twelve (12) new lots will be accessed from a new private road that is located off E. Square Lake Road. The site is two parcels and is a total of 3.0 acres. The site has been improved with two single-family homes and a number of accessory buildings. The applicant has not identified any wetlands on site.

The property is surrounded by R-1C on the north, west, south, and boarded by neighborhood node to the east. The applicant proposes a cluster development. The applicant proposes a T-turnaround with no vehicular connection to Colleen Drive to south. The applicant proposes pedestrian connection to Colleen Drive.

The base density base under the R-1C, One-Family Residential as determined by the submission of a parallel plan is eight (8) units. The applicant is seeking four (4) additional units above the parallel plan density by doing a cluster, providing 33% of the total site as open space and providing 1,900 sq/ft homes with first floor master bedroom and bath.

Figure 1. - Location and Aerial Image of Subject Site



Size of Subject Property:

The parcel is 3.0 acres

Proposed Uses of Subject Parcel:

Twelve (12) detached single family condominium cluster development.

Current Use of Subject Property:

The subject property is currently improved with two (2) single family homes

Current Zoning:

The property is currently zoned R-1C, One-Family Residential District.

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	NN, Neighborhood Node	Townhomes (under development)
West	R-1C, One-family Residential District	Place of Worship

NATURAL FEATURES

Topography: A topographic survey has been provided on sheet P-1. The site is relatively flat.

Wetlands: There are no identified wetlands on site.

Floodplain: The site is not located within a floodplain.

Woodlands: A tree survey has been provided to inventory the natural features that exist onsite. The survey identified a total of 81 trees on site. Many of the trees are invasive. There is an especially high number of Cottonwoods. The applicant has identified a total of 9 landmark trees and 40 woodland trees, preserving 2 and 14, respectively. Full replacement and preservation details are shown in **Table 2**.

Table 2. – Woodland Protection Ordinance

Replacement Details		
Protected Tree	Inches Removed	Replacement Required
Landmark	151 inches	151 inches
Woodland	257 inches	129 inches
Preservation/Mitigation	Inches Preserved	Credit
Landmark	36 inches	72 inches
Woodland	124 inches	248 inches
Total	0 inches required for replacement. The number of inches preserved and credited exceed the mitigation required.	

Items to be addressed: None.

SITE ARRANGEMENT

The proposed one-family cluster development consists of twelve (12) units. All twelve (12) new lots will be accessed from a new private road off E. Square Lake Road. The proposed lots range between 5,617 sq. ft. and 6,115 sq. ft.

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

Items to be addressed: Planning Commission shall determine if requirements are met to qualify for cluster development options and if the additional number of units is commensurate with open space being preserved.

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 to seek specific departures from the dimensional requirements of the Zoning Ordinance for yards and perimeter setback as a part of the approval process.

Table 1. – Bulk Requirements

	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.	Base Density = 8 units + Cluster bonus (33% bonus) + Housing Diversity = 17 units are allowed The applicant is seeking 12 units.	Complies. 12 units are permitted with City Council approval.
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	Decks for Units 1-3 encroach up to 10- into the required perimeter setback	Decks for Units 1-3 encroach up to 10- into the required perimeter setback
Lot Size	10,500 sq. ft.	The proposed lots range between 5,617 sq. ft. and 6,115 sq. ft.	Complies with approval of Cluster by City Council
Front Setback (building)	20 feet	22 feet	Complies
Rear Setback (building)	25-foot setback	25-foot minimum 10-foot with deck	Building envelopes comply. All decks encroach 15-feet into required rear yard. Applicant seeking relief to have minimum rear yard less than 25-feet due to deck.
Side Setback (building)	7.5-foot setback	7.5-foot minimum	Complies
Open Space Requirements: Minimum Percentage	20%	Proposing to preserve 1 acre of the 3 acre parcel, or 33%, for open space.	Complies. Applicant must submit open space preservation covenant.

The applicant is showing decks on the rear of all properties. As set forth in Section 7.08.B:

An open, unenclosed, and uncovered porch, raised deck, or patio structure may project into a required rear yard for a distance not to exceed fifteen (15) feet, subject further to the requirement that the distance remaining between the encroaching facility and the rear lot line shall in no instance be less than twenty-five (25) feet. Porch, deck, patio, or terrace facilities encroaching into required front or rear yards shall not include fixed canopies, gazebos or permanent enclosures, and shall be at a grade no higher than that of the first or main floor of the building to which they are attached.

Lots 1-3 encroach up to 10-feet into the required 40-foot perimeter setback. In addition, all decks extend 15-feet from home and encroach 15-feet into the required 25-foot rear yard. Please note that provision 7.08.B was drafted for a conventional R 1 through R-5 lot that requires a 40-foot setback. Hence for a typical R-lot, the 40-foot rear yard requirement would allow a 15-foot deck and still maintain at least a 25-foot rear yard setback. However, due to the required additional perimeter setback required by the cluster provisions, the decks are further away from the northern property line via cluster than conventional layout.

The City Council, based upon a recommendation from the Planning Commission, may waive the rear lot and perimeter setback provisions provided that the applicant has demonstrated innovative and creative site and building designs and solutions, which would otherwise be unfeasible or unlikely to be achieved absent this provision. The Planning Commission should consider the purpose and intent of the Cluster Development option in considering the setback deviations.

Items to be addressed: Consider the deck encroachment into rear setback and perimeter buffer

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 site is 3 acres, and the applicant is proposing to reserve 1.0 acres for common open space, or 33% of the total site. Open space is provided within an open space collar around the northern, western, eastern, and southern property line. The open space collar ranges from 13-feet in depth along the northwest portion of the site, 50+ feet along the eastern property line, and 10-feet along the southern property line. As part of the review, the Planning Commission is to consider and make a recommendation to City Council if the layout and open space plan meets the intent and standards of the Cluster provision and has the applicant creatively designed the site to either preserve significant natural resources (trees, wetland, and floodplain) or provide quality open space.

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.

***Items to be addressed:** Planning Commission is to consider and make a recommendation to City Council if the layout and open space plan, and/or natural features meet the intent of the Cluster provision and has the applicant creatively designed the site to either preserve significant natural resources (trees) or provide quality open space.*

SITE ACCESS AND CIRCULATION

Vehicular

Access to the site will be from a single location off Square Lake Road. The development will be served by an internal twenty-eight (28) foot wide private road, located inside of a forty (40) foot roadway easement. The applicant proposes a T-turn around at the end of the private road. The City Streets Department and Fire Department has reviewed the T-turnaround and finds it complies with city requirements.

Pedestrian

The applicant proposes a five (5) foot wide concrete sidewalk along the perimeter of the private road. The internal sidewalk will connect to existing sidewalk on Square Lake Road. In addition, the applicant proposes a sidewalk connection Colleen Drive to the south.

Items to be Addressed: None

STORMWATER

Stormwater will be managed by a regional detention system.

Items to be Addressed: None.

LANDSCAPING

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

Table 2. – Landscaping Requirements

Frontage	Required	Provided	Compliance
Proposed Private Rd.	One (1) deciduous tree for every 50 lineal feet. $890 / 50 = 18$ trees	18 trees	Complies
E. Square Lake Road 120-foot ROW (section 13.02 F.2.c)	One (1) large evergreen tree per ten (10) lineal feet. $329 \text{ lf} / 10 \text{ lf} = 33$ evergreen trees	13 proposed	Does not Complies

The applicant is deficient of twenty (20) trees along Square Lake.

Items to be Addressed: Provide twenty (20) additional trees along Square Lake Road.

ELEVATIONS AND FLOOR PLANS

The applicant has submitted one housing options with a square footage up to 1,900. The applicant shall supply additional housing elevation options. Materials include brick, stone, and cedar veneer.

Items to be Addressed: Provide additional housing elevation options

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 garage shall not be the dominant feature of a residential building.

The applicant is seeking four (4) additional units above the parallel plan density by doing a cluster, providing 33% of the total site as open space and providing 1,900 sq/ft homes with first floor master bedroom and bath.

RECOMMENDATIONS

Planning Commission shall determine if requirements are met to qualify for cluster development option, if the required standards have been met, and if the additional number of units is commensurate with open space being preserved and the provision of smaller homes.

Items to consider include:

- Applicant is seeking following relief:
 - Decks encroaching 15-foot into the required 25-foot rear yard
 - Lots 1-3 encroach up to 10-feet into the required 40-foot perimeter setback
- Provide additional housing elevation options
- Provide twenty (20) additional trees along Square Lake Road.

The Planning Commission may request that either the applicant address aforementioned items or make a recommendation for City Council consideration.



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

PRELIMINARY SITE PLANS

GOLDEN VILLAS

EAST SQUARE LAKE ROAD
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
P-1	TOPOGRAPHIC SURVEY
P-2	PRELIMINARY SITE PLAN
P-2.1	PARALLEL SITE PLAN
P-3	PRELIMINARY GRADING PLAN
P-4	PRELIMINARY UTILITY PLAN
L-1	PRELIMINARY LANDSCAPE PLAN
T-1	TREE PRESERVATION PLAN
	1ST FLOOR PLAN
	2ND FLOOR PLAN
	2ND FLOOR PLAN
	FRONT ELEV.

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
GOLDEN HOMES 48661 HAYES ROAD SHELBY TOWNSHIP, MI 48315 CONTACT: SAM DIMERCURIO PHONE: 586.566.8990 EMAIL: OFFICE@GOLDENHOMESMI.COM	PEA GROUP 2430 ROCHESTER COURT, STE. 100 TROY, MI 48063-1872 CONTACT: JOHN B. THOMPSON, PE PHONE: 844.813.2949 EMAIL: JTHOMPSON@PEAGROUP.COM

ARCHITECT	LANDSCAPE ARCHITECT
GOLDEN HOMES 48661 HAYES ROAD SHELBY TOWNSHIP, MI 48315 CONTACT: SAM DIMERCURIO PHONE: 586.566.8990 EMAIL: OFFICE@GOLDENHOMESMI.COM	PEA GROUP 45 W. GRAND RIVER AVE., STE. 501 DETROIT, MI 48226 CONTACT: KIMBERLY DIETZEL, RLA PHONE: 844.813.2949 EMAIL: KDIEZEL@PEAGROUP.COM

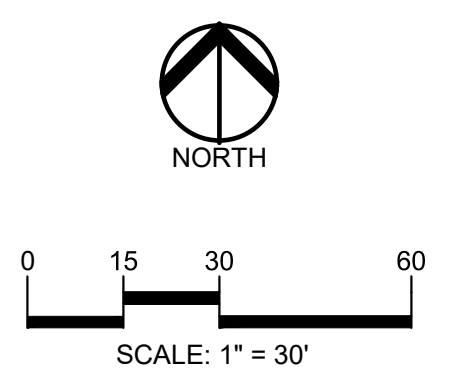


REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	12/22/2021
ADDED HAMMERHEAD	2/28/2022



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**
- OH-ELEC—W—O— 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 VAL. VALVE & GAS LINE MANHOLE
 - WATERMAN. HYD. GATE VALVE, TAPPING BREEVIE & VALVE
 - SANITARY SEWER, CLEANOUT & MANHOLE
 - STORM SEWER, CLEANOUT & MANHOLE
 - COMBINED SEWER & MANHOLE
 - SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
 - POST INDICATOR VALVE
 - WATER VALVE BODY/HYDRANT VALVE BOX, SERVICE SHUTOFF
 - MARB. TRANSFORMER, IRRIGATION CONTROL VALVE
 - UNIDENTIFIED STRUCTURE
 - SPOT ELEVATION
 - CONTOUR LINE
 - FENCE
 - GUARD RAIL
 - STREET LIGHT
 - SIGN
 - CONC. CONCRETE
 - ASPH. ASPHALT
 - GRAVEL SHOULDER



CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL UTILITIES AND STRUCTURES BEFORE THE START OF CONSTRUCTION.



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

LEGAL DESCRIPTION
(Per LEHNER ASSOCIATES, INC.)
2836 E. Square Lake Road, Troy, MI 48085-3976
Parcel ID # 88-20-12-200-035
THE NORTH 400.00 FEET OF LOT 3 OF 'SUPERVISOR'S PLAT OF WILBRETT ACRES' OF PART OF THE N.E. 1/4 OF THE N.E. 1/4 OF SECTION 12, T2N., R11E., TROY TOWNSHIP (NOW CITY OF TROY), OAKLAND COUNTY, MICHIGAN. RECORDED IN LIBER 13, PAGE 54 OF PLATS, OAKLAND COUNTY RECORDS.
2872 E. Square Lake Road, Troy, MI 48085-3976
Parcel ID # 88-20
THE NORTH 400.00 FEET OF LOT 4 OF 'SUPERVISOR'S PLAT OF WILBRETT ACRES' OF PART OF THE N.E. 1/4 OF THE N.E. 1/4 OF SECTION 12, T2N., R11E., TROY TOWNSHIP (NOW CITY OF TROY), OAKLAND COUNTY, MICHIGAN. RECORDED IN LIBER 13, PAGE 54 OF PLATS, OAKLAND COUNTY RECORDS.

SITE BENCHMARKS:
#1 EX. ARROW ON HYDRANT, NORTHWEST OF SUBJECT PARCEL LOCATED AS SHOWN
ELEV. = 662.00 (NAVD88)
#2 EX. ARROW ON HYDRANT, NORTHEAST OF SUBJECT PARCEL LOCATED AS SHOWN
ELEV. = 660.25 (NAVD88)
#3 EX. ARROW ON HYDRANT, EAST SUBJECT PARCEL LOCATED AS SHOWN
ELEV. = 660.74 (NAVD88)
#4 EX. ARROW ON HYDRANT, SOUTH OF SUBJECT PARCEL LOCATED AS SHOWN
ELEV. = 659.52 (NAVD88)
CITY OF TROY BENCHMARKS:
BM0378 - ARROW ON TOP OF HYDRANT, #12-8 SOUTH SIDE SQUARE LAKE @ #2784 CHURCH
ELEV. = 661.97 (NAVD88)
BM2511 - ARROW ON TOP OF HYDRANT, #12-9 SOUTH SIDE SQUARE LAKE OPPOSITE OF HOUSE #2885
ELEV. = 659.69 (NAVD88)
BM2512 - NORTH RIM SANITARY MANHOLE SOUTH SIDE OF SQUARE LAKE RD AT HOUSE #2836
ELEV. = 658.83 (NAVD88)

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 AND 26125C0552F BOTH DATED SEPTEMBER 29, 2006.

CLIENT
GOLDEN HOMES
48661 HAYES ROAD
SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
EAST SQUARE LAKE ROAD
CITY OF TROY, MICHIGAN

REVISIONS	
ADDED HAMMERHEAD	02-28-22

ORIGINAL ISSUE DATE:
DECEMBER 22, 2021
DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO.	2021-0627
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	

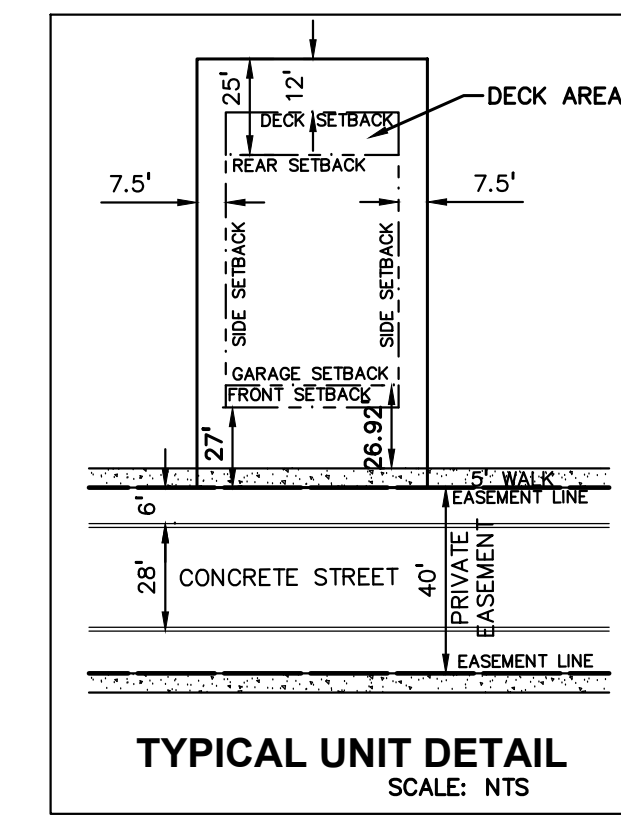
NOT FOR CONSTRUCTION

P-1

S:\PROJECTS\2021\021-0627 COLLEEN (P-1) - TROY\DWG\USE PLANS (P-1) - TROY-210627.dwg

LEGEND

- | | | |
|------------------|------------------|---------------------|
| ● IRON FOUND | ⊗ BRASS PLUG SET | ⊙ SEC. CORNER FOUND |
| ⊗ IRON SET | ⊗ MONUMENT FOUND | ⊙ R. RECORDED |
| ⊗ NAIL FOUND | ⊗ MONUMENT SET | ⊙ M. MEASURED |
| ⊗ NAIL & CAP SET | | ⊙ C. CALCULATED |
-
- | | | |
|-------------------------------------------------------|----------------------------------------------------|--------------------------------------------------|
| — OH-ELEC— | ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE | — PROPOSED — |
| — UG-CATV — | UNDERGROUND CABLE TV, CATV PEDESTAL | — ELEC. — |
| — UG-PHONE — | TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE | — ELEC. U.G. CABLE, MANHOLE, METER & HANDHOLE |
| — UG-ELEC — | ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE | — GAS VALVE & GAS LINE MARKER |
| — WATERMAN, HYD. — | GATE VALVE, TAPPING BLEWIE & VALVE | — SANITARY SEWER, CLEANOUT & MANHOLE |
| — STORM SEWER, CLEANOUT & MANHOLE | | — COMBINED SEWER & MANHOLE |
| — SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN | | — POST INDICATOR VALVE |
| — WATER VALVE BODY/HYDRANT VALVE BOX, SERVICE SHUTOFF | | — MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE |
| — UNIDENTIFIED STRUCTURE | | — UNIDENTIFIED STRUCTURE |
| — SPOT ELEVATION | | — CONTOUR LINE |
| — FENCE | | — GUARD RAIL |
| — STREET LIGHT | | — SIGN |
| — CONC. | CONCRETE | |
| — ASPHL. | ASPHALT | |
| — GRAVEL | GRAVEL SHOULDER | |



SITE DATA:

LOCATION OF PROJECT:
SOUTH SIDE OF E SQUARE LAKE ROAD, WEST OF DEQUINDRE ROAD

SIZE OF PROPERTY: 3.01 ACRES

AREA DEVELOPED: 2.01 AC (66.8%)
TOTAL UNDEVELOPED AREA: 1.00 AC (33.2%)

PROPOSED USE OF PROPERTY: TWELVE (12) DETACHED, SINGLE FAMILY HOMES

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

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

CLUSTER OPTION CALCULATION:

- BASE NUMBER OF UNITS - PARALLEL PLAN = 8 UNITS
- 20% DENSITY BONUS PER 10,040 = 1 UNITS (OPEN SPACE PROVIDED = 1.00 ACRES, 33.2%) (OPEN SPACE INCLUDES UTILITY EASEMENTS)
- HOUSING DIVERSITY = 2 X PARALLEL PLAN = 16 (MAXIMUM SQUARE FOOTAGE NOT TO EXCEED 1,900 FIRST FLOOR MASTER BEDROOM AND LAUNDRY)
- TOTAL UNITS ALLOWED = 17 UNITS
- TOTAL UNITS PROVIDED = 12 UNITS

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	NN-K, NEIGHBORHOOD NODE	MULTI-FAMILY CHURCH
WEST	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	CHURCH

REQUIRED AND PROVIDED LOT DIMENSIONS:

	REQUIRED (CLUSTER):	PROVIDED:
FRONT	20 FOOT SETBACK*	22 FOOT SETBACK
REAR	25 FOOT SETBACK	25 FOOT SETBACK
SIDES	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL
MAXIMUM HEIGHT	30 FEET, 2.5 STORY	30 FEET, 2.5 STORY
LOT WIDTH	85 FEET (R-1C)	60 FEET MIN.
OPEN SPACE	20%	33.2%

* 25' (MIN) FOR GARAGE SETBACK (EDGE WALK TO GARAGE DOOR)

PROJECT AND SITE DESCRIPTION:
PROPOSED CONSTRUCTION OF A 12-LOT SINGLE FAMILY DETACHED SITE CONDOMINIUM PROJECT ON THE SOUTH SIDE OF E SQUARE LAKE ROAD, WEST OF DEQUINDRE ROAD. ACCESS TO ALL UNITS WILL BE VIA CONNECTION TO E SQUARE LAKE ROAD. THE PROPOSED RESIDENTIAL USE IS PERMITTED BY-RIGHT IN THE R-1C DISTRICT. THE SITE IS CURRENTLY PRIVATE RESIDENCES.

SITE ARRANGEMENT:
THE PROPOSED SITE CONDOMINIUM CONSISTS OF 12 LOTS (17 LOTS ALLOWED) WITH MINIMUM LOT SIZE OF 5,617 SQUARE FEET. THE AVERAGE LOT SIZE IS 5,829 SQUARE FEET. ALL UNITS FRONT ON A NEW PRIVATE STREET. THE PROPOSED LOTS ARE REGULAR IN SHAPE, 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 CURRENTLY HAS MINIMAL TREE COVER.

FLOODPLAIN:
THE PROPERTY IS NOT LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE NUMBER 26125C0551F AND 26125C0552F BOTH DATED SEPTEMBER 29, 2006.

ACCESS AND CIRCULATION:

VEHICULAR ACCESS AND CIRCULATION:
VEHICULAR ACCESS TO ALL UNITS WILL BE VIA A NEW STREET LOCATED OFF E SQUARE LAKE ROAD. THE NEW ROADWAY WILL HAVE A FORTY (40) FOOT WIDE PRIVATE ROAD EASEMENT.

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

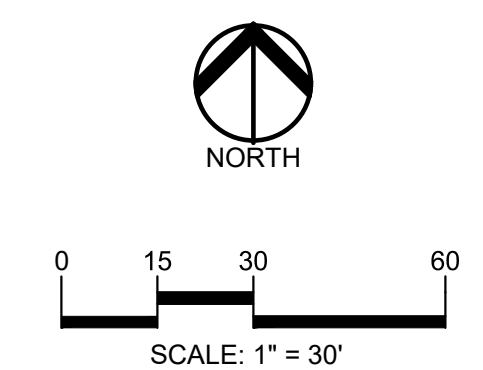
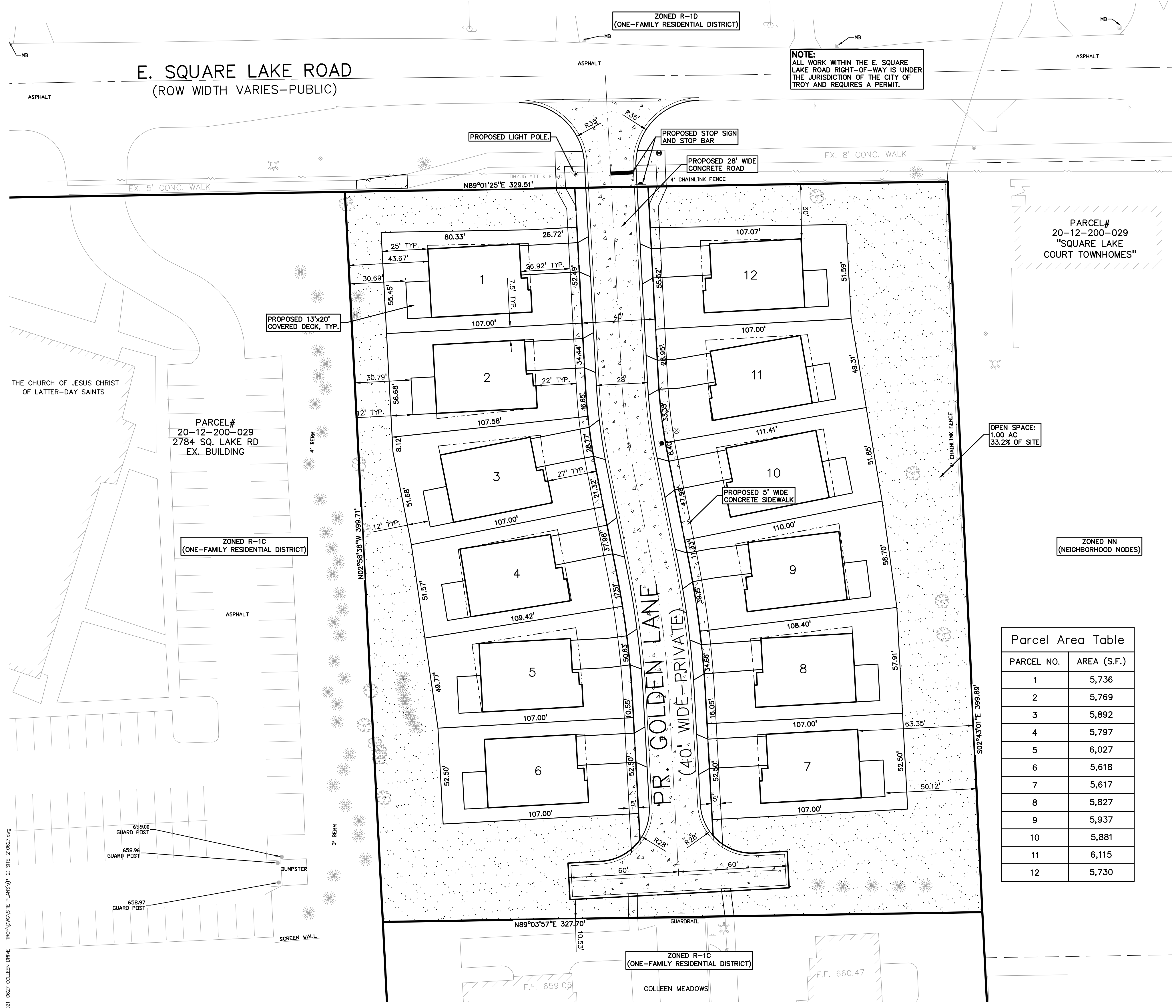
UTILITIES:
UTILITIES ARE PLACED WITHIN STREET RIGHT-OF-WAY, OR WITHIN EASEMENTS APPROVED AS TO SIZE AND LOCATION BY THE CITY ENGINEER.

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.

DETENTION WAS PROVIDED FOR THIS DEVELOPMENT IN THE COLLEEN MEADOWS STORM SEWER DETENTION CALCULATIONS.

Parcel Area Table

PARCEL NO.	AREA (S.F.)
1	5,736
2	5,769
3	5,892
4	5,797
5	6,027
6	5,618
7	5,617
8	5,827
9	5,937
10	5,881
11	6,115
12	5,730



811 Know what's below. Call before you dig.

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.

CLIENT
GOLDEN HOMES
48661 HAYES ROAD
SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
EAST SQUARE LAKE ROAD
CITY OF TROY, MICHIGAN

REVISIONS

ADDED HAMMERHEAD	02-28-22
------------------	----------

ORIGINAL ISSUE DATE:
DECEMBER 22, 2021

DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO. 2021-0627
P.M. JBT
DN. TMK
DES. TMK
DRAWING NUMBER:

S:\PROJECTS\2021\0627\0627 COLLEEN ERVE - TROY\DWG\USE PLANS\UP-2 - BE-210627.dwg

LEGEND

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

EXISTING

- OH—ELEC— 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 VALVE & GAS LINE MARKER
- ⊗ WATER MAIN, HYD., GATE VALVE, TAPPING BLEEVE & VALVE
- ⊗ SANITARY SEWER, CLEANOUT & MANHOLE
- ⊗ STORM SEWER, CLEANOUT & MANHOLE
- ⊗ COMBINED SEWER & MANHOLE
- ⊗ SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- ⊗ POST INDICATOR VALVE
- ⊗ WATER VALVE BODY/DRYANT VALVE BOX, SERVICE SHUTOFF
- ⊗ MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- ⊗ UNIDENTIFIED STRUCTURE
- ⊗ SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER

PROPOSED

- ⊗ 671.21
- ⊗ 671
- 310 HEAVY FLOW DUTY ONLY
- 310 HEAVY DEEP DUTY STRENGTH

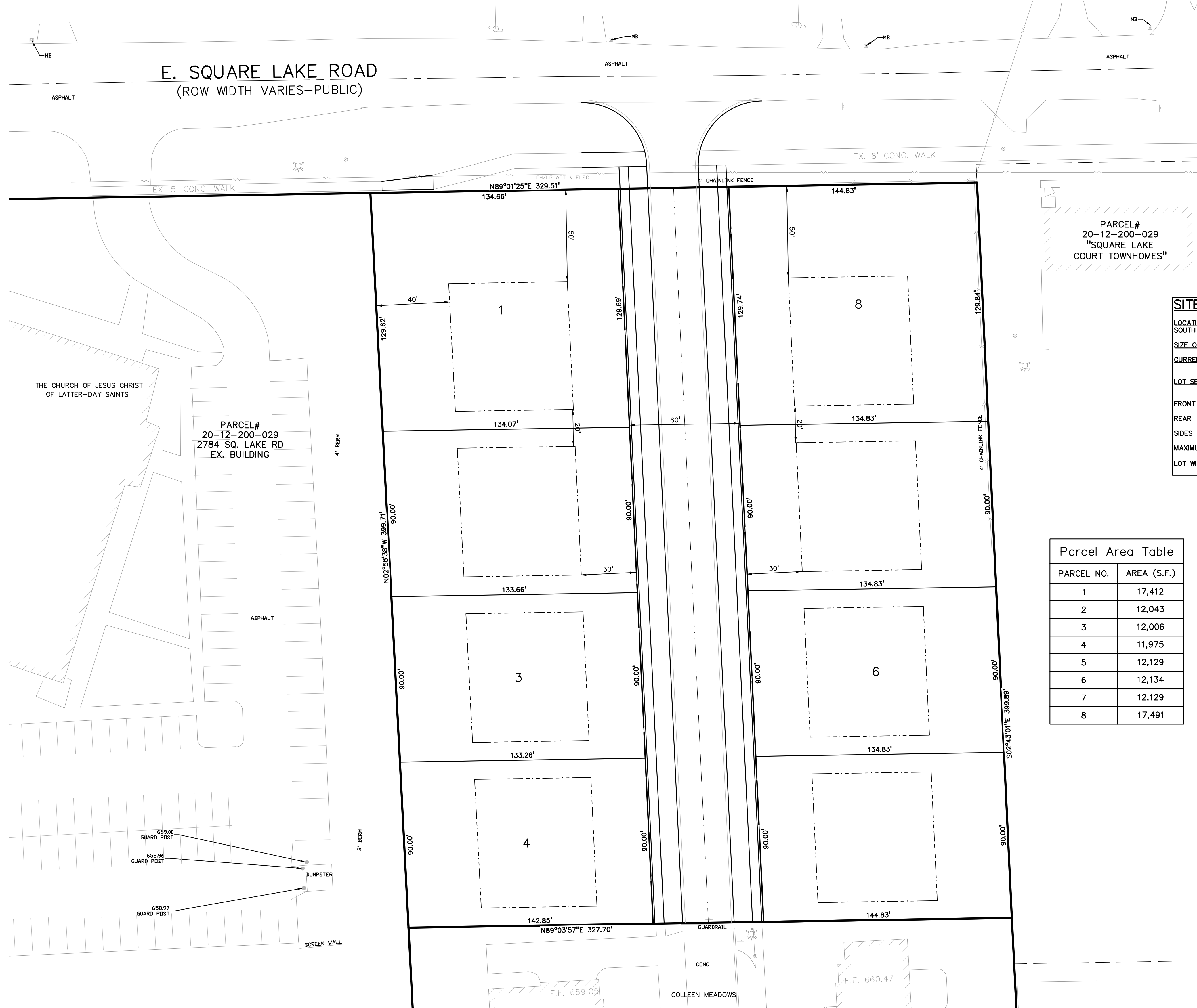
NORTH

0 15 30 60

SCALE: 1" = 30'

811 Know what's below. Call before you dig.

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.



SITE DATA:

LOCATION OF PROJECT:
SOUTH SIDE OF E SQUARE LAKE ROAD, WEST OF DEQUINDRE ROAD

SIZE OF PROPERTY: 3.01 ACRES

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

LOT SETBACK DIMENSIONS:

FRONT	30 FOOT SETBACK
REAR	40 FOOT SETBACK
SIDES	10 FOOT EACH SIDE
MAXIMUM HEIGHT	30 FEET, 2.5 STORY
LOT WIDTH	85 FEET (R-1C)

Parcel Area Table

PARCEL NO.	AREA (S.F.)
1	17,412
2	12,043
3	12,006
4	11,975
5	12,129
6	12,134
7	12,129
8	17,491

CLIENT
GOLDEN HOMES
48661 HAYES ROAD
SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
EAST SQUARE LAKE ROAD
CITY OF TROY, MICHIGAN

REVISIONS

ADDED HAMMERHEAD	02-28-22
------------------	----------

ORIGINAL ISSUE DATE:
DECEMBER 22, 2021

DRAWING TITLE
PARALLEL SITE PLAN

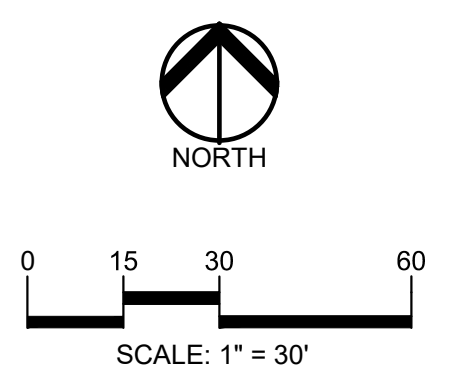
PEA JOB NO.	2021-0627
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	

NOT FOR CONSTRUCTION

P-2.1

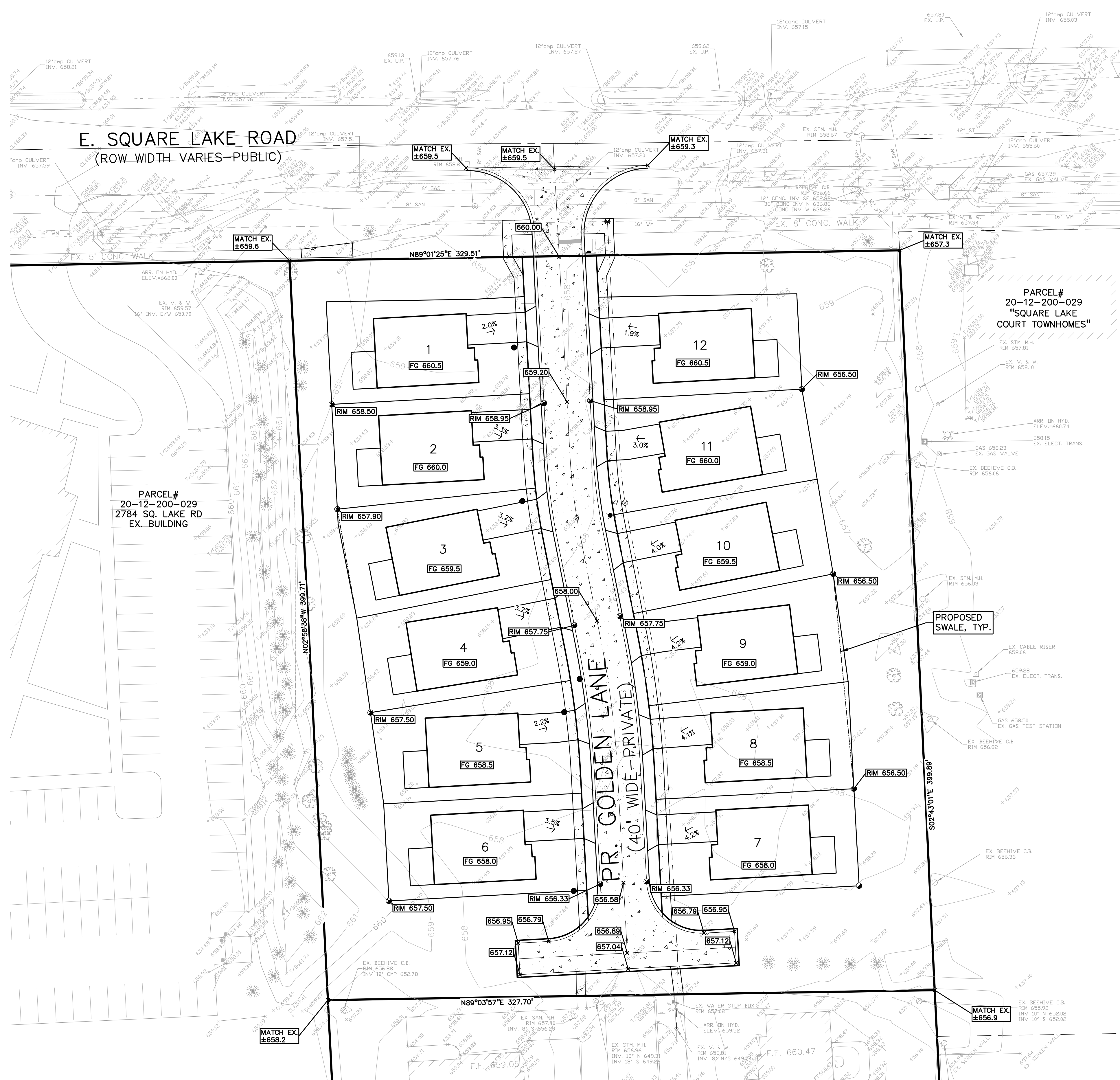
S:\PROJECTS\2021\0627-GOLDEN VILLAS - TROY\MID-USE PLANS\UP-211 PARALLEL-210627.dwg

- LEGEND**
- | | | |
|------------------|------------------|--------------------|
| ● IRON FOUND | ○ BRASS PLUG SET | ● SEC CORNER FOUND |
| ⊗ IRON SET | ⊗ MONUMENT FOUND | ○ R RECORDED |
| ⊗ NAIL FOUND | ⊗ MONUMENT SET | ○ M MEASURED |
| ⊗ NAIL & CAP SET | | ○ C CALCULATED |
- EXISTING**
- OH-ELEC-AV-○ ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
 - UG-CATV-○ UNDERGROUND CABLE TV, CATV PEDESTAL
 - ⊗-PHONE-○ TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
 - ⊗-ELEC-○ ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
 - GAS VALVE & GAS LINE MARKER
 - WATERMAN, HYD., GATE VALVE, TAPPING BLEEVE & 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/DIAPHRAGM VALVE BOX, SERVICE SHUTOFF
 - M&I BOX, TRANSFORMER, IRRIGATION CONTROL VALVE
 - UNIDENTIFIED STRUCTURE
 - SPOT ELEVATION
 - CONTOUR LINE
 - FENCE
 - GUARDRAIL
 - STREET LIGHT
 - SIGN
 - CONC. CONCRETE
 - ASPHL ASPHALT
 - GRAVEL GRAVEL SHOULDER
- PROPOSED**
- 671.21
 - 671
 - STD HEAVY FLOW DUTY ONLY
 - STD HEAVY DEEP DUTY STRENGTH



811 Know what's below.
Call before you dig.

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.



E. SQUARE LAKE ROAD
(ROW WIDTH VARIES-PUBLIC)

PARCEL#
20-12-200-029
"SQUARE LAKE
COURT TOWNHOMES"

PARCEL#
20-12-200-029
2784 SQ. LAKE RD
EX. BUILDING

SYMBOLS: GRADING	
PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.	[Symbol] 622.50
PROPOSED CONTOUR LINE — 922 —	
ABBREVIATIONS:	
T/C = TOP OF CURB	G = GUTTER GRADE
T/P = TOP OF PAVEMENT	T/S = TOP OF SIDEWALK
T/W = TOP OF WALL	B/W = BOTTOM OF WALL
F.G. = FINISH GRADE	RIM = RIM ELEVATION
RETAINING WALL NOTE:	
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.	

CLIENT
GOLDEN HOMES
48661 HAYES ROAD
SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
EAST SQUARE LAKE ROAD
CITY OF TROY, MICHIGAN

REVISIONS	
ADDED HAMMERHEAD	02-28-22

ORIGINAL ISSUE DATE:
DECEMBER 22, 2021

DRAWING TITLE
**PRELIMINARY
GRADING PLAN**

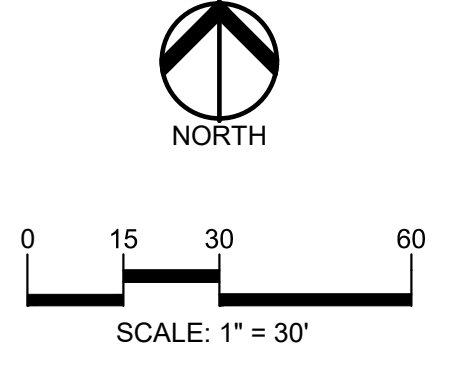
PEA JOB NO.	2021-0627
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	

NOT FOR CONSTRUCTION **P-3**

S:\PROJECTS\2021-0627-GOLDEN VILLAS - PRELIMINARY GRADING PLANS\PEA-210627.dwg

LEGEND

EXISTING	PROPOSED
● IRON FOUND	○ BRASS PLUG SET
⊗ IRON SET	⊗ MONUMENT FOUND
● NAIL FOUND	⊗ MONUMENT SET
⊗ NAIL & CAP SET	
○ SEC. CORNER FOUND	
R RECORDED	
M MEASURED	
C CALCULATED	
○—ELEC.—○ ELEC. PHONE OR CABLE TV O.U. LINE, POLE & GUY WIRE	
—UG—CATV— UNDERGROUND CABLE TV, CATV PEDESTAL	
○—UG—PHONE—○ TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
○—ELEC.—○ ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
○—GAS—○ GAS MAIN, VALVE & GAS LINE MARKER	
○ WATERMAIN, HYD., GATE VALVE, TAPPING BLEEVE & VALVE	
○ SANITARY SEWER, CLEANOUT & MANHOLE	
○ STORM SEWER, CLEANOUT & MANHOLE	
○ COMBINED SEWER & MANHOLE	
○ SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	
○ POST INDICATOR VALVE	
○ WATER VALVE BODY/HYDRANT VALVE BOX, SERVICE SHUTOFF	
○ MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
○ UNIDENTIFIED STRUCTURE	
○ SPOT ELEVATION	
○ CONTOUR LINE	
○ FENCE	
○ GUARDRAIL	
○ STREET LIGHT	
○ SIGN	
CONC. CONCRETE	
ASPH. ASPHALT	
GRAVEL GRAVEL SHOULDER	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	
310 HEAVY FLOW DUTY ONLY	



811 Know what's below. Call before you dig.

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.



NOTE:
 DETENTION FOR THIS DEVELOPMENT WAS INCLUDED IN THE DESIGN OF THE COLLEEN MEADOWS STORM WATER DETENTION CALCULATIONS.

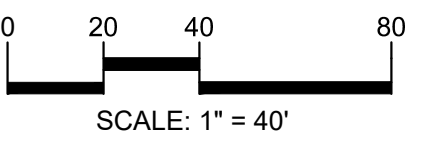
CLIENT
GOLDEN HOMES
 48661 HAYES ROAD
 SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
 EAST SQUARE LAKE ROAD
 CITY OF TROY, MICHIGAN

REVISIONS	
ADDED HAMMERHEAD	02-28-22

ORIGINAL ISSUE DATE:
 DECEMBER 22, 2021
 DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO.	2021-0627
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	



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.

CLIENT
GOLDEN HOMES
48661 HAYES ROAD
SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
EAST SQUARE LAKE ROAD
CITY OF TROY, MICHIGAN

REVISIONS
ADDED HAMMERHEAD 02-28-22

ORIGINAL ISSUE DATE:
DECEMBER 22, 2021

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN

PEA JOB NO. 2021-0627
P.M. JBT
DN. TMK
DES. DES.
DRAWING NUMBER: TMK

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

INTERNAL PUBLIC ROADS STREET TREES:
REQUIRED: 1 TREE / 50 LF (BOTH SIDES RD.) 445 LF / 50 LF = 9 TREES EACH SIDE.
PROVIDED: 18 TREES TOTAL
NOTE: TREES SHALL BE PLACED AT A MINIMUM OF 5' AWAY FROM UTILITY LEADS.

GREENBELT TREES:
REQUIRED: 1 TREE / 30 LF OF STREET FRONTAGE. 330' OF RIGHT OF WAY / 30 = 11 DEC TREES REQUIRED.
PROVIDED: 11 EVG TREES PROVIDED
NOTE: TREES SHALL BE PLANTED 5' AWAY FROM UTILITIES.

TREE REPLACEMENT:
REQUIRED: NO TREE REPLACEMENT REQUIRED
SEE TREE PRESERVATION PLAN, T-1.0, FOR TREE REMOVALS AND CALCULATIONS.

ADDITIONAL PARK SPACE TREES:
NOT REQUIRED. PROVIDING SUBSTANTIAL TREE INFILL TO FURTHER IMPROVE OPEN LANDSCAPE AREA BETWEEN SINGLE FAMILY RESIDENCES AND ADJACENT PROPERTIES.

KEY:

- = INTERNAL DRIVE TREES
- = GREENBELT TREES
- = ADDITIONAL OPEN-SPACE TREES
- = IRRIGATED SOD LAWN
- = NON-IRRIGATED SEED LAWN
- = EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE

DECIDUOUS TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
6	MP2.5	Prairiefire Crab	<i>Malus 'Prairiefire'</i>	2.5" Cal.	B&B
4	LT2.5	Tulip Tree	<i>Liriodendron tulipifera</i>	2.5" Cal.	B&B
11	QA2.5	White Oak	<i>Quercus alba</i>	2.5" Cal.	B&B
8	UF2.5	Frontier Elm	<i>Ulmus 'Frontier'</i>	2.5" Cal.	B&B
29		TOTAL DECIDUOUS TREES			

EVERGREEN TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
7	ABS	Balsam Fir	<i>Abies balsamea</i>	8" HL	B&B
6	PGB	Black Hills Spruce	<i>Picea glauca 'Densata'</i>	8" HL	B&B
8	PS8	Eastern White Pine	<i>Pinus strobus</i>	8" HL	B&B
21		TOTAL EVERGREEN TREES			

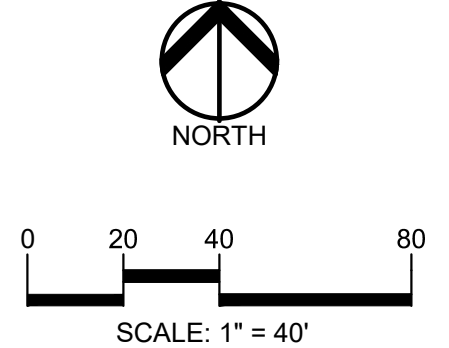
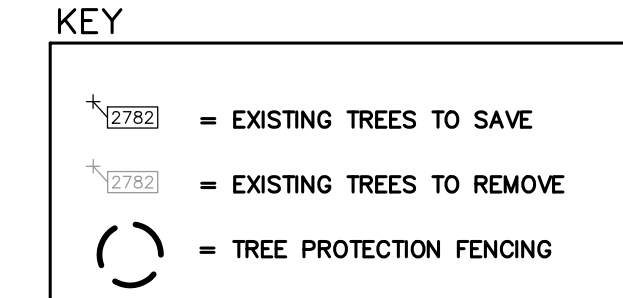


- GENERAL PLANTING NOTES:**
- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
 - CONTRACTOR SHALL VERIFY 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.
 - 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.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
 - THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
 - ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
 - ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
 - 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.
 - ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
 - ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
 - 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.
 - 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.
 - ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
 - ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
 - SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
 - CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
 - TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY / DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.

NOT FOR CONSTRUCTION **L-1**

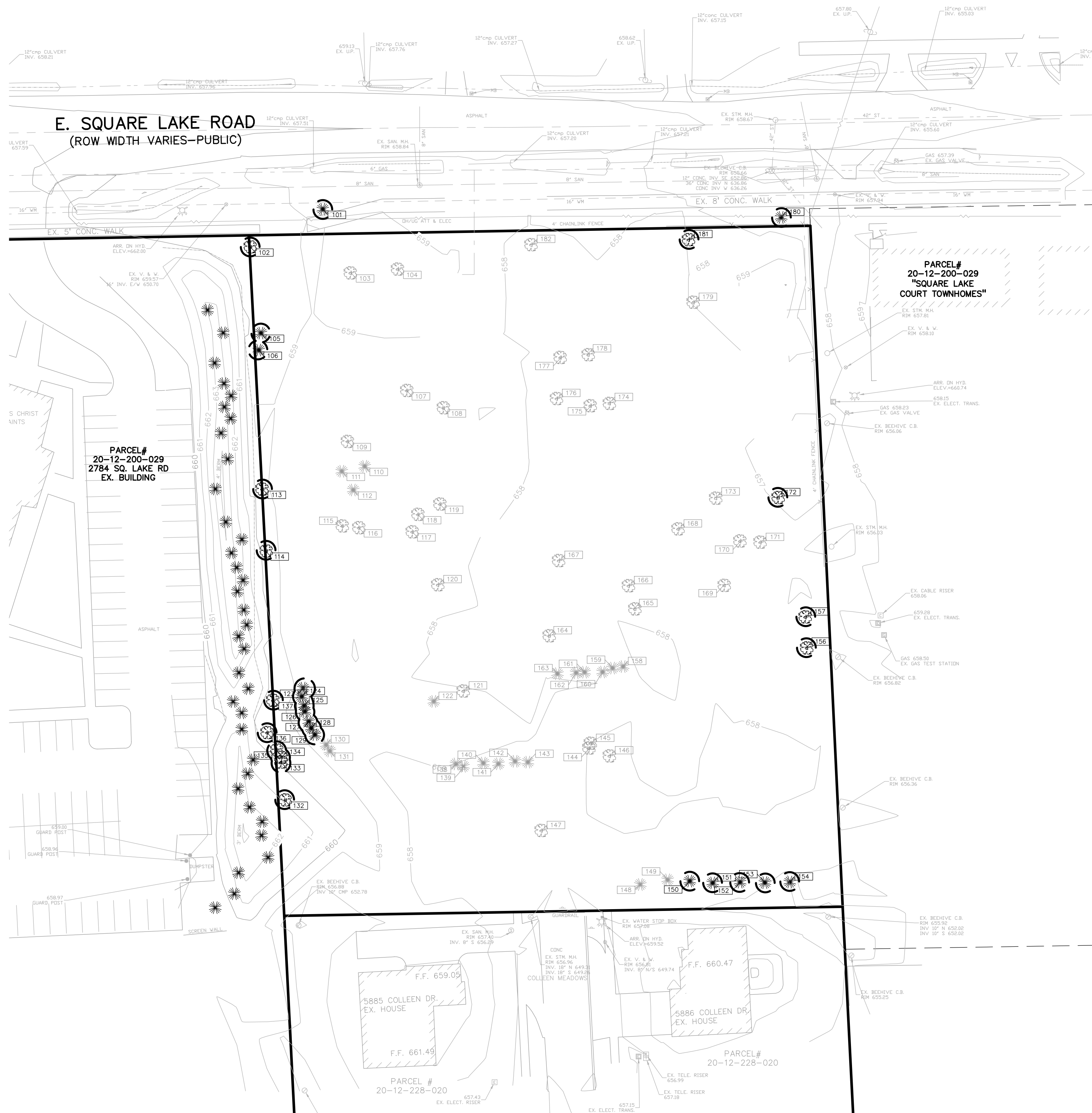
S:\PROJECTS\2021\2021-0627 COLLEEN DRIVE - TROY\MID SITE PLANS\L-1 LANDSCAPE-210627.dwg

TREE INVENTORY/PRESERVATION CALCULATIONS			
WOODLAND TREES			
WOODLAND TREES REMOVED:	26	(REPLACE AT 50% OF REMOVED DBH)	
257" DBH x 0.5 =	128.5	129"	REPLACEMENT
WOODLAND TREES SAVED: 14 (CREDIT OF 2X DBH)			
124" DBH x 2 =	248		CREDIT
128.5 -	248	=	-119.5
0" DBH REQUIRED FOR WOODLAND REPLACEMENT			
LANDMARK TREES			
LANDMARK TREES REMOVED:	7	(REPLACE AT 100% OF REMOVED DBH)	
151" DBH x 1 =	151"		REPLACEMENT
LANDMARK TREES SAVED: 2 (CREDIT OF 2X DBH)			
36" DBH x 2 =	72		CREDIT
151 -	72	=	79
0" TOTAL DBH REQUIRED FOR REPLACEMENT			
-119.5 (WOODLAND CREDIT) + 79" LANDMARK = -40.5 (CREDIT)			



CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR IS EITHER RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION OR THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
101	WP	18	(Eastern) White Pine	Pinus strobus	Good		LANDMARK	S	Y	-
102	CT	27	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
103	B	10	Basewood	Filia americana	Good	x3	WOODLAND	R	Y	REPLACE
104	MR	10	Red Mulberry	Morus rubra	Good		INVASIVE	R	Y	-
105	WP	12	(Eastern) White Pine	Pinus strobus	Good		WOODLAND	S	Y	-
106	WP	15	(Eastern) White Pine	Pinus strobus	Good		WOODLAND	S	Y	-
107	RB	15	River Birch	Betula nigra	Good	x3	LANDMARK	R	Y	REPLACE
108	BL	20	Black Locust	Robinia pseudoacacia	Good		INVASIVE	R	Y	-
109	RM	24	Red Maple	Malus sylvestris	Good		LANDMARK	R	Y	REPLACE
110	BS	12	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
111	WP	12	(Eastern) White Pine	Pinus strobus	Good		WOODLAND	R	Y	REPLACE
112	BS	10	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
113	CT	27	Cottonwood	Acer negundo	Good		INVASIVE	S	Y	-
114	CT	24	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
115	MR	18	Red Mulberry	Morus rubra	Good		INVASIVE	R	Y	-
116	WA	15	White Ash	Fraxinus americana	Good		INVASIVE	R	Y	-
117	SM	24	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
118	SM	30	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
119	BX	32	Box elder	Acer negundo	Good		INVASIVE	R	Y	-
120	RM	42	Red Maple	Acer rubrum	Good		LANDMARK	R	Y	REPLACE
121	AP	10	Domestic Apple	Malus sylvestris	Good	x3	WOODLAND	R	Y	REPLACE
122	WP	18	(Eastern) White Pine	Pinus strobus	Good		LANDMARK	R	Y	REPLACE
123	RP	10	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
124	RP	6	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
125	RP	8	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
126	RP	10	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
127	RP	6	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
128	RP	10	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
129	RP	8	Red Pine	Pinus resinosa	Good		WOODLAND	S	Y	-
130	RP	15	Red Pine	Pinus resinosa	Good		WOODLAND	R	Y	REPLACE
131	RP	10	Red Pine	Pinus resinosa	Good		WOODLAND	R	Y	REPLACE
132	CT	26	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
133	CT	18	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
134	CT	15	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
135	CT	15	Cottonwood	Populus deltoides	Good	x2	INVASIVE	S	Y	-
136	CT	12	Cottonwood	Populus deltoides	Good		INVASIVE	S	N	-
137	CT	24	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
138	RP	15	Red Pine	Pinus resinosa	Good		WOODLAND	R	Y	REPLACE
139	RP	10	Red Pine	Pinus resinosa	Good		WOODLAND	R	Y	REPLACE
140	RP	22	Red Pine	Pinus resinosa	Good		LANDMARK	R	Y	REPLACE
141	RP	18	Red Pine	Pinus resinosa	Good		LANDMARK	R	Y	REPLACE
142	RP	8	Red Pine	Pinus resinosa	Good		WOODLAND	R	Y	REPLACE
143	RP	15	Red Pine	Pinus resinosa	Good		WOODLAND	R	Y	REPLACE
144	CT	20	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
145	CT	20	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
146	CT	26	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
147	CT	28	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
148	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
149	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
150	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	S	Y	-
151	BS	7	Blue Spruce	Picea pungens	Good		WOODLAND	S	Y	-
152	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	S	Y	-
153	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	S	Y	-
154	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	S	Y	-
155	BX	13	Box elder	Acer negundo	Good		INVASIVE	S	Y	-
156	BX	2.5	Box elder	Acer negundo	Good	x8	INVASIVE	S	Y	-
157	BS	10	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
158	BS	6	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
159	BS	10	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
160	BS	10	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
161	BS	8	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
162	BS	12	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
163	BS	10	Blue Spruce	Picea pungens	Good		WOODLAND	R	Y	REPLACE
164	WA	6	White Ash	Fraxinus americana	Good		INVASIVE	R	Y	-
165	AP	8	Domestic Apple	Malus sylvestris	Good		WOODLAND	R	Y	REPLACE
166	AP	12	Domestic Apple	Malus sylvestris	Good		LANDMARK	R	Y	REPLACE
167	SM	20	Silver Maple	Acer saccharinum	Good	x2	INVASIVE	R	Y	-
168	AP	6	Domestic Apple	Malus sylvestris	Good		WOODLAND	R	Y	REPLACE
169	CT	36	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
170	CT	32	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
171	CT	30	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
172	CT	27	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
173	W	8	Willow	Salix Spp.	Good		INVASIVE	R	Y	-
174	PR	10	Pear	Pyrus communis	Good		WOODLAND	R	Y	REPLACE
175	PR	10	Pear	Pyrus communis	Good		WOODLAND	R	Y	REPLACE
176	PR	8	Pear	Pyrus communis	Good		WOODLAND	R	Y	REPLACE
177	AP	8	Domestic Apple	Malus sylvestris	Good	x3	WOODLAND	R	Y	REPLACE
178	PR	8	Pear	Pyrus communis	Good		WOODLAND	R	Y	REPLACE
179	WA	36	White Ash	Fraxinus americana	Good		INVASIVE	R	Y	-
180	WP	18	(Eastern) White Pine	Pinus strobus	Good		LANDMARK	S	Y	-
181	WA	32	White Ash	Fraxinus americana	Good		INVASIVE	S	Y	-
182	WA	45	White Ash	Fraxinus americana	Good		INVASIVE	R	Y	-



CLIENT
GOLDEN HOMES
48661 HAYES ROAD
SHELBY TWP, MICHIGAN

PROJECT TITLE
GOLDEN VILLAS
EAST SQUARE LAKE ROAD
CITY OF TROY, MICHIGAN

REVISIONS	
ADDED HAMMERHEAD	02-28-22

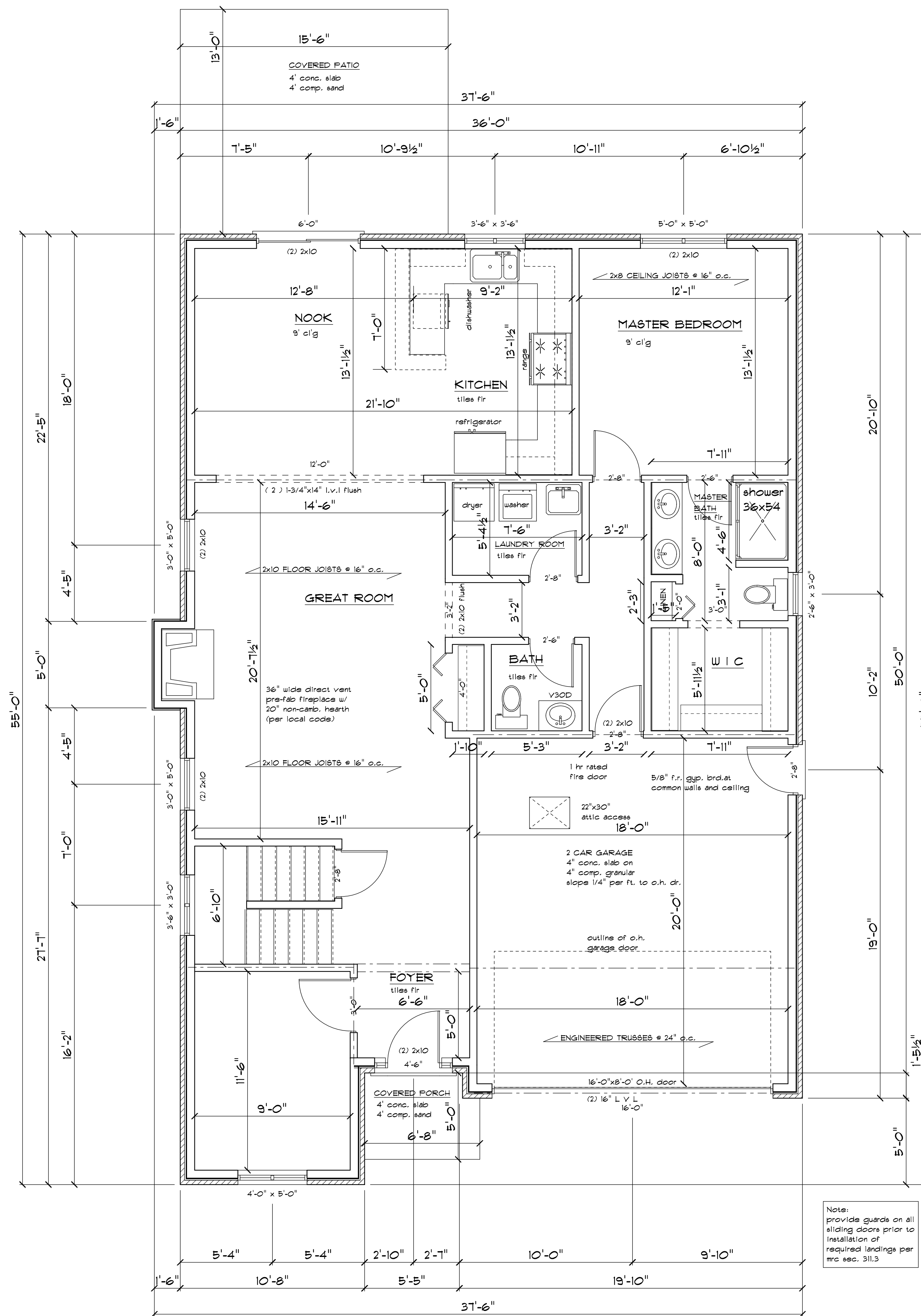
ORIGINAL ISSUE DATE:
DECEMBER 22, 2021

DRAWING TITLE
TREE PRESERVATION PLAN

PEA JOB NO.	2021-0627
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	

NOT FOR CONSTRUCTION

T-1



1ST FLOOR PLAN
 SCALE: 1/4" = 1'-0" 1452 sq ft

Revisions
 12/2/21
 relocate 2nd
 floor bedrooms

Date issued:
 11/5/21

Project:
 1892 sq ft split level

Client:
 Golden Homes

Sheet title:
 Floor plan

Project Number:
 #35 (revised)

Issue:
 Preliminary
 Construction (x)
 Record

Copyright: © 2021
 Golden Homes

These Drawings are the
 property of Golden Homes
 and are not to be reproduced
 in partial or in full without
 permission of Golden Homes,

Sheet nu.- 1

roof design loads
 snow : 30 p.s.f.
 gyp. bd. : 10 p.s.f.
 dead load : 7 p.s.f.
 total load : 47 p.s.f.

floor design loads
 live load : 40 p.s.f.
 dead load : 10 p.s.f.
 total load : 50 p.s.f.

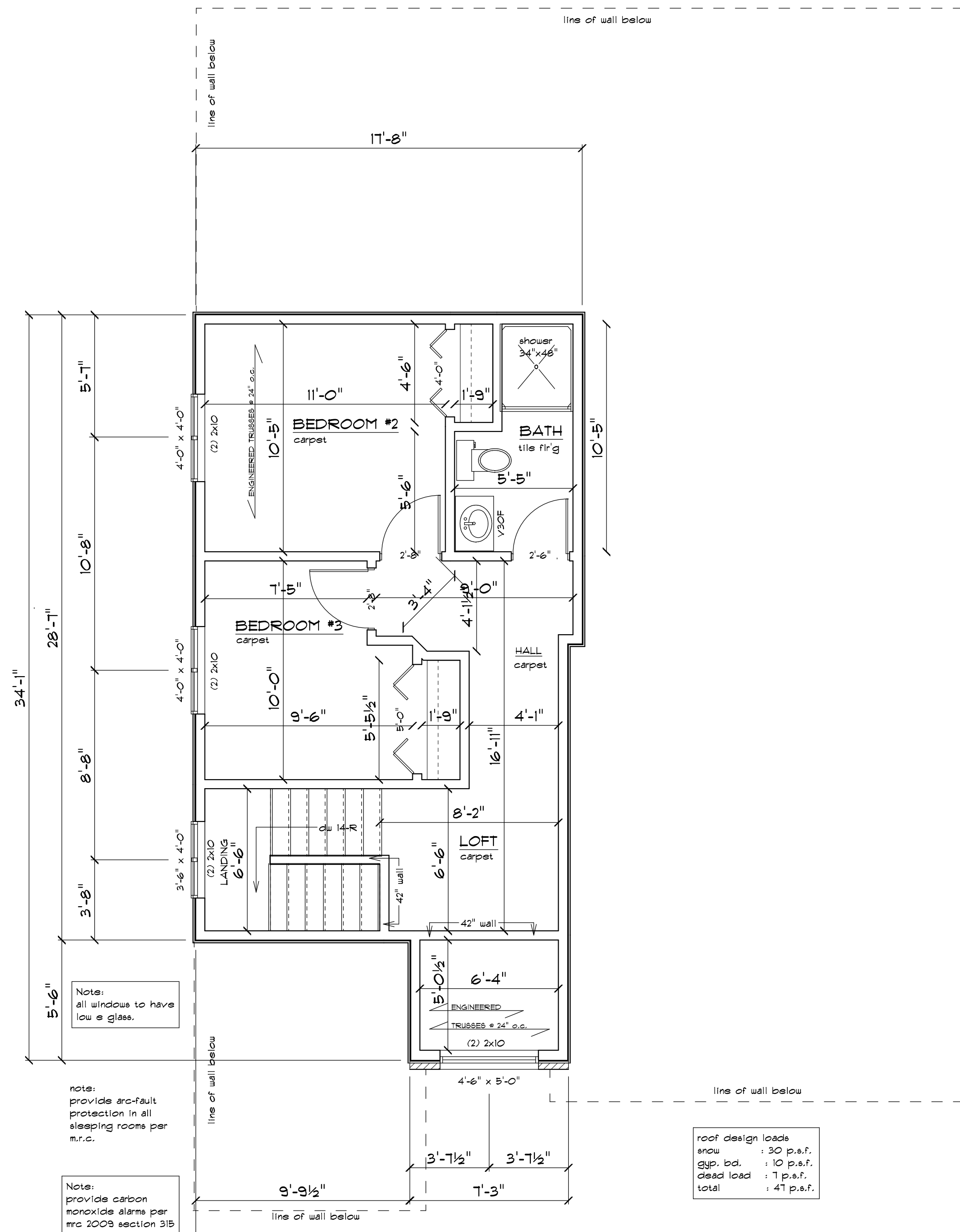
Note:
 all windows to have
 low e glass.

Note:
 provide carbon
 monoxide alarms per
 mrc 2009 section 315

Note:
 air leakage test to be
 provided per muec
 2009 sec. 402.4.

structural post note
 (1) 6x6 solid bearing ext.
 unless
 noted otherwise (typ.)

Square Footage
 first floor: 533 sq. ft.
 second floor: 553 sq ft
 total: 1152 sq ft



2ND FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 440 sq ft

Revisions
 12/2/21
 relocate bedrooms

Date issued:
 11/5/21

Project:
 1892 sq ft split level

Client:
 Golden Homes

Sheet title:
 2nd Floor plan

Project Number:
 #35 (revised)

Issue:
 Preliminary
 Construction (x)
 Record

Copyright: © 2021
 Golden Homes

These Drawings are the
 property of Golden Homes
 and are not to be reproduced
 in partial or in full without
 permission of Golden Homes,

Sheet nu.- 2

roof design loads
 snow : 30 p.s.f.
 gyp. bd. : 10 p.s.f.
 dead load : 1 p.s.f.
 total load : 41 p.s.f.

floor design loads
 live load : 40 p.s.f.
 dead load : 10 p.s.f.
 total load : 50 p.s.f.

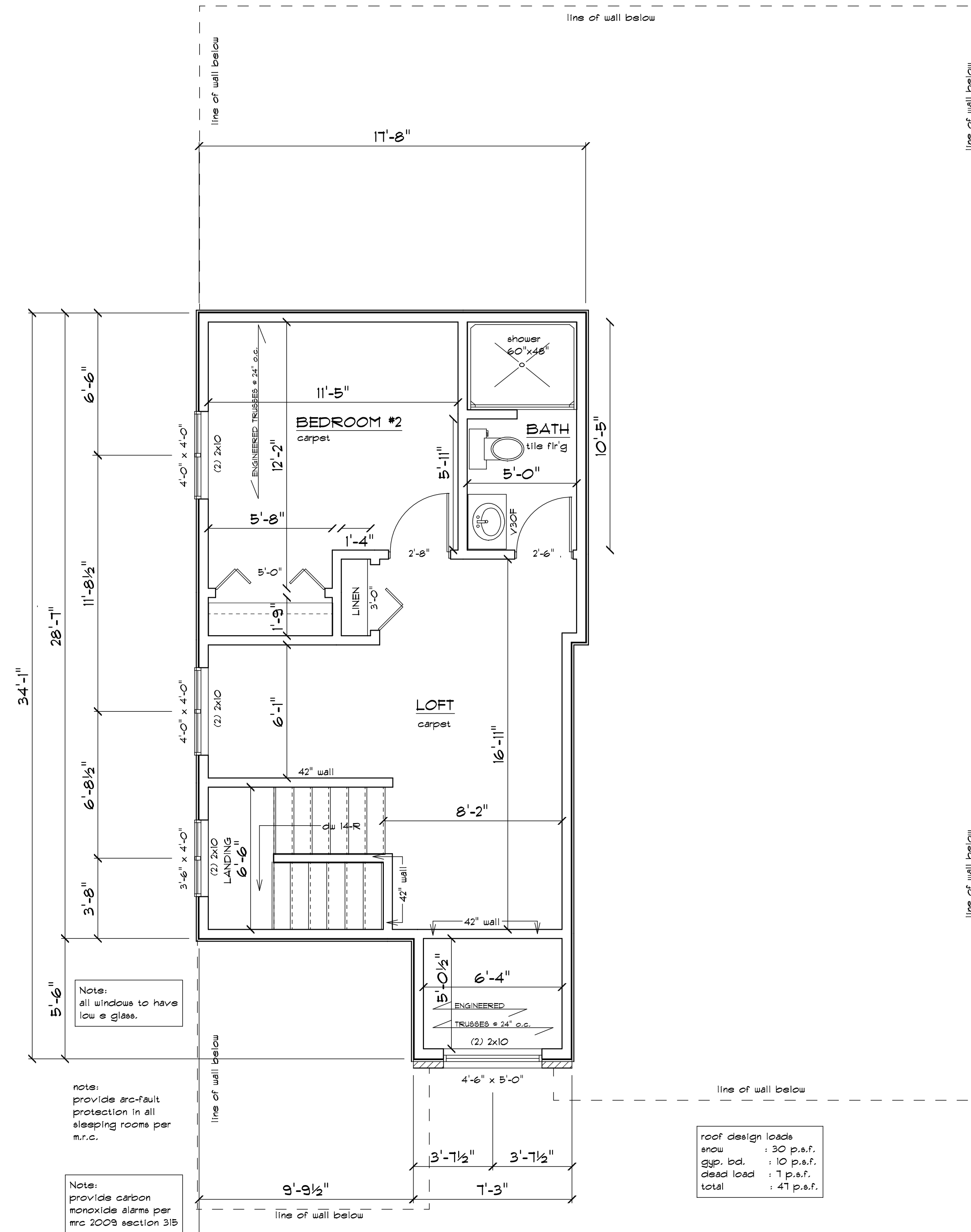
Note:
 all windows to have
 low e glass.

Note:
 provide carbon
 monoxide alarms per
 mrc 2009 section 315

Note:
 air leakage test to be
 provided per muec
 2009 sec. 402.4.

structural post note
 (1) 6x6 solid bearing ext.
 unless
 noted otherwise (typ.)

Square Footage
 first floor: 599 sq. ft.
 second floor: 553 sq ft
 total: 1152 sq ft



2ND FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 440 sq ft

Revisions
 12/2/21
 relocate bedrooms

Date issued:
 11/5/21

Project:
 1892 sq ft split level

Client:
 Golden Homes

Sheet title:
 2nd Floor plan

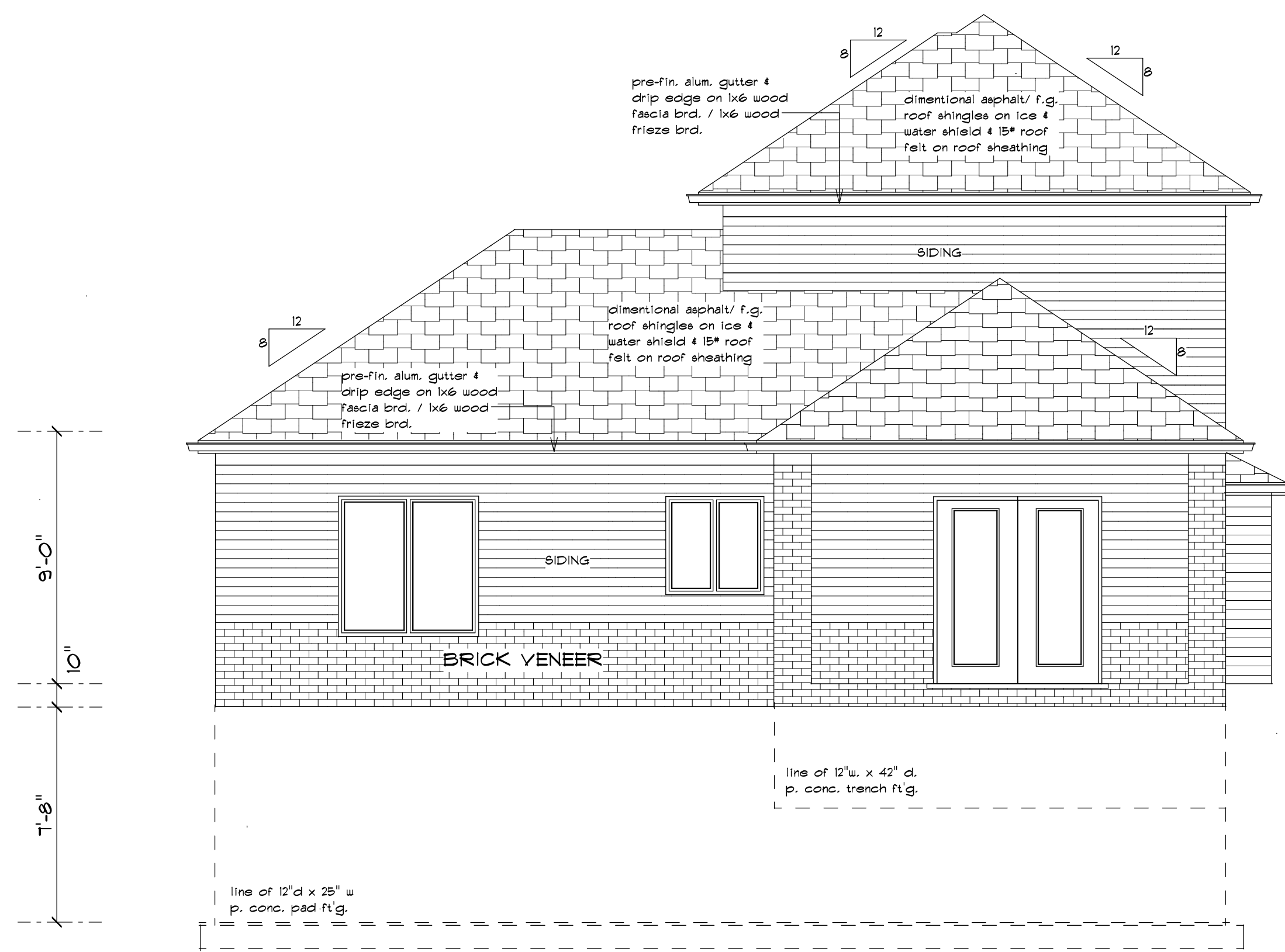
Project Number:
 #35 (revised)

Issue:
 Preliminary
 Construction (x)
 Record

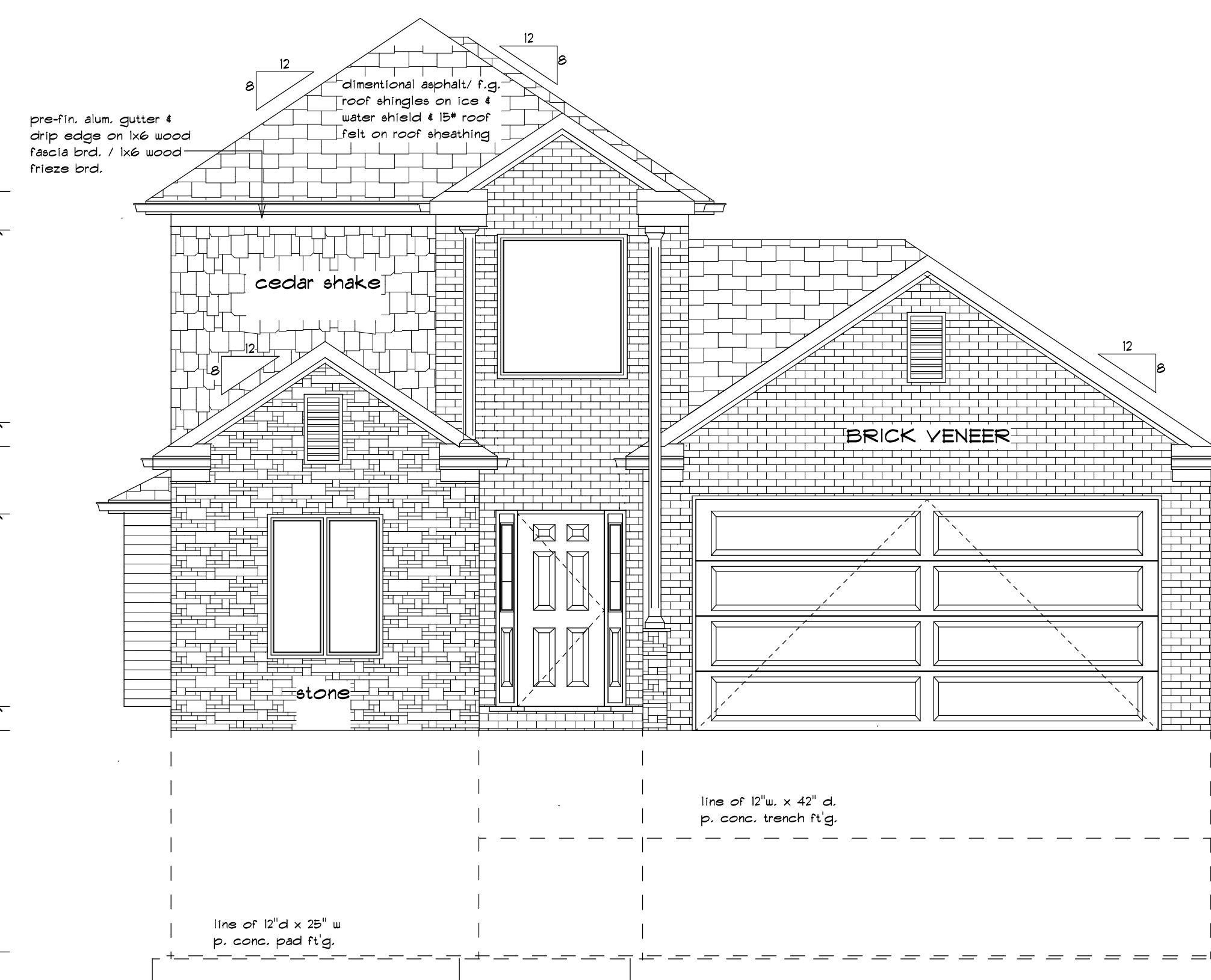
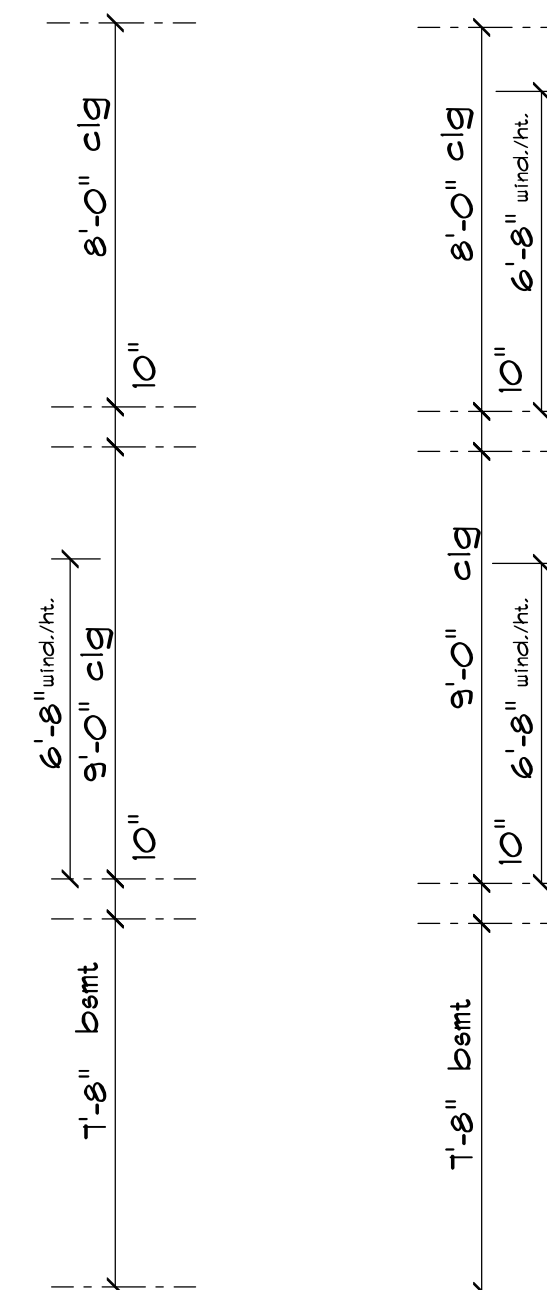
Copyright: © 2021
 Golden Homes

These Drawings are the
 property of Golden Homes
 and are not to be reproduced
 in partial or in full without
 permission of Golden Homes,

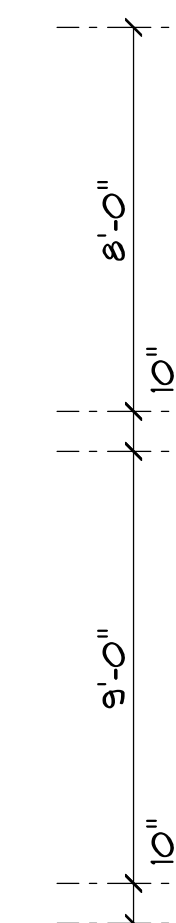
Sheet nu.- 2



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



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



Revisions

Date issued:
11/5/21

Project:
1892 sq ft split level

Client:
Golden Homes

Sheet title:
Front Elev.

Project Number:
#35

Issue:
Preliminary
Construction (x)
Record

Copyright: © 2021
Golden Homes

These Drawings are the property of Golden Homes and are not to be reproduced in partial or in full without permission of Golden Homes.

Sheet nu.-

DATE: May 6, 2022

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: PRELIMINARY SITE PLAN REVIEW (SP JPLN2022-0002) – Proposed Norton and Quill Site Condominium, Northwest corner of Norton Street and Quill Creek Drive (PIN 88-20-03-251-043 & 88-20-03-251-044), Section 3, Currently Zoned R-1B (One Family Residential) District.

The petitioner Mauro Engineering submitted the above referenced Preliminary Site Plan application for a 4-unit Site Condominium, comprised of one family detached homes. The site is 1.786 acres in area. The Planning Commission is the approval authority for this item.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and the recommendations included therein.

Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.
3. Preliminary Site Plan Application

G:\SITE PLANS\SP JPLN2022-0002 NORTON & QUILL\PC Memo 2022 05 10.docx

PROPOSED RESOLUTION

PRELIMINARY SITE PLAN REVIEW (SP JPLN2022-0002) – Proposed Norton and Quill Site Condominium, Northwest corner of Norton Street and Quill Creek Drive (PIN 88-20-03-251-043 & 88-20-03-251-044), Section 3, Currently Zoned R-1B (One Family Residential) District.

Resolution # PC-2022-05-

Moved by:

Support by:

RESOLVED, That Preliminary Site Condominium Approval, pursuant to Article 8 and Section 10.02 of the Zoning Ordinance, as requested for Norton and Quill Site Condominium, 4 units/lots, Northwest corner of Norton Street and Quill Creek Drive (PIN 88-20-03-251-043 & 88-20-03-251-044), Section 3, approximately 1.786 acres in size, Currently Zoned R-1B (One Family Residential) District, be granted, subject to the following:

1. Provide tree survey and mitigation requirements.
2. Provide easement for 6443 Norton for City review.
3. Submit revised plan with 45-foot rear setbacks.
4. Have landscape plan prepared by licensed Landscape Architect.
5. Provide elevations of all four sides and provide materials.

_____) or

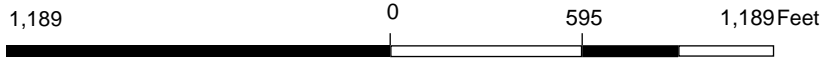
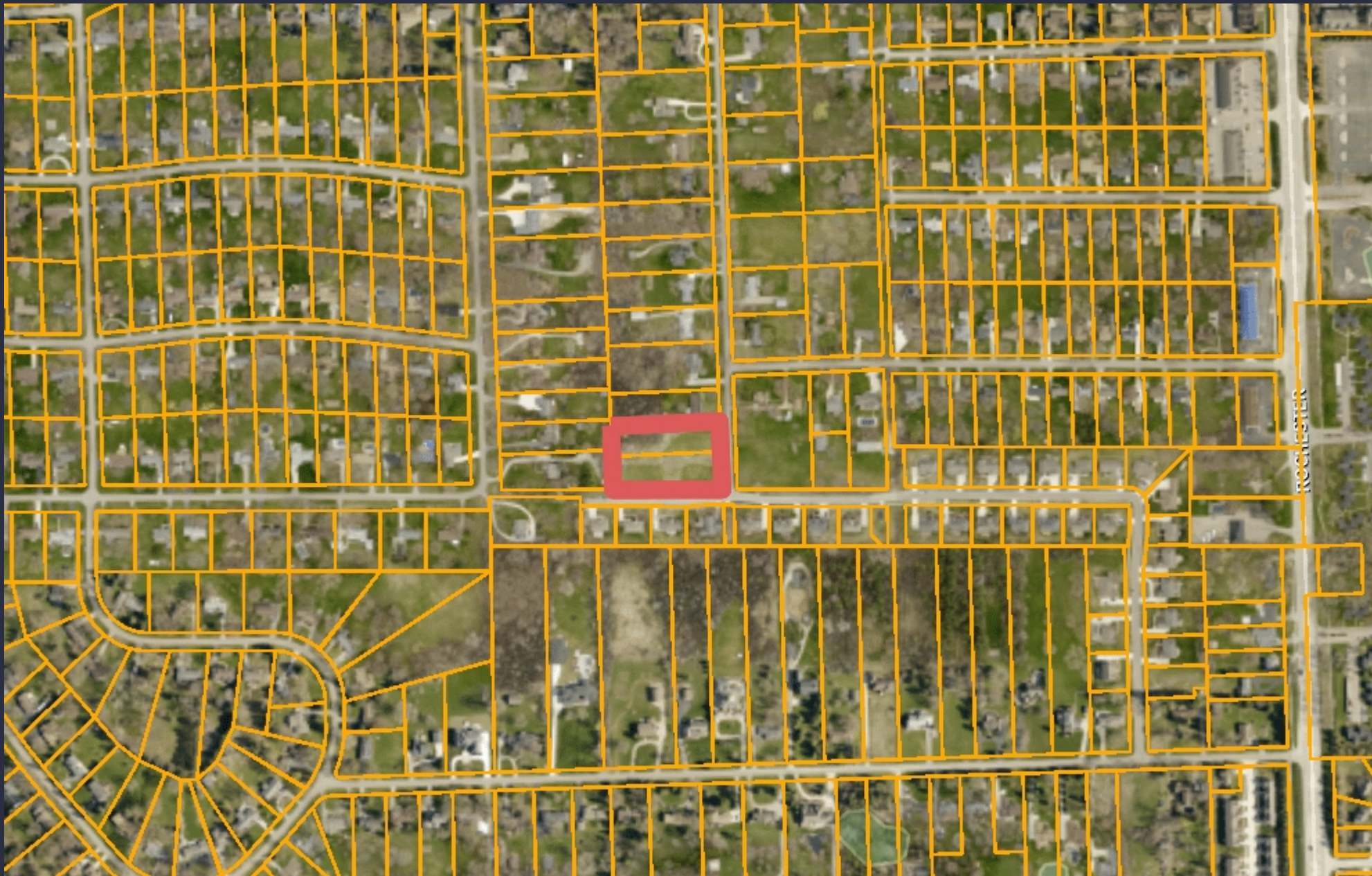
(denied, for the following reasons: _____) or

(postponed, for the following reasons: _____)

Yes:

Absent:

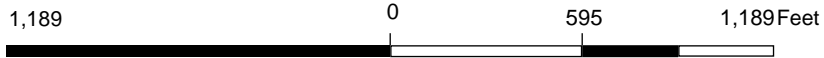
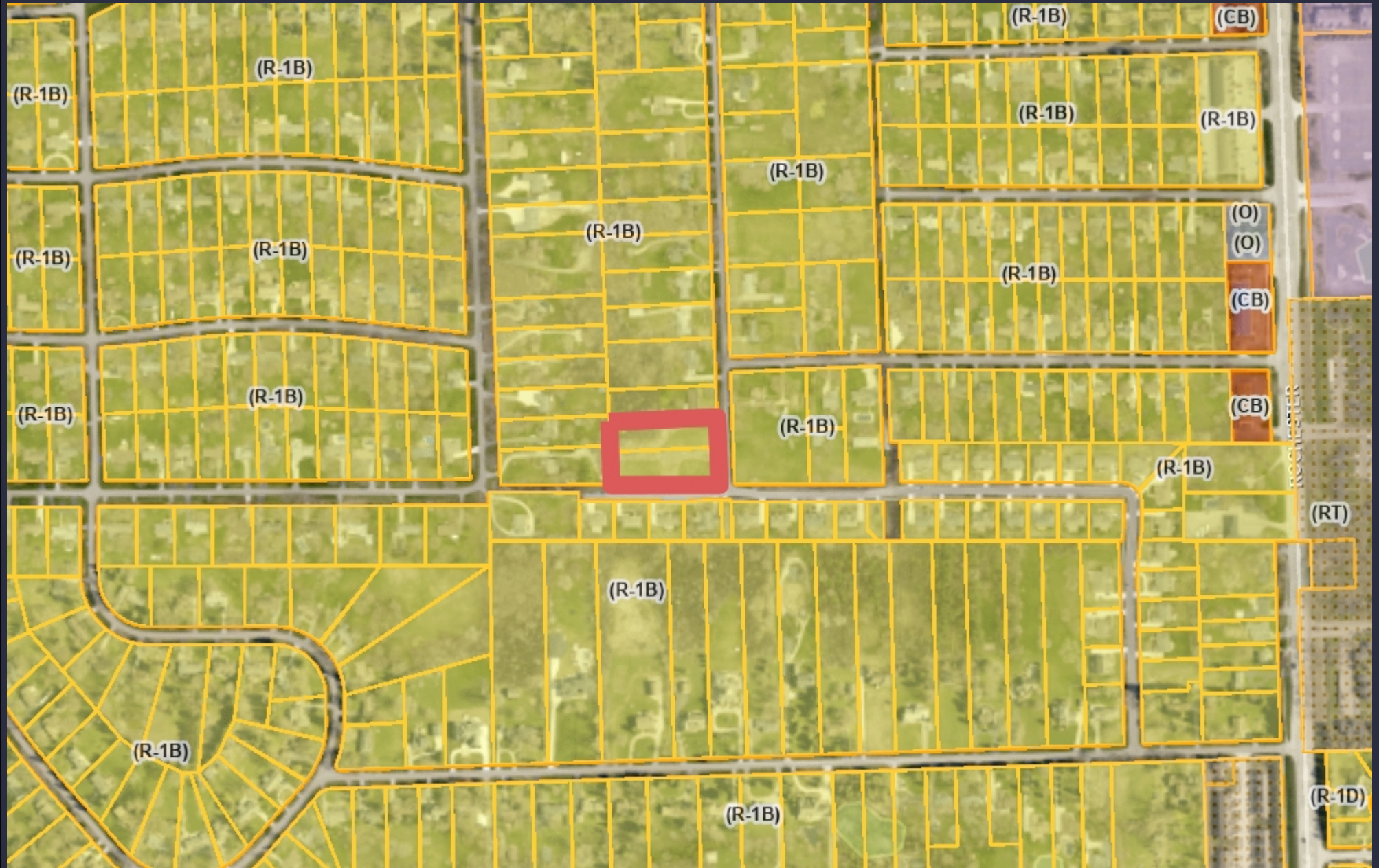
MOTION CARRIED



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



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.



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: May 6, 2022

**Preliminary Site Plan Approval for a
Site Condominium Plan
For
City of Troy, Michigan**

Applicant: Mauro Engineering (owner Aaron O'Connor)
Project Name: Norton and Quill Site Condominium
Plan Date: June 6, 2020
Location: 6407 Norton (NW corner of Norton and Quill Creek Drive)
Zoning: R-1B, One-Family Residential
Action Requested: Preliminary Site Condominium Approval

PROJECT AND SITE DESCRIPTION

The applicant is requesting approval to construct a four (4) single family detached site condominium project. The proposed four (4) lots will be created from two (2) existing parcels which total approximately 1.75 acres. The two existing parcels are currently vacant. Please note that there is one (1) additional lot that will be used for stormwater detention. The property is zoned R-1B, One-Family Residential, and the proposed site condominium use is permitted by-right. Please note that the existing home at 6443 Norton will continue to access their home through one of the newly created lots.

Two lots will be accessed off of Norton and two off Quill Creek Drive. Sidewalks will be added in front of units on both Norton and Quill Creek Drive.

Location of subject site:



Size of subject property:

+/-77,800 sq/ft in area

Current use of subject property:

Vacant

Proposed use of subject site:

The proposed use is single-family residential site condominium of four (4) lots for homes and one (1) for detention.

Current Zoning:

The property is currently zoned R-1B, One-Family Residential

Surrounding Property Details:

<u>Direction</u>	<u>Zoning</u>	<u>Use</u>
North	R-1B, One-family Residential District	Single-family home
South	R-1B, One-family Residential District	Single-family home
East	R-1B, One-family Residential District	Single-family home
West	R-1B, One-family Residential District	Single-family home

NATURAL RESOURCES

Topography - The grading plan shows gentle slopes.

Woodlands/Landmark Trees – There is an existing area of trees along the northern and western property line. The applicant did not provide a tree survey but noted on the plans that “No Woodland and Landmark Trees Exist on Site.” They note that brush and small healthy cottonwoods under 6-inches will be removed. Based on the location of the proposed detention pond and the required grading, we think most or all trees on site will be removed. A tree survey should be provided to confirm if tree mitigation is required.

Wetlands/Flood Plain – There are no wetlands on the site. The site does not lie within the 100-year floodplain.

Items to be Addressed: Provide tree survey and mitigation requirements

SITE ARRANGEMENT, ACCESS, AND CIRCULATION

All lots meet the minimum lot area for the R-1B District, are regular in shape, allow for adequate setbacks, and permit sufficient space for the homes and ingress and egress for each unit.

Two (2) lots will be accessed of Norton and two (2) off Quill Creek Drive. Sidewalks will be added in front of units on both Norton and Quill Creek Drive. A stormwater detention facility is located in the northwest corner of the site. The stormwater detention facility is accessed via an easement and 12-foot wide driveway that runs between the two houses that front on Quill Creek. The driveway will be required to be maintained by the homeowners association. The detention facility and accessed has been reviewed by the engineering and public works department and they don’t raise any issues.

6443 Norton will continue to access their home through one of the newly created lots. While unusual it is permitted provided that an easement is provided for 6443 Norton to use a portion of the new lot for access. The easement shall be provided to the City for review and recorded by the applicant.

Items to be Addressed: 1). Provide easement for 6443 Norton for City review; 2). Once review of easement is complete, applicant shall record with Oakland County.

AREA, WIDTH, HEIGHT, SETBACKS

Required and Provided Dimensions:

Table 4.06.C establishes the requirements for the R-1B District. The requirement and the proposed dimensions are as follows:

	Required	Provided	Compliance
Minimum Lot Area	15,000 sq ft	15,000 sq ft (Min)	Complies
Minimum Lot Width	100 ft	100 ft (Min)	Complies
Setbacks			
Front	40 ft	40 ft	Complies

Side (Least)	10 ft	10 ft	Complies
Side (Total)	30 ft	30 ft	Complies
Rear	45 ft	44.96 ft	Does not comply
Maximum Building Height	30 ft, 2.5 story	Under 30 ft	Will be reviewed with building permits
Minimum Floor Area per Unit	1,200 sq ft	Over 1,200 sq. ft (Min)	Will be reviewed with building permits
Maximum Lot Coverage	30%	30% (Max)	Will be reviewed with building permits

The rear yards of two lots are 44.96 feet, where 45-feet is required. This can easily be rectified in a resubmittal.

Items to be Addressed: Submit revised plan with 45-foot rear setbacks.

LANDSCAPING

Site condominium and subdivision landscaping are regulated by Section 13.02.F.2.

	<u>Required</u>	<u>Provided</u>	<u>Compliance</u>
Public Drive: 1 tree per 50 lineal feet	582 lf / 50 = 12 trees	15 trees	Complies
Stormwater Detention Pond	Seeded	Seeded	Complies
Mitigation	Unknown	Unknown	Unknown

Applicant proposes to plant fifteen 2.5-inch Oaks. Landscape Plan not stamped by Landscape Architect.

Items to be Addressed: 1). Provide tree survey and mitigation requirements; and 2). Have plan prepared by licensed Landscape Architect.

FLOOR PLANS AND ELEVATIONS

The applicant submitted two proposed plans: a 3,300 sq/ft colonial and a 2,400 sq/ft ranch. The applicant has only provided the front rendering of the two home types. Materials are not indicated. The applicant should provide elevations of all four sides and provide materials.

Items to be Addressed: Provide elevations of all four sides and provide materials.

SUBMITTAL REQUIREMENTS

Section 10.02 sets forth the intent and standards for site condominium projects.

1. Intent: The intent of this Section is to regulate site condominium projects to ensure compliance with this Ordinance and other applicable standards of the City, to provide procedures and standards for review and approval or disapproval of such developments, and to insure that each project will be consistent and compatible with other developments in the community.

The applicant shall provide the additional information as requested.

Section 10.02.E. regulates physical improvements associated with condominium projects. It requires the following:

1. Principal access and circulation through a site condominium shall be provided by public streets constructed to City standards, within sixty (60) foot wide rights-of-way. Secondary access and circulation through such developments, on which some of the residential parcels may have their sole frontage, may be provided by twenty-eight (28) foot wide streets constructed to City public street standards, within forty (40) foot private easements for public access.

The newly create lots will be accessed from existing City right-of-way requirements.

2. Principal access to site condominium of five (5) acres or less in area may be provided by way of twenty-eight (28) foot wide streets constructed to City public street standards, within forty (40) foot private easements for public access, when in the opinion of the City Council the property configuration is such that the provision of conforming dwelling unit parcels is impractical.

The newly create lots will be accessed from existing City right-of-way requirements.

3. All entrances to major or secondary thoroughfares shall include deceleration, acceleration and passing lanes as required by Engineering Standards of the City of Troy.

Subject to approval by the City engineering department.

4. Sidewalks shall be constructed, in accordance with City Standards, across the frontage of all dwelling unit parcels. Utilities shall be placed within street rights-of-way, or within easements approved as to size and location by the City Engineer.

Five (5) foot wide sidewalks will be provided across the frontage of all parcels.

5. All shall be served by public water, sanitary sewer, storm sewer 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.

The applicant has proposed full utilities, but all proposed configurations are subject to approval by the City engineering department.

As noted above, all condominium projects are subject to Section 8.05.A.7, which establishes the requirements for a preliminary site plan submittal. Three additional requirements are specifically identified for residential projects. The three additional requirements, identified in 8.05.A.7.o, include:

Norton and Quill
May 6, 2022

i. Calculation of the dwelling unit density allowable and a statement of the number of dwelling units, by type, to be provided.

The maximum density is 2.9 units per acre. The site complies at 4 units.

ii. Topography on site and fifty (50) feet beyond, drawn at two (2) foot contour intervals, with existing drainage courses, flood plains, wetlands, and tree stands indicated.

Satisfied.

iii. The typical floor plans and elevations of the proposed buildings, with building height(s).

The maximum allowable building height is 2.5 stories or 30 feet. Proposed building height will be confirmed through building permit reviews.

Items to be Addressed: None.

RECOMMENDATIONS

The Planning Commission can either allow the applicant to address the following items as part of the Final Site Plan Review or the item can be postponed until those items are addressed:

- 1. Provide tree survey and mitigation requirements.*
- 2. Provide easement for 6443 Norton for City review.*
- 3. Submit revised plan with 45-foot rear setbacks.*
- 4. Have landscape plan prepared by licensed landscape architect.*
- 5. Provide elevations of all four sides and provide materials.*



CARLISLE/WORTMAN ASSOC., INC.

Benjamin R. Carlisle, AICP, LEED AP

Principal

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

EXISTING	DESCRIPTION	PROPOSED
	SILT FENCE	
	STORM SEWER	
	SANITARY SEWER	
	WATER MAIN	
	GAS MAIN	
	OVERHEAD TELEPHONE	
	UNDERGROUND TELEPHONE	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	FENCE OR GUARDRAIL	
	RIGHT-OF-WAY EASEMENT	
	PROPERTY LINE SETBACK LINE	
	ROADWAY CENTERLINE	
	CONTOUR	
	SANITARY MANHOLE	
	STORM MANHOLE	
	REAR-YARD CATCH BASIN	
	STREET CATCH BASIN	
	FIRE HYDRANT	
	PIPE REDUCER	
	VALVE AND VAULT, VALVE	
	FLARED END SECTION	
	STREET LIGHT	
	GUY WIRE	
	UTILITY POLE	
	SIGN	
	SPOT ELEVATION	
	SOIL BORING	
	OVERLAND FLOOD ROUTE	
	DRAINAGE SLOPE	
	WATER'S EDGE OR E. OF DITCH	
	TREE, FIR TREE, BUSH	
	SECTION CORNER	
	CURB AND GUTTER	
	CLEANOUT	
	TELEPHONE RISER	
	CABLE RISER	
	ELECTRIC TRANSFORMER	

Description Legend:

TC	- TOP OF CURB
TW	- TOP OF WALK
TD	- TOP OF DRIVE
ME	- MATCH EXISTING
FG	- FINAL (FINISHED) GRADE
SW	- SWALE
HP	- HIGH POINT
CB	- CATCH BASIN
GFF	- GARAGE FINISH FLOOR
FF	- FIRST FINISH FLOOR
BFF	- BSMT. FINISH FLOOR
STM-MH	- STORM MANHOLE
SAN-MH	- SANITARY MANHOLE
BLDG	- BUILDING
T/WALL	- TOP OF WALL
B/WALL	- BOTTOM OF WALL
TRD	- TOPOGRAPHY SPOT GRADE
TRE	- EXISTING TREE
BSMT	- BASEMENT
UNDK	- UNDEGRADED
EDP	- EDGE OF PAVEMENT
EDG	- EDGE OF GRAVEL
P	- PITCH
W/B	- WATER BOX
IF	- IRON FOUND
MF	- MONUMENT FOUND

Site Info

CURRENT ZONE: R-1B
 SETBACKS:
 FRONT - 40'
 REAR - 45'
 SIDE - 10' MIN. 25' TOTAL
 LOT SQUARE FOOTAGE: 15,000 SF
 MIN.
 LOT WIDTH: 100' MIN.
 BUILDING HEIGHT: 2.5 STORIES, 30' MAX.
 LOT COVERAGE: 30% MAX.

Legal Description:

PARCEL: 20-03-251-044
 LOT(S) 51, EXCLUDING NORTH 245.49 FEET OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS
 PARCEL: 20-03-251-043
 THE SOUTH 100 FEET OF THE NORTH 245.49 FEET OF LOT(S) 51 OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

General Notes:

ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION.
 ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLOT PLAN.
 OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES.
 UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES. NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.
 THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

Wetland and Landscaping Note:

-NO REGULATED WETLANDS ON SITE
 -GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
 -LESS THAN 5 ACRES IN SIZE
 TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK: LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST

Legend

● - FOUND IRON
 ○ - SET IRON

Benchmark

1) SAN. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM-714.24-NWD88
 2) P.W.M. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM-714.24-NWD88

Location map

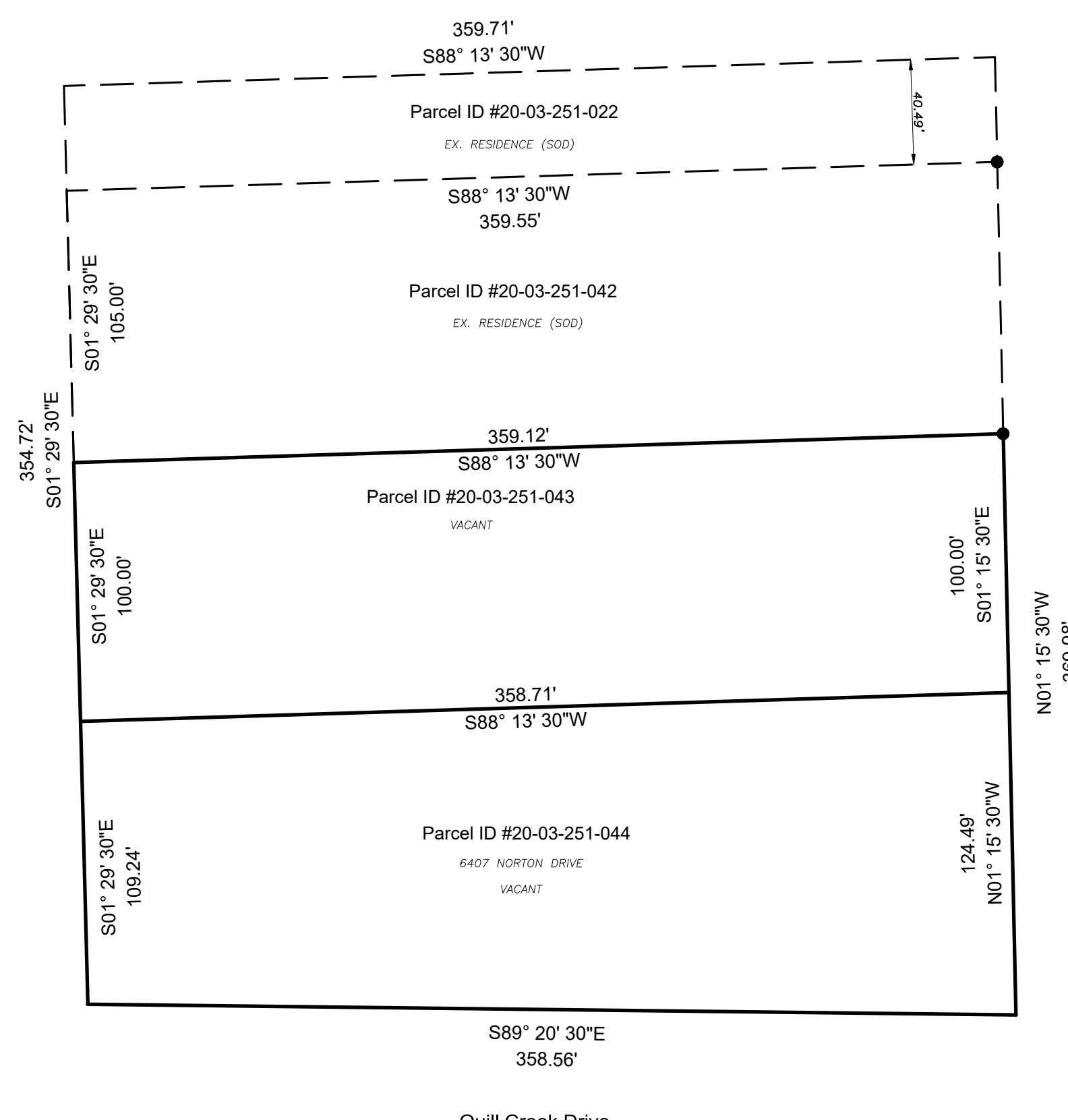
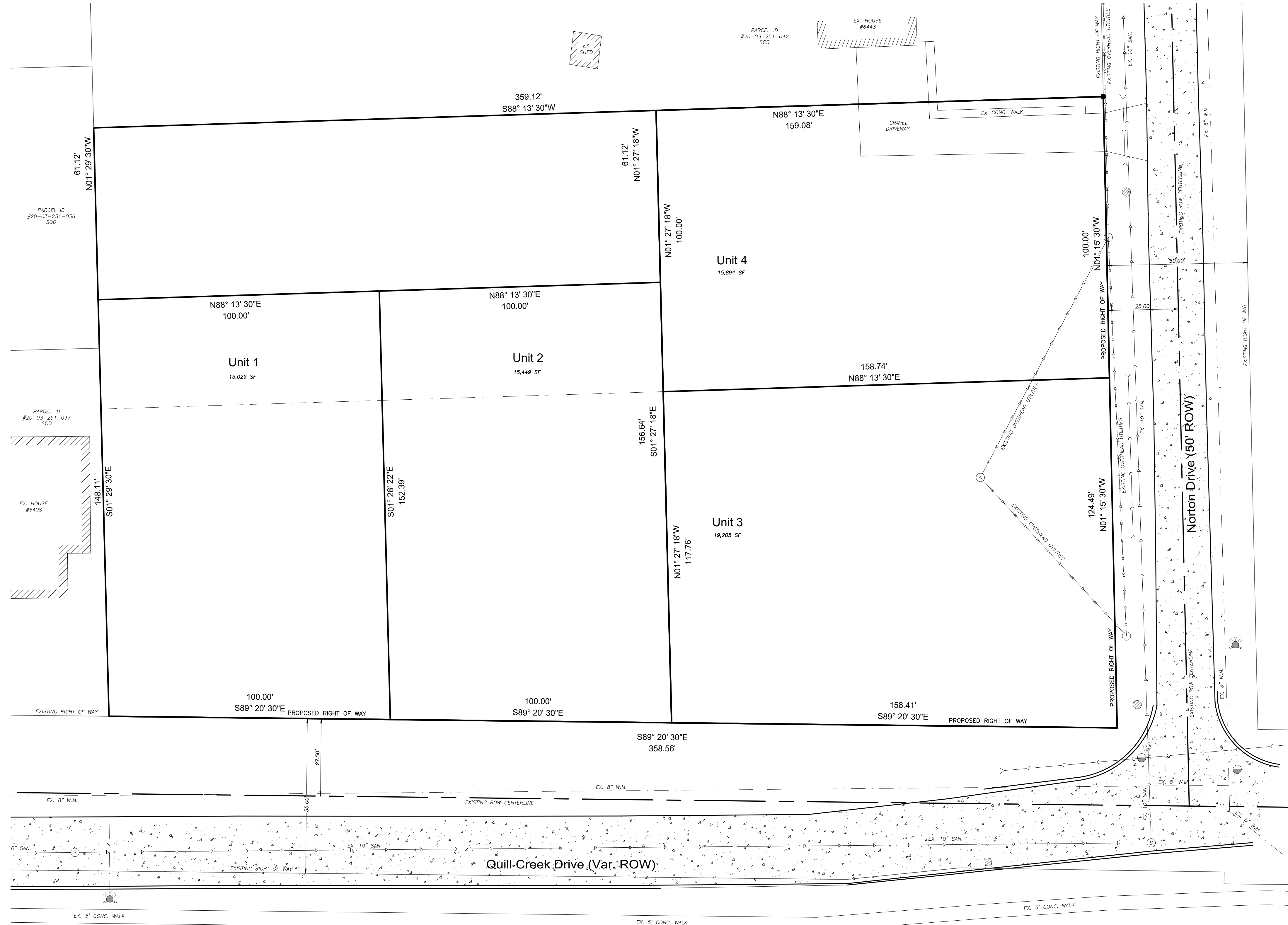
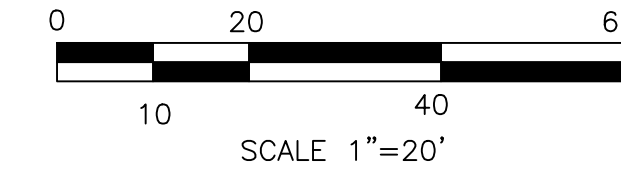
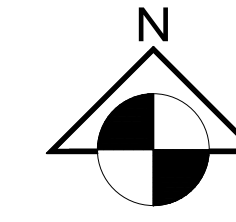
NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
 (586) 524-2855

Sheet Index:

- 1) BOUNDARY SURVEY AND EXISTING CONDITIONS
- 2) TOPOGRAPHIC SURVEY AND EXISTING CONDITIONS
- 3) PRELIMINARY SITE PLAN
- 4) PRELIMINARY TREE PRESERVATION PLAN/TREE INVENTORY
- 5) PRELIMINARY LANDSCAPE PLAN
- 6) PRELIMINARY GRADING PLAN
- 7) PRELIMINARY UTILITY PLAN
- 8) PRELIMINARY FLOOR PLANS
- 9) PRELIMINARY ELEVATIONS



Lot 51 Bassett & Smith Flowing Spring Acres

SCALE: 1" = 50'

UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

CLIENT: AARON O'CONNOR
 PROJECT LOCATION: CITY OF TROY
 DATE: 06-10-2020
 SCALE: 1" = 20'

6407 NORTON DR.
 BOUNDARY SURVEY

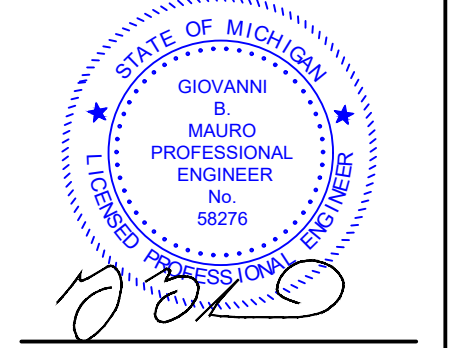
Mauro Engineering
 Development & Building Solutions • Civil Engineers • Designers • Planners
 48657 Hayes Road, Shelby Township, MI 48315
 PH: (586) 247-2800 • FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-485-7171
 TOAL TIME FOR THE LOCATION OF UNDERGROUND FACILITIES

PRELIMINARY CONSTRUCTION AS-BUILT

Drawn By: G.M.
 Checked By: S.M.
 Approved By: S.M.

Revisions:	Date:	By:



SIMONE B. MAURO, P.E. - No. 30592
 GIOVANNI B. MAURO, P.E. - No. 58276

Job No. 16-032
 Sheet No. 1 OF 9

Mauro Engineering
 Development & Building Solutions • Civil Engineers • Designers • Planners
 48657 Hayes Road, Shelby Twp., MI 48315
 PH: (586) 247-2800 • FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM

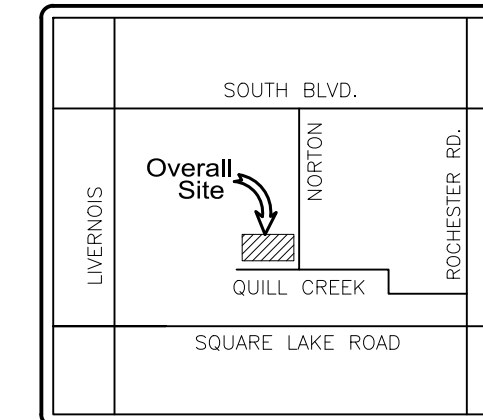
- Mauro Engineering**
- 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to construct.
 - 2.) This plan shall not be used to set foundations.
 - 3.) Setbacks shown on this plot plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 - 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 - 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 - 6.) No title work given at the time of survey

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

Benchmark

- 1) SAN. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM=(717.77)-NAV088
- 2) F.W.M. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHEAST CORNER OF LOT 51 AS SHOWN ON PLAN RM=(714.24)-NAV088



Location map

NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
(586) 524-2855

UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

EXISTING	DESCRIPTION	PROPOSED
	SILT FENCE	
	STORM SEWER	
	SANITARY SEWER	
	WATER MAIN	
	GAS MAIN	
	OVERHEAD TELEPHONE	
	UNDERGROUND TELEPHONE	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	FENCE OR GUARDRAIL	
	RIGHT-OF-WAY EASEMENT	
	PROPERTY LINE	
	SETBACK LINE	
	ROADWAY CENTERLINE	
	CONTOUR	
	SANITARY MANHOLE	
	STORM MANHOLE	
	REAR-YARD CATCH BASIN	
	STREET CATCH BASIN	
	FIRE HYDRANT	
	PIPE REDUCER	
	VALVE AND VAULT, VALVE	
	FLARED END SECTION	
	STREET LIGHT	
	GUY WIRE	
	UTILITY POLE	
	SIGN	
	SPOT ELEVATION	
	SOIL BORING	
	OVERLAND FLOOD ROUTE	
	DRAINAGE SLOPE	
	WATER'S EDGE OR E. OF DITCH	
	TREE, FIR TREE, BUSH	
	SECTION CORNER	
	CURB AND GUTTER	
	CLEANOUT	
	TELEPHONE RISER	
	CABLE RISER	
	ELECTRIC TRANSFORMER	

Description Legend:

TC	TOP OF CURB
TW	TOP OF WALK
TD	TOP OF DRIVE
ME	MATCH EXISTING
FG	FINAL (FINISHED) GRADE
SW	SKWALE
HP	HIGH POINT
CB	CATCH BASIN
GFF	GARAGE FINISH FLOOR
FF	FIRST FINISH FLOOR
BFF	B.S.M.T. FINISH FLOOR
STM-MH	STORM MANHOLE
SAN-MH	SANITARY MANHOLE
BLDG	BUILDING
T/WALL	TOP OF WALL
B/WALL	BOTTOM OF WALL
GRADE	TOPOGRAPHY SPOT GRADE
TREE	EXISTING TREE
BSMT	BASEMENT
UNEX	UNDEVELOPED
EDP	EDGE OF PAVEMENT
EDG	EDGE OF GRAVEL
P	PORCH
W/B	WATER BOX
IF	IRON FOUND
MF	MONUMENT FOUND

Site Info

CURRENT ZONE: R-1B
 SETBACKS:
 FRONT - 40'
 REAR - 45'
 SIDE - 10' MIN. 25' TOTAL
 LOT SQUARE FOOTAGE: 15,000 SF MIN.
 LOT WIDTH: 100' MIN.
 BUILDING HEIGHT: 2.5 STORIES, 30' MAX
 LOT COVERAGE: 30% MAX.

Legal Description:

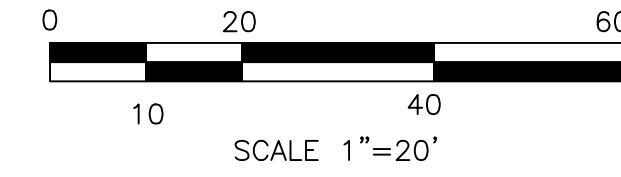
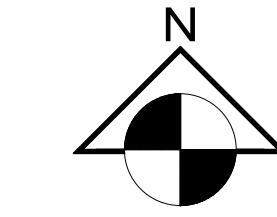
PARCEL: 20-03-251-044
 LOT(S) 51, EXCLUDING NORTH 245.49 FEET OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS
 PARCEL: 20-03-251-043
 THE SOUTH 100 FEET OF THE NORTH 245.49 FEET OF LOT(S) 51 OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

General Notes:

- 1) ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION.
- 2) ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLOT PLAN.
- 3) OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES.
- 4) UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.
- 5) THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

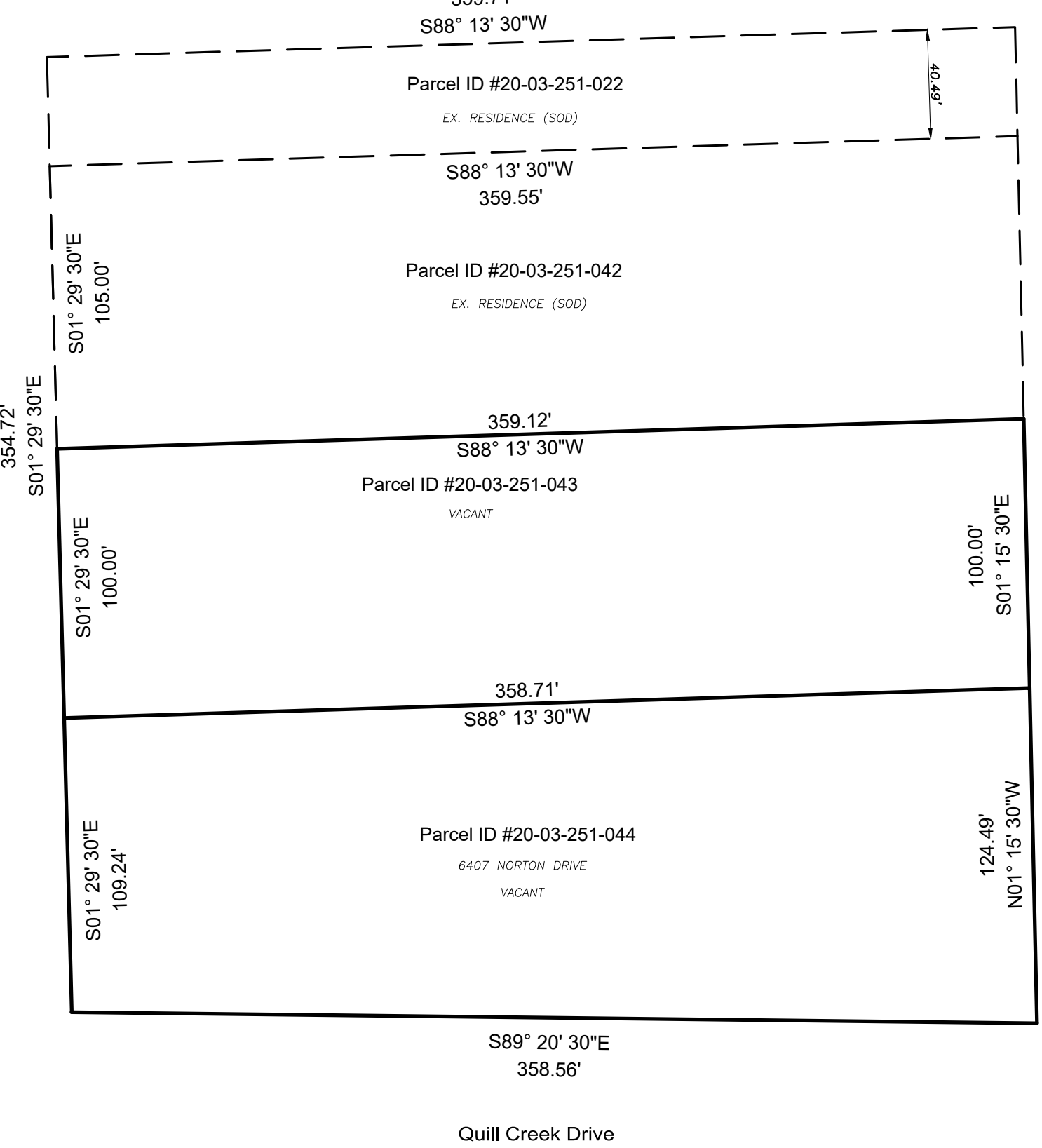
Wetland and Landscaping Note:

- NO REGULATED WETLANDS ON SITE
 - GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
 - LESS THAN 5 ACRES IN SIZE.
- TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK, LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST



Sheet Index:

- 1) BOUNDARY SURVEY
- 2) TOPOGRAPHIC SURVEY AND EXISTING CONDITIONS
- 3) PRELIMINARY SITE PLAN
- 4) PRELIMINARY TREE PRESERVATION PLAN/TREE INVENTORY
- 5) PRELIMINARY LANDSCAPE PLAN
- 6) PRELIMINARY GRADING PLAN
- 7) PRELIMINARY UTILITY PLAN
- 8) PRELIMINARY FLOOR PLANS
- 9) PRELIMINARY ELEVATIONS



Lot 51 Bassett & Smith Flowing Spring Acres SCALE: 1" = 50'

CLIENT:	AARON O'CONNOR
PROJECT LOCATION:	CITY OF TROY
DATE:	06-10-2020
SCALE:	1" = 20'

6407 NORTON DR.
 TOPOGRAPHIC SURVEY
 AND EXISTING CONDITIONS

Mauro Engineering
 Development & Building Solutions • Civil Engineers • Designers • Planners

48657 Hoyes Road, Shelby Township, MI 48315
 PH: (586) 247-2800 FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

PRELIMINARY	CONSTRUCTION	AS-BUILT
Drawn By:	G.M.	
Checked By:	S.M.	
Approved By:	S.M.	

Revisions:	Date:	By:

STATE OF MICHIGAN
 GIOVANNI MAURO
 PROFESSIONAL ENGINEER
 No. 58276

SIMONE B. MAURO, P.E. - No. 30592
 GIOVANNI B. MAURO, P.E. - No. 58276

Job No. 16-032
 Sheet No. 2 OF 9

Mauro Engineering
 Development & Building Solutions • Civil Engineers • Designers • Planners

Mauro Engineering
 48657 Hoyes Road, Shelby Twp., MI 48315
 PH: (586) 247-2800 • FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM

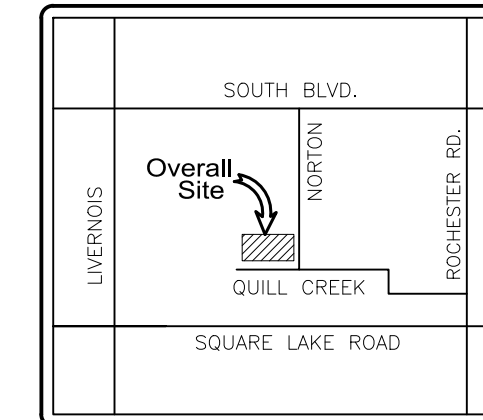
- Mauro Engineering
- 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to construct.
 - 2.) This plan shall not be used to set foundations.
 - 3.) Setbacks shown on this plot plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 - 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 - 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 - 6.) No title work given at the time of survey.

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

Benchmark

- 1) SAN. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM-1711.77--NAV088
- 2) P.M.T. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM-1711.77--NAV088



Location map
NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
(586) 524-2855

UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

EXISTING	DESCRIPTION	PROPOSED
	SILT FENCE	
	STORM SEWER	
	SANITARY SEWER	
	WATER MAIN	
	GAS MAIN	
	OVERHEAD TELEPHONE	
	UNDERGROUND TELEPHONE	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	FENCE OR GUARDRAIL	
	RIGHT-OF-WAY EASEMENT	
	PROPERTY LINE	
	SETBACK LINE	
	ROADWAY CENTERLINE	
	CONTOUR	
	SANITARY MANHOLE	
	STORM MANHOLE	
	REAR-YARD CATCH BASIN	
	STREET CATCH BASIN	
	FIRE HYDRANT	
	PIPE REDUCER	
	VALVE AND VAULT, VALVE	
	FLARED END SECTION	
	STREET LIGHT	
	GDN WIRE	
	UTILITY POLE	
	SIGN	
	SPOT ELEVATION	
	SOIL BORING	
	OVERLAND FLOOD ROUTE	
	DRAINAGE SLOPE	
	WATER'S EDGE OR Q OF DITCH	
	TREE, FIR TREE, BUSH	
	SECTION CORNER	
	CURB AND GUTTER CLEANOUT	
	TELEPHONE RISER	
	CABLE RISER	
	ELECTRIC TRANSFORMER	

Description Legend:

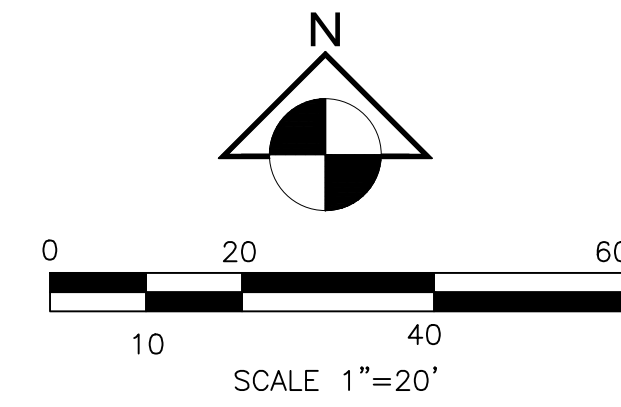
TC	TOP OF CURB
TW	TOP OF WALK
TD	TOP OF DRIVE
ME	MATCH EXISTING
FG	FINAL (FINISHED) GRADE
SW	SWALE
HP	HIGH POINT
CB	CATCH BASIN
GFF	GARAGE FINISH FLOOR
FF	FIRST FINISH FLOOR
BFF	BSMT. FINISH FLOOR
STM-MH	STORM MANHOLE
SAN-MH	SANITARY MANHOLE
BLDG	BUILDING
T/WALL	TOP OF WALL
B/WALL	BOTTOM OF WALL
GRADE	TOPOGRAPHY SPOT GRADE
TREE	EXISTING TREE
BSMT	BASEMENT
UNEX	UNEXCAVATED
EDP	EDGE OF PAVEMENT
EDG	EDGE OF GRAVEL
P	PORCH
W/B	WATER BOX
IF	IRON FOUND
MF	MONUMENT FOUND

Site Info

CURRENT ZONE: R-1B
 SETBACKS:
 FRONT - 40'
 REAR - 45'
 SIDE - 10' MIN. 25' TOTAL
 LOT SQUARE FOOTAGE: 15,000 SF MIN.
 LOT WIDTH: 100' MIN.
 BUILDING HEIGHT: 2.5 STORES, 30' MAX
 LOT COVERAGE: 30% MAX.

Wetland and Landscaping Note:

-NO REGULATED WETLANDS ON SITE
 -GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
 -LESS THAN 5 ACRES IN SIZE
 TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK: LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST



Sheet Index:

- 1) BOUNDARY SURVEY
- 2) TOPOGRAPHIC SURVEY AND EXISTING CONDITIONS
- 3) PRELIMINARY SITE PLAN
- 4) PRELIMINARY TREE PRESERVATION PLAN/TREE INVENTORY
- 5) PRELIMINARY LANDSCAPE PLAN
- 6) PRELIMINARY GRADING PLAN
- 7) PRELIMINARY UTILITY PLAN
- 8) PRELIMINARY FLOOR PLANS
- 9) PRELIMINARY ELEVATIONS

General Notes:

ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION

ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLOT PLAN

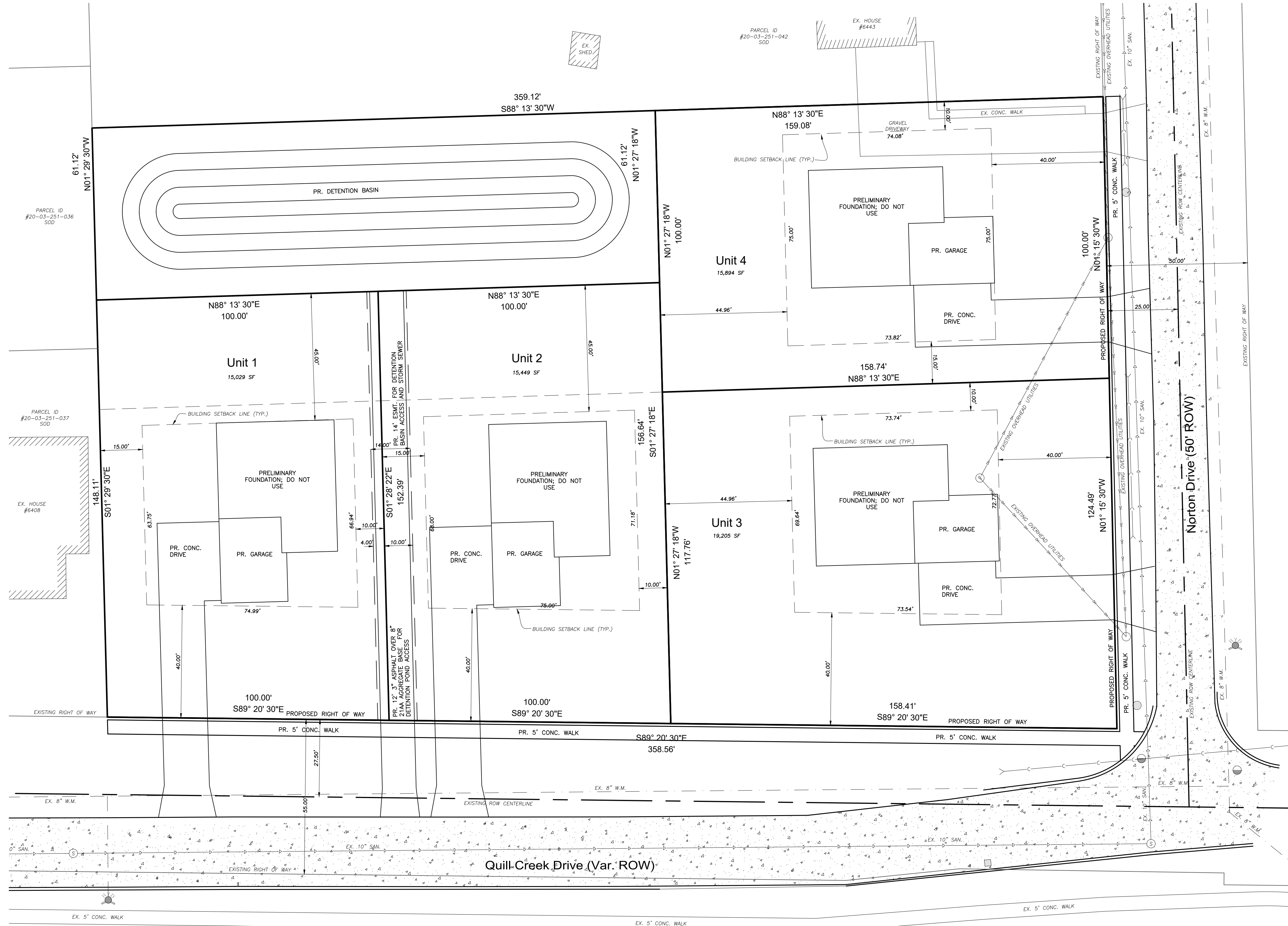
OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

Open Space and Landscape Notes:

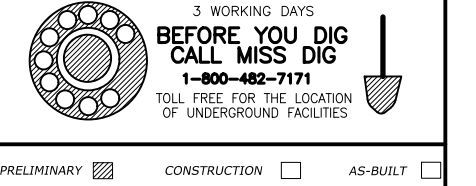
GROSS SITE AREA = 77,797 S.F.
 NET SITE AREA = 77,797 S.F.
 GROSS BUILDING AREA = 20,902 S.F.
 NET BUILDING AREA = 20,902 S.F.
 OPEN SPACE REQUIREMENT = 20% OF GROSS SITE AREA = 15,557 S.F.
 PROVIDED OPEN SPACE AREA = 56,895 S.F.
 STATEMENT OF INTENT: AREA SHALL REMAIN PERPETUALLY IN AN UNDEVELOPED STATE OF LAWN AND YARD AREA
 LANDSCAPE AREA REQUIREMENT = 15% OF SITE AREA = 11,670 S.F.
 PROVIDED LANDSCAPE AREA = 56,895 S.F.
 STATEMENT OF INTENT: LANDSCAPE AREA SHALL CONSIST OF TREES, SHRUBS, GROUND COVER, AND GRASSES INCLUDED IN THE YARD AREA



CLIENT:	AARON O'CONNOR
PROJECT LOCATION:	CITY OF TROY
DATE:	12-10-2020
SCALE:	1" = 20'

6407 NORTON DR.
 PRELIMINARY SITE PLAN

Mauro Engineering
 Development & Building Solutions • Civil Engineers • Designers • Planners
 48657 Hayes Road, Shelby Township, MI 48315
 PH: (586) 247-2800 FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM



Drawn By: G.M.
 Checked By: S.M.
 Approved By: S.M.

Revisions:	Date:	By:



SIMONE B. MAURO, P.E. - No. 30592
 GIOVANNI B. MAURO, P.E. - No. 58276
 Job No. 16-032
 Sheet No. 3 OF 9

Mauro Engineering
 Development & Building Solutions • Civil Engineers • Designers • Planners
 Mauro Engineering
 48657 Hayes Road Shelby Twp., MI 48315
 PH: (586) 247-2800 • FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM

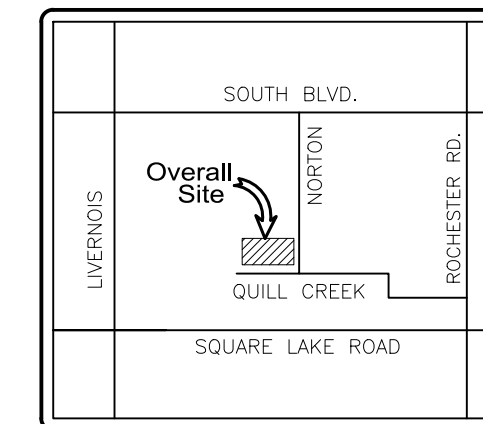
- Mauro Engineering**
- 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to construct.
 - 2.) This plan shall not be used to set foundations.
 - 3.) Setbacks shown on this plot plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 - 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 - 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 - 6.) No title work given at the time of survey

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

Benchmark

- 1) SAN. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM=(717.77)-NAV088
- 2) P.W.T. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM=(714.24)-NAV088



Location map

NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
(586) 524-2855

UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

EXISTING	DESCRIPTION	PROPOSED
	SILT FENCE	
	STORM SEWER	
	SANITARY SEWER	
	WATER MAIN	
	GAS MAIN	
	OVERHEAD TELEPHONE	
	UNDERGROUND TELEPHONE	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	FENCE OR GUARDRAIL	
	RIGHT-OF-WAY EASEMENT	
	PROPERTY LINE	
	SETBACK LINE	
	ROADWAY CENTERLINE	
	CONTOUR	
	SANITARY MANHOLE	
	STORM MANHOLE	
	REAR-YARD CATCH BASIN	
	STREET CATCH BASIN	
	FIRE HYDRANT	
	PIPE REDUCER	
	VALVE AND VAULT, VALVE	
	FLARED END SECTION	
	STREET LIGHT	
	GUY WIRE	
	UTILITY POLE	
	SIGN	
	SPOT ELEVATION	
	SOIL BORING	
	OVERLAND FLOOD ROUTE	
	DRAINAGE SLOPE	
	WATER'S EDGE OR E. OF DITCH	
	TREE, FIR TREE, BUSH	
	SECTION CORNER	
	CURB AND GUTTER CLEANOUT	
	TELEPHONE RISER	
	CABLE RISER	
	ELECTRIC TRANSFORMER	

Description Legend:

- TC - TOP OF CURB
- TW - TOP OF WALK
- TD - TOP OF DRIVE
- ME - MATCH EXISTING
- FG - FINAL (FINISHED) GRADE
- SW - SWALE
- HP - HIGH POINT
- CB - CATCH BASIN
- GFF - GARAGE FINISH FLOOR
- FF - FIRST FINISH FLOOR
- BFF - BSMT. FINISH FLOOR
- STM-MH - STORM MANHOLE
- SAN-MH - SANITARY MANHOLE
- BLDG - BUILDING
- T/WALL - TOP OF WALL
- B/WALL - BOTTOM OF WALL
- TRD - TOPOGRAPHY SPOT GRADE
- TREE - EXISTING TREE
- BSMT - BASEMENT
- UNCK - UNDEGRADED
- EDP - EDGE OF PAVEMENT
- EDG - EDGE OF GRAVEL
- P - PITCH
- W/B - WATER BOX
- IF - IRON FOUND
- MF - MONUMENT FOUND

Site Info

CURRENT ZONE: R-1B

SETBACKS:

FRONT - 40'

REAR - 45'

SIDE - 10' MIN. 25' TOTAL

LOT SQUARE FOOTAGE: 15,000 SF MIN.

LOT WIDTH: 100' MIN.

BUILDING HEIGHT: 2.5 STORIES, 30' MAX

LOT COVERAGE: 30% MAX.

Legal Description:

PARCEL: 20-03-251-044

LOT(S) 51, EXCLUDING NORTH 245.49 FEET OF BASSET & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

PARCEL: 20-03-251-043

THE SOUTH 100 FEET OF THE NORTH 245.49 FEET OF LOT(S) 51 OF BASSET & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

General Notes:

ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION.

ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLOT PLAN.

OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

Open Space and Landscape Notes:

GROSS SITE AREA = 77,797 S.F.

NET SITE AREA = 77,797 S.F.

GROSS BUILDING AREA = 20,902 S.F.

NET BUILDING AREA = 20,902 S.F.

OPEN SPACE REQUIREMENT = 20% OF GROSS SITE AREA = 15,557 S.F.

PROVIDED OPEN SPACE AREA = 56,895 S.F.

STATEMENT OF INTENT: AREA SHALL REMAIN PERPETUALLY IN AN UNDEVELOPED STATE OF LAWN AND YARD AREA.

LANDSCAPE AREA REQUIREMENT = 15% OF SITE AREA = 11,670 S.F.

PROVIDED LANDSCAPE AREA = 56,895 S.F.

STATEMENT OF INTENT: LANDSCAPE AREA SHALL CONSIST OF TREES, SHRUBS, GROUND COVER, AND GRASSES INCLUDED IN THE YARD AREA.

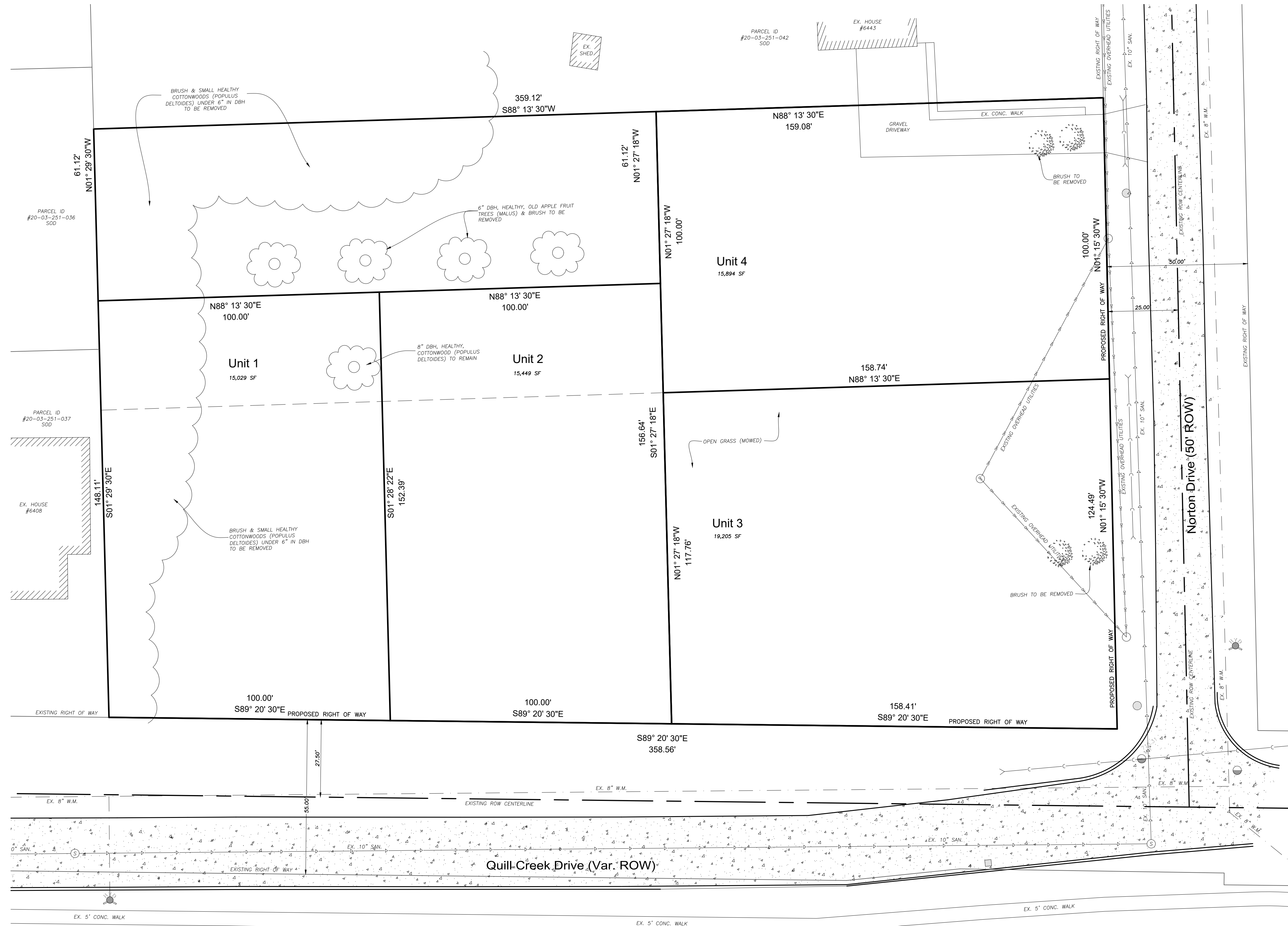
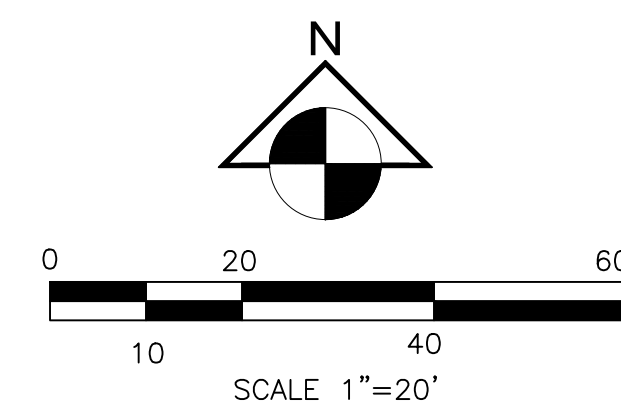
Woodland and Landmark Tree Note:

NO WOODLAND AND LANDMARK TREES EXIST ON SITE.

Wetland and Landscaping Note:

-NO REGULATED WETLANDS ON SITE
-GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
-LESS THAN 5 ACRES IN SIZE.

TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK; LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST



CLIENT:
AARON O'CONNOR

PROJECT LOCATION:
CITY OF TROY

DATE:
06-10-2020

SCALE:
1" = 20'

6407 NORTON DR.
PRELIMINARY TREE PRESERVATION
AND TREE INVENTORY PLAN

Mauro Engineering
Development & Building Solutions • Civil Engineers • Designers • Planners

48657 Hayes Road, Shelby Township, MI 48315
PH: (586) 247-2800 • FAX: (586) 247-2811
VISIT US AT: WWW.MAUROENG.COM



PRELIMINARY CONSTRUCTION AS-BUILT

Drawn By: G.M.

Checked By: S.M.

Approved By: S.M.

Revisions:	Date:	By:



SIMONE B. MAURO, P.E. - No. 30592
GIOVANNI B. MAURO, P.E. - No. 58276

Job No.
16-032

Sheet No.
4 OF 9

Mauro Engineering
Development & Building Solutions • Civil Engineers • Designers • Planners

Mauro Engineering
48657 Hayes Road, Shelby Twp., MI 48315
PH: (586) 247-2800 • FAX: (586) 247-2811
Visit us at: www.mauroeng.com

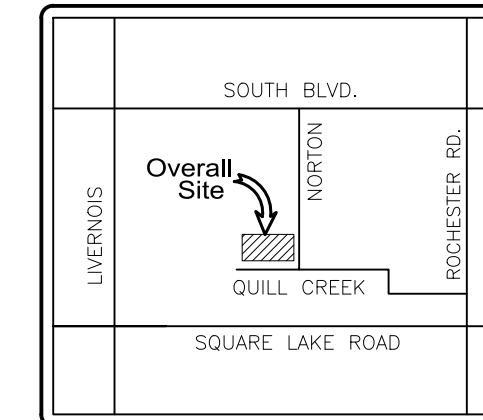
- Mauro Engineering
- 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to construct.
 - 2.) This plan shall not be used to set foundations.
 - 3.) Setbacks shown on this plot plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 - 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 - 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 - 6.) No title work given at the time of survey.

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

Benchmark

- 1) S.M. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN. RM=(217.77)-NAVD88
- 2) P.M.T. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN. RM=(214.24)-NAVD88



Location map
NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
(586) 524-2855

UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

EXISTING	DESCRIPTION	PROPOSED
[Symbol]	SILT FENCE	[Symbol]
[Symbol]	STORM SEWER	[Symbol]
[Symbol]	SANITARY SEWER	[Symbol]
[Symbol]	WATER MAIN	[Symbol]
[Symbol]	GAS MAIN	[Symbol]
[Symbol]	OVERHEAD TELEPHONE	[Symbol]
[Symbol]	UNDERGROUND TELEPHONE	[Symbol]
[Symbol]	OVERHEAD ELECTRIC	[Symbol]
[Symbol]	UNDERGROUND ELECTRIC	[Symbol]
[Symbol]	FENCE OR GUARDRAIL	[Symbol]
[Symbol]	RIGHT-OF-WAY	[Symbol]
[Symbol]	EASEMENT	[Symbol]
[Symbol]	PROPERTY LINE	[Symbol]
[Symbol]	SETBACK LINE	[Symbol]
[Symbol]	ROADWAY CENTERLINE	[Symbol]
[Symbol]	CONTOUR	[Symbol]
[Symbol]	SANITARY MANHOLE	[Symbol]
[Symbol]	STORM MANHOLE	[Symbol]
[Symbol]	REAR-YARD CATCH BASIN	[Symbol]
[Symbol]	STREET CATCH BASIN	[Symbol]
[Symbol]	FIRE HYDRANT	[Symbol]
[Symbol]	PIPE REDUCER	[Symbol]
[Symbol]	VALVE AND VAULT, VALVE	[Symbol]
[Symbol]	FLARED END SECTION	[Symbol]
[Symbol]	STREET LIGHT	[Symbol]
[Symbol]	GUY WIRE	[Symbol]
[Symbol]	UTILITY POLE	[Symbol]
[Symbol]	SIGN	[Symbol]
[Symbol]	SPOT ELEVATION	[Symbol]
[Symbol]	SOIL BORING	[Symbol]
[Symbol]	OVERLAND FLOOD ROUTE	[Symbol]
[Symbol]	DRAINAGE SLOPE	[Symbol]
[Symbol]	WATER'S EDGE OR ϵ OF DITCH	[Symbol]
[Symbol]	TREE, FIR TREE, BUSH	[Symbol]
[Symbol]	SECTION CORNER	[Symbol]
[Symbol]	CURB AND GUTTER	[Symbol]
[Symbol]	CLEANOUT	[Symbol]
[Symbol]	TELEPHONE RISER	[Symbol]
[Symbol]	CABLE RISER	[Symbol]
[Symbol]	ELECTRIC TRANSFORMER	[Symbol]

Description Legend:

- TC - TOP OF CURB
- TW - TOP OF WALK
- TD - TOP OF DRIVE
- ME - MATCH EXISTING
- FG - FINAL (FINISHED) GRADE
- SW - SWALE
- HP - HIGH POINT
- CB - CATCH BASIN
- GFF - GARAGE FINISH FLOOR
- FF - FIRST FINISH FLOOR
- BFF - BSMT. FINISH FLOOR
- STM-MH - STORM MANHOLE
- SAN-MH - SANITARY MANHOLE
- BLDG - BUILDING
- T/WALL - TOP OF WALL
- B/WALL - BOTTOM OF WALL
- GRADE - TOPOGRAPHY SPOT GRADE
- TREE - EXISTING TREE
- BSMT - BASEMENT
- UNEK - UNDEVELOPED
- EDP - EDGE OF PAVEMENT
- EDG - EDGE OF GRAVEL
- P - PITCH
- W/B - WATER BOX
- IF - IRON FOUND
- MF - MONUMENT FOUND

Site Info

CURRENT ZONE: R-1B
SETBACKS:
FRONT - 40'
REAR - 45'
SIDE - 10' MIN. 25' TOTAL
LOT SQUARE FOOTAGE: 15,000 SF
LOT WIDTH: 100' MIN.
BUILDING HEIGHT: 2.5 STORIES, 30' MAX
LOT COVERAGE: 30% MAX.

Legal Description:

PARCEL: 20-03-251-044
LOT(S) 51, EXCLUDING NORTH 245.49 FEET OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS
PARCEL: 20-03-251-043
THE SOUTH 100 FEET OF THE NORTH 245.49 FEET OF LOT(S) 51 OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

General Notes:

- ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION.
- ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLAT PLAN.
- OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES.
- UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.
- THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

Open Space and Landscape Notes:

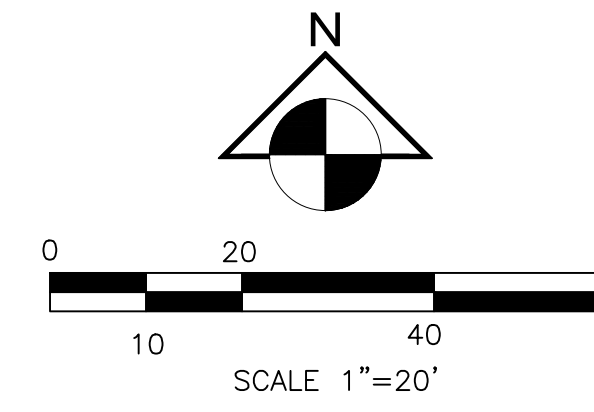
- GROSS SITE AREA = 77,797 S.F.
NET SITE AREA = 77,797 S.F.
- GROSS BUILDING AREA = 20,902 S.F.
NET BUILDING AREA = 20,902 S.F.
- OPEN SPACE REQUIREMENT = 20% OF GROSS SITE AREA = 15,557 S.F.
PROVIDED OPEN SPACE AREA = 56,895 S.F.
- STATEMENT OF INTENT: AREA SHALL REMAIN PERPETUALLY IN AN UNDEVELOPED STATE OF LAWN AND YARD AREA.
- LANDSCAPE AREA REQUIREMENT = 15% OF SITE AREA = 11,670 S.F.
PROVIDED LANDSCAPE AREA = 56,895 S.F.
- STATEMENT OF INTENT: LANDSCAPE AREA SHALL CONSIST OF TREES, SHRUBS, GRASS COVER, AND GRASSES INCLUDED IN THE YARD AREA.

Woodland and Landmark Tree Note:

NO WOODLAND AND LANDMARK TREES EXIST ON SITE.

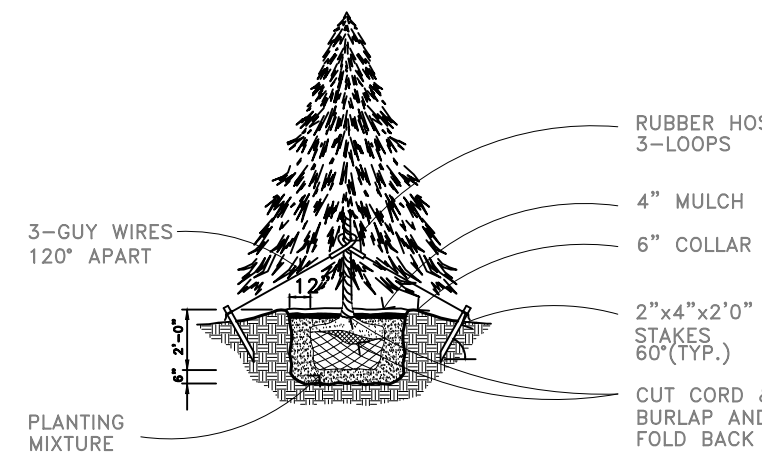
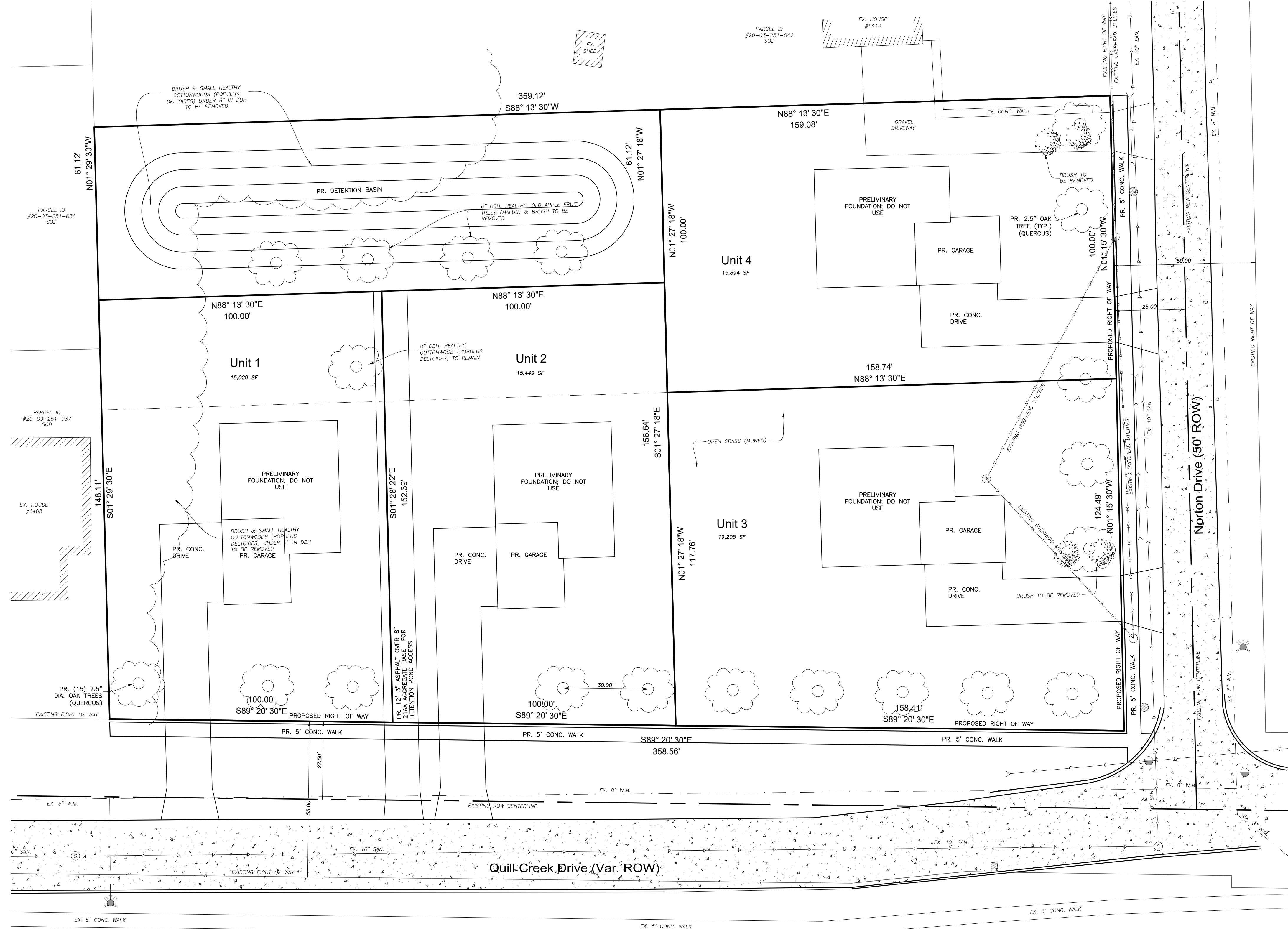
Wetland and Landscaping Note:

- NO REGULATED WETLANDS ON SITE.
- GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
- LESS THAN 5 ACRES IN SIZE.
- TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK; LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST.



Sheet Index:

- 1) BOUNDARY SURVEY
- 2) TOPOGRAPHIC SURVEY AND EXISTING CONDITIONS
- 3) PRELIMINARY SITE PLAN
- 4) PRELIMINARY TREE PRESERVATION PLAN/TREE INVENTORY
- 5) PRELIMINARY LANDSCAPE PLAN
- 6) PRELIMINARY GRADING PLAN
- 7) PRELIMINARY UTILITY PLAN
- 8) PRELIMINARY FLOOR PLANS
- 9) PRELIMINARY ELEVATIONS



8' arborvitae planting detail

no scale

CLIENT:	AARON O'CONNOR
PROJECT LOCATION:	CITY OF TROY
DATE:	06-10-2020
SCALE:	1" = 20'

6407 NORTON DR.
PRELIMINARY LANDSCAPE PLAN

Mauro Engineering
Development & Building Solutions • Civil Engineers • Designers • Planners
48657 Hoyes Road, Shelby Township, MI 48315
PH: (586) 247-2800 FAX: (586) 247-2811
VISIT US AT: WWW.MAUROENG.COM



PRELIMINARY	CONSTRUCTION	AS-BUILT
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drawn By:	G.M.	
Checked By:	S.M.	
Approved By:	S.M.	

Revisions:	Date:	By:



SIMONE B. MAURO, P.E. - No. 30592
GIOVANNI B. MAURO, P.E. - No. 58276

Job No.	16-032
Sheet No.	5 OF 9

Mauro Engineering
Development & Building Solutions • Civil Engineers • Designers • Planners
Mauro Engineering
48657 Hoyes Road, Shelby Twp., MI 48315
PH: (586) 247-2800 FAX: (586) 247-2811
VISIT US AT: WWW.MAUROENG.COM

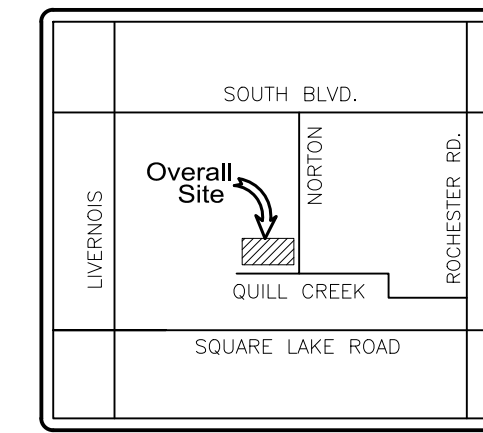
- Mauro Engineering**
- 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to construct.
 - 2.) This plan shall not be used to set foundations.
 - 3.) Setbacks shown on this plot plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 - 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 - 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 - 6.) No time work given at the time of survey.

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

Benchmark

- 1) SAN. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM=(717.77)-NAV088
- 2) P.M.T. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RM=(714.24)-NAV088



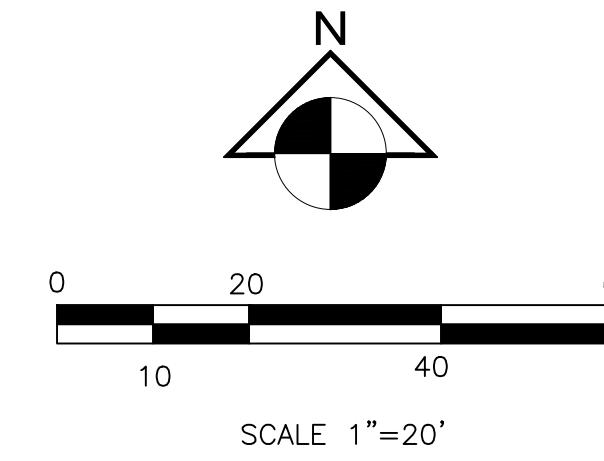
Location map
NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
(586) 524-2855

Sheet Index:

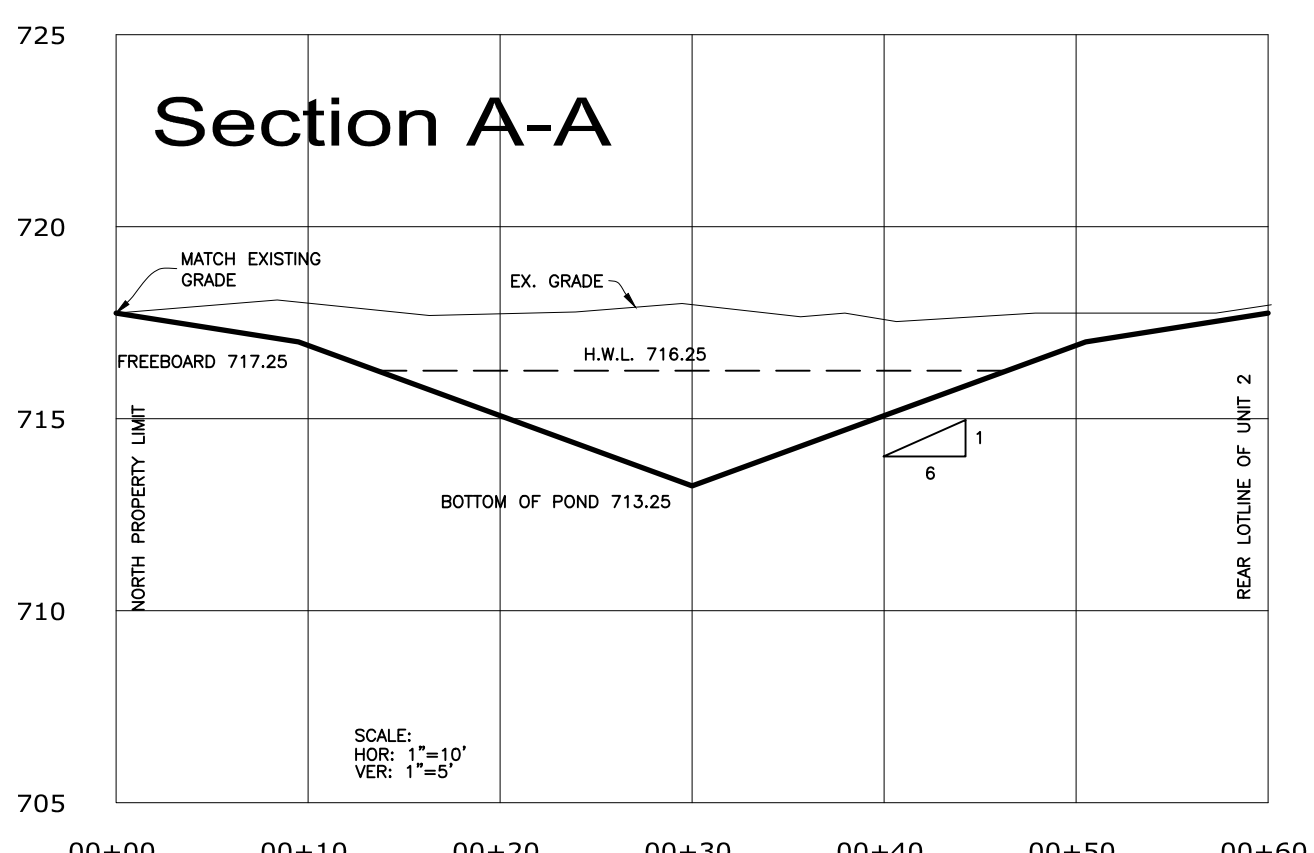
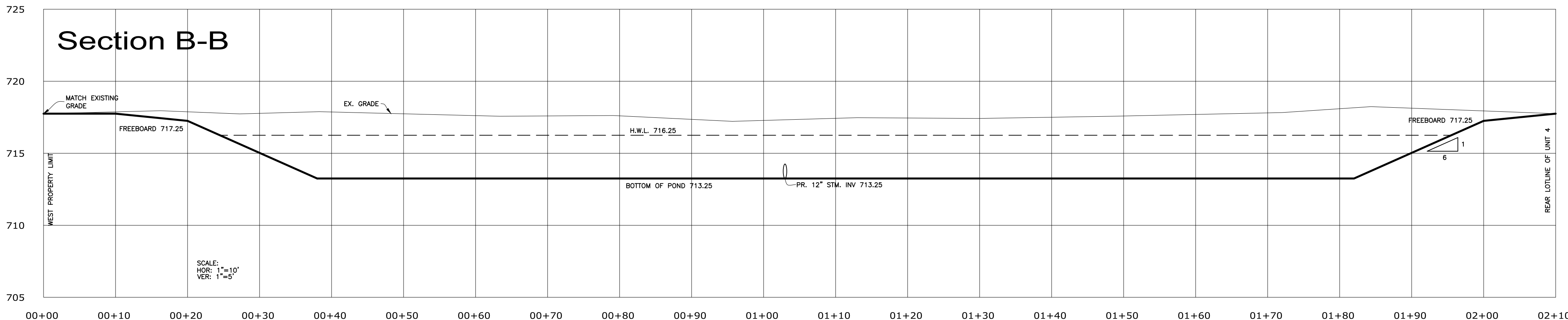
- 1) BOUNDARY SURVEY
- 2) TOPOGRAPHIC SURVEY AND EXISTING CONDITIONS
- 3) PRELIMINARY SITE PLAN
- 4) PRELIMINARY TREE PRESERVATION PLAN/TREE INVENTORY
- 5) PRELIMINARY LANDSCAPE PLAN
- 6) PRELIMINARY GRADING PLAN
- 7) PRELIMINARY UTILITY PLAN
- 8) PRELIMINARY FLOOR PLANS
- 9) PRELIMINARY ELEVATIONS



Legal Description:

PARCEL: 20-03-251-044
 LOT(S) 51, EXCLUDING NORTH 245.49 FEET OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

PARCEL: 20-03-251-043
 THE SOUTH 100 FEET OF THE NORTH 245.49 FEET OF LOT(S) 51 OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS



Detention Calcs:

ACREAGE = 1.786 ACRES
 C = 0.3
 $Q_p = 0.2 \text{ CFS/ACRE} = 0.357 \text{ CFS}$
 $Q_s = Q_p / (\text{ACREAGE} \times C) = 0.667 \text{ CFS}$
 USE ORIFICE:
 $T = -25 + (6562.5 / Q_p) \times 0.5 = 74.22 \text{ MINUTES}$
 $V_h = (10500 \text{ FT}^3) / (T \times 2.5) - (40 \text{ FT} \times 4) = 5875.18 \text{ CF/ACRE}$
 $V_t = V_h \times \text{ACREAGE} \times C = 3,148 \text{ C.F. REQUIRED}$

Site Info

CURRENT ZONE: R-1B
 SETBACKS:
 FRONT = 40'
 REAR = 45'
 SIDE = 10' MIN. 25' TOTAL
 LOT SQUARE FOOTAGE: 15,000 SF MIN.
 LOT WIDTH: 100' MIN.
 BUILDING HEIGHT: 2.5 STORIES, 30' MAX
 LOT COVERAGE: 30% MAX.

Orifice Size Calcs:

$G = 32.2 \text{ FT/SEC}^2$
 $H = 2 \text{ FT}$
 $Q_p = 0.357 \text{ CFS}$
 $A = Q_p / (0.62(2 \text{ FT}) \times 0.5) = 0.0414 \text{ FT}^2$
 USE 2.75" RESTRICTION

Storage Area 1 (Elev.)	Square Feet	Cubic Feet	Total Storage (Cu. Ft.)
716.25	4712	3609.074727	5184.3 PROVIDED
715.25	2609	1574.316932	
714.25	732		

Wetland and Landscaping Note:

NO REGULATED WETLANDS ON SITE
 GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
 LESS THAN 5 ACRES IN SIZE
 TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK: LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST

General Notes:

ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION.
 ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLAT PLAN.
 OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES.
 UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES. NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.
 THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

Description Legend:

- TC - TOP OF CURB
- TK - TOP OF WALK
- TD - TOP OF DRIVE
- ME - MATCH EXISTING
- FE - FINAL (FINISHED) GRADE
- SW - SWALE
- CB - CATCH BASIN
- GF - GARAGE FINISH FLOOR
- FF - FIRST FINISH FLOOR
- BFF - BSMT. FINISH FLOOR
- SM - STORM MANHOLE
- SM-MH - SANITARY MANHOLE
- BLDC - BUILDING
- T/WALL - TOP OF WALL
- B/WALL - BOTTOM OF WALL
- GR - GRADE
- TREE - EXISTING TREE
- BSMT - BASEMENT
- UNEV - UNEV. GRADE
- EDP - EDGE OF PAVEMENT
- EDG - EDGE OF GRAVEL
- P - PORCH
- W/B - WATER BOX
- F - IRON FOUND
- MF - MONUMENT FOUND

UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

CLIENT: AARON O'CONNOR
 PROJECT LOCATION: CITY OF TROY
 DATE: 12-10-2020
 SCALE: 1" = 20'

6407 NORTON DR.
 PRELIMINARY GRADING PLAN

Mauro Engineering
 Development & Building Solutions • Civil Engineers Designers • Planners
 48657 Hoyes Road, Shelby Township, MI 48315
 PH: (586) 247-2800 • FAX: (586) 247-2811
 VISIT US AT: WWW.MAUROENG.COM

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171
 100% FREE FOR THE LOCATION OF UNDERGROUND FACILITIES

Drawn By: G.M.
 Checked By: S.M.
 Approved By: S.M.

Revisions:	Date:	By:

STATE OF MICHIGAN
 GIOVANNI MAURO
 PROFESSIONAL ENGINEER
 No. 58276
 58276

SIMONE B. MAURO, P.E. - No. 30592
 GIOVANNI B. MAURO, P.E. - No. 58276

Job No. 16-032
 Sheet No. 6 OF 9

Mauro Engineering
 Development & Building Solutions • Civil Engineers Designers • Planners
 Mauro Engineering
 48657 Hoyes Road, Shelby Twp., MI 48315
 Ph: (586) 247-2800 • Fax: (586) 247-2811
 Visit us at: www.mauroeng.com

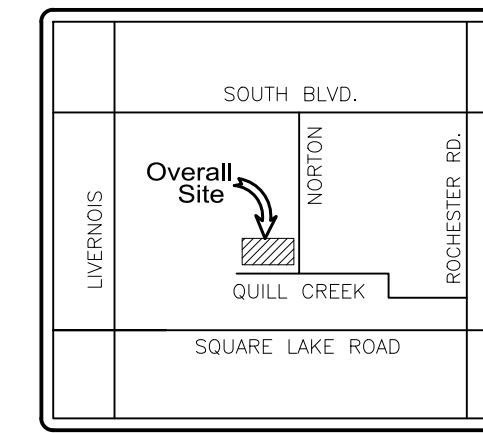
Mauro Engineering
 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to const.
 2.) This plan shall not be used to set foundations.
 3.) Setbacks shown on this plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 6.) No title work given at the time of survey.

Preliminary Site Condominium Plan

SECTION 3 T.2 N., R. 11 E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

Benchmark

- 1) SAN. M.H. LOCATED IN CENTER OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RIM=(717.77)-NAV088
- 2) P.M.T. C.B. LOCATED AT ALONG SOUTHERN CURB OF QUILL CREEK DR. NEAR SOUTHWEST CORNER OF LOT 51 AS SHOWN ON PLAN RIM=(714.24)-NAV088



Location map

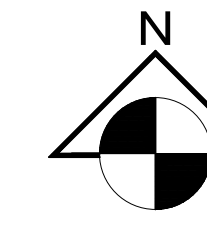
NOT TO SCALE

Onsite Contact:

AARON O'CONNOR
(586) 524-2855

Sheet Index:

- 1) BOUNDARY SURVEY
- 2) TOPOGRAPHIC SURVEY AND EXISTING CONDITIONS
- 3) PRELIMINARY SITE PLAN
- 4) PRELIMINARY TREE PRESERVATION PLAN/TREE INVENTORY
- 5) PRELIMINARY LANDSCAPE PLAN
- 6) PRELIMINARY GRADING PLAN
- 7) PRELIMINARY UTILITY PLAN
- 8) PRELIMINARY FLOOR PLANS
- 9) PRELIMINARY ELEVATIONS

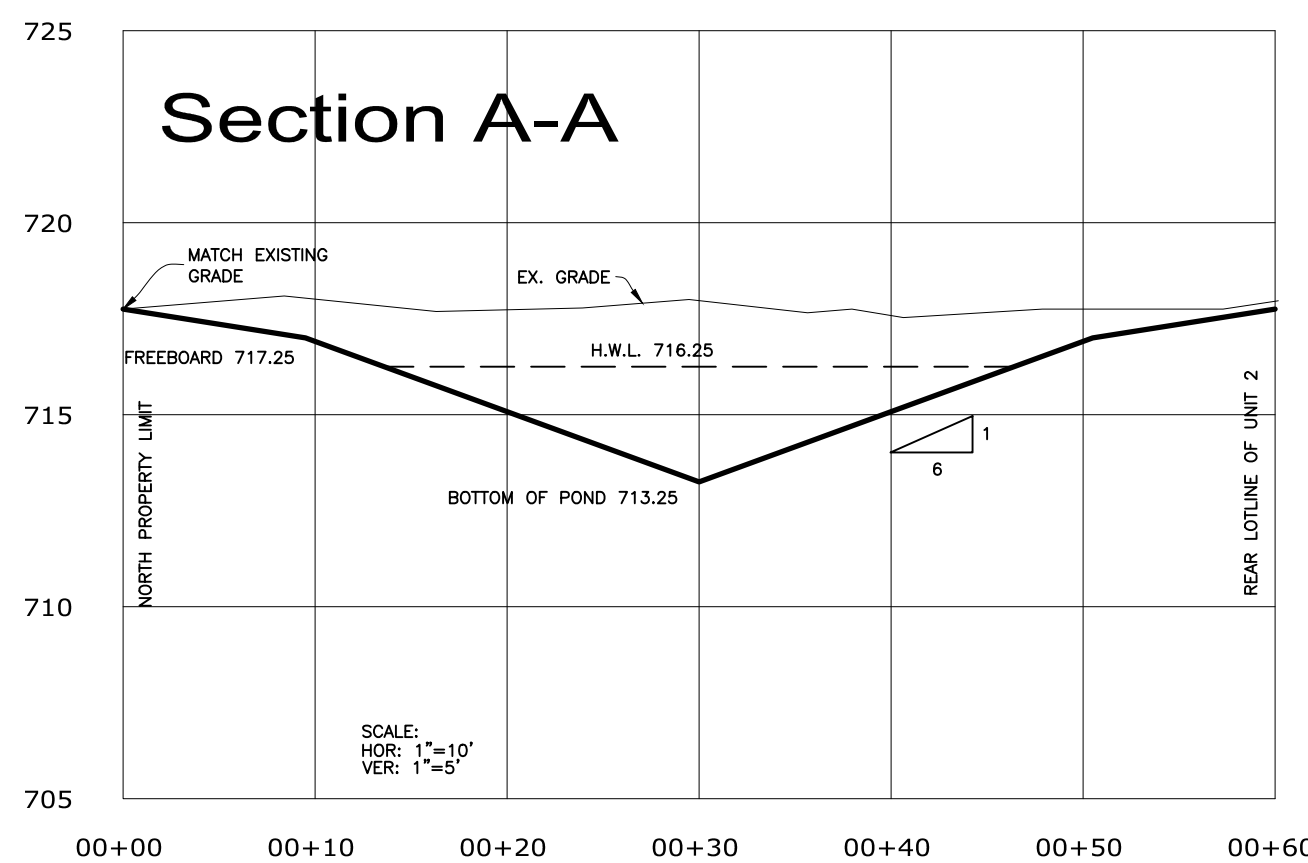
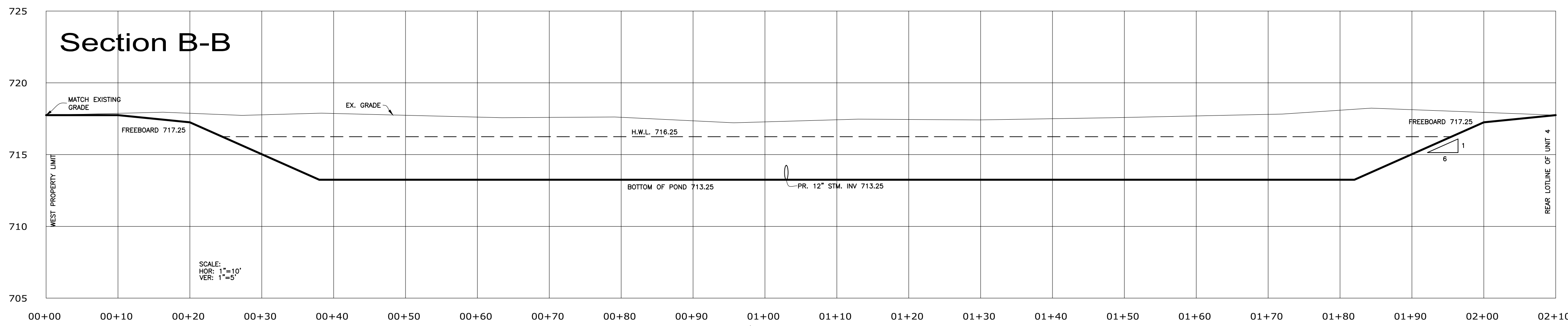


Legal Description:

PARCEL: 20-03-251-044
LOT(S) 51, EXCLUDING NORTH 245.49 FEET OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

PARCEL: 20-03-251-043
THE SOUTH 100 FEET OF THE NORTH 245.49 FEET OF LOT(S) 51 OF BASSETT & SMITH FLOWING SPRING ACRES ACCORDING TO THE PLAT RECORDED IN LIBER 37 OF PLATS, PAGE 9 OF OAKLAND COUNTY RECORDS

PARCEL ID #20-03-251-042 S00



Detention Calcs:

ACREAGE = 1.786 ACRES
C = 0.3
 $Q_p = 0.2 \text{ CFS/ACRE} = 0.357 \text{ CFS}$
 $Q_p = Q_p(\text{ACREAGE}^C) = 0.667 \text{ CFS}$
USE ORIFICE:
 $T = -25 + (8562.5/Q_p^{0.5}) \times 0.5 = 74.22 \text{ MINUTES}$
 $V_p = (10500 \times T)/(T+25) - (40 \times Q_p \times T) = 5875.18 \text{ CF/ACRE}$
 $V_t = V_p \times \text{ACREAGE}^C = 3,148 \text{ C.F. REQUIRED}$

Orifice Size Calcs:

$G = 32.2 \text{ FT/SEC}^2$
H = 3 FT
 $Q_p = 0.357 \text{ CFS}$
 $A = G/(0.62(20H)^{0.5}) = 0.0414 \text{ FT}^2$
USE 2.75" RESTRICTION

Storage Area 1 (Elev.)	Square Feet	Cubic Feet	Total Storage (Cu. Ft.)
716.25	4712	3609.074727	5184.3 PROVIDED
715.25	2609	1574.316932	
714.25	732		

Site Info

CURRENT ZONE: R-1B
SETBACKS:
FRONT - 40'
REAR - 45'
SIDE - 10' MIN. 25' TOTAL
LOT SQUARE FOOTAGE: 15,000 SF MIN.
LOT WIDTH: 100' MIN.
BUILDING HEIGHT: 2.5 STORIES, 30' MAX
LOT COVERAGE: 30% MAX.

Wetland and Landscaping Note:

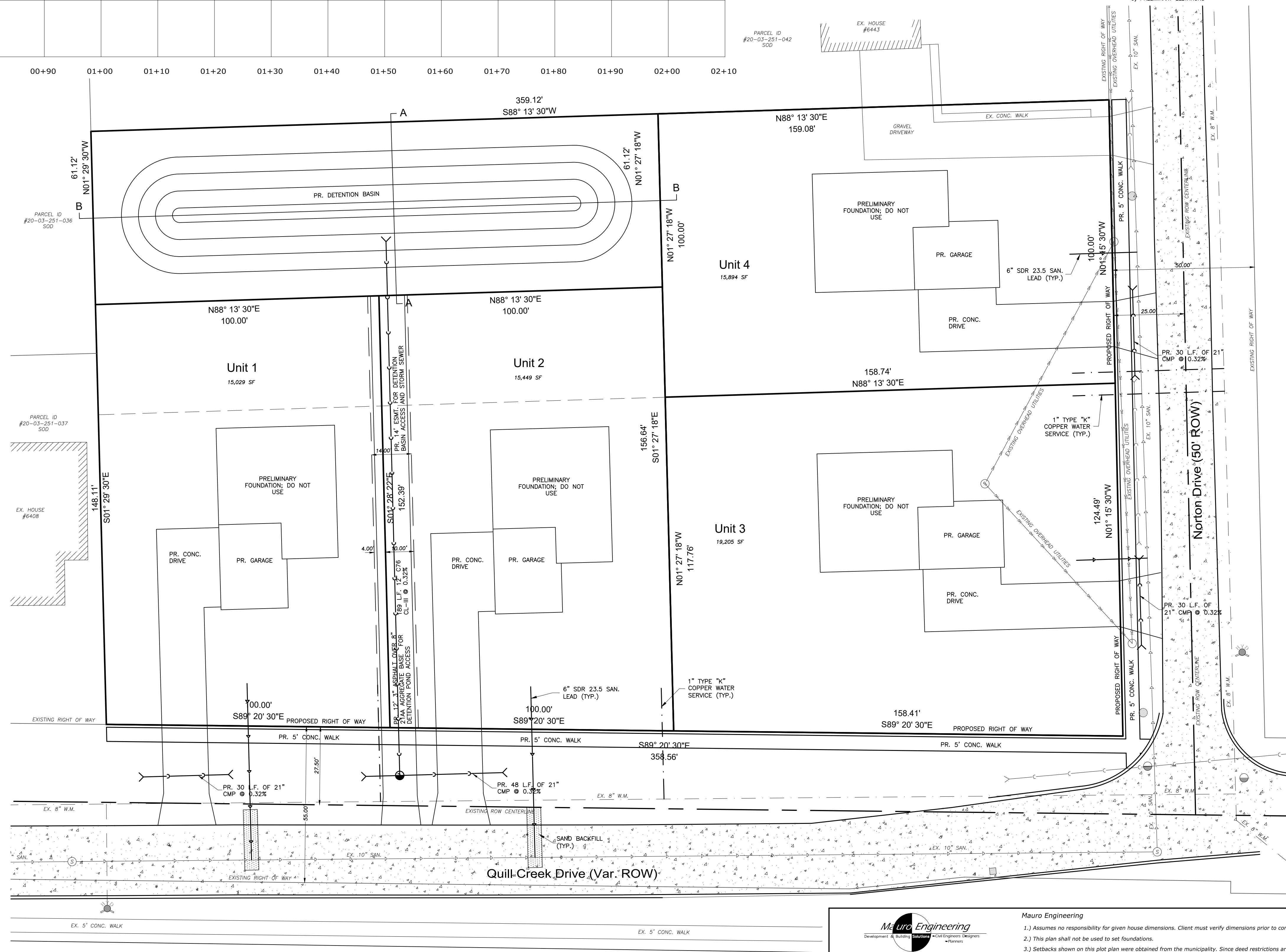
-NO REGULATED WETLANDS ON SITE
-GREATER THAN 500 FEET FROM AN INLAND LAKE, POND, OR STREAM.
-LESS THAN 5 ACRES IN SIZE
TREE SURVEY AND WETLAND REVIEW DONE BY DEREK STRATELAK; LICENSED LANDSCAPE ARCHITECT AND WETLAND SPECIALIST

General Notes:

ALL INTERIOR GRADES (ARCHITECTURAL) SHALL BE VERIFIED BY THE BUILDER, ARCHITECT AND/OR CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD FOR CONSTRUCTION.
ALL PROPOSED GRADES ON THIS PLAN WERE OBTAINED FROM THE SUBDIVISION MASTER GRADE PLAN. GRADE CHANGES ARE SUBJECT TO FIELD VERIFICATIONS AND TOPOGRAPHIES CONDUCTED AT THE TIME OF THE PLOT PLAN.
OWNER, BUILDER AND/OR ANY CONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES AND/OR ORDINANCES. APPROVAL OF THIS PLAN DOES NOT RELIEVE ANY PARTIES FROM THOSE COMPLIANCES.
UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES. AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.
THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

Description Legend:

- TC - TOP OF CURB
- TH - TOP OF WALK
- TD - TOP OF DRIVE
- ME - MATCH EXISTING
- FG - FINAL (FINISHED) GRADE
- SW - SWALE
- HP - HIGH POINT
- CB - CATCH BASIN
- GF - GARAGE FINISH FLOOR
- FF - FIRST FINISH FLOOR
- BFF - BSMT. FINISH FLOOR
- STW-MH - STORM MANHOLE
- SAN-MH - SANITARY MANHOLE
- BLDG - BUILDING
- T/WALL - TOP OF WALL
- B/WALL - BOTTOM OF WALL
- GRADE - TOPOGRAPHY SPOT GRADE
- TREE - EXISTING TREE
- BSMT - BASEMENT
- UNEX - UNEXCAVATED
- EDF - EDGE OF PAVEMENT
- EDG - EDGE OF GRAVEL
- P - PORCH
- W/B - WATER BOX
- I - IRON FOUND
- MF - MONUMENT FOUND



UNAUTHORIZED USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MAURO ENGINEERING IS STRICTLY PROHIBITED, AND IS A VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION

CLIENT: AARON O'CONNOR
PROJECT LOCATION: CITY OF TROY
DATE: 12-10-2020
SCALE: 1" = 20'

6407 NORTON DR.
PRELIMINARY UTILITY PLAN

Mauro Engineering
Development & Building Solutions • Civil Engineers • Designers • Planners
48657 HOYES ROAD, SHELBY TOWNSHIP, MI 48315
PH: (586) 247-2800 FAX: (586) 247-2811
WWW.MAUROENG.COM

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 800-486-7171
TOOL FREE FOR THE LOCATION OF UNDERGROUND FACILITIES

Drawn By: G.M.
Checked By: S.M.
Approved By: S.M.

Revisions:	Date:	By:



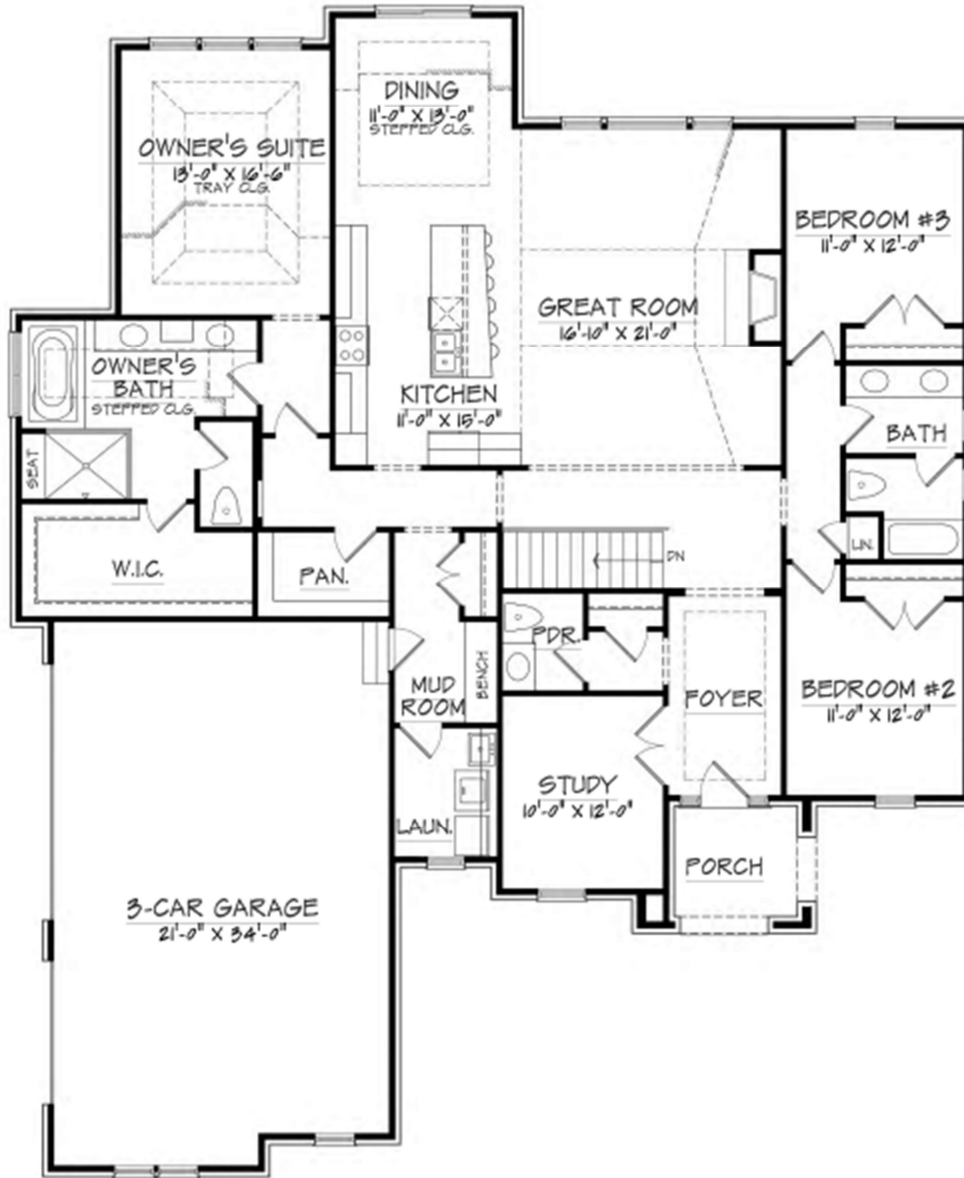
SIMONE B. MAURO, P.E. - No. 30592
GIOVANNI B. MAURO, P.E. - No. 58276
Job No. 16-032
Sheet No. 7 OF 9

Mauro Engineering
Development & Building Solutions • Civil Engineers • Designers • Planners
48657 HOYES ROAD SHELBY TWP., MI 48315
PH: (586) 247-2800 FAX: (586) 247-2811
WWW.MAUROENG.COM

- Mauro Engineering**
- 1.) Assumes no responsibility for given house dimensions. Client must verify dimensions prior to construct.
 - 2.) This plan shall not be used to set foundations.
 - 3.) Setbacks shown on this plot plan were obtained from the municipality. Since deed restrictions are not supplied by the municipality, the client must verify any special subdivision restrictions.
 - 4.) Lead locations shown on plan are approx. from approved plans. Contractor to field verify all lead locations.
 - 5.) Assumes no responsibility for house placement designed within 0.5' of approved setbacks.
 - 6.) No title work given at the time of survey

City of TROY

Ranch Home Model 2,484 Sqft



FIRST FLOOR PLAN

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

FIRST FLOOR: 2,484 SQ. FT.

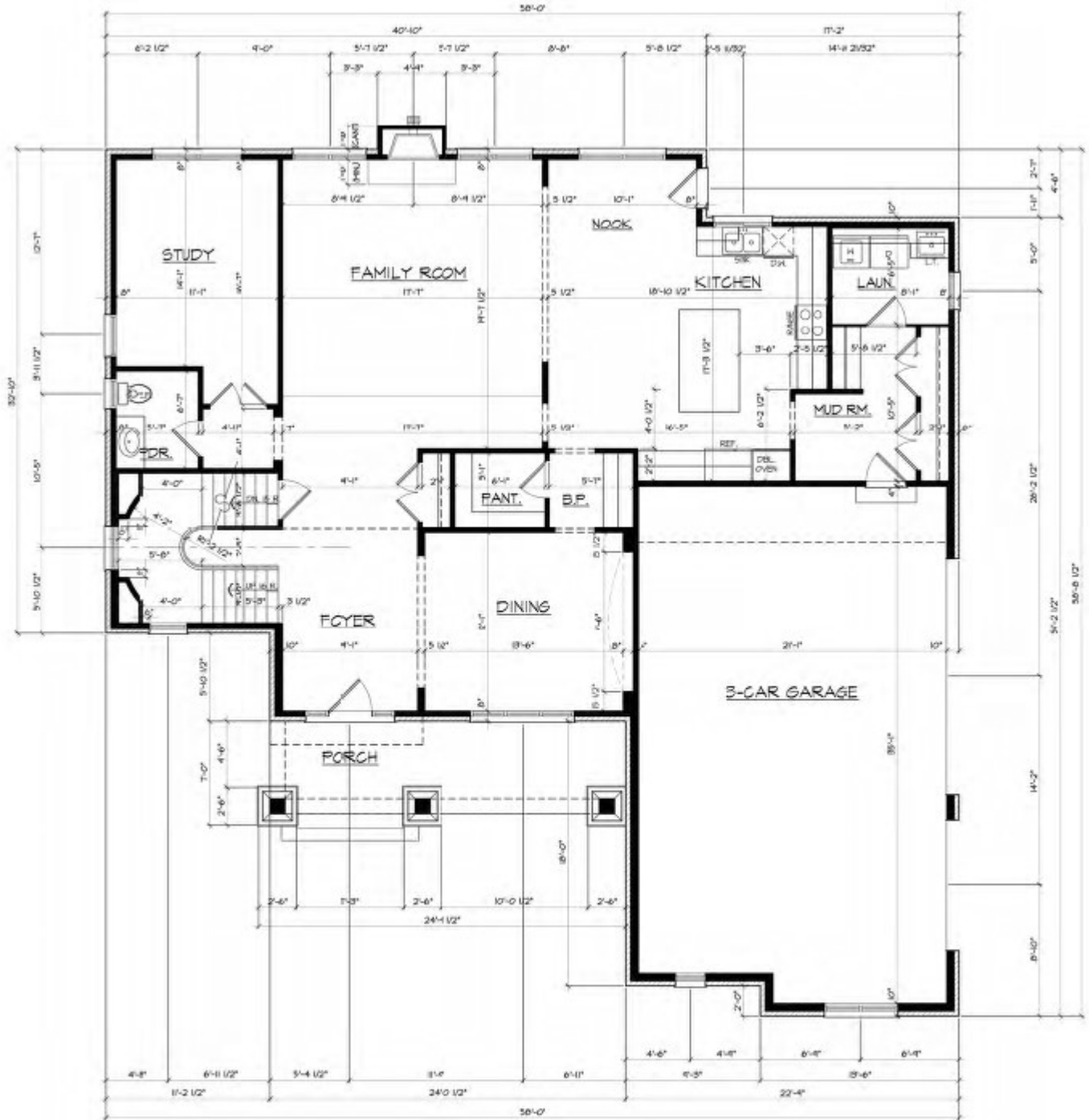


City of TROY

Ranch Home Model 2,484 Sqft



City of TROY
Colonial Home Model 3,333 Sqft

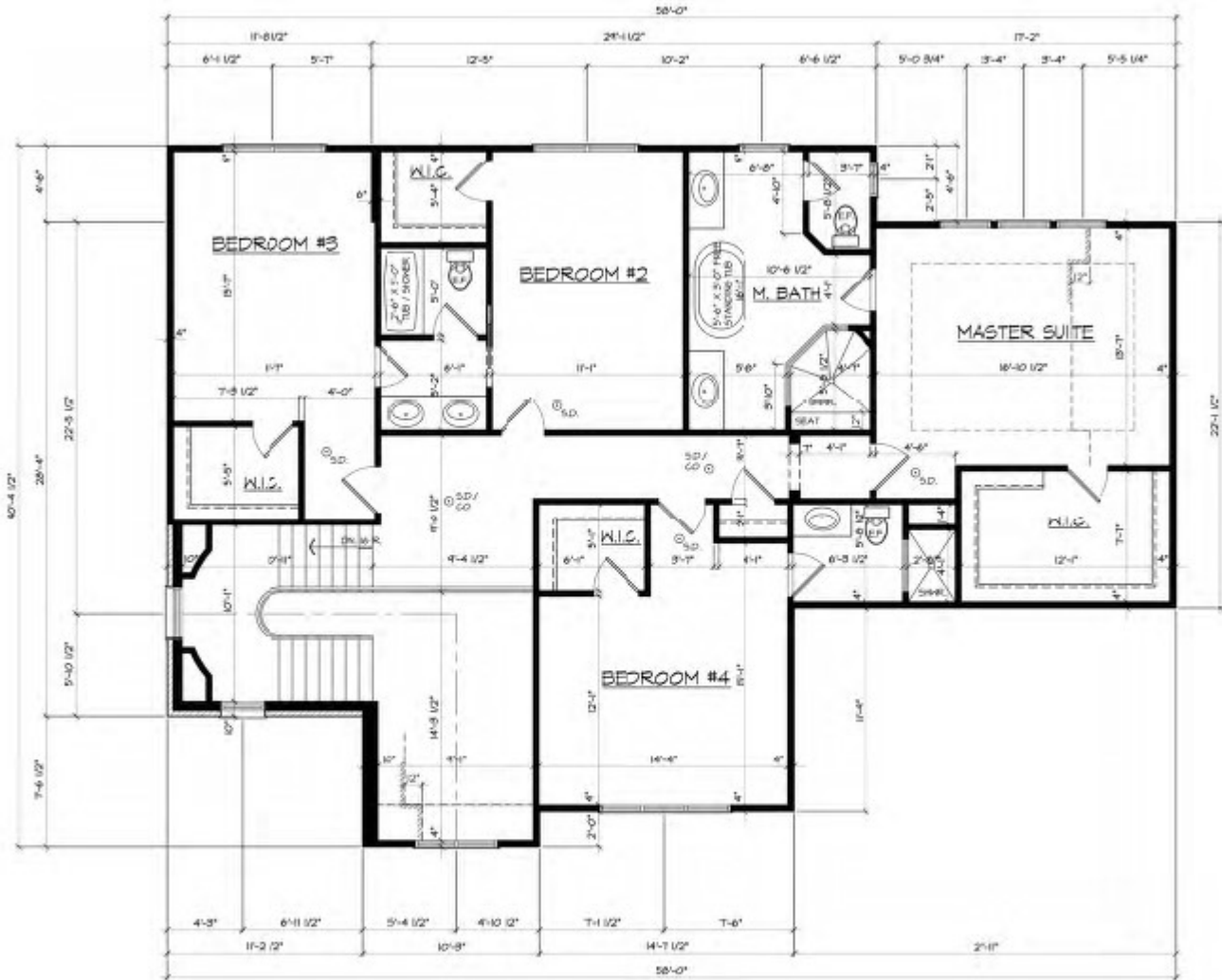


FIRST FLOOR PLAN

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

FIRST FLOOR: 1,754 SQ. FT.
 SECOND FLOOR: 1,579 SQ. FT.
 TOTAL: 3,333 SQ. FT.





SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"

City of TROY

Colonial Home Model 3,333 Sqft

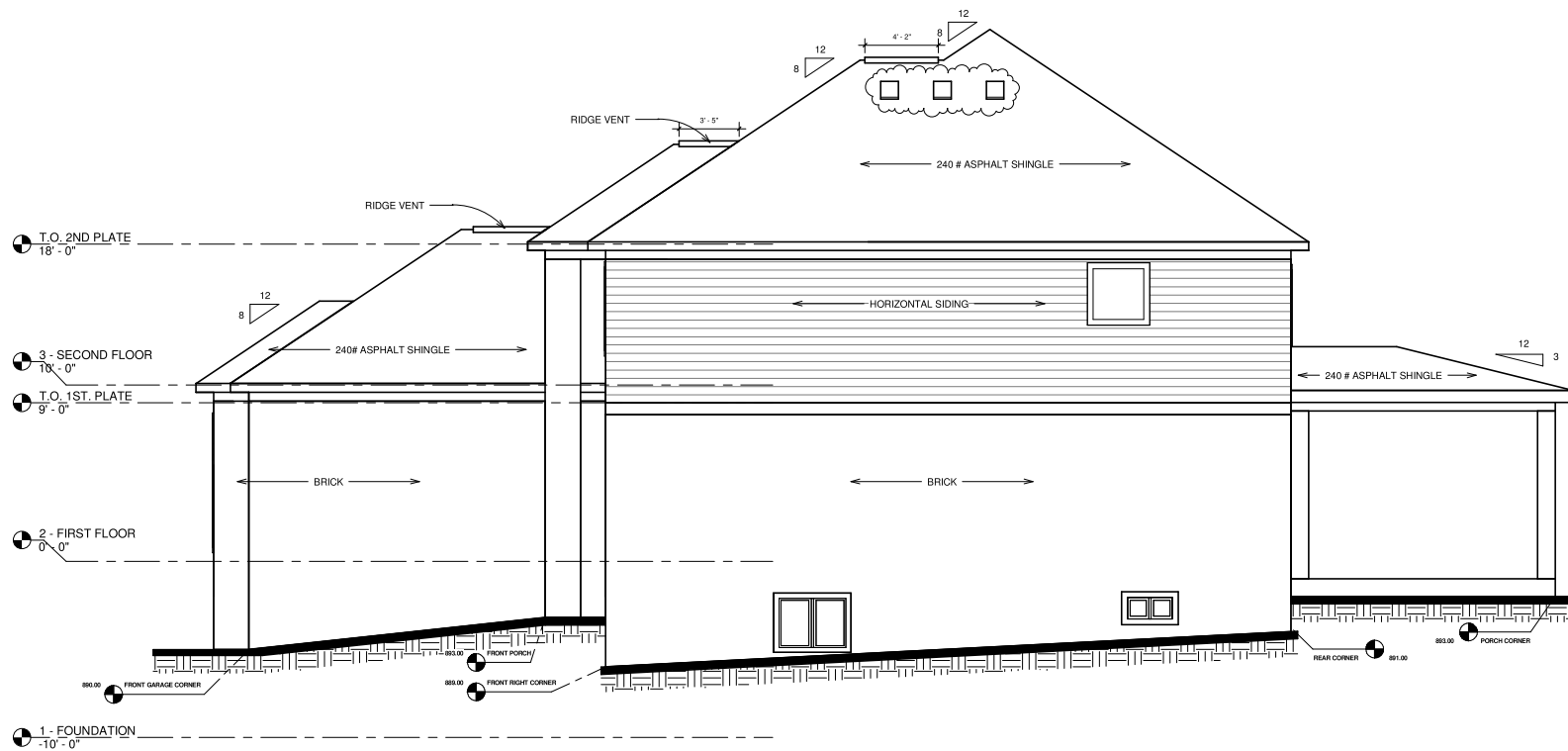


Elevation Concept

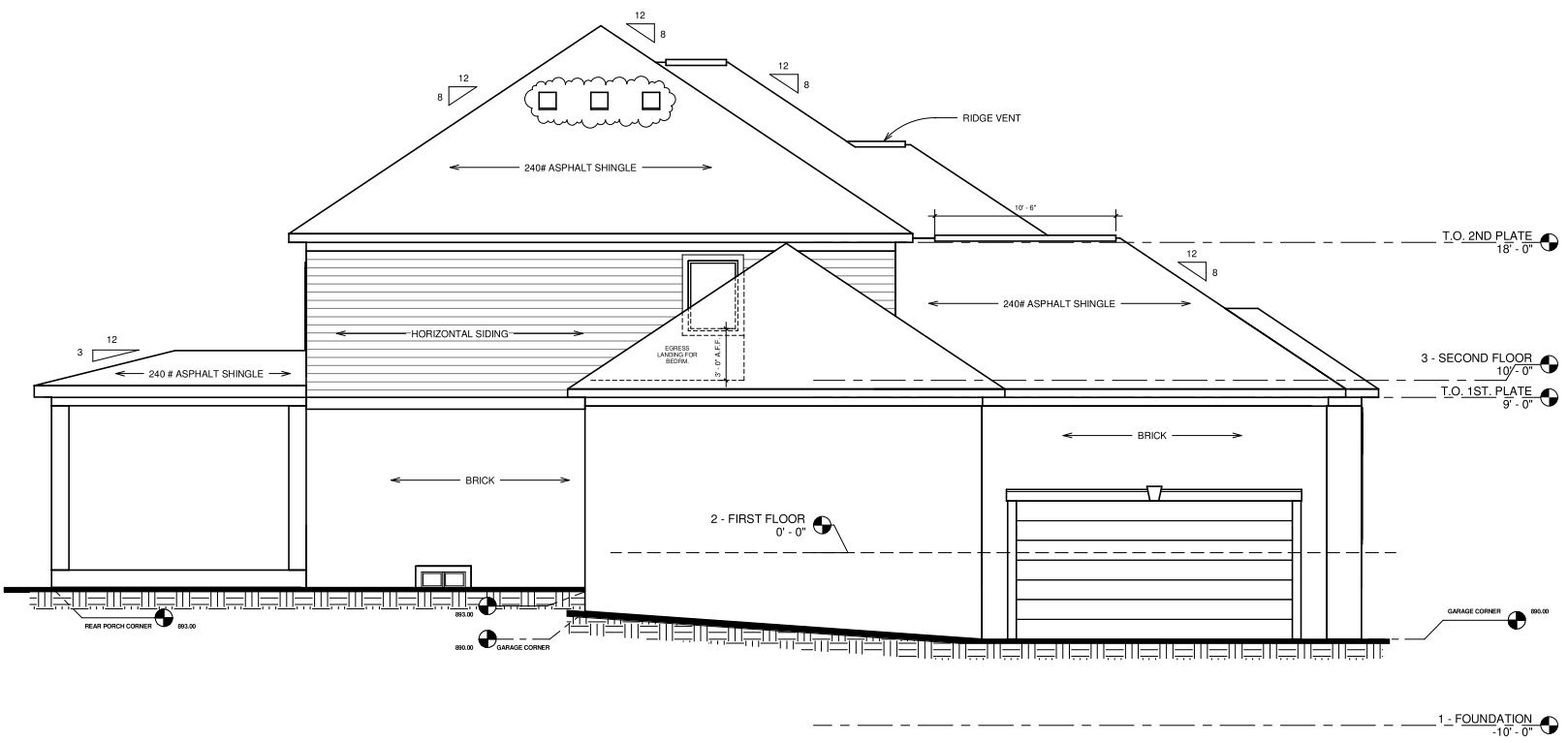
SCALE 1/4" = 1'-0"



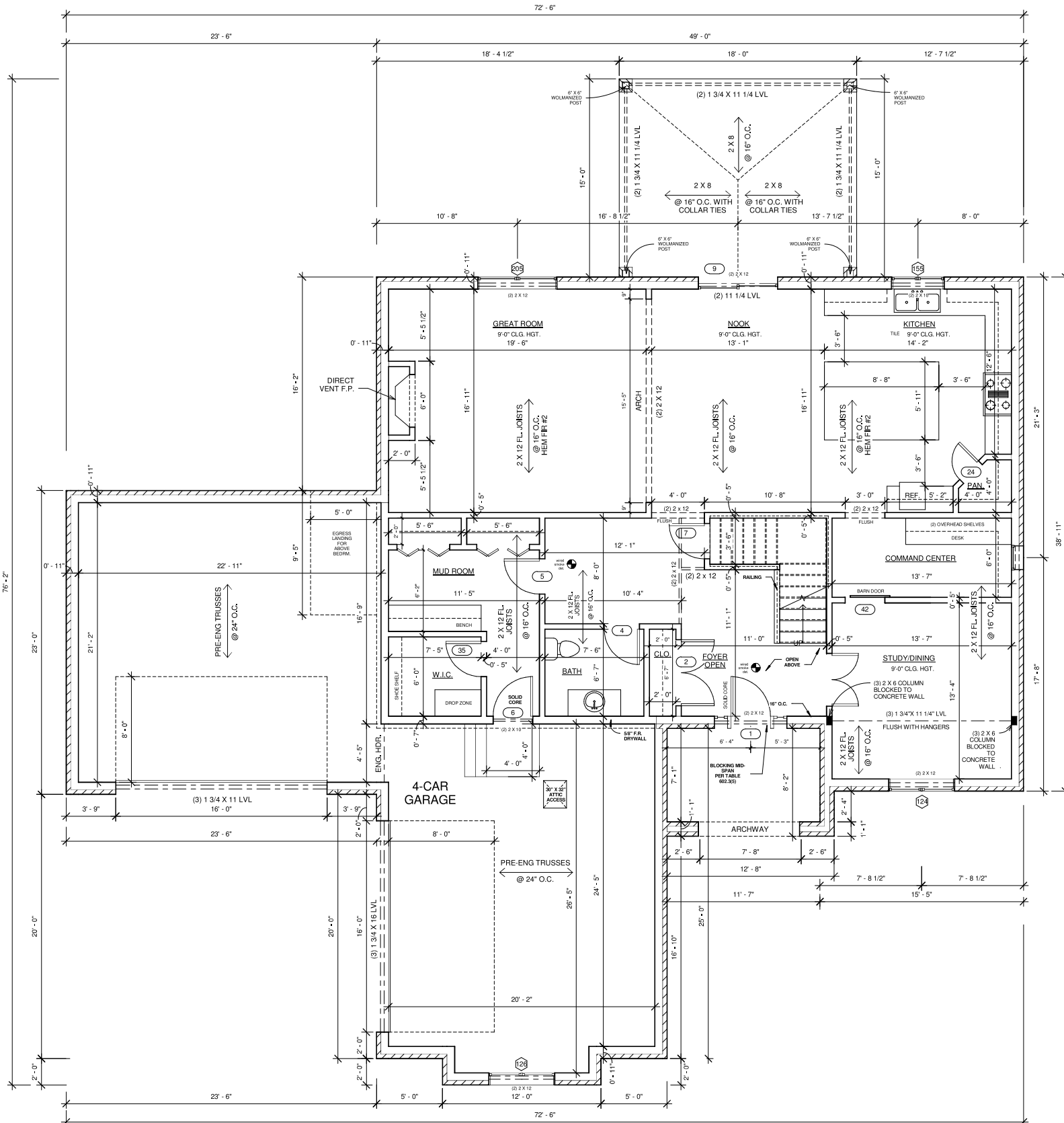
Grand Cypress v.1



① RIGHT
1/4" = 1'-0"



② LEFT
1/4" = 1'-0"



② 2 - FIRST FLOOR
 1/4" = 1'-0"

FIRST FLOOR 1,741 SQ. FT.
 SECOND FLOOR 1,581 SQ. FT.
 TOTAL SQ. FT. 3,322 SQ. FT.