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CITY of NOVI CITY COUNCIL

Agenda Item 3
September 14, 2015

SUBJECT: Approval of the request of Biltmore Land, LLC for development of Covington Estates, JSP 15-02 as a Residential Unit Development (RUD) and approval of the RUD Plan. The subject property is located on 48.83 acres in Section 31, north of Eight Mile Road and west of Garfield Road in the RA, Residential Acreage District. The applicant is proposing a 38 unit single-family development. The approval would be subject to entry into an RUD Agreement between the City and the applicant.

SUBMITTING DEPARTMENT: Community Development Department - Planning *Barb*

CITY MANAGER APPROVAL: 

BACKGROUND INFORMATION:

The applicant is proposing a Residential Unit Development (RUD) on a 48.83 acre parcel on the north side of Eight Mile Road and west of Garfield Road in order to construct 38 single-family residential units. Covington Estates is proposed to be located immediately to the west of Ballantyne, another RUD development of similar size and scale that has been approved at the northwest corner of Eight Mile and Garfield Roads. Private roads are proposed in Covington Estates, with a gated entry at Eight Mile Road, and an emergency access to extend easterly to meet the emergency access drive proposed in the adjacent Ballantyne development.

The applicant has proposed features to enhance the site, including preserved and enhanced open areas with trails to provide passive and active recreation for residents. The ordinance states that an RUD shall include detached one-family dwelling units, which is what the applicant proposes. The overall density of the site (based on gross site acreage per Section 3.29.3 of the Zoning Ordinance) generally must not exceed the density permitted in the underlying zoning district. The proposed density is 0.78 units per acre, which is consistent with the Residential Acreage (RA) zoning and recommended maximum density of 0.8 units per acre.

Intent of the Residential Unit Development (RUD) Option

As an optional form of development, the RUD allows development flexibility of various types of residential dwelling units (one-family, attached one-family cluster). It is also the intent of the RUD option to permit permanent preservation of valuable open land, fragile natural resources and rural community character that would be lost under conventional development. This is accomplished by permitting flexible lot sizes in accordance with open land preservation credits when the residential developments are located in a substantial open land setting, and through the consideration of relaxation of area, bulk, yard, dimensional and other zoning ordinance standards in order to accomplish specific planning objectives.

This flexibility is intended to reduce the visual intensity of development; provide privacy; protect natural resources from intrusion, pollution, or impairment; protect locally important

animal and plant habitats; preserve lands of unique scenic, historic, or geologic value; provide private neighborhood recreation; and protect the public health, safety and welfare.

Such flexibility will also provide for:

- The use of land in accordance with its character and adaptability;
- The construction and maintenance of streets, utilities and public services in a more economical and efficient manner;
- The compatible design and use of neighboring properties; and
- The reduction of development sprawl, so as to preserve open space as undeveloped land.

Lot Sizes and Building Setbacks

The applicant has requested a modification of the minimum lot size and width requirements as follows (there are no maximum lot size requirements in the RA District):

- A reduction in the RA minimum lot size from 43,560 square feet to a minimum of 21,780 square feet.
- A reduction in the RA minimum lot width from 150 feet to 120 feet.

The City Council may modify lot size and width requirements where such modification will result in the preservation of open space for those purposes set forth in Section 3.29.8.B of the Zoning Ordinance and where the RUD will provide a genuine variety of lot sizes. The applicant has proposed reduced building setbacks consistent with the proposed lot size.

The plans indicate that a total of 39% of the site area will be maintained as open space. The applicant has provided a summary of lot sizes throughout the entire development. Lots range from approximately a minimum size of 21,780 square feet to a maximum size of 46,212 square feet, allowing for some variation in lot size.

Open Space

The submitted RUD plan shows 19.10 acres of open space being preserved, which amounts to 39 percent of the site. Of that area, 1.24 acres (3 percent of the site) is preserved woodland area, 5.15 acres (11 percent of the site) is taken up with the stormwater detention facility. The remaining 12.89 acres (26 percent of the site) of remaining open space will be reserved for active open space.

A proposed 8,940-foot (1.69 miles) walking trail, with both natural features and other amenities, is intended within the open space to provide active recreation for the residents. The trail is to remain unpaved and be constructed of compacted fine grade stone. Other items that will encourage the active recreation on the trail include benches, bird houses, and quarter-mile marker signage. In addition, the developer proposed approximately 2.90 acre open park area, which extends to Garfield Road along the north property line. This open park area is intended for both active and passive recreation and specific uses can be determined by the future homeowners association. A paved pathway connection is provided through this park to Garfield Road, which will encourage further active pedestrian and bicycle recreation and a larger pathway loop. The proposed pathways will further connect with the existing and planned pathways in Garfield Road, particularly as Ballantyne is developed a public pathway is built along the west side of Garfield Road.

Development Impacts

The RUD ordinance allows flexibility in ordinance standards for minimum lot sizes and widths when the creation and preservation of open space is offered. The City Council is asked to review the plan and make findings acknowledging that any detrimental impact

from an RUD resulting in an increase in dwelling units over that which would occur with conventional development is outweighed by benefits occurring from the preservation and creation of open space.

For the subject property, Planning staff notes that if the property were developed with a conventional plan under the current RA zoning (and depending on the proposed street layout) approximately the same number of units could be developed, but less open space would be preserved. The Planning Division calculates that about 32 homes could be developed with conventional zoning (48.83 net acres, less 0 acres of wetlands, and less roughly 9 acres for roads, landscaping, detention = 40 acres). With each lot required to be a minimum of 1 acre in size, and with no requirement for additional open space preservation required under conventional development, six fewer homes could be developed using conventional development, but it is highly likely that, in a conventional development, the additional 19 acres +/- that is proposed to be preserved through the submitted RUD plan, would be used for home sites to the extent possible, and would not be incorporated as open space. It is Planning staff's opinion that this preservation of additional common open space is a valuable benefit in the use of the Residential Unit Development ordinance in this instance, and the flexibility that is being offered clearly outweighs any impact presented by the RUD plan.

The former farmland proposed for development here is essentially an open field. The site is naturally undulating, with grades ranging from elevation 958 to elevation 976. The site is mostly clear, with a small non-regulated wetland (0.311 acres), and small woodland area that is contiguous to a woodland on the parcel to the west near the northwest corner of the site. The wetland and woodland area is to be preserved. The applicant indicated that the permanent preservation of the woodland and wetland (natural features), as well as the maintenance and preservation of the remaining open space will be addressed in the Master Deed and Bylaws of the development and will be the responsibility of the Homeowner's Association.

The applicant has indicated they have analyzed market and development trends in the vicinity, and has determined that the proposed lot sizes and amenities are desired by future residents. The applicant has indicated that this development is intended to be high-end construction, with a minimum home size of 3,200 square feet, and the expected home sales prices will be between \$800,000 and \$1,100,000. The resultant population is anticipated total 152 people.

RECOMMENDED ACTION: To grant preliminary approval of the Residential Unit Development Plan for the Covington. This preliminary approval is subject to and conditioned on Council's final approval of the RUD Agreement to be provided and approved at a future meeting. This motion is based on the following findings, lot size modifications, building setback reductions and conditions:

Determinations (Zoning Ordinance Section 3.29.8.A):

- a. The site is zoned for and appropriate for the proposed single-family residential use;
- b. Council is satisfied that with the proposed pathway and sidewalk network and added open space, the development will not have detrimental effects on adjacent properties and the community;
- c. Council is satisfied with the applicant's commitment and desire to proceed with construction of 38 new homes as demonstrating a need for the proposed use;
- d. Care has been taken to maintain the naturalness of the site and to blend the use within the site and its surroundings through the preservation of 19 acres (or 39 %) of the proposed development area as open space;

- e. Council is satisfied that the applicant has provided clear, explicit, substantial and ascertainable benefits to the City as a result of the RUD;
- f. Factors evaluated (Zoning Ordinance Section 3.29.8.B):
 - 1. Subject to the lot size modifications and building setbacks reductions, all applicable provisions of the Zoning Ordinance, including those in Section 3.29.8.B and for special land uses, and other ordinances, codes, regulations and laws have been or will be met;
 - 2. Council is satisfied with the adequacy of the areas that have been set aside in the proposed RUD development area for walkways, parks, recreation areas, and other open spaces and areas for use by residents of the development;
 - 3. Council is satisfied that the traffic circulation, sidewalk and crosswalk features and improvements for within the site have been designed to assure the safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets;
 - 4. Based on and subject to the recommendations in the traffic consultant's review letter, Council is satisfied that the proposed use will not cause any detrimental impact in existing thoroughfares in terms of overall volumes, capacity, safety, travel times and thoroughfare level of service;
 - 5. The plan provides adequate means of disposing of sanitary sewage, disposing of stormwater drainage, and supplying the development with water;
 - 6. The RUD will provide for the preservation and creation of approximately 39 % of the site as open space and result in minimal impacts to provided open space and the most significant natural features;
 - 7. The RUD will be compatible with adjacent and neighboring land uses for the reasons already stated;
 - 8. The desirability of conventional residential development on this site in strict conformity with the otherwise applicable minimum lot sizes and widths being modified by this motion is outweighed by benefits occurring from the preservation and creation of the open space that will result from the RUD;
 - 9. Any detrimental impact from the RUD resulting from an increase in total dwelling units over that which would occur with conventional residential development is outweighed by benefits occurring from the preservation and creation of open space that will result from the RUD;
 - 10. Council is satisfied that the proposed reductions in lot sizes are the minimum necessary to preserve and create open space and to ensure compatibility with adjacent and neighboring land uses;
 - 11. The RUD will not have a detrimental impact on the City's ability to deliver and provide public infrastructure and public services at a reasonable cost;
 - 12. Council is satisfied that the applicant has made or will make satisfactory provisions for the financing of the installation of all streets, necessary utilities and other proposed improvements;
 - 13. Council is satisfied that the applicant has made or will make satisfactory provisions for future ownership and maintenance of all common areas within the proposed development; and
 - 14. Proposed deviations from the area, bulk, yard, and other dimensional requirements of the Zoning Ordinance applicable to the property enhance the development, are in the public interest, are consistent with the surrounding area, and are not injurious to the natural features and resources of the property and surrounding area.
- g. Modification of proposed lot sizes to a minimum of 21,780 square feet and modification of proposed lot widths to a minimum of 120 feet is hereby approved,

based on and limited to the lot configuration shown on the concept plan as last revised, as the requested modification will result in the preservation of open space for those purposes noted in Section 3.29.3.B of the Zoning Ordinance and the RUD will provide a genuine variety of lot sizes;

- h. Reduction of permitted building setbacks is approved as it is consistent with the proposed reduction in lot size and width;
- i. City Council variance from Appendix C Section 4.04(A) (1) of Novi City Code for not providing a stub street to the subdivision boundary along subdivision perimeter is granted;
- j. City Council variance from Section 11-194(a)(7) of the Novi City Code for exceeding the maximum distance between Eight Mile Road and the proposed emergency access is granted; and
- k. This approval is subject to all plans and activities related to it being in compliance with all applicable provisions of the Zoning Ordinance, including Articles 3, 4 and 5, and all applicable City Zoning Ordinance approvals, decisions, conditions and permits.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Markham				

	1	2	Y	N
Council Member Mutch				
Council Member Poupard				
Council Member Wrobel				

PLANNING COMMISSION MEETING MINUTES
August 12, 2015



PLANNING COMMISSION MINUTES

CITY OF NOVI

Regular Meeting

AUGUST 12, 2015 7:00 PM

Council Chambers | Novi Civic Center | 45175 W. Ten Mile
(248) 347-0475

CALL TO ORDER

The meeting was called to order at 7:00 PM.

ROLL CALL

Present: Member Anthony, Member Baratta, Member Lynch, Chair Pehrson

Absent: Member Greco (excused), Member Giacometti (excused), Member Zuchlewski (excused)

Also Present: Barbara McBeth, Community Development Deputy Director; Sri Komaragiri, Planner; Rick Meader, Landscape Architect; Jeremy Miller, Engineer; Gary Dovre, City Attorney; Chris Gruba, Planner

PUBLIC HEARING

1. COVINGTON ESTATES JSP15-0002

Public hearing at the request of Biltmore Land, LLC for recommendation to City Council for approval of a Residential Unit Development (RUD) Plan. The subject property is located in Section 31 north of Eight Mile and West of Garfield in the RA, Residential Acreage District. The applicant is proposing a Residential Unit Development (RUD) on a 48.83 acre parcel to construct 38 single-family residential units.

Planner Komaragiri stated that the subject property is located west of Garfield and north of Eight Mile Road in Section 31. The property is zoned Residential Acreage and is surrounded by the same zoning on all sides. The current plan is proposing the Residential Unit Development option to develop the subject property. The Future Land Use map indicates Single Family Residential for the subject property and the surrounding properties. There are regulated wetlands and woodlands on the property.

The applicant is proposing a 38 unit single family Residential Unit Development (RUD) on 48.85 acres. The purpose of the Residential Unit Development Option is to permit an optional means of development with flexibility in the RA district and in the R-1 through R-4 districts. It allows a mixture of various types of residential dwelling units and to permit permanent preservation of valuable open land, fragile natural resources, and rural community character that would be lost under conventional development.

The current plan is proposing a variety of lot sizes with four lots conforming to the underlying zoning district RA requirements. The rest of the lots conform to R-1 requirements. The proposed density is 0.8 units per acre consistent with the RA, Residential Acreage zoning of the site. The current plan proposes to preserve the natural features of the site and provides active recreation for the residents such as a trail with additional features. Thirty-nine percent of the site is intended to be open space. A paved pathway connection is proposed from the trail to Garfield road, which provides opportunities for active or passive recreation. The applicant is proposing a gated community.

The plan is in general conformance with the code except for few deviations as identified in the review letters.

Planning recommends approval of the current plan provided City Council approves the modification to lot sizes and building setback reductions per the RUD ordinance. Engineering also recommends approval with additional comments to be addressed with the next submittal. Engineering identified two DCS variances that

would be required. One, to be able exceed the maximum allowed distance of 1500 feet between Eight Mile Road to the emergency access. Two, to allow absence of vehicle connection to the property on the west. Landscape and Traffic recommend approval of the Concept Plan with additional comments to be addressed with the next submittal.

The current plan does not propose any impacts to wetlands. It is proposing removal of three regulated woodland trees and would require a City of Novi Woodland permit. Woodlands and Wetlands recommend approval of the Concept plan. Fire also recommends approval with additional comments to be addressed with the next submittal.

The Planning Commission is asked tonight to hold a public hearing and to make a recommendation to City Council to approve the RUD Plan.

The applicant David Stollman is here tonight with his Engineer Carol Thurber to answer any questions you may have.

Carol Thurber from Fazal, Khan and Associates addresses the Members. Ms. Thurber stated that the main reasons that they went with the RUD concept was to preserve the few natural features on the site. There is a wetland and a woodland on the northwest portion of the site which will have no impact proposed. They also proposed quite a bit of active recreation space with the trail. The trail is over 1.5 miles and goes around the entire property with benches and birdhouses proposed to promote a very active community.

Chair Pehrson said this is a Public Hearing and asked if anyone had any comments on this particular subject. No one in the audience wished to participate. Chair Pehrson asked if there was any correspondence.

There was correspondence from Ed and Caryn Bartone at 49651 Deer Run, Northville, MI. The letter stated that, "when this was discussed before we were approached by lawyers because the water table would dip and lower our already shallow pond, thus reducing our property level. Water draining to Deer Run ponds will be affected. There will be more fertilizer flowing into the ponds". They object to this project.

There was no other correspondence, and Chair Pehrson closed the Public Hearing. He turned the topic over the Planning Commission members for consideration.

Member Anthony asked Planner Komaragiri, when we look at this development exceeding the 1500 foot variance for the distance from the main road through the subdivision how far does that exceed the maximum?

Planner Komaragiri said that the reason that they exceed the maximum is that they are trying to align with the access on the adjacent property, the Ballantyne RUD. I think that it is exceeding the maximum by 200 or 300 feet.

Member Anthony asked if the purpose of that shorter distance is for time response for emergency vehicles.

Planner Komaragiri responded yes, and also for the fire trucks to be able to maneuver. There are two cul de sacs to the south so fire was okay with that.

Deputy Director McBeth said that the emergency access proposed in Covington Estates will align with the proposed access in the Ballantyne development, which was recently approved.

Member Anthony stated concerns that without that being made very clear to the residents who purchase those lots, that with the development coming in later, residents will say "I wouldn't have purchased that lot if I had known that a road was going to be there". Member Anthony asked what can be done to ensure that prospective buyers would be aware of future changes?

Planner Komaragiri responded that the emergency access will have a fire gate so everyone will know that it is only for emergency access.

Member Anthony asked if the hatched area on the plan will not be developed until Ballantyne is developed.

Homeowners that buy the property need to be informed of the future development.

Staff Engineer, Jeremy Miller responded that they have to put this emergency access in with this development. Secondary access is required whether Ballantyne has developed or not. If Ballantyne is not yet developed they have to come up with some alternative to connect. It is not just grass, it will be grass pavers, so it is very clear to homeowners that there is something there and not just lawn. There is a visual marker.

Member Anthony asked about stub streets.

Staff Engineer Jeremy Miller responded that the subdivision ordinance requires a stub street every 1200 feet. They want to have a gated community here so they don't want to connect so they are asking for a variance from that requirement.

Member Anthony asked whether cul de sac's don't qualify as a stub street. Would the hatched area where the street is intended once it connects with Ballantyne be considered a stub street?

Engineer Miller responded that a stub street is supposed to be a full access street to connect to future developments. The hatched area is for emergency access only and is not a full street for the public.

Deputy Director McBeth stated that this is proposed to be a gated community so these roads will be private.

Member Anthony questioned whether the plan reviewers feel that the developer has presented a strong argument in support of an RUD development.

Planner Komaragiri stated that it is staff's opinion that most of the concerns have been addressed.

Member Anthony asked if there was any consideration for a hard surface and widening the walk areas?

Planner Komaragiri said, yes it was addressed in the response letter and they wanted to keep it as natural and easy to maintain as possible. That is why they preferred the wood chip trail.

Ms. Thurber responded with the statement that actually, it was more of a hard-packed limestone. She also made one more clarification on the stub to the west. That area to the west is almost all woodlands. The emergency access is intended to be connected to Ballantyne.

Member Anthony asked that with this being a gated community it looked like anyone can use these paths and walk through the neighborhood. Is this correct?

Ms. Thurber responded, that is correct. The trail also connects over to Garfield Road.

Member Anthony asked if all of the path would be the crushed limestone?

Ms. Thurber responded that the only place where that is proposed is where the path goes around backs of the lots. Through the entire development there will be concrete sidewalks. The connections to that path will be concrete also. This is intended to be less intrusive. The goal would be to discourage bicycles and encourage walking.

Member Baratta asked if the stub to the west is the emergency access hatched area?

Carol Thurber responded, that there is a stub to the east that is capable of supporting the fire trucks. To the west there is a walking path but there is no stub.

Member Baratta asked, since the emergency access will not be paved at this time, what type of material will be used?

Ms. Thurber responded that she believes that brick pavers are proposed.

Member Lynch asked to confirm that the paths will be for non-motorized vehicles?

Ms. Thurber responded that the paths will be for non-motorized vehicles and pedestrians.

Member Baratta asked about the direction of the site's drainage.

Ms. Thurber responded that the site drains into the wetlands.

Motion by Member Anthony and seconded by Member Lynch:

ROLL CALL VOTE ON THE APPROVAL OF THE RESIDENTIAL UNIT DEVELOPMENT (RUD) MADE BY MEMBER ANTHONY AND SECONDED BY MEMBER LYNCH.

In the matter of Covington Estates, JSP15-02, motion to recommend approval of the Residential Unit Development (RUD) Plan subject to and based on the following findings:

- a. The site is appropriate for the proposed use;
- b. The development will not have detrimental effects on adjacent properties and the community;
- c. The applicant has clearly demonstrated a need for the proposed use;
- d. Care has been taken to maintain the naturalness of the site and to blend the use within the site and its surroundings;
- e. The applicant has provided clear, explicit, substantial and ascertainable benefits to the City as a result of the RUD;
- f. Relative to other feasible uses of the site:
 1. All applicable provisions of Section 3.29.8.B of the Zoning Ordinance, other applicable requirements of the Zoning Ordinance, including those applicable to special land uses, and all applicable ordinances, codes, regulations and laws have been met;
 2. Adequate areas have been set aside for all walkways, playgrounds, parks, recreation areas, parking areas and other open spaces and areas to be used by residents of the development and the Planning Commission is satisfied that the applicant will make provisions that assure that;
 3. Traffic circulation features within the site have been designed to assure the safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets;
 4. The proposed use will not cause any detrimental impact in existing thoroughfares in terms of overall volumes, capacity, safety, travel times and thoroughfare level of service;
 5. The plan provides adequate means of disposing of sanitary sewage, disposing of stormwater drainage, and supplying the development with water;
 6. The RUD will provide for the preservation and creation of open space and result in minimal impacts to provided open space and natural features;
 7. The RUD will be compatible with adjacent and neighboring existing and planned land uses;
 8. The desirability of conventional residential development within the City is outweighed by benefits occurring from the preservation and creation of open space and the establishment of park facilities that will result from the RUD;
 9. There will not be an increase in the total number of dwelling units over that which would occur with a conventional residential development;
 10. The proposed reductions in lot sizes are the minimum necessary to preserve and create open space, to provide for park sites, and to ensure compatibility with adjacent and neighboring land uses;
 11. The RUD will not have a detrimental impact on the City's ability to deliver and provide public infrastructure and public services at a reasonable cost and will add to the City tax base;
 12. The Planning Commission is satisfied that the applicant will make satisfactory provisions for the financing of the installation of all streets, necessary utilities and other proposed improvements;
 13. The Planning Commission is satisfied that the applicant will make satisfactory provisions for future ownership and maintenance of all common areas within the proposed development; and
 14. Proposed deviations from the area, bulk, yard, and other dimensional requirements of the Zoning Ordinance applicable to the property enhance the development, are in the public interest, are consistent with the surrounding area, and are not injurious to the natural features and resources of the property and surrounding area.

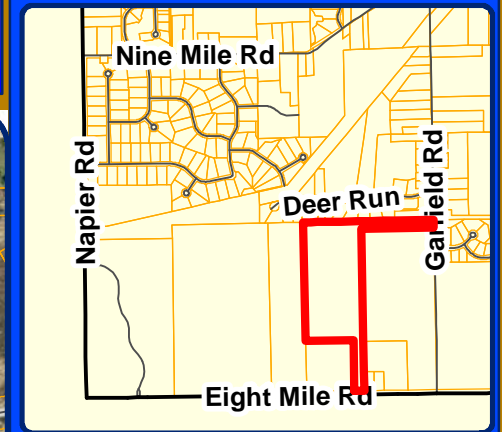
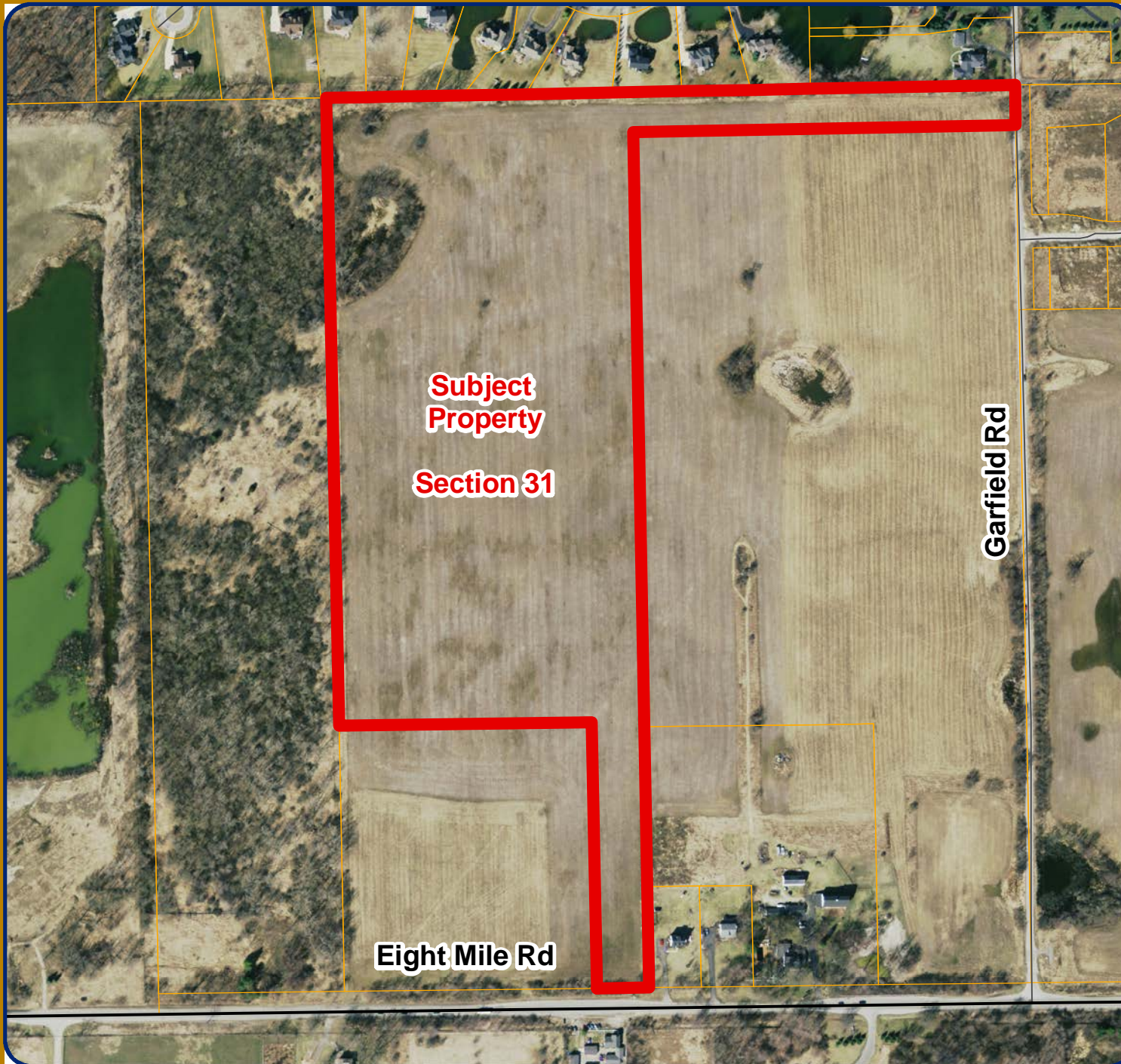
- g. City Council modification of proposed lot sizes to a minimum of 21,780 square feet and modification of proposed lot widths to a minimum of 120 feet as the requested modification will result in preserving and creating open space and recreational area as noted in Section 3.29.8.B.x of the Zoning Ordinance and the RUD will provide a genuine variety of lot sizes;
- h. City Council reduction of permitted building setbacks consistent with the proposed reduction in lot size and width;
- i. City Council variance from Appendix C Section 4.04(A) (1) of Novi City Code for not providing a stub street to the subdivision boundary along subdivision perimeter;
- j. City Council variance from Section 11-194(a)(7) of the Novi City Code for exceeding the maximum distance between Eight Mile Road and the proposed emergency access.

This motion is made because the plan is otherwise in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance. *Motion carried 4-0*

Maps
Location
Zoning
Future Land Use
Natural Features

JSP 15-02 Covington Estates

Location



City of Novi

Dept. of Community Development
City Hall / Civic Center
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

Map Author: Sri Komaragiri
Date: 08/06/15
Project: JSP15-02 Covington Estates
Version #: 1



1 inch = 417 feet

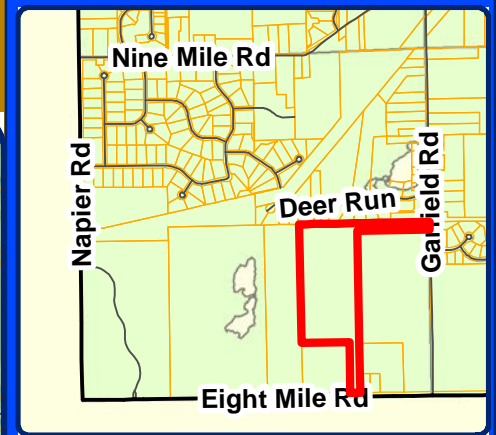
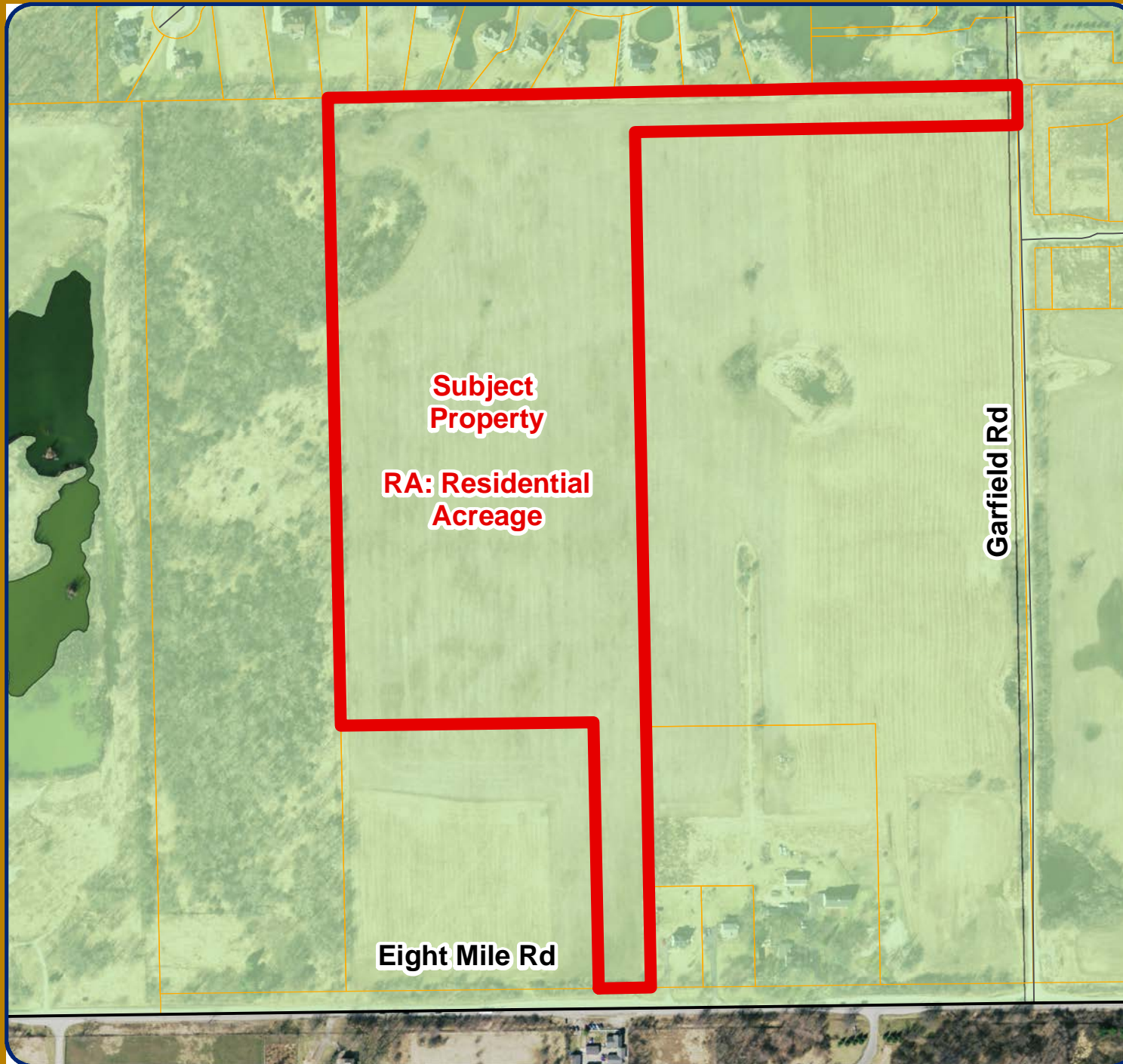


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JSP 15-02 Covington Estates

Zoning



Legend

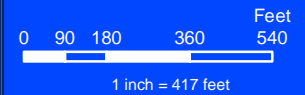
 R-A: Residential Acreage



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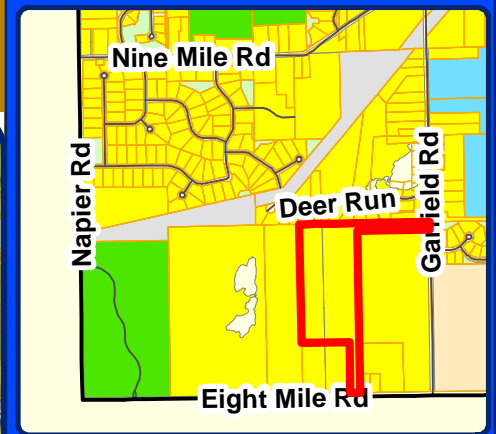
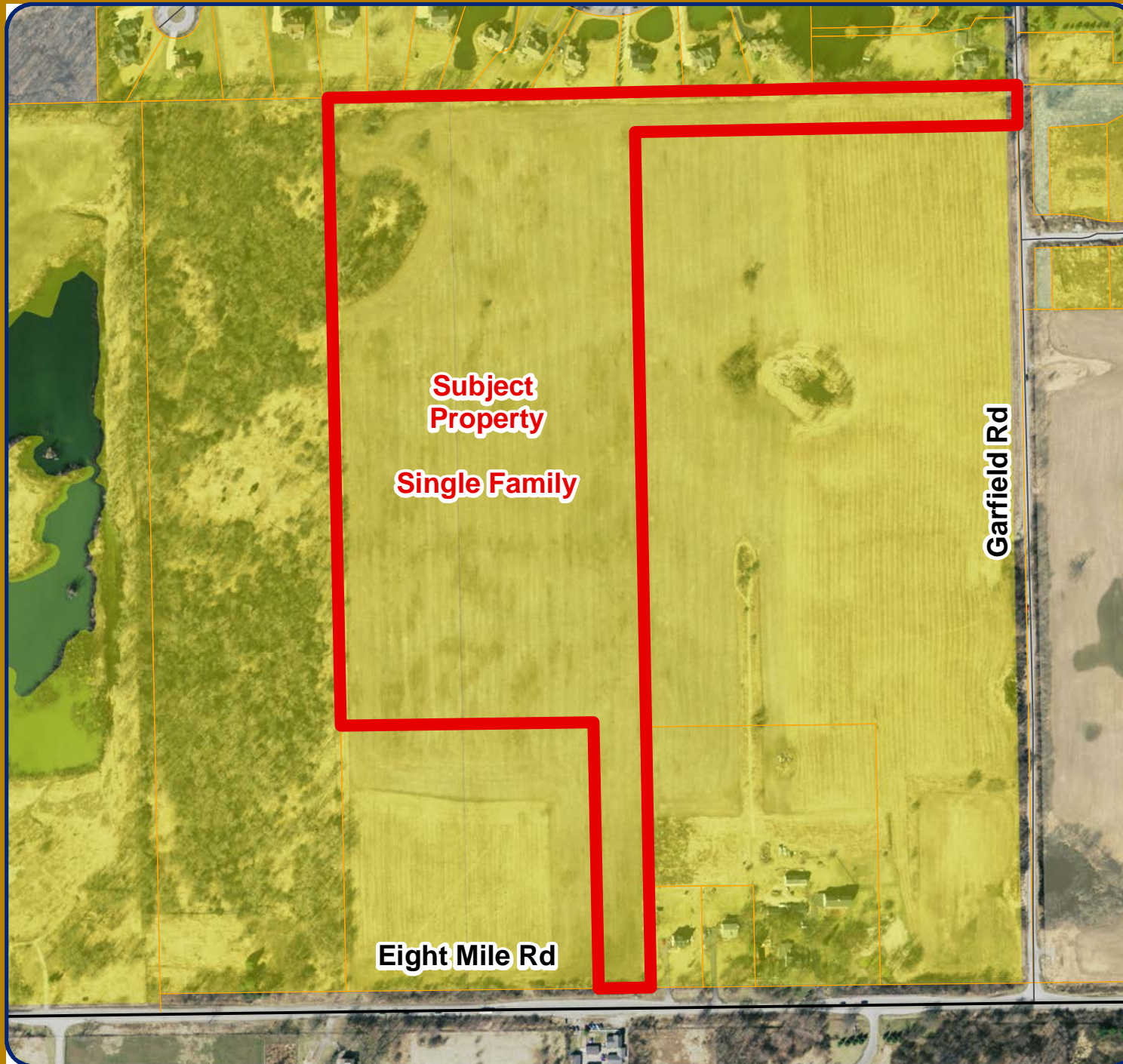


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

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JSP 15-02 Covington Estates

Future Landuse



Legend

-  SINGLE FAMILY
-  EDUCATIONAL FACILITY
-  PUBLIC
-  PUBLIC PARK
-  PRIVATE PARK
-  UTILITY



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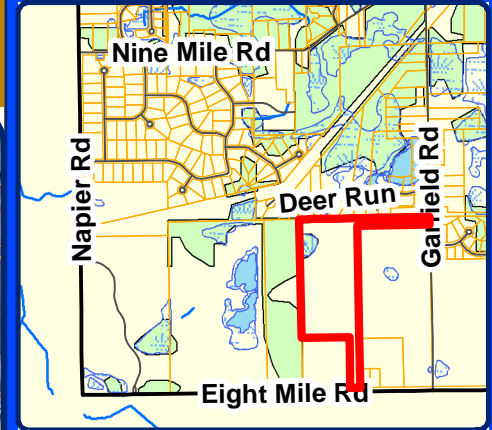
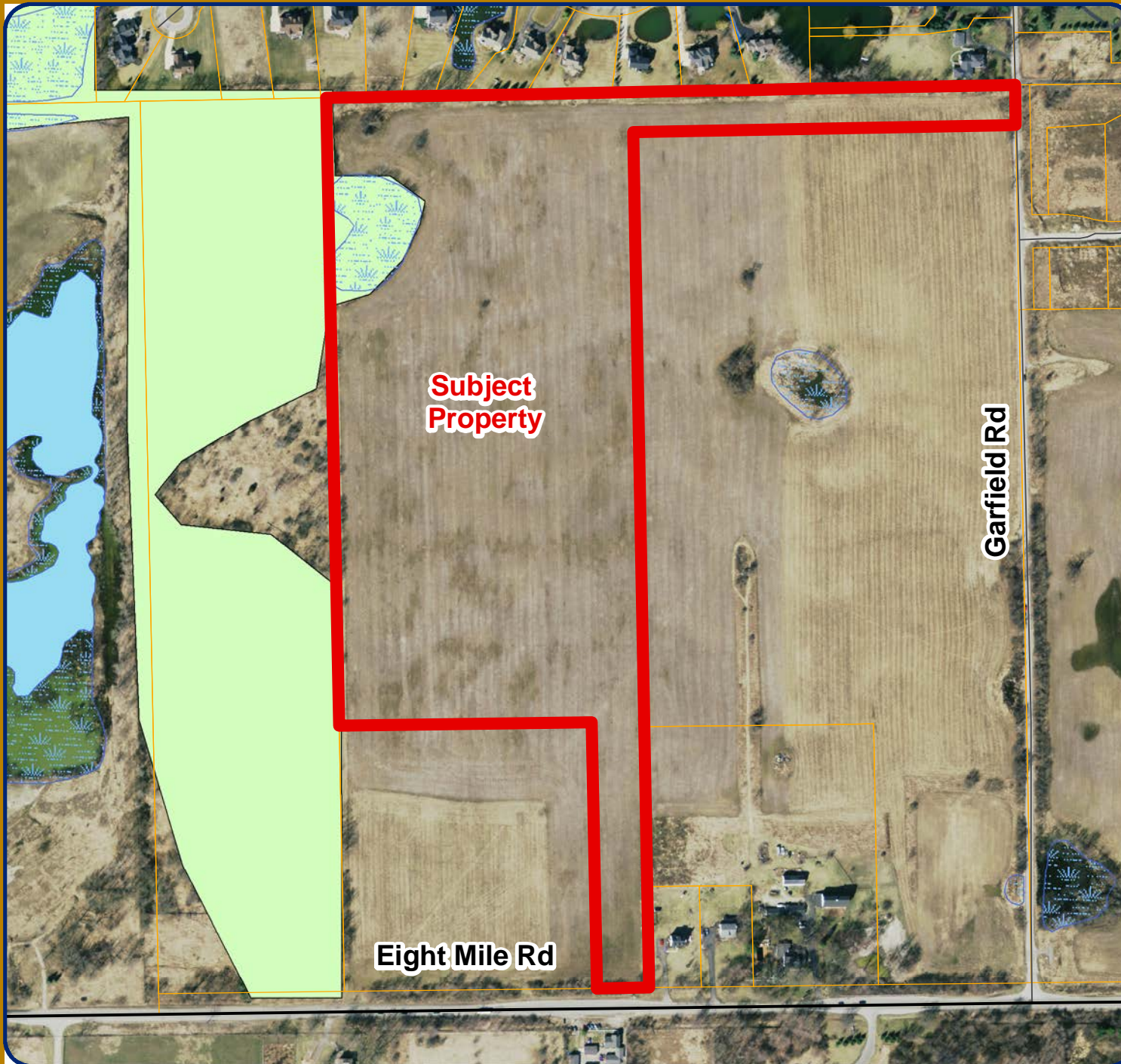


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JSP 15-02 Covington Estates

Natural Features



Legend

-  Wetlands
-  Woodlands



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1 inch = 417 feet



MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Site Plan

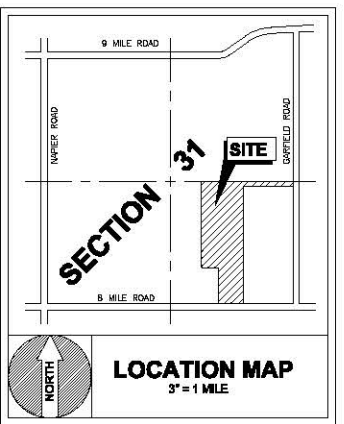
(Full size plans will be available for viewing at Community Development Department)

COVINGTON ESTATES

PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT



- LEGEND**
- DECIDUOUS TREE--2.5"--3" CAL.
 - EVERGREEN TREE--8" HT.
 - ORNAMENTAL TREE SMALL TO MEDIUM 2--2.5" CAL./8 HT.
 - DECIDUOUS SHRUB 18"--24" HT.
 - EVERGREEN SHRUB 24" HT./24" SPD.
 - EXISTING TREE TO REMAIN



CALL 1-888-DIG-4-NOVI FOR MORE INFORMATION BEFORE YOU DIG 1-800-485-7111 CALL811.COM (TOLL FREE)

BY: _____

REVISED: _____

DATE: _____

REVISIONS: _____

COVINGTON ESTATES
PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

FAZAL KHAN & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
PHONE (989) 734-9077 FAX (989) 734-9084
WWW.FAZALKHAN.COM

PRELIMINARY LANDSCAPE PLAN

FIELD BOOK: 00X
PROJECT NO.: 14-031
DATE: 12-18-2014
DRAWN BY: O.G.
CHECKED BY: C.T.

CLIENT: BILTMORE LAND LLC
SCALE: 1" = 50'

PRELIMINARY []
CONSTRUCTION []
AS-BUILT []

R-1

Planning Review



PLAN REVIEW CENTER REPORT

July 10, 2015

Planning Review

Covington Estates RUD

JSP15-02

Petitioner

Biltmore Land, LLC

Review Type

RUD Plan

Property Characteristics

- Site Location: West of Garfield Road and North of Eight Mile Road (Section 31)
- Site Zoning: RA, Residential Acreage
- Adjoining Zoning: North, East and West: RA; South (Northville Township) Maybury State Park
- Current Site Use: Vacant
- Adjoining Uses: East and West: Vacant; South: Maybury State Park; North: Single-Family Residential
- School District: Northville Community School District
- Site Size: 48.83 acres
- Plan Date: 04-16-15

Project Summary

The applicant is proposing a Residential Unit Development (RUD) on a 48.83 acre parcel north of Eight Mile and West of Garfield in order to construct 38 single-family residential units. Four of the total units are consistent with the underlying zoning (RA) requirements. The rest are consistent with R-1 requirements. The ordinance states that an RUD shall include detached one-family dwelling units, as proposed. While a variety of housing types is expected in an RUD, the overall density generally shall not exceed the density permitted in the underlying zoning district. The proposed density is 0.8 units per acre consistent with the RA, Residential Acreage zoning of the site. The remainder of the site (39%) is intended to be open space. The applicant is proposing a gated community.

Recommendation

Staff **recommends approval of the RUD Plan** to allow for the development of the subject property. If the RUD Plan and RUD Amendment are approved by the City Council, the Preliminary Site Plan, Woodland Permit, and Stormwater Management Plan will be considered by the Planning Commission.

RUD Standards

The Planning Commission and City Council are asked to consider the following noted in **Section 3.29.8.A** when evaluating the proposed RUD. Staff comments are (underlined and bracketed). Items for the applicant to address **prior to Planning Commission Meeting** are highlighted in **bold** text.

- a) The appropriateness of the site for the proposed use;
- b) The effects of the proposed use upon adjacent properties and the community;
- c) The demonstrable need for the proposed use;
- d) The care taken to maintain the naturalness of the site and to blend the use within the site and its surroundings;
[The site is zoned RA which is intended for single family low-residential development. However, it fits well with the development patterns that are happening in the surrounding properties. The proposed density is kept at 0.8 DUA per RA requirements, but the applicant is requesting reduction to lot sizes and preservation of open space]
- e) The existence of clear, explicit, substantial and ascertainable benefits to the City from the RUD.

[The applicant should provide a narrative describing the benefits of the RUD and demonstrate a need for the proposed RUD as part of their response letter prior to proceeding to the Planning Commission]

The Planning Commission and City Council shall consider the following factors noted in Section 3.29.8.B as part of their evaluation of the RUD Amendment. Staff comments are italicized and bracketed.

- a) *Whether all applicable provisions of this Section [3.29.8.B of the Zoning Ordinance], other applicable requirements of this Ordinance, including those applicable to special land uses, and all applicable ordinances, codes, regulations and laws have been met.*

[Submit the following as required per section 3.29.7, such as, but not limited to

- **The topography survey indicating the trees to be removed. Refer to Woodland review letter for more detail.**
- **A written statement explaining in detail the full intent of the applicant as explained in section 3.29.7.F]**
- **Additional information as requested in other review letters**

- b) *Whether adequate areas have been set aside for all schools, walkways, playgrounds, parks, recreation areas, parking areas and other open spaces and areas to be used by residents of the development. The applicant shall make provisions to assure that such areas have been or will be committed for those purposes.*

[A 1.12 mile walking trail is proposed as part of the proposed development. The applicant has set aside 39 % of the proposed development area as open space, some of which will have woodchip pathways running through it, storm water facilities and regulated wetlands.] **The applicant is suggested to look into alternate hard surface options for the proposed pathway as well as widening it. This would enable the pathway to be used for multiple purposes such as biking and walking. Considering pervious hard paving would also help with natural aesthetic, easy maintenance and help with storm water run-off**

- c) *Whether traffic circulation features within the site and the location of parking areas are designed to assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets.*

[The applicant has provided for safe traffic flow as indicated in the traffic review letter.]

- d) *Whether, relative to conventional one-family development of the site, the proposed use will not cause any detrimental impact in existing thoroughfares in terms of overall volumes, capacity, safety, travel times and thoroughfare level of service, or, in the alternative, the development will provide onsite and offsite improvements to alleviate such impacts.*

[The development will not have a detrimental impact on existing thoroughfares over and above development under the existing zoning as indicated in the traffic review letter.]

- e) *Whether there are or will be, at the time of development, adequate means of disposing of sanitary sewage, disposing of stormwater drainage, and supplying the development with water.*

[The applicant has not provided for adequate stormwater management and utilities.]**Please refer to the Engineering review letter for additional information required.**

- f) *Whether, and the extent to which, the RUD will provide for the preservation and creation of open space. Open space includes the preservation of significant natural assets, including, but not limited to, woodlands, topographic features, significant views, natural drainage ways, water bodies, floodplains, wetlands, significant plant and animal habitats and other natural features. Specific consideration shall be given to whether the proposed development will minimize disruption to such resources. Open space also includes the creation of active and passive*

recreational areas, such as parks, golf courses, soccer fields, ball fields, bike paths, walkways and nature trails.

[The applicant has set aside 39% of the proposed development area as open space, some of which will include woodchip paths. See comment for item "b" above. The applicant has proposed two benches at one location. **The applicant is suggested to look into proposing amenities at additional location along the trail.** Due to insufficient information about the grades along what appears to be Stormwater detention pond on the east side, staff is unable to analyze whether the proposed pathway provides a safe access. The pathway seems too close the contours. **Provide further information with regards to the contours in that area]**_

- g) *Whether the RUD will be compatible with adjacent and neighboring land uses, existing and master planned.*
[Existing single-family zoning surrounds the site. There was a recent RUD approved adjacent to this site.]
- h) *Whether the desirability of conventional residential development within the City is outweighed by benefits occurring from the preservation and creation of open space and the establishment of school and park facilities that will result from the RUD.*
- i) *Whether any detrimental impact from the RUD resulting from an increase in total dwelling units over that which would occur with conventional residential development is outweighed by benefits occurring from the preservation and creation of open space and the establishment of school and park facilities that will result from the RUD.*
- j) *Whether the proposed reductions in lot sizes and setback areas are the minimum necessary to preserve and create open space, to provide for school and park sites, and to ensure compatibility with adjacent and neighboring land uses.*
[A reduction in lot sizes below the Zoning Ordinance standards is proposed which is compatible to the adjacent land use.]
- k) *Evaluation of the impact of RUD development on the City's ability to deliver and provide public infrastructure and public services at a reasonable cost and with regard to the planned and expected contribution of the property to tax base and other fiscal considerations.*
[Staff is unable to make the determination due to insufficient information, which should be remedied with the additional information that is being requested. **The current infrastructure connections are dependent on future construction in the neighboring properties (Ballantyne). Alternative infrastructure connections should be provided in the event that the adjacent construction is not complete prior to the construction on the subject property]**
- l) *Whether the applicant has made satisfactory provisions for the financing of the installation of all streets, necessary utilities and other proposed improvements.*
[Will be reviewed at the time of Preliminary Site Plan approval. Applicant should express intent in this regard.]
- m) *Whether the applicant has made satisfactory provisions for future ownership and maintenance of all common areas within the proposed development.*
[Applicant indicated his intent that the new development would be regulated under the provisions of a proposed master deed and associated by-laws.]
- n) *Whether any proposed deviations from the area, bulk, yard, and other dimensional requirements of the zoning ordinance applicable to the property enhance the development, are in the public interest, are consistent with the surrounding area, and are not injurious to the natural features and resources of the property and surrounding area.*

Ordinance Requirements

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3.0 (Zoning Districts), Article 4.0(Use Standards), Article 5.0(Site Standards) and any other applicable

provisions of the Zoning Ordinance. Please see the attached charts for information pertaining to ordinance requirements. Items in **bold** below must be addressed by the applicant and or Planning Commission/City Council.

1. RUD Intent: *As an optional form of development, the RUD allows development flexibility of various types of residential dwelling units (one-family, attached one-family cluster). It is also the intent of the RUD option to permit permanent preservation of valuable open land, fragile natural resources and rural community character that would be lost under conventional development. This is accomplished by permitting flexible lot sizes in accordance with open land preservation credits when the residential developments are located in a substantial open land setting, and through the consideration of relaxation of area, bulk, yard, dimensional and other zoning ordinance standards in order to accomplish specific planning objectives.*
This flexibility is intended to reduce the visual intensity of development; provide privacy; protect natural resources from intrusion, pollution, or impairment; protect locally important animal and plant habitats; preserve lands of unique scenic, historic, or geologic value; provide private neighborhood recreation; and protect the public health, safety and welfare. Such flexibility will also provide for:
 - *The use of land in accordance with its character and adaptability;*
 - *The construction and maintenance of streets, utilities and public services in a more economical and efficient manner;*
 - *The compatible design and use of neighboring properties; and*
 - *The reduction of development sprawl, so as to preserve open space as undeveloped land.*

Applicant should provide a written statement explaining in detail the full intent of the applicant as explained in section 3.29.7.F

2. Lot Size and Area: One-family detached dwellings are subject to the minimum lot area and size requirements of the underlying district. RA zoning requires 43,560 sq. ft. lots that are a minimum of 150 ft. wide. The applicant has proposed a minimum size of 21,766 sq. ft. and a minimum width of 120 ft. **The City Council may modify lot size and width requirements where such modification will result in the preservation of open space for those purposes set forth in Section 3.29B of the Zoning Ordinance and where the RUD will provide a genuine variety of lot sizes.** The plans indicate that a total of 19.10 acres of open space will be maintained in this development (mostly in the perimeter buffering, the detention basin area), which is about 39 percent of the area of the site. The applicant has provided a summary of lot sizes throughout the entire development. There are a variety of lot sizes throughout the proposed development. Lots range from approximately 21,766 sq. ft. to 46,212 sq. ft., allowing for some variation in lot size, although most lots (34 out of 38) fall within the lower to mid-20,000 sq. ft. range.
3. Building Setback: One-family detached dwellings in an RUD are subject to the building setback regulations of the underlying zoning district, in this case the RA District. The RA District setbacks are listed in the attached planning review chart. The applicant has proposed reduced building setbacks consistent with the proposed lot size. **This setback reduction would be permitted provided the City Council agrees to the reduction in lot size and area noted above.**
4. Submittal Requirements: The applicant has not submitted all the items noted in Section 3.29.7. **Submit a written statement regarding the expected population for the RUD Plan; Refer to response to item "a" in Page 2.**
5. Streets (Subdivision Ordinance: Sec. 4.04): Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists: practical difficulties because of topographic conditions or natural features or would create undesirable traffic patterns. **A Design construction standards variance is required for this deviation approved by City Council. The deviation should be part of the RUD agreement. Please submit the required form.**
6. Sidewalks: The applicant has proposed 8' sidewalks along Eight Mile Road and Garfield Road. **Refer to Engineering comments with regards to pathways within the site.**
7. Special Land Use: The Planning Commission shall also consider the standards for Special Land Use approval as a part of its review of the proposed RUD, per Section 6.2.
8. Master Deed and By-laws: The Master Deed and By-laws must be submitted for review with the Final Site Plan submittal.
9. Lighting: The City Council recently passed a text amendment requiring an entrance light at all residential developments. **The applicant should send via email a plan showing the location of a**

proposed entrance light. Once the proposed location has been approved by the Planning Division, the applicant should contact Adam Wayne (248.735.5648) in the Engineering Division to begin the process of working with the City and DTE on the installation of the entrance light. Attached are the options available through DTE for residential development entrance lighting.

10. Signage: Exterior Signage is not regulated by the Planning Division or Planning Commission. Please contact Jeannie Niland (248.347.0438) for information regarding sign permits.

Site Addressing

The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found on the Internet at www.cityofnovi.org under the forms page of the Community Development Department. Please contact Jeannie Niland [248.347.0438] in the Community Development Department with any specific questions regarding addressing of sites.

Street and Project Name

Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval. **The applicant should contact Richelle Leskun at rleskun@cityofnovi.org or 248-347-0579 to schedule a meeting.**

Response Letter

With this submittal, all reviews are recommending approvals. This Site Plan is scheduled to go before Planning Commission on August 08, 2015. Please provide the following **no later than July 31, 2015** if you wish to keep the schedule.

1. A response letter addressing **ALL** the comments from **ALL** the review letters (including the ones sent in March 2015) and a request for waivers and variances as you see fit.
2. A PDF version of the all Site Plan drawings that were dated 4-16-2015. **NO CHANGES MADE.**
3. A color rendering of the Site Plan, if any.
4. A written statement explaining in detail the full intent of the applicant as explained in section 3.29.7.F, as requested in this review letter

Other Reviews:

1. Engineering Review: Additional comments to be addressed during revised submittal. Engineering recommends denial
2. Landscape Review: Additional comments to be addressed during next submittal. Landscape recommends approval.
3. Wetland and Woodland Review: There are wetlands on site. No further review of wetlands would be necessary if no changes are made to the submittal. Additional information requested for woodlands. Refer to review letter. Woodlands recommend approval.
4. Traffic Review: Additional comments to be addressed during next submittal. Traffic recommends approval.
5. Facade Review: Not Applicable.
6. Fire Review: Additional comments to be addressed during next submittal. Fire recommends approval.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5607 or skomaragiri@cityofnovi.org.



PLANNING REVIEW SUMMARY CHART

Review Date: July 10, 2015
Project Name: JSP15-02 Covington Estates
Plan Date: 27 February 2015
Prepared by: Sri Komaragiri, Planner **E-mail:** skomaragiri@cityofnovi.org; **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant and/or the Planning Commission before approval of the Preliminary Site Plan. Underlined items need to be addressed on the Final Site Plan.

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted August 25, 2010)</i>	Single Family, with master planned 0.8 maximum dwelling units per acre.	38 Unit single family residential development with RUD option	Yes	Planning Commission recommendation & City Council approval RUD Plan – City Council approval RUD agreement – Site Plan or Plat normal approval process
Zoning <i>(Effective December 25, 2013)</i>	RA: Residential Acreage district	Residential Unit Development (RUD)	Yes	
Uses Permitted <i>(Sec.3.1.1)</i>	Single Family Dwellings	Single Family Dwellings with RUD	Yes	
RUD Residential Unit Development (Sec. 3.29) Height, bulk, density and area limitations (Sec. 3.1.1)				
Parcel Size <i>(Sec. 3.29.1)</i>	At least 20 contiguous acres of land under single ownership	48.85 Acres	Yes	Agreement of sale document is submitted to confirm ownership
Perimeter Buffering <i>(Sec. 3.29.2)</i>	- Where the RUD abuts a one-family district, development of the land up to 330 feet shall be restricted to detached, one-family, non-clustered dwelling units. - All clustered housing dwelling units shall be at least 75 feet from any peripheral property line.	Detached one-family, non-clustered dwelling units are proposed.	NA	
Density <i>(Sec. 3.29.3A)</i>	For RA: maximum dwelling units per net acre is 0.8	0.8 DUA	Yes	
Additional density credit <i>(Sec 3.29.3B)</i>	- Watercourses and bodies of water - Quality wetlands less than 2 acres	Applicant did not apply for additional density credit	NA	

Item	Required Code	Proposed	Meets Code	Comments						
	<ul style="list-style-type: none"> - Wetland and watercourse setback areas - Regulated woodlands - Local important plant/animal habitats - Historical buildings - Recreational areas 									
Lot Area (Sec 3.29.4) & (Sec 3.1.1)	One-family detached dwellings are subject to the minimum lot area requirements of the underlying district. RA zoning requires 43,560 sq. ft. lots.	34 Units @ 0.5 Acres minimum (50% reduction) Consistent with R-1 requirements 4 Units @ 1 Acre minimum Consistent with RA requirements	No	No lot shall be of an area or width less than that required in the R-3 zoning district unless the parcel is in R-4 zoning district. The City Council may modify lot area requirements where such modification will result in the preservation of open space for those purposes set forth in this section 3.29.B and where the RUD will provide a genuine variety of lot sizes.						
Lot Size (Sec 3.1.1)	One-family detached dwellings are subject to the minimum lot width requirements of the underlying district. RA zoning requires 150 ft. lot widths.	34 Units @ 120 ft minimum (20% reduction) Consistent with R-1 requirements 4 Units @ 150 ft minimum Consistent with RA requirements	No	No lot shall be of an area or width less than that required in the R-3 zoning district unless the parcel is in R-4 zoning district. See comment above for City Council consideration requirements.						
Building Setbacks (Sec 3.1.1)& (Sec 3.29.5)		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%; text-align: center;">For 0.5 Acre lots</th> <th style="width: 25%; text-align: center;">For 1 Acre lots</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">R-1 Code</td> <td style="text-align: center;">RA Code</td> </tr> </tbody> </table>		For 0.5 Acre lots	For 1 Acre lots		R-1 Code	RA Code	No	If lot sizes are reduced in accordance with Sec. 3.29, yard requirements shall be governed by that zoning district which has minimum lot area and width standards that correspond to the dimensions of the particular lot. City Council has to approve the reduction in lot sizes from RA to R-1
	For 0.5 Acre lots	For 1 Acre lots								
	R-1 Code	RA Code								
Front	RA: 45ft. R-1: 30 ft.	30 ft.	45 ft.							
Side	RA: 20 ft. one side, 50 ft. two sides R-1: 15 ft. one side, 40 ft. two sides	20 ft. each side;40 ft. two sides	25 ft. each side;50 ft. two sides							
Rear	RA: 50 ft. R-1: 35 ft.	35 ft.	50 ft.							
Deviations from standards (Sec 3.29.6)	As part of the final approval of RUD plan, the City Council shall be authorized to grant deviations according to	Reduction to lot area, size and yard setbacks are proposed		The City Council may modify lot area requirements where such modification will result in the preservation of open						

Item	Required Code	Proposed	Meets Code	Comments
	section 3.29.6			space for those purposes set forth in this section 3.29.B and where the RUD will provide a genuine variety of lot sizes.
Deviations from standards (Sec 3.29.6)	As part of the final approval of RUD plan, the City Council shall be authorized to grant deviations according to section 3.29.6	Reduction to lot area, size and yard setbacks are proposed		The City Council may modify lot area requirements where such modification will result in the preservation of open space for those purposes set forth in this section 3.29.B and where the RUD will provide a genuine variety of lot sizes.
Maximum % of Lot Area Covered (By All Buildings) (Sec 3.1.1)	25%	Information is not provided at this point		
Minimum Floor Area (Sec 3.1.1)	1,000 Sq.ft.	3,200 sq ft. Provided as a written statement.	Yes	<u>Details reviewed at plot plan phase</u>
Building Height (Sec 3.1.1)	35 ft. or 2.5 stories whichever is less	No elevations provided at this time	NA	<u>Building height reviewed at plot plan phase. Please mention the tentative height.</u>
Frontage on a Public Street. (Sec. 5.12)	No lot or parcel of land shall be used for any purpose permitted by this Ordinance unless said lot or parcel shall front directly upon a public street, unless otherwise provided for in this Ordinance.	All units front on a proposed private road within the proposed condominium, with access to Eight Mile Road	Yes	<u>Frontage on Private road for individual lots is permitted for a Condominium development</u>
Note to District Standards (Sec 3.6)				
Area Requirements (Sec 3.6A & Sec. 2.2)	<ul style="list-style-type: none"> - Lot width shall be measured between two lines where a front setback line intersects with side setback lines. - Distance between side lot lines cannot be less than 90% between the front setback line and the main building. 		Yes	
Additional	NA	Single family	NA	

Item	Required Code	Proposed	Meets Code	Comments
Setbacks (Sec 3.6B)		development and no off-street parking		
Exterior Side yard abutting Streets (Sec 3.6C)	NA	Side yards abutting residential districts	NA	
Wetland/Water-course Setback (Sec 3.6M)	25ft. from boundary of a wetland and 25ft. from the ordinary highwater mark of a watercourse is required	No wetland is contained within proposed unit.	No	Refer to wetlands review for additional comments
Subdivision Ordinance				
Blocks (Subdivision Ordinance: Sec. 4.01)	<ul style="list-style-type: none"> - Maximum length for all blocks shall not exceed 1,400 ft. - Widths of blocks shall be determined by the conditions of the layout. 	Lots are laid out such that the emergency access drive and internal streets avoid creating blocks longer than 1400 ft.	Yes	
Lots: Sizes and Shapes (Subdivision Ordinance: Sec. 4.02A)				
Lot Depth Abutting a Secondary Thoroughfare (Subdivision Ordinance: Sec. 4.02.A5)	Lots abutting a major or secondary thoroughfare must have a depth of at least 140'	All lots are at least 220'	Yes	
Depth to Width Ratio (Subdivision Ordinance: Sec. 4.02.A6)	Single Family lots shall not exceed a 3:1 depth to width ratio	Maximum of 1.6:1 ratio is maintained	Yes	
Arrangement (Subdivision Ordinance: Sec. 4.02.B)	<ul style="list-style-type: none"> - Every lot shall front or abut on a street. - Side lot lines shall be at right angles or radial to the street lines, or as nearly as possible thereto. 	<ul style="list-style-type: none"> - All lots front on proposed streets - All lots conform to shape requirement 	Yes	
Streets (Subdivision Ordinance: Sec. 4.04)	Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists: <ul style="list-style-type: none"> - practical difficulties because of topographic conditions or natural features - Would create undesirable traffic 	Emergency access drive is located beyond 1300 ft. to align with the street layout in the adjacent lot.	Yes	A DCS variance is required for this deviation approved by City Council. The deviation should be part of the RUD agreement. Please submit the required form.

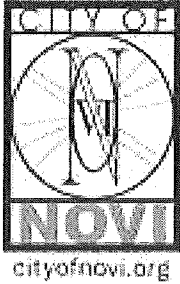
Item	Required Code	Proposed	Meets Code	Comments
	patterns			
Topographic Conditions (Subdivision Ordinance Sec 4.03)				
A. Flood plain	Compliance with applicable state laws and City Code Areas in a floodplain cannot be platted	Not Applicable	NA	
B. Trees and Landscaping	Compliance with Chapter 37 and Article 5 of City Zoning Code	Landscape Plan is provided	Yes	
C. Natural Features	To be preserved Lots cannot extend into a wetland or watercourse	Wetlands exist on North west corner of the site which are un touched	Yes	
D. Man-made Features	To be built according to City standards	Not Applicable		
E. Open Space Areas	Any Open Space Area shall meet the following: <ul style="list-style-type: none"> - Require performance guarantee - Shall be brought to a suitable grade - Compliance with zoning ordinance - Except for wooded areas, all ground area should be top dressed with a minimum of 25% of red fescue and a maximum of 20% perennial rye. 	The open space that is provided will need to meet these standards.		Refer to section 3.29.3B for Open space options.
F. Non-Access Greenbelt Easements	Along rear or side property lines for reverse frontage lots	No reverse frontage lots	NA	
G. Zoning Boundary Screening	A non-residential development abutting a residential development would need screening	Not Applicable		
Sidewalks Requirements				

Item	Required Code	Proposed	Meets Code	Comments
Non-Motorized Plan	No additional trails or pathways beyond those identified in the Bicycle and Pedestrian Master Plan are recommended for the subject property			
Sidewalks within RUD (Sec 3.29.12E) (Subdivision Ordinance: Sec. 4.05)	<ul style="list-style-type: none"> - Shall meet the City of Novi Design and Construction Standards. - Such safety paths shall be at least five (5) feet in width along both sides of all public and private streets within the RUD. - Shall be placed 1ft. off property lines - Shall be required where necessary along retention ponds, open spaces to ensure continuity 	<ul style="list-style-type: none"> - Sidewalks details are not provided at this time. - 5 ft. sidewalks are proposed along both sides of internal streets. - Unable to determine at this time. - A woodchip trail is proposed around the retention ponds. Width is not specified. 	No	The applicant is suggested to look into alternate hard surface options for the proposed recreational pathway as well as widening it to eight feet. This would enable the pathway to be used for multiple purposes such as biking and walking. Considering pervious hard paving would also help with natural aesthetic, easy maintenance and help with storm water run-off
Public Sidewalks (Chapter 11, Sec.11-276(b), Subdivision Ordinance: Sec. 4.05)	A 8' wide public sidewalk shall be constructed along all arterial and collector roads except in industrial districts	8' sidewalk proposed along Eight Mile Road and Garfield Rd within ROW	Yes	
Application Requirements (Sec 3.29.7) Scale not smaller than 1"=200'				
Boundary Survey (Sec 3.29.7A)	Prepared by registered land surveyor or Engineer		Yes	
Topographic Map (Sec 3.29.7B)	<ul style="list-style-type: none"> - No more than 2 foot contour interval - All major trees of 8" or greater in diameter - Bodies of water and unbuildable areas 	Provided	Yes	
Aerial Photograph (Sec 3.29.7C)	A recent one not smaller than 1"=200'	An aerial photograph is provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
RUD Plan (Sec 3.29.7D)	<p>Shall be provided on the RUD Plan</p> <ul style="list-style-type: none"> - Functional use areas - Dwelling unit types - Proposed population densities - Traffic circulation plan - Other site uses such as recreation, parking etc - Open spaces for public or RUD residents 	<ul style="list-style-type: none"> - No - Yes - No - Yes - Yes - Yes. But not specific 	No	Provide further details about functional use areas and proposed population densities.
Utilities (Sec 3.29.7E)	Contemplated storm and sewer plan	A preliminary utility plan is provided	Yes	Refer to Engineering Comments for requirements
Statement of Intent (Sec 3.29.7F)	<p>Required on RUD plan</p> <ul style="list-style-type: none"> - Type of dwelling units - Resultant population - Soil surveys - Land use requests - Intended scheduling of the development 	<ul style="list-style-type: none"> - Single Family Dwelling Units - 18B Fox Sandy Loam; 1-6 percent slopes - NA - Design 2015; Construction 2016; Houses in Summer 2016 	Yes	This information was taken from Pre-application written statement. Please submit an updated one.
Statement of permanent preservation (Sec 3.29.7G)	To assure permanent preservation and maintenance of open space areas, RUD amenities and common areas.	A note has been added to the plan.	Yes	Details will be outlined in the Master Deed and bylaws
Phasing (Sec 3.29.11)	According to site design manual	No phasing is proposed	NA	
RUD Agreement (Sec 3.29.10C)	The preliminary RUD plan approval shall be subject to and conditioned upon Council approval of an RUD agreement setting forth the terms and conditions of the RUD, once the tentative approval is granted.	Draft agreement not yet prepared.	NA	RUD Agreement may be approved by City Council once the RUD Plan is tentatively approved

Item	Required Code	Proposed	Meets Code	Comments
Open Space Preservation (Sec 3.29.15)	<ul style="list-style-type: none"> - A schedule of completion of open space - Mechanism to preserve and maintain - In the event of failure, allowance for City to maintain and assess the cost to property owners 	A 5,900 ft. walking trail with features is intended within the open space		Applicant indicated that the details will be outlined in the Master Deed and bylaws
Other Requirements				
Development and Street Names	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval			<u>Contact Richelle Leskun at 248-347-0475 to schedule a meeting with the Committee</u>
Development/ Business Sign	Signage if proposed requires a permit.			<u>For sign permit information contact Jeannie Niland 248-347-0438.</u>
<p>NOTES:</p> <ol style="list-style-type: none"> 1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards. 2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details. 3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals. 				

Engineering Review



PLAN REVIEW CENTER REPORT

07/07/2015

Engineering Review

COVINGTON ESTATES

JSP15-0002

Applicant

FIRST BAPTIST CHURCH

Review Type

RUD Conceptual Plan

Property Characteristics

- Site Location: N. of 8 Mile Rd. and W. of Garfield Rd.
- Site Size: 48.847 acres
- Plan Date: 06/18/15

Project Summary

- Construction of an approximately 38 lot residential development. Site access would be provided by a Private roadway from 8 Mile Rd.
- Water service would be provided by an extension from the proposed Ballantyne water main along the north side of 8 Mile Rd. and looping to the Ballantyne water main, along with 8 additional hydrants.
- Sanitary sewer service would be provided extension from the proposed Ballantyne sanitary sewer along the north side of 8 Mile Rd.
- Storm water would be collected by a single storm sewer collection system and detained in two on-site retention pond.

Recommendation

Approval of the Revised Concept Plan and the Preliminary Storm Water Management Plan is recommended.

Comments:

The Concept Plan does meet the general requirements of Chapter 11 of the Code of Ordinances, the Storm Water Management Ordinance and/or the Engineering Design Manual. The following items must be addressed prior to resubmittal:

Additional Comments (to be addressed prior to the Final Site Plan submittal):

General

1. Provide the distance from 8 Mile to the emergency access. **If this distance exceeds 1500 feet a variance from Section 11-194 (a) (7) of the Novi City Code will be required.** This request must be submitted under a separate cover.
2. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
3. Provide a traffic control sign table listing the quantities of each sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
4. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
5. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review.
6. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website (www.cityofnovi.org/DesignManual).

Water Main

7. Provide a profile for all proposed water main 8-inch and larger.
8. The water main stub to the west shall terminate with a hydrant followed by a valve in well. If the hydrant is not a requirement of the development for another reason the hydrant can be labeled as temporary allowing it to be relocated in the future.
9. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Department for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

10. Provide a testing bulkhead immediately upstream of the sanitary connection point. Additionally, provide a temporary 1-foot deep sump in the first sanitary structure proposed upstream of the connection point, and provide a secondary watertight bulkhead in the downstream side of this structure.
11. Seven (7) sealed sets of revised utility plans along with the MDEQ permit application (11/07 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Department for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets. Also, the MDEQ can be contacted for an expedited review by their office.

Storm Sewer

12. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
13. Match the 0.80 diameter depth above invert for pipe size increases.
14. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot deep plunge pool.
15. Provide a four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.
16. Label all inlet storm structures on the profiles. Inlets are only permitted in paved areas and when followed by a catch basin within 50 feet.
17. Label the 10-year HGL on the storm sewer profiles, and ensure the HGL remains at least 1-foot below the rim of each structure.
18. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

Storm Water Management Plan

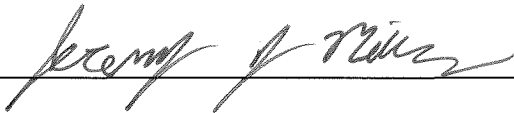
19. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
20. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
21. Provide an access easement for maintenance over the storm water retention system and any pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
22. Provide supporting calculations for the runoff coefficient determination.
23. A runoff coefficient of 0.35 shall be used for all turf grass lawns (mowed lawns).
24. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.
25. Provide a minimum 25 foot wide vegetated buffer around the perimeter of the basin.

Paving & Grading

26. Provide a stub street to the subdivision boundary at intervals not to exceed 1,300 feet along the subdivision perimeter or **provide a variance application from Appendix C Section 4.04 (A) (1) of Novi City Code**. This request must be submitted under a separate cover.
27. Provide top of curb/walk and pavement/gutter grades to indicate height of curb.
28. Provide the standard Type 'M' approach at the 8 Mile Rd. intersection.

29. Add a note to the plan stating that the emergency access gate is to be installed and closed prior to the issuance of the first TCO in the subdivision.
30. Provide permanent hard surface pathways in place of the proposed woodchip pathways.

Please contact Jeremy Miller at (248) 735-5694 with any questions.



cc: Ben Croy, Engineering
Brian Coburn, Engineering
Sri Komaragiri, Community Development
Sabrina Lilla, Water & Sewer

Landscape Review



PLAN REVIEW CENTER REPORT

March 16, 2015

RUD Conceptual Plan - Landscaping

Covington Estates Residential Unit Development

Review Type

Conceptual Site Plan Landscape Review for RUD

Property Characteristics

- Site Location: East side of Dixon Road, north of 12 Mile Road
- Site Zoning: RA
- Adjacent Zoning: RA
- Plan Date: 2/27/2015

Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the Preliminary Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and not intended to substitute for any Ordinance.

Summary

Conceptual plan mostly compliant with city ordinances. No significant problems with layout or plantings.

EXISTING ELEMENTS

Existing and proposed overhead and underground utilities, including hydrants.(LDM 2.e.(4))

1. Need to indicate whether utilities are overhead.

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))

1. Shown.
2. **Critical root zones (1' beyond dripline) need to be shown for trees to be saved.**
3. **Mark clearly which trees are to be removed.**

Existing Trees Protection (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))

1. **Add City of Novi Tree Protection Detail with fencing located at Critical Root Zone (1 foot outside of dripline).**

LANDSCAPING REQUIREMENTS

Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Zoning Sec. 5.5.3.B.ii and iii)

1. **Proposed berm is not minimum of 4' tall. Berm should vary vertically and horizontally. Add contour labels to grading shown.**
2. **Need calculations to show proposed plantings meet requirements.**
3. **Identify which plantings are intended to meet which requirement (buffer vs. street trees).**
4. **Add berm cross section detail showing representative height, width and planting.**

Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and LDM 1.d.)

1. **Street tree calculations are incorrect. Street tree requirements for corner lots need to be based on frontage of each side. As an example, lot 32, which has frontage of approximately feet of 225 feet on the street and 150 feet on the cul-de-sac, has a total street tree requirement of 9 trees, not 4 as indicated. Also, lots 1 and 38 should have 5 trees each, not 3. Please correct the calculations and place the correct number of trees on the plan.**
2. **15 Street trees are required for Eight Mile Road (1 tree per 35 feet of frontage).**
3. **Relocate trees at street corners so they are no closer than 35' from the intersection of the street curb line intersection.**

Parking Lot Landscape (Zoning Sec. 5.5.3.C.)

1. Not applicable

Woodland Replacement Trees (Chapter 37 – Woodlands Protection Sec 37-8.)

1. **Indicate which proposed trees are woodland tree replacements.**

Storm Basin Landscape (Zoning Sec 5.5.3.E.iv and LDM 1.d.(3))

1. **Clusters of shrubs are required to cover 70-75% of the basin rim area at and above the high water elevation of the basin. Please add the high water line to the plan and locate shrubs closer to the line.**
2. **The basin bottom is to be planted with native grasses or groundcover to discourage waterfowl. Please add seeding to basin bottom and show seed mix.**

Transformer/Utility Box and Fire Hydrant Plantings (LDM 1.3 from 1-5, Zoning Sec 5.5.3.C.ii.d)

1. NA – no utility boxes or hydrants are shown. If utility boxes are added, please add the required screening landscaping.

Trees near overhead utilities (LDM 3.e)

1. **Label/dimension the distance from overhead utilities near proposed trees.**

Landscape Tree Credit (LDM 3.b.(d))

1. **Not provided and not required, but applicant may want to see if they can benefit from provision.**

OTHER REQUIREMENTS

Plant List (LDM 2.h. and t.)

1. Acceptable.
2. Cornus rubra should be Cornus florida f. Rubra.
3. If possible, please replace Acer platanoides with a different species from the Novi Street Tree list that isn't as invasive. Possible substitutions are Celtis occidentalis, Liriodendron tulipifera, Quercus rubra, Gleditsia triacanthos, Valley Forge Elm, Ostrya virginiana, or Zelkova serrata.

Planting Notations and Details (LDM)

1. Most landscape notes meet City of Novi requirements. **Please add the note stating that there should be a minimum of 1 cultivation in planted areas in June, July and August for the 2-year warranty period.**
2. **Please add note stating that plant materials should not be planted within 4 feet of property line.**
3. **Please add symbols or other notation calling out which proposed/existing trees are being used to satisfy each requirement.**
4. **Specify color of mulch as "natural" in Evergreen tree planting detail.**

Cost estimates for Proposed Landscaping (LDM 2.t.)

1. Provided.
2. **Please change unit values for the following:**
 - a. Sod should be \$6.00/sy
 - b. Seed should be \$3.00/sy
3. **Mulch should also include required mulch for tree and shrub plantings and any other area where mulch will be the ground cover.**

Irrigation (LDM 1.a.(1)(e) and 2.s)

1. Irrigation plan for landscaped areas is required for Final Site Plan.

Proposed topography. 2' contour minimum (LDM 2.e.(1))

1. Shown. **Please show berm contours more clearly (this can be on the grading plan).**

Snow Deposit (LDM.2.q.)

1. **Indicated area for snow deposit in cul-de-sac island is not acceptable as there is significant landscaping in that area.**

Corner Clearance (Zoning Sec 5.9)

1. Provided.

If the applicant has any questions concerning the above review or the process in general, please do not hesitate to contact me at 248.735.5621 or rmeader rmeader@cityofnovi.org.



Rick Meader – Landscape Architect

Traffic Review



March 20, 2015

Barbara McBeth, AICP
Deputy Director of Community Development
City of Novi
45175 W. 10 Mile Road
Novi, MI 48375

**SUBJECT: Covington Estates, Traffic Review for Conceptual Plan Submission
JSP15-0002**

Dear Ms. McBeth,

URS has completed our review of the conceptual plan submission for the above referenced applicant. Our comments are as follows:

1. General Comments

- a. The applicant, Biltmore Land, LLC, is proposing to develop 48.85 acres near 8 Mile Road and Garfield Road in the City of Novi.
- b. The applicant is proposing a single family residential development of 38 units with a RUD option (a special land use within RA zoning).

2. Potential Traffic Impacts - The proposed development is not expected to generate traffic volumes heavy enough to warrant any additional traffic impact studies.

3. General Plan Comments – The proposed development appears to be in compliance with the traffic engineering aspects of the City of Novi Code of Ordinances and URS offers the following comments.

- a. The development proposes to include 5' sidewalks adjacent to all development roadways, which is in compliance with the City ordinances.
- b. The development proposes to include an 8' sidewalk along the 8 Mile Road property line, which is in compliance with the City ordinances.
- c. The development proposes three cul-de-sacs and the detailed design shows they are in compliance with the City ordinances.
- d. The proposed access to the site is provided by a boulevard design. The 21' width of the lanes entering and exiting the site do not meet the City's standard range of 22' – 27'. The applicant should also provide the dimension from the edge of roadway to the beginning of the island.
- e. At the entrance to the development, sight distance dimensions and driveway spacing dimensions are in compliance with the City ordinances.
- f. **The applicant plans to submit a variance due to the excessive length from 8 Mile Road to emergency access, as well as for the exclusion of a stub street to the west of the site. The variance was not provided and therefore not reviewed as part of this submittal.**
- g. An emergency access road is proposed that connects to the



development to the east. The applicant should provide dimensions and details for this access road in further submittals.

- 4. Signing and Pavement Marking** - The conceptual plan set did not include signing and pavement marking details. The applicant should consider including such details in the Preliminary Site Plan submittal.

The conceptual plans as submitted were reviewed to the level of detail provided and additional information is required to fully review the traffic-related elements. URS recommends **approval** of the concept plans with the condition that the applicant will address the comments within this letter in the preliminary plans submission and that the responses to the comments are acceptable to the City and in conformance with City requirements and standards.

Sincerely,

URS Corporation Great Lakes

A handwritten signature in blue ink, appearing to read "Matthew G. Klawon".

Matthew G. Klawon, PE
Manager, Traffic Engineering and ITS Engineering Services

Woodland Review

March 24, 2015

Ms. Barbara McBeth
Deputy Director of Community Development
City of Novi
45175 West Ten Mile Road
Novi, MI 48375

Re: Covington Estates (JSP15-0002)
Woodland Review of the RUD Conceptual Plan (PRUD15-0001)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the RUD Conceptual Plan for the proposed Covington Estates project prepared by Fazal Khan & Associates, Inc. dated February 27, 2015 (Plan). ECT visited the site on Tuesday, March 17, 2015 for the purpose of a Woodland Evaluation. The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. The purpose of the Woodlands Protection Ordinance is to:

- 1) *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;*
- 2) *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*
- 3) *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

The proposed development is located north of Eight Mile Road and west of Garfield Road in Section 31. The proposed development includes the construction of a 38-unit residential development, associated roads, utilities and a storm water retention basin. The majority of the proposed project site is currently idle agricultural field. It should be noted that the proposed development would be located just west of the proposed Ballantyne residential development, which is to be developed at the northwest corner of Eight Mile Road and Garfield Road.

What follows is a summary of our findings regarding on-site woodlands and proposed woodland impacts associated with the proposed project.

Onsite Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on Tuesday, March 17, 2015. At that time, ECT found that the *Boundary and Topographic Survey Plan* (Sheet 2) and the *Tree Survey* appeared to accurately depict the location, species composition and the size of the existing trees. ECT took numerous diameter-at-breast-height (d.b.h.) measurements and found that the data provided on the Plan was consistent with the field measurements.

The entire site is approximately 49 acres with regulated woodland mapped across a small portion of the property. These mapped, regulated woodlands are located in the northwest portion of the site, near existing Wetland A (see Figure 1). On-site trees consist of black walnut (*Juglans nigra*), box elder (*Acer negundo*), shagbark hickory (*Carya ovata*), American basswood (*Tilia americana*), white ash (*Fraxinus americana*), eastern cottonwood (*Populus deltoides*), American elm (*Ulmus americana*) and several other species.

The *Tree Survey* on Sheet 2 of the Plan includes approximately 100 surveyed trees. Many of the surveyed trees appear to be outside the property boundaries (mainly along the west side of the site). As noted above, for the most part the majority of the proposed project site is currently idle agricultural field and lacks trees. It should be noted however that after our woodland evaluation and review of the *Tree Survey* submitted by the applicant's woodland consultant, there are six (6) trees on-site that meet the minimum caliper size for designation as a specimen tree (Section 37-6.5). These trees include:

- Tree #420, 25" black walnut ($\geq 24"$, the minimum caliper size for specimen trees);
- Tree #437, 34.5" red maple ($\geq 24"$, the minimum caliper size for specimen trees);
- Tree #2740, 25" Bitternut hickory ($\geq 24"$, the minimum caliper size for specimen trees);
- Tree #2741, 28"/33" black walnut ($\geq 24"$, the minimum caliper size for specimen trees);
- Tree #2743, 31.5" black walnut ($\geq 24"$, the minimum caliper size for specimen trees);
- Tree #2744, 31.5" black walnut ($\geq 24"$, the minimum caliper size for specimen trees);

Proposed Woodland Impacts

While the *Tree Survey* (list) on the *Boundary and Topographic Survey Plan* (Sheet 2) does not appear to indicate which trees are proposed for removal, the Concept RUD Plan (Sheet 3) indicates that a total of three (3) trees will be removed;

- Tree #2737, 8" diameter black cherry (requires 1 Woodland Replacement Credit);
- Tree #2744, 32" diameter black walnut (requires 4 Woodland Replacement Credits);
- Tree #2745, 17" diameter black walnut (requires 2 Woodland Replacement Credit).

Also, of the six (6) total trees that appeared meet the minimum caliper size for designation as a specimen tree (Section 37-6.5), the Plan indicates the proposed removal of one (1) of these trees (approximately 17% of the potential specimen trees). The Applicant should be aware of the City's

Specimen Tree Designation as outlined in Section 37-6.5 of the Woodland Ordinance. This section states that:

“A person may nominate a tree within the city for designation as a historic or specimen tree based upon documented historical or cultural associations. Such a nomination shall be made upon that form provided by the community development department. A person may nominate a tree within the city as a specimen tree based upon its size and good health. Any species may be nominated as a specimen tree for consideration by the planning commission”.

Woodland Comments

ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. The *Tree Survey* on the *Boundary and Topographic Survey* Plan does not clearly indicate which of the surveyed trees are proposed for removal. The *Tree Survey* should be revised to indicate which trees are being removed and how many Woodland Replacement credits are required for each removal.
2. The Applicant is encouraged to provide preservation/conservation easements for any areas of remaining woodland.
3. It is currently not clear if the seven (7) required Woodland Replacement credits will be provided on-site. The Plan should be reviewed and revised as necessary in order to provide clarification.
4. The Applicant is encouraged to provide woodland conservation easements for any areas containing woodland replacement trees, if applicable.
5. A Woodland Permit from the City of Novi would be required for proposed impacts to any existing trees 8-inch d.b.h. or greater located within areas designated as regulated woodland. Such trees shall be relocated or replaced by the permit grantee. All replacement trees shall be two and one-half (2 ½) inches caliper or greater (deciduous) or 7-foot tall (evergreen).
6. A Woodland Replacement financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400.

Based on a successful inspection of the installed on-site Woodland Replacement trees, seventy-five percent (75%) of the original Woodland Financial Guarantee shall be returned to the Applicant. Twenty-five percent (25%) of the original Woodland Replacement financial guarantee will be kept for a period of 2-years after the successful inspection of the tree replacement installation as a *Woodland Maintenance and Guarantee Bond*.

7. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site or otherwise accounted for.

Covington Estates (JSP15-0002)
Woodland Review of the RUD Conceptual Plan (PRUD15-0001)
March 24, 2015
Page 4 of 7

8. Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.

Recommendation

ECT recommends approval of the RUD Conceptual Plan for woodlands. We recommend that the Applicant address the items noted above under "Comments" in subsequent site plan submittals.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Pete Hill, P.E.
Senior Associate Engineer

cc: Kristen Kapelanski, AICP, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect
Stephanie Ramsay, City of Novi, Customer Service

Attachments: Regulated Woodlands & Wetlands Map (Figure 1)
Site Photos



Figure 1. City of Novi Regulated Woodlands & Wetlands Map (accessed March 23, 2015). Regulated wetland areas are shown in blue and regulated woodland areas are shown in green. The approximate project boundary is shown in red.

Site Photos



Photo 1. Looking west towards area of proposed tree removals (Tree #TT2744 and #TT2745), ECT, March 17, 2015.



Photo 2. Tree #2737, 8-inch black cherry, to be removed (ECT, March 17, 2015).



Photo 3. Looking northwest at Tree #2738 through #2742, all to be preserved during development (ECT, March 17, 2015).



Photo 4. Looking east at Tree #2738 through #2742, all to be preserved during development (ECT, March 17, 2015).

Wetland Review

March 24, 2015

Ms. Barbara McBeth
Deputy Director of Community Development
City of Novi
45175 W. Ten Mile Road
Novi, Michigan 48375

Re: Covington Estates (JSP15-0002)
Wetland Review of the RUD Conceptual Plan (PRUD15-0001)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the RUD Conceptual Plan for the proposed Covington Estates project prepared by Fazal Khan & Associates, Inc. dated February 27, 2015 (Plan). The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance. ECT visited the site on Tuesday, March 17, 2015 for the purpose of a Wetland Boundary Verification.

The proposed development is located north of Eight Mile Road and west of Garfield Road in Section 31. The proposed development includes the construction of a 38-unit residential development, associated roads, utilities and a storm water retention basin. The majority of the proposed project site is currently idle agricultural field. It should be noted that the proposed development would be located just west of the proposed Ballantyne residential development, which is to be developed at the northwest corner of Eight Mile Road and Garfield Road.

Wetlands and Proposed Wetland Impacts

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands Map, it appears as if this proposed project site contains one (1) area of existing wetland. This wetland (Wetland A) is an emergent and scrub/shrub wetland located in the northwest corner of the property (see Figure 1 and Site Photos, attached). The dominant vegetation found in the wetland included reed canary grass (*Phalaris arundinacea*) and silky dogwood (*Cornus amomum*). Dominant vegetation observed within the upland adjacent to Wetland A included black walnut (*Juglans nigra*), black cherry (*Prunus serotina*), prickly ash (*Zanthoxylum americanum*) and corn (*Zea mays*). The overall on-site wetland acreage does not appear to be provided on the Plan. The applicant should provide this information on subsequent site plan submittals. The wetland delineation was completed by ASTI Environmental on December 5, 2014. Wetland boundary flagging (pink survey ribbon) was apparent at the time of our site inspection and the wetland boundary appears to have been accurately depicted on the Plan.

The current Plan appears to propose preservation of this wetland in its entirety as well as the preservation of the associated 25-foot wetland setback. Previous iterations of the Plan appeared to show proposed storm water storage within Wetland A and potential wetland or wetland buffer impacts for the construction of the proposed storm water outfall.

Permits and Regulatory Status

Wetland A appears to be considered essential by the City as it meets one or more of the essentiality criteria set forth in the City's Wetland and Watercourse Protection Ordinance (i.e., storm water storage/flood control, wildlife habitat, etc.). These wetlands do not appear to be MDEQ regulated, as they are not within 500-feet of an inland lake, pond, stream or river and are not greater than 5 acres in size. If however, impacts to Wetland A were proposed, it should be noted that it would be the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland impact. Final determination as to the regulatory status of the wetland would need to be made by MDEQ if wetland impacts are proposed.

The project as proposed does not appear to require a City of Novi *Wetland Use Permit* or an *Authorization to Encroach the 25-Foot Natural Features Setback* because the current site Plan appears to avoid impacts to the wetland and 25-foot setback.

Comments

Please consider the following wetland comments when preparing subsequent site plan submittals:

1. Although there are no wetland impacts associated with the proposed site development plan, the plan should indicate the overall acreage of the on-site wetland.
2. The Plan should indicate and quantify any proposed impacts to Wetland A or its 25-foot wetland setback, *if applicable*. The plan does not currently propose any impacts to these natural features.

Conclusion

The site appears to contain one area of City of Novi Regulated Wetland (Wetland A). The wetland is considered regulated by the City and any proposed impacts would require a City of Novi *Wetland Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback*. The current Plan does not propose any impacts to on-site wetland or 25-foot wetland setback. Unless changes to the plan are proposed that introduce wetland or wetland buffer impacts, no further wetland review is necessary.

Covington Estates (JSP15-0002)
Wetland Review of the RUD Conceptual Plan (PRUD15-0001)
March 24, 2015
Page 3 of 6

Recommendation

ECT recommends approval of the RUD Conceptual Plan for wetlands. We recommend that the Applicant address the items noted above under "Comments" in subsequent site plan submittals. Again, unless changes to the plan are proposed that introduce wetland or wetland buffer impacts, no further wetland review is necessary.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Pete Hill, P.E.
Senior Associate Engineer

cc: Kristen Kapelanski, AICP, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect
Stephanie Ramsay, City of Novi, Customer Service

Attachments: Regulated Woodlands & Wetlands Map (Figure 1)
Site Photos



Figure 1. City of Novi Regulated Woodlands & Wetlands Map (accessed March 23, 2015). Regulated wetland areas are shown in blue and regulated woodland areas are shown in green. The approximate project boundary is shown in red.

Site Photos



Photo 1. Looking west towards Wetland A along northern site boundary (ECT, March 17, 2015).



Photo 2. Looking southeast at Wetland A (ECT, March 17, 2015).



Photo 3. Looking south at Wetland A (ECT, March 17, 2015).



Photo 4. Scrub-shrub edge of Wetland A (ECT, March 17, 2015).

Fire Review



DATE: January 14th, 2015

Revised : March 13, 2015

TO: Barbara McBeth- Deputy Director of Community Development
Kristen Kapelanski- Plan Review Center
Sri Komaragiri- Plan Review Center

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Gwen Markham

Andrew Mutch

Doreen Poupard

Wayne Wrobel

Laura Marie Casey

City Manager
Pete Auger

**Director of Public Safety
Chief of Police**
David E. Molloy

Director of EMS/Fire Operations
Jeffery R. Johnson

Assistant Chief of Police
Victor C.M. Lauria

Assistant Chief of Police
Jerrod S. Hart

RE: Covington Estates

PSP# 15-0001 (PRUD)

Project Description: Residential unit development

Comments:

1. Emergency access must follow standards below.
2. Main entrance gate- Will provide further details concerning entrance gates, which follow city ordinances below.
3. Water mains and fire hydrants shall be installed prior to construction above the foundation. Note this on all plans.
4. Prior to construction above the foundation of all multi-residential buildings and single family dwellings, all roads are to be paved.
5. Prior to construction above the foundation of non-residential buildings, an all-weather access road capable of supporting 35 tons shall be provided.

Recommendation:

1. When the property has limited frontage along external arterials, or topographic conditions on the external arterials reduce sight line distances so that a secondary access point cannot be established which will provide safe ingress and egress, the City shall require access roads for emergency vehicles, where feasible. A secondary access driveway shall be a minimum of eighteen (20 feet in width and paved to provide all-weather access and shall be designed to support a vehicle of thirty-five (35) tons. Minimum easement width for secondary access driveways shall be twenty-five (25) feet. A permanent "break-away" gate shall be provided at the secondary access driveway's intersection with the public roadway in accordance with Figure VIII-K of the Design and

Novi Public Safety Administration
45125 W. Ten Mile Road
Novi, Michigan 48375
248.348.7100
248.347.0590 fax

cityofnovi.org

Construction Standards. To discourage non-emergency vehicles, emergency access roads shall be designated by signage as for emergency access only, shall be separated from the other roadways by mountable curbs, and shall utilize entrance radii designed to permit emergency vehicles while discouraging non-emergency traffic. (D.C.S. Sec 11-194 (a)(19))

2. Entrances to public and private roadways shall not have locked gates, cables or barricades that would impede fire apparatus response. (Fire Prevention Ord.)

Sincerely,

A handwritten signature in black ink that reads "Andrew Copeland". The signature is written in a cursive style with a large, looping initial 'A'.

Andrew Copeland – FPO/Inspector II - CFPE
City of Novi – Fire Dept.

cc. FPO. Paul Mullett – CFPE training
cc. FPO. Matt Marken – CFPE training

RUD Narrative

Covington Estates
SE ¼ Section 31
Parcel Nos. 22-31-400-011 and 012
Project Narrative / Written Statements

Proposed Covington Estates is located north of 8 Mile Road, west of Garfield Road, and is a proposed 38 unit single family Residential Unit Development (RUD) on 48.85 acres. The proposed RUD is consistent with recent and proposed development in the area. The full intent of the developer is to provide a quality upscale development while still preserving the natural features of the site and providing active recreation for the residents.

The 38 units are each a minimum of 0.5 acre in size, with a minimum width of 120 feet, consistent with the requirements. Four units are proposed with a size of a minimum of 1.0 acre, conforming to the underlying zoning of R-A. The proposed density is 0.78 units per acre, also consistent with Section 2402 (Residential Unit Developments). The remainder of the site acreage is intended to be open space. The proposed homes are intended to be high-end construction, with a minimum size of 3,200 square feet, and the expected home cost is between \$800,000 and \$1,100,000. The resultant population will consist of a conventional family population, with an anticipated total of 152 people.

A proposed 8,940-foot (1.69 miles) walking trail with features is intended within the open space to provide active recreation for the residents. The trail is to remain unpaved and be constructed of natural materials, consisting of compacted fine grade stone to remain quiet and unobtrusive for the residents. Many of the premier trails of Oakland County are constructed of these materials including the Polly Ann Trail, the Paint Creek Trail, and the Clinton River Trail. Other items that will encourage the active recreation on the trail include benches, bird houses, and quarter-mile marker signage. In addition, the property contains a 115 foot wide by 1,100 foot deep park area (2.90 acre) which extends to Garfield Road along the north property line. This open park area is intended for both active and passive recreation. A paved pathway connection is provided through this park to Garfield Road, which will encourage further active pedestrian and bicycle recreation and a larger pathway loop. The future homeowner's association may wish to consider additional activity-specific areas along the path including badminton or volleyball courts, bocce ball or horseshoe courts, residential garden plots, or a picnic area. Instead of providing amenities that may not be desired by the residents and as a result not properly maintained, it is best that the homeowner's association determine those amenities.

The site is naturally undulating, with grades ranging from elevation 958 to elevation 976. The site is mostly clear, with a small non-regulated wetland, and a small woodland that is contiguous to a woodland on the parcel to the west near the northwest corner of the site. The wetland and woodland area is to be preserved. The predominant existing onsite soils consist of fox sandy loam.

The developer has analyzed market and development trends in the vicinity, and has determined that the proposed lot sizes and amenities are desired by future residents.

The proposed schedule of development is to complete site planning and engineering in 2015, with construction to begin in early 2016. Home construction would begin in the summer of 2016.

The benefit of the proposed RUD over a conventional site plan conforming to the R-A designation is that open space can be provided both for the preservation of the natural features on site, and for the recreation and enjoyment of the residents.

The permanent preservation of the woodland and wetland (natural features), as well as the maintenance and preservation of the remaining open space will be addressed in the Master Deed and Bylaws of the development. The maintenance of the open spaces will be the responsibility of the Homeowner's Association, and will be outlined in the Master Deed and Bylaws.

Applicant Response Letter

FAZAL KHAN & ASSOCIATES, INC.

Civil Engineers & Land Surveyors

Fazlullah M. Khan, P.E., MSCE
Donald H. King, P.S.
Carol P. Thurber, P.E., CFM
Shannon L. Filarecki, P.E.
Thomas R. DeHondt, P.E.

July 27, 2015

City of Novi
Community Development
Attn: Sri Ravali Komaragiri
45175 West 10 Mile Road
Novi, MI 48375

RE: Proposed Covington Estates RUD
SE ¼ Section 31, 8 Mile Road west of Garfield Road
FKA Job No. 14-031

Dear Ms. Komaragiri:

We received your email dated July 13, 2015, and we are pleased to submit our drawings for the Planning Commission meeting of August 8. Enclosed please find plans and the following documents:

- Project Narrative / Statement per 3.29.7F
- Request for Variance

As requested, we are addressing all comments from all review letters received. We have the following comments:

Planning comments:

1. As noted above, a written statement (Project Narrative) explaining in detail the full intent of the applicant as explained in section 3.29.7F is enclosed.
2. The anticipated population is addressed in the enclosed Project Narrative.
3. A proposed entrance light is indicated on the Site Plan to be included in the boulevard near the entrance.
4. The applicant will contact Richelle Leskun to discuss the development and street names.
5. Additional information regarding the DUA calculation is added to the Site Plan. The 8 Mile Road right of way area is indicated (however it was not part of the property acreage per legal description).
6. The additional information to support the deviation of a maximum of 1,300 feet to the emergency access is enclosed. Our office only has a stripped-down .pdf file of the Ballantyne development, however a complete site plan set should be on file with the City of Novi.
7. The sidewalks connecting to public sidewalks are indicated to be paved. The recreational pathway is increased to eight feet wide. As indicated in the Project Narrative, the intent of the trail is to remain quiet and unobtrusive for the residents, and is indicated to remain unpaved and be constructed of natural

- materials, consisting of compacted fine grade stone, similar to many of the trails within the Oakland County trail system.
8. Further details regarding the functional use recreation areas are provided in the Project Narrative.
 9. The topographic survey indicates the trees that to be removed.
 10. The proposed walking / bike path is indicated to be of a pervious hard material (compacted fine grade stone) to remain quiet and unobtrusive for the residents. Many of the premier trails of Oakland County are constructed of these materials, including the Polly Ann Trail, the Paint Creek Trail, and the Clinton River Trail.
 11. Additional amenities are proposed along the walking trail, including benches, bird houses, and quarter-mile marker signage.
 12. Additional contours and grades for the pathway adjacent to the storm water basins are included on the storm water management plan. The path will not have a cross slope exceed five (5) percent.
 13. It is indicated on the Utility Plan that the developer must extend sanitary sewer and water main to the site in the event that the construction has not yet been completed from Garfield Road to the site.
 14. Enclosed please find the Design Construction Standards Variance request for the deviation for the requirement of stub streets to the west at 1,300 foot intervals.

Engineering comments:

General:

1. A request for a variance from Section 11-194(a) of the Novi City Code is enclosed. The proposed emergency access is indicated to line up exactly with the emergency access drive for the adjacent site (Ballantyne). Placing an emergency access point at another location would result in the emergency access ending at the rear of a unit within the proposed Ballantyne development.
2. A note will be provided on the plans that all work shall conform to the current City of Novi standards and specifications prior to Final Site Plan submittal.
3. A traffic control sign table listing the quantities of each sign type proposed for the development and a note along with the table stating all traffic signage will comply with the current MMUTCD standards will be provided prior to Final Site Plan submittal.
4. A construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed will be provided prior to Final Site Plan submittal.
5. A note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review will be provided prior to Final Site Plan submittal.
6. The City standard detail sheets will be provided with the Stamping Set submittal.

Water Main:

7. A profile for all proposed water main 8" and larger will be provided prior to Final Site Plan submittal.
8. The water main stub to the west will terminate with a hydrant followed by a valve in well will be indicated prior to Final Site Plan submittal.

9. Three sealed sets of revised utility plans along with the MDEQ permit application for water main construction and the Streamlined Water Main Permit Checklist will be provided prior to Final Site Plan submittal.

Sanitary Sewer:

10. A testing bulkhead immediately upstream of the sanitary connection point, with a temporary 1-foot deep sump in the first sanitary structure proposed upstream of the connection point and a secondary watertight bulkhead in the upstream side of this structure will be indicated prior to Final Site Plan submittal.
11. Seven sealed sets of revised utility plans along with the MDEQ permit application for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Checklist will be provided prior to Final Site Plan submittal.

Storm Sewer:

12. A 0.1 foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs will be indicated prior to Final Site Plan submittal.
13. The match of 0.80 diameter depth above the invert for pipe size increases will be indicated prior to Final Site Plan submittal.
14. Storm manholes with differences in inverts elevations exceeding two feet will contain a 2-foot deep plunge pool and will be indicated prior to Final Site Plan submittal.
15. A four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin will be indicated prior to Final Site Plan submittal.
16. A label for all inlet storm structures on the profiles will be indicated prior to Final Site Plan submittal. We understand that inlets are only permitted in paved areas and when followed by a catch basin within 50 feet.
17. A label for the 10-year HGL on the storm profiles will be indicated prior to Final Site Plan submittal. It will be ensured that the HGL will remain at least 1-foot below the rim of each structure.
18. A schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan will be indicated prior to Final Site Plan submittal. Round castings will be provided on all catch basins except curb inlet structures.

Storm Water Management Plan

19. The Storm Water Management Plan will be designed in accordance with the Storm water Ordinance and Chapter 5 of the new Engineering Design Manual.
20. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures will be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment) will be indicated prior to Final Site Plan submittal. It will be verified that the access route does not conflict with proposed landscaping.
21. An access easement for maintenance over the storm water retention system and any pretreatment structures will be provided prior to Final Site Plan submittal. Additionally, an access easement to the retention area from the public road right of way will be indicated prior to Final Site Plan submittal.

22. Supporting calculations for the runoff coefficient determination will be indicated prior to Final Site Plan submittal.
23. A runoff coefficient of 0.35 will be used for all turf grass lawns.
24. There is no proposed permanent water surface elevation provided in the retention basin in response to the previous reviews, so the required 4-foot wide safety shelf one foot below the permanent water surface elevation within the basin cannot be provided.
25. The required 25 foot wide vegetated buffer around the perimeter of the retention basins will be indicated prior to Final Site Plan submittal.

Paving and Grading

26. A variance for the stub street to the subdivision boundary at intervals not to exceed 1,300 feet along the subdivision perimeter will be sought. A variance application obtained from Appendix C Section 4.04(A) (1) of the Novi City Code will be submitted under separate cover.
27. Top of curb/walk and pavement/gutter grades to indicate the height of curb will be provided prior to Final Site Plan submittal.
28. The standard Type "M" approach at the 8 Mile Road intersection will be indicated prior to Final Site Plan submittal.
29. A note stating that the emergency access gate is to be installed and closed prior to the issuance of the first TCO in the development will be indicated prior to Final Site Plan submittal.
30. No wood chip pathways are indicated in the development with the RUD plan submittal. As indicated in previous submittals and the Narrative, the non-paved pathways are to consist of compacted fine grade stone.

Landscape Comments:

A preliminary landscape plan is provided for conceptual purposes. The remaining landscape plan comments will be addressed with Preliminary Site Plan submittal as follows:

1. Critical root zones are indicated for the trees to be saved on the Landscape plan.
2. The removed trees are clearly marked on the topographic survey
3. The City of Novi Tree Protection Detail is indicated on Sheet L-3.
4. The proposed berm adjacent to 8 Mile Road will be a minimum of 4' tall. The berm will vary vertically and horizontally. Contour labels will be added to the Grading Plan and the Landscape Plan.
5. Calculations will be provided to verify that the proposed plantings meet requirements.
6. It will be identified which plantings are intended to meet which requirements (buffer vs. street trees).
7. A berm cross section detail showing representative height, width and planting will be provided.
8. Street tree calculations will be revised to include the frontage of each side for corner lots.
9. 15 Street trees will be indicated for Eight Mile Road.

10. Trees at street corners will be relocated so that they are no closer than 35 feet from the intersection of the street curb line intersection.
11. It will be indicated which proposed trees are woodland tree replacements.
12. The high water line for the retention basins will be added and the clusters of shrubs will be located closer to that line.
13. The retention basin bottom(s) will be indicated to be planted with native grasses or groundcover to discourage waterfowl. Seeding will be indicated for the basin bottom and the seed mix will be indicated.
14. The dimension of the distance from overhead utilities near the proposed trees will be indicated.
15. A note will be added stating that there should be a minimum of 1 cultivation in planted areas in June, July and August for the 2-year warranty period.
16. A note will be added stating that plant materials should not be planted within 4 feet of the property line.
17. Symbols or other notation will be added calling out which proposed / existing trees are being used to satisfy each requirement.
18. The color of mulch will be specified as "natural" in the Evergreen tree planting detail.
19. The unit values for Sod will be \$6.00 / sy, and the Seed will be \$3.00 / sy.
20. Mulch quantities will also include the required mulch for tree and shrub plantings in any other area where mulch will be the ground cover.
21. An acceptable area for snow deposit in the cul-de-sac will be indicated.

Woodland / Wetland Comments:

1. The overall acreage of the on-site wetland is indicated on the Site Plan and the Topographic Survey.
2. There are no impacts to Wetland A or its 25 foot wetland setback.
3. The Tree Survey indicates the trees indicated for removal. The Woodland Replacement Credits will be indicated on the Site Plan submittal.
4. It is intended to provide preservation / conservation easements for the woodland area.
5. The required Woodland Replacement credits will be provided on site. If possible, woodland conservation easements will be provided for the areas containing woodland replacement trees.
6. A woodland permit for impacts to any existing trees 8-inch dbh or greater within areas designated as regulated woodland will be applied for. Currently, there are no impacts anticipated within the regulated woodland area.
7. A Woodland Replacement financial guarantee for the planting of replacement trees will be provided if required.
8. The applicant will pay the City of Novi Tree Fund a value of \$400/credit for any woodland Replacement tree credits that cannot be placed on site.
9. Replacement material will not be located within 10 feet of built structures or edges of utility easement no over underground structures / utilities or within the easements. Replacement tree spacing will follow the "Plant Material Spacing Relationship Chart for Landscape Purposes".

Traffic Engineering Review:

1. The lanes entering and exiting the site will be increased to be within the standard range of 22' to 27' to meet the City Standard. A dimension from the edge of roadway to the beginning of the island will be provided.
2. The variance application for the excessive length from 8 Mile Road to the emergency access was previously submitted. Enclosed is a copy of the application. An application for variance for the exclusion of a stub street to the west of the site will be sought.
3. Dimensions and details for the emergency access road will be provided in future submittals.

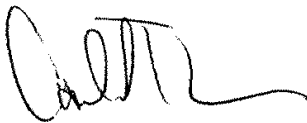
Fire Department:

1. The emergency access will follow the standards listed in D.C.S Sec 11-194 (a)(19).
2. Further details regarding the Main entrance gate, following City ordinances, will be provided in future submittals.
3. It will be noted on the plans that water mains and fire hydrants shall be installed prior to construction above the foundation.
4. It will be noted that all roads are to be paved prior to construction above the foundation.
5. A secondary access designed to support a vehicle of thirty-five tons within a minimum easement width of 25 feet will be provided. A permanent "break-away" gate will be provided at the access driveway's intersection with the public roadway. Proper signage will be provided.
6. The entrances to public and private roadways will not have locked gates, cables or barricades that would impede fire apparatus response.

We believe that we have addressed all of the necessary comments pertaining to the RUD from the correspondence dated March 27, 2015, as well as the Engineering Comments received July 13, 2015.

Sincerely,

FAZAL KHAN & ASSOCIATES, INC.



Carol P. Thurber, PE, CFM

Enclosure(s): Written Statement / Project Narrative
Dimensional Variance Form for Emergency Access
Request for Variance – Design & Construction Standards

Cc: David Stollman, Biltmore Land, LLC

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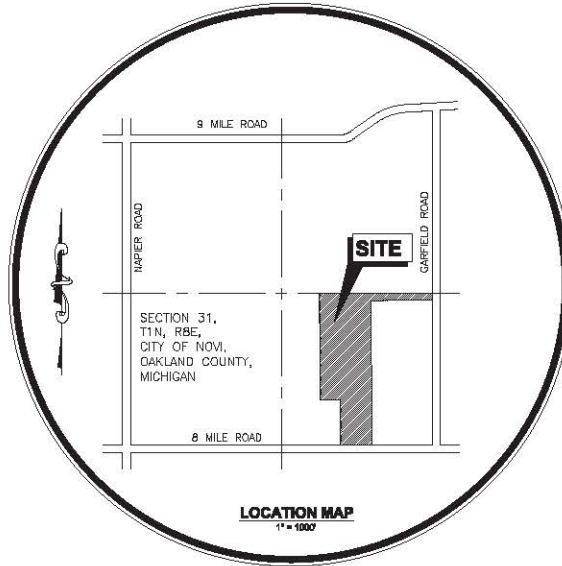
COVINGTON ESTATES

PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

RESIDENTIAL UNIT DEVELOPMENT

PROPERTY DESCRIPTION
A PARCEL OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 31; THENCE N89°55'04"W 1100.00 FEET ALONG THE SOUTH LINE OF SECTION 31; THENCE N00°15'40"W 600.00 FEET TO THE POINT OF BEGINNING; THENCE EXTENDING N89°55'04"W 534.92 FEET ALONG THE NORTH RIGHT OF WAY LINE OF EIGHT MILE ROAD (60'-1/2' WIDTH); THENCE N02°22'42"W 764.80 FEET; THENCE S89°55'04"W 341.93 FEET; THENCE N02°22'42"W 1835.49 FEET TO THE EAST-WEST 1/4 LINE OF SECTION 31; THENCE N89°43'21"E 1981.92 FEET ALONG THE EAST-WEST 1/4 LINE OF SECTION 31 TO THE EAST 1/4 CORNER OF SECTION 31; THENCE S00°15'40"E 115.00 FEET (RECORDED) 115.19 FEET (MEASURED) ALONG THE EAST LINE OF SECTION 31; THENCE S89°43'21"W 1099.98 FEET; THENCE S00°15'40"E 2480.40 FEET TO THE POINT OF BEGINNING; CONTAINING 48.847 ACRES OF LAND.

SUBJECT TO THE RIGHTS OF THE PUBLIC IN EIGHT MILE ROAD AND GARFIELD ROAD.
ALSO SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY RECORDED OR OTHERWISE.



- GENERAL NOTES**
1. THE CONTRACTOR SHALL NOTIFY THE CITY OF NOVI ENGINEERING DIVISION (248-461-0488) 48 HOURS PRIOR TO THE START OF CONSTRUCTION OF PUBLIC UTILITIES OR CONSTRUCTION IN THE STREET RIGHT OF WAY.
 2. ON SITE PARKING SHALL BE PROVIDED FOR CONSTRUCTION WORKERS.
 3. ALL ON-SITE STORMWATER TANKS EXCEPT THOSE CONTAINING POTABLE WATER, SHALL BE PROVIDED WITH REDUNDANT CONTINGENT DRAIN TO A MINIMUM VEE OF FIVE CAPACITY.
 4. ALL POTENTIAL UTILITY CONFLICTS MUST BE FULLY IDENTIFIED PRIOR TO THE START OF CONSTRUCTION OF UTILITIES. AN ENGINEERING INSPECTOR MUST BE PRESENT.
 5. UNDERGROUND SANITARY SEWERS, WATERMains, AND IRON SEWER AND IRON PIPE RECORDS LOCATION WHERE NOT PHYSICALLY EXISTENT, ALL SOILS AND LOGS ARE TO BE VERIFIED PRIOR TO AN CONSTRUCTION.
 6. UNDERGROUND ELECTRIC, TELEPHONE, AND GAS LINE LOCATIONS ARE UNKNOWN AND NOT SHOWN ON THIS THE CORNER OF THIS SURVEY WILL BE SENT TO THE RESPECTIVE COMPANIES IDENTIFYING THEIR LOCATION AND DEPTHS WILL BE MADE UPON RECEIPT OF THEIR COMMENTS.
 7. TREE REMOVAL PERMIT IS REQUIRED.
 8. STREET SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF NOVI.
 9. ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND SPECIFICATIONS.

ALL DRAWINGS, SPECIFICATIONS, AND OTHER RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF FAZAL KHAN & ASSOC. INC. AND SHALL BE RETURNED UPON REQUEST.

REPRODUCTION OF DRAWINGS AND RELATED DOCUMENTS, IN WHOLE OR IN PART, IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF FAZAL KHAN & ASSOCIATES, INC.

THE CONTRACTOR SHALL CHECK AND VERIFY ALL PERTINENT DIMENSIONS AND REPORT ANY DISCREPANCIES TO FAZAL KHAN & ASSOCIATES INC. BEFORE PROCEEDING WITH THE WORK.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF ALL GOVERNING AGENCIES.

ALL WATERMANS, SANITARY SEWERS (AND LEADS) AND STORM SEWERS UNDER PROPOSED OR EXISTING PAVEMENT OR WITHIN 3 FT. OF PAVEMENT TO BE SAND BACK FILLED AND COMPACTED TO 90% OPTIMUM DENSITY (PROCTOR). ALSO ALL UTILITY DITCHES ARE TO BE SAND BACK FILLED. SAND BACK FILLING TO BE INCIDENTAL TO CONTRACT.

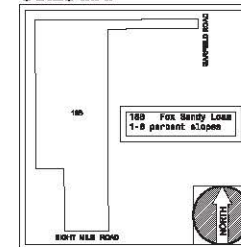
INDEX OF SHEETS

- | | |
|-----------|--|
| SHEET 1 | COVER SHEET |
| SHEET 2 | BOUNDARY AND TOPOGRAPHIC SURVEY |
| SHEET 3 | CONCEPT RUD PLAN |
| SHEET 4 | UTILITY PLAN |
| SHEET 5 | PRELIMINARY STORMWATER MANAGEMENT PLAN |
| SHEET L-1 | LANDSCAPE PLAN |
| SHEET L-2 | LANDSCAPE PLAN |
| SHEET L-3 | LANDSCAPE DETAILS |

OWNER / DEVELOPER
BILTMORE LAND LLC
555 S. OLD WOODWARD #1409
BIRMINGHAM, MI 48009
(248) 563-5800

SURVEYOR / ENGINEER
FAZAL KHAN AND ASSOCIATES, INC.
43279 SCHOENHERR ROAD
STERLING HEIGHTS, MI 48313
(586) 739-8007

SOILS MAP



PLANS SUBMITTED TO:	DATE SUBMITTED:	COMMENTS RECEIVED:	RE-SUBMITTED:	COMMENTS RECEIVED:	RE-SUBMITTED:	DATE APPROVED:	ADDRESS AND PHONE #:
CITY OF NOVI	01-13-2015	01-27-2015	03-05-2015	03-27-2015	04-16-2015		555 S. OLD WOODWARD #1409 BIRMINGHAM, MI 48009 (248) 563-5800
CITY OF NOVI (CONT.)		04-28-2015	06-18-2015				

CALL 811 LOCATE BEFORE YOU DIG
1-800-4-A-DIG
CALL 811.COM (toll-free)

DATE: 01-13-2015
PROJECT: COVINGTON ESTATES
SHEET: COVER SHEET

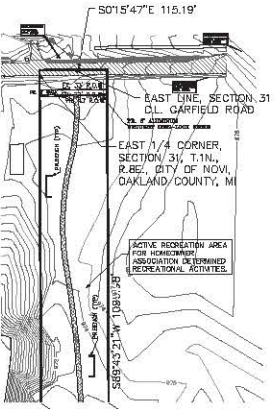
FAZAL KHAN & ASSOCIATES, INC.
2011 ENGINEERING AND SURVEYING
43279 SCHOENHERR ROAD
STERLING HEIGHTS, MI 48313
WWW.FAZAL-KHAN-AND-ASSOCIATES.COM

COVER SHEET

PROJECT NO.: FIELD BOOK
DATE: 01-13-2015
CLIENT: BILTMORE LAND LLC
SCALE: 1" = 100'
DRAWN BY: [REDACTED]
CHECKED BY: [REDACTED]
DATE: [REDACTED]

SHEET NO. 1

COVINGTON ESTATES
PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT

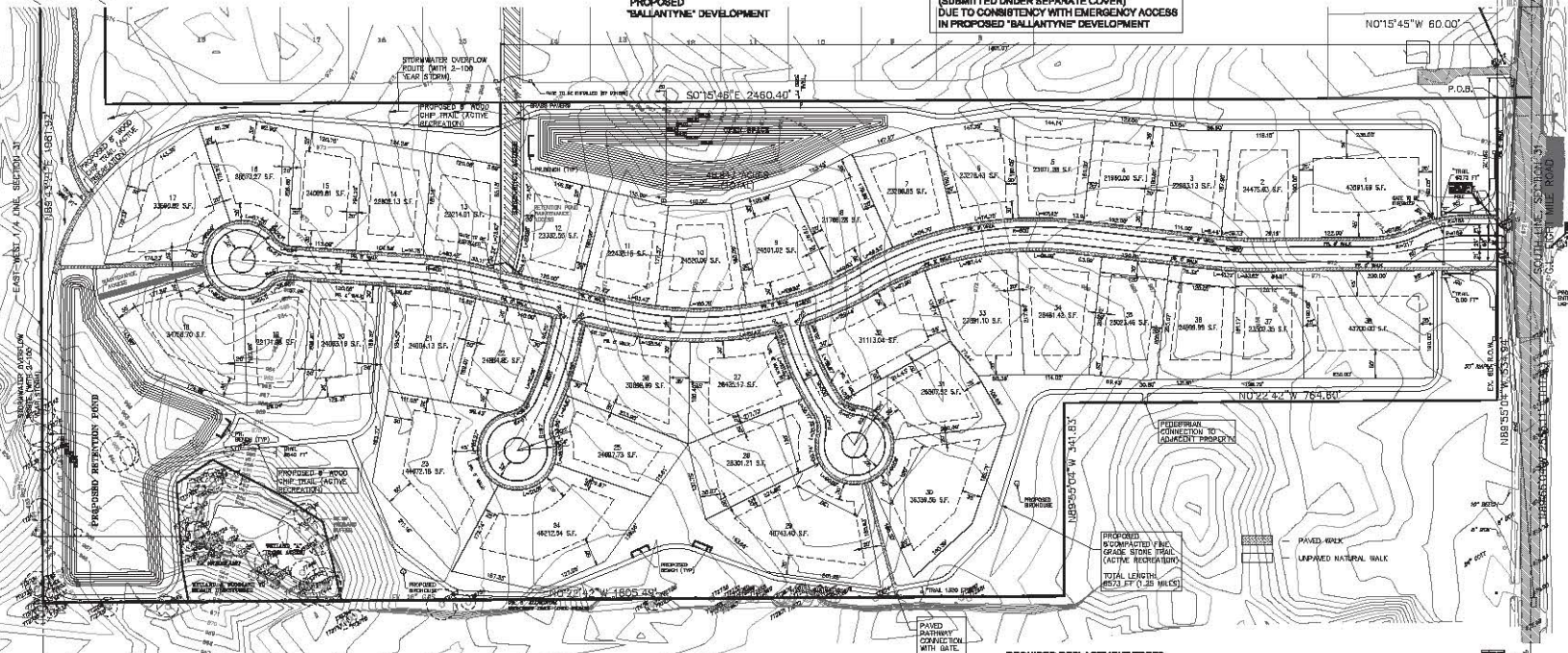


PROPERTY DESCRIPTION
A PARCEL OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 31, THENCE N89°50'04"W 1100.00 FEET ALONG THE SOUTH LINE OF SECTION 31; THENCE N00°15'46"W 60.00 FEET TO THE POINT OF BEGINNING, THENCE EXTENDING N89°50'04"W 534.82 FEET ALONG THE NORTH RIGHT OF WAY LINE OF EIGHT MILE ROAD (60'-1/2 WIDTH), THENCE N00°22'42"W 764.90 FEET; THENCE N89°58'04"W 341.83 FEET; THENCE N00°22'42"W 1805.48 FEET TO THE EAST-WEST 1/4 LINE OF SECTION 31; THENCE N89°43'21"E 1581.92 FEET ALONG THE EAST-WEST 1/4 LINE OF SECTION 31 TO THE EAST 1/4 CORNER OF SECTION 31; THENCE S00°18'46"E 115.00 FEET (RECORDED) 115.19 FEET (MEASURED) ALONG THE EAST LINE OF SECTION 31; THENCE S89°43'21"W 1089.98 FEET; THENCE S00°18'46"E 2480.40 FEET TO THE POINT OF BEGINNING, CONTAINING 48.847 ACRES OF LAND.

SUBJECT TO THE RIGHTS OF THE PUBLIC IN EIGHT MILE ROAD AND GARFIELD ROAD.
ALSO SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY RECORDED OR OTHERWISE.



SOUTHEAST 1/4 CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI



UNIT SUMMARY

UNIT NO.	UNIT SF	UNIT WIDTH
1	43591.88	238.09
2	24478.63	136.70
3	22663.13	122.00
4	21860.00	122.00
5	23071.28	120.00
6	23278.43	120.00
7	23295.85	120.00
8	21785.28	120.00
9	24501.02	150.91
10	24520.08	151.80
11	23435.15	131.43
12	23332.55	130.13
13	23214.01	130.88
14	24802.13	120.03
15	24281.81	130.02
16	25573.27	120.00
17	33690.82	120.00
18	34738.70	120.00
19	23171.98	130.00
20	24063.16	120.58
21	24004.13	137.89
22	24883.85	140.07/164.62
23*	44872.18	182.47
24*	48212.54	175.01
25	24697.73	121.79
26	33958.89	132.57/163.33
27	26425.17	161.29/136.69
28	28301.21	120.00
29	40743.40	120.00
30	38338.59	130.00
31	28507.52	120.00
32	31113.04	142.78/227.66
33	23281.10	138.58
34	23481.42	145.24
35	23023.46	120.00
36	24595.89	120.01
37	23827.39	130.12
38*	43700.00	232.00

* - UNITS 1, 23, 24, & 38 ARE DESIGNED TO BE 1-ACRE UNITS THAT CONFORM TO THE UNDERLYING ZONING (R-1)

RESIDENTIAL UNIT DEVELOPMENT OPTION
EX ZONING: R-1
TOTAL NUMBER OF UNITS: 38
PR. MINIMUM UNIT SIZE: 21,780 FT² (0.60 ACRES) (CONSISTENT WITH R-1)
PR. MINIMUM UNIT WIDTH: 120 FT (CONSISTENT WITH R-1)

4 UNITS TO CONFORM TO EX. ZONING (11% OF 91%)
MINIMUM UNIT SIZE: 43,800 FT² (1.00 ACRES)
MINIMUM UNIT WIDTH: 160 FT

AVERAGE DENSITY CALCULATION:
SITE AREA: 48.85 AC.
AREA OF RIGHT OF WAY: 0.0 AC.
REGULATED WETLAND AREA (BY PART 301/303 OF NREPSA, OR CHAPTER 12, ARTICLE 6 OF NOVI CODE OF ORDINANCES): 0.0 AC.
NET SITE AREA: 48.85 AC.
NUMBER OF UNITS: 38
DENSITY: 38 UNITS/48.85 ACRES = 0.78 UNITS/ACRE

REQUIRED REPLACEMENT TREES:
 IF < 1" = 1 REPLACEMENT TREE
 > 1" < 2" = 2 REPLACEMENT TREES
 > 2" < 2 1/2" = 3 REPLACEMENT TREES
 > 2 1/2" = 4 REPLACEMENT TREES

TREES TO BE REMOVED:

TAG NO.	SIZE	TYPE	WOOLAND REPLACEMENT REQ.
02737	8"	Black cherry	1
02744	32"	Black walnut	4
02745	17"	Black walnut	2
			7 REPL. TREES

SOUTH 1/4 CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI

NOTE:
NO IMPACT TO WETLAND "A" OR 25 FOOT WETLAND SETBACK IS PROPOSED.

TOTAL 26632.86'±
CENTER CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI 073.10

CONCEPT RUD PLAN

FAZAL KHAN & ASSOCIATES INC.
CIVIL ENGINEERS & LAND SURVEYORS
20000 WOODBINE AVENUE SUITE 100
TROY, MI 48063-1000
WWW.FAZALKHAN.COM
CALL 919.423.1111

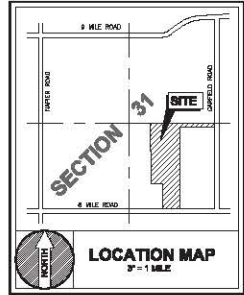
COVINGTON ESTATES
PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

PROJECT NO. 2024-001
DATE: 08/20/24
SCALE: 1" = 100'
SHEET: 3 OF 3

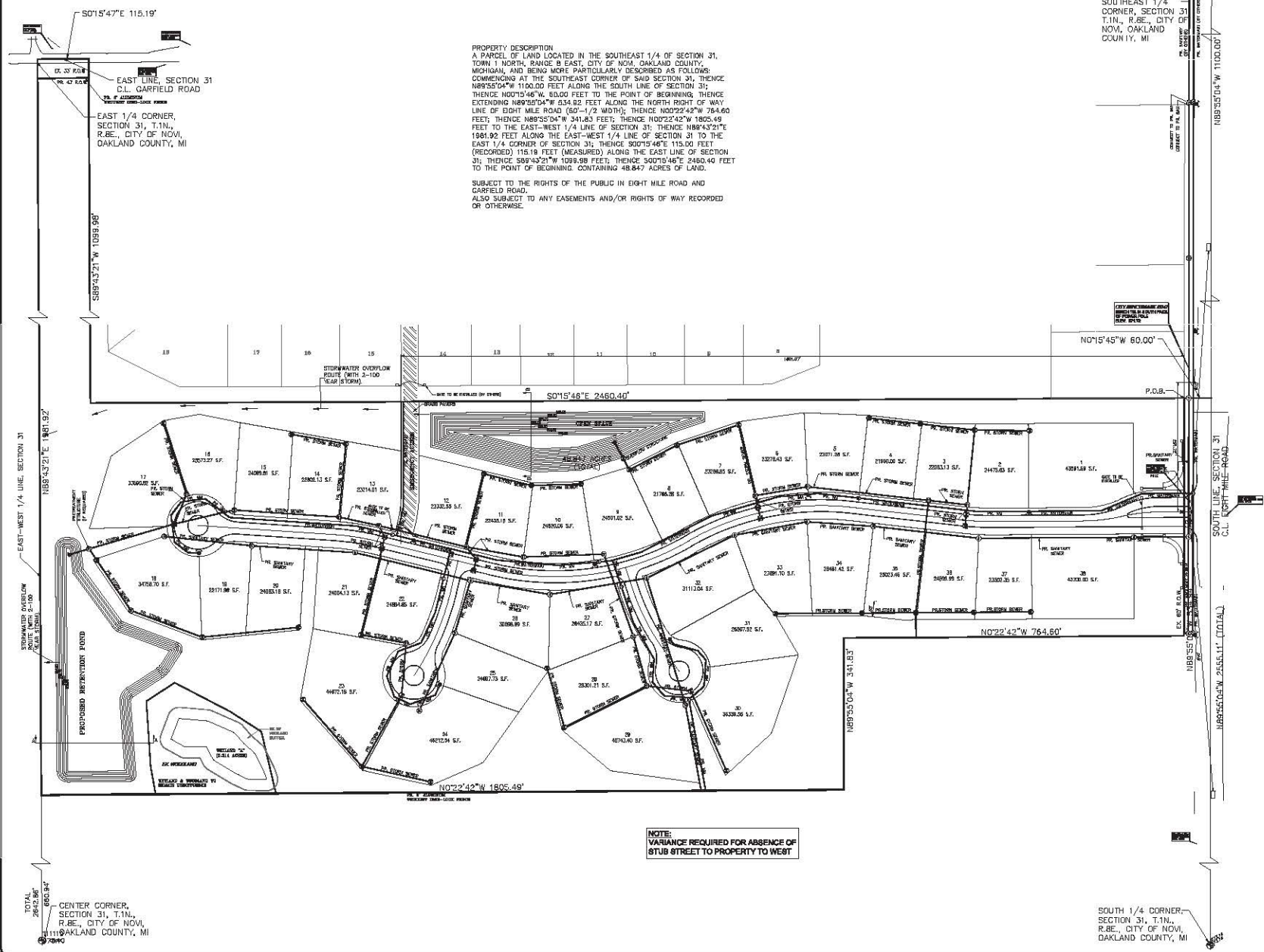
COVINGTON ESTATES
 PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
 CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT

PROPERTY DESCRIPTION
 A PARCEL OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 31; THENCE N89°55'04"W 1100.00 FEET TO THE POINT OF BEGINNING; THENCE N89°55'04"W 634.82 FEET ALONG THE NORTH RIGHT OF WAY LINE OF EIGHT MILE ROAD (60'-1/2 WIDTH); THENCE N00°22'42"W 764.60 FEET; THENCE N89°55'04"W 341.83 FEET; THENCE N00°22'42"W 1805.49 FEET TO THE EAST-WEST 1/4 LINE OF SECTION 31; THENCE N88°43'21"E 1981.92 FEET ALONG THE EAST-WEST 1/4 LINE OF SECTION 31 TO THE EAST 1/4 CORNER OF SECTION 31; THENCE S00°15'46"E 115.00 FEET (RECORDED) 115.18 FEET (MEASURED) ALONG THE EAST LINE OF SECTION 31; THENCE S89°43'21"W 1099.99 FEET; THENCE S00°15'46"E 2460.40 FEET TO THE POINT OF BEGINNING, CONTAINING 48.847 ACRES OF LAND.

SUBJECT TO THE RIGHTS OF THE PUBLIC IN EIGHT MILE ROAD AND GARFIELD ROAD.
 ALSO SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY RECORDED OR OTHERWISE.



NOTE:
 IF SANITARY SEWER AND WATER MAIN IS NOT COMPLETED FROM GARFIELD ROAD TO PARCEL 80-22-31-400-008 AT THE TIME OF CONSTRUCTION, CONTRACTOR IS TO COMPLETE CONNECTION FROM WESTERN BOUNDARY OF SITE TO GARFIELD ROAD. DETAILS AND PROFILES WILL BE PROVIDED WHEN NECESSARY.



NOTE:
 VARIANCE REQUIRED FOR ABSENCE OF STUB STREET TO PROPERTY TO WEST

SOUTHEAST 1/4 CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI

N0°15'45"W 60.00'

N0°22'42"W 764.60'

SOUTH 1/4 CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI

05°33'20"E 47.83'
 EAST LINE, SECTION 31, C.L. GARFIELD ROAD
 EAST 1/4 CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI

EAST-WEST 1/4 LINE, SECTION 31
 1189°43'21"E 1881.92'

TOTAL 2662.86'
 850.94'
 CENTER CORNER, SECTION 31, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MI

PROJECT NO.	FIELD BOOK	DATE	SCALE	DATE	BY
NOV 15, 2008	NOV 15, 2008	1" = 100'	NOV 15, 2008	NOV 15, 2008	NOV 15, 2008
CLIENT	PREPARED BY	CHECKED BY	APPROVED BY	DATE	BY
LAND LLC	FAZAL KHAN & ASSOCIATES, INC.	NOV 15, 2008	NOV 15, 2008	NOV 15, 2008	NOV 15, 2008
CONTRIBUTION	CONTRIBUTION	CONTRIBUTION	CONTRIBUTION	CONTRIBUTION	CONTRIBUTION
SCALE: 1" = 100'	DATE: 11/15/08	BY: [Signature]	DATE: 11/15/08	BY: [Signature]	DATE: 11/15/08
PROJECT: COVINGTON ESTATES	CLIENT: LAND LLC	SCALE: 1" = 100'	DATE: 11/15/08	BY: [Signature]	DATE: 11/15/08
PROJECT NO.	FIELD BOOK	DATE	SCALE	DATE	BY
NOV 15, 2008	NOV 15, 2008	1" = 100'	NOV 15, 2008	NOV 15, 2008	NOV 15, 2008
CLIENT	PREPARED BY	CHECKED BY	APPROVED BY	DATE	BY
LAND LLC	FAZAL KHAN & ASSOCIATES, INC.	NOV 15, 2008	NOV 15, 2008	NOV 15, 2008	NOV 15, 2008
CONTRIBUTION	CONTRIBUTION	CONTRIBUTION	CONTRIBUTION	CONTRIBUTION	CONTRIBUTION
SCALE: 1" = 100'	DATE: 11/15/08	BY: [Signature]	DATE: 11/15/08	BY: [Signature]	DATE: 11/15/08
PROJECT: COVINGTON ESTATES	CLIENT: LAND LLC	SCALE: 1" = 100'	DATE: 11/15/08	BY: [Signature]	DATE: 11/15/08

COVINGTON ESTATES
PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT

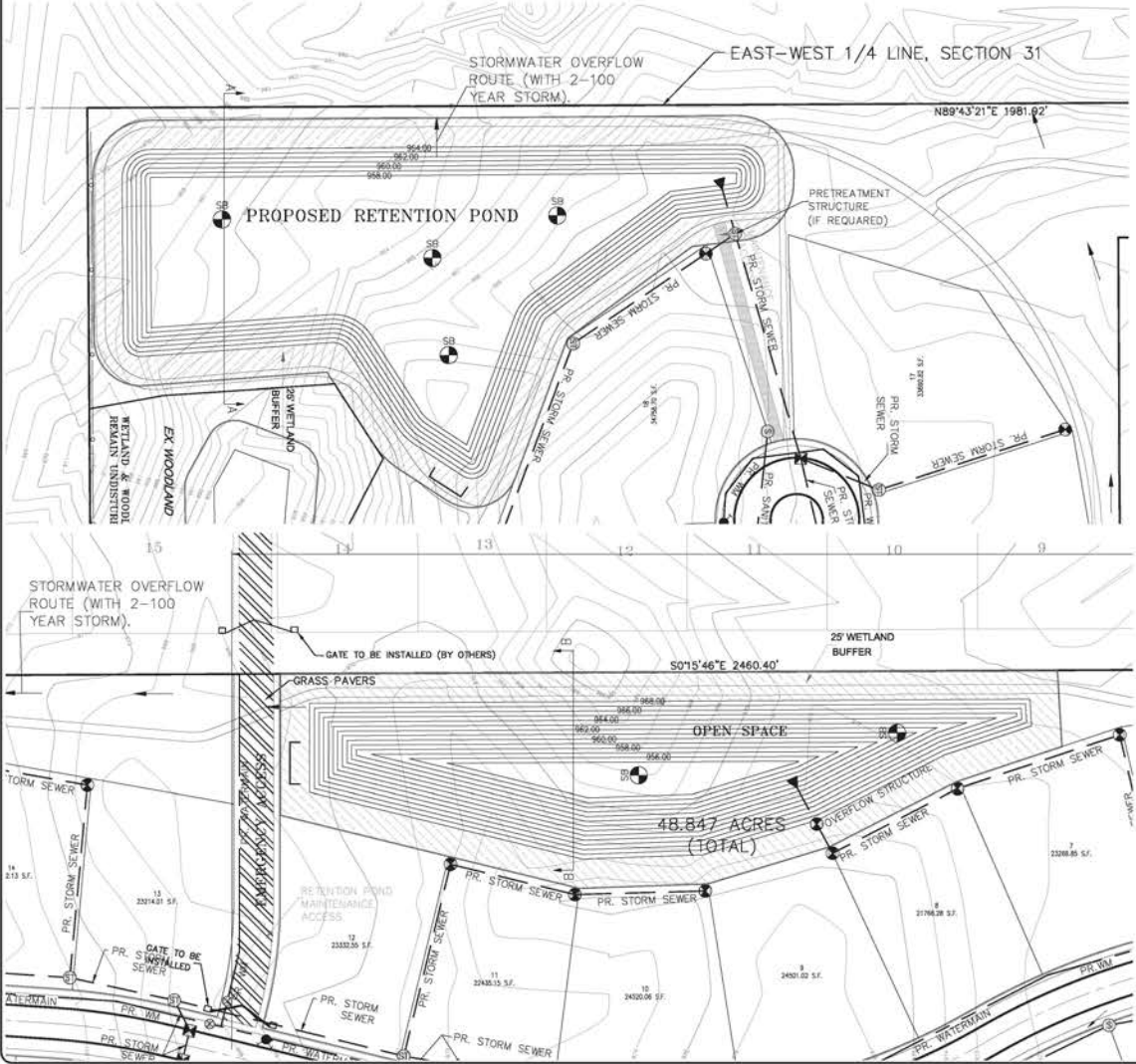


PROPERTY DESCRIPTION
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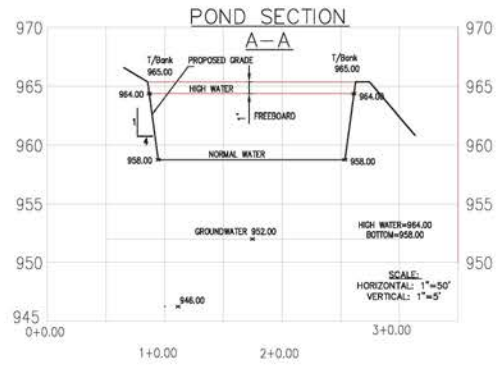
CALL LAND USE DEPARTMENT FOR PROPOSED PROJECTS: (248) 845-1500
 (248) 845-1511
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 (248) 845-1598
 (248) 845-1599
 (248) 845-1600



Stormwater	
Flow	Area
Household	25,750
Street	10,000
Driveway	10,000
Roof	10,000
Other	10,000
Total	65,750

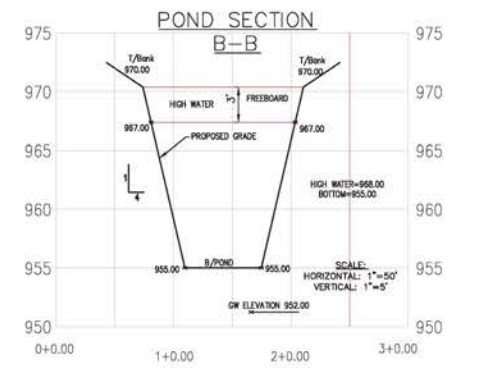
200 YEAR STORM DETENTION DESIGN (CITY OF NOVI DESIGN MANUAL)

Contributing Area (A) 51.50 acres (5473-2047-1.38)
 Coefficient of Runoff (C) 0.44
 Peak Flow (Q) 186000 cfs
 Velocity (V) 7.46 ft/s



Volume Calculation - north

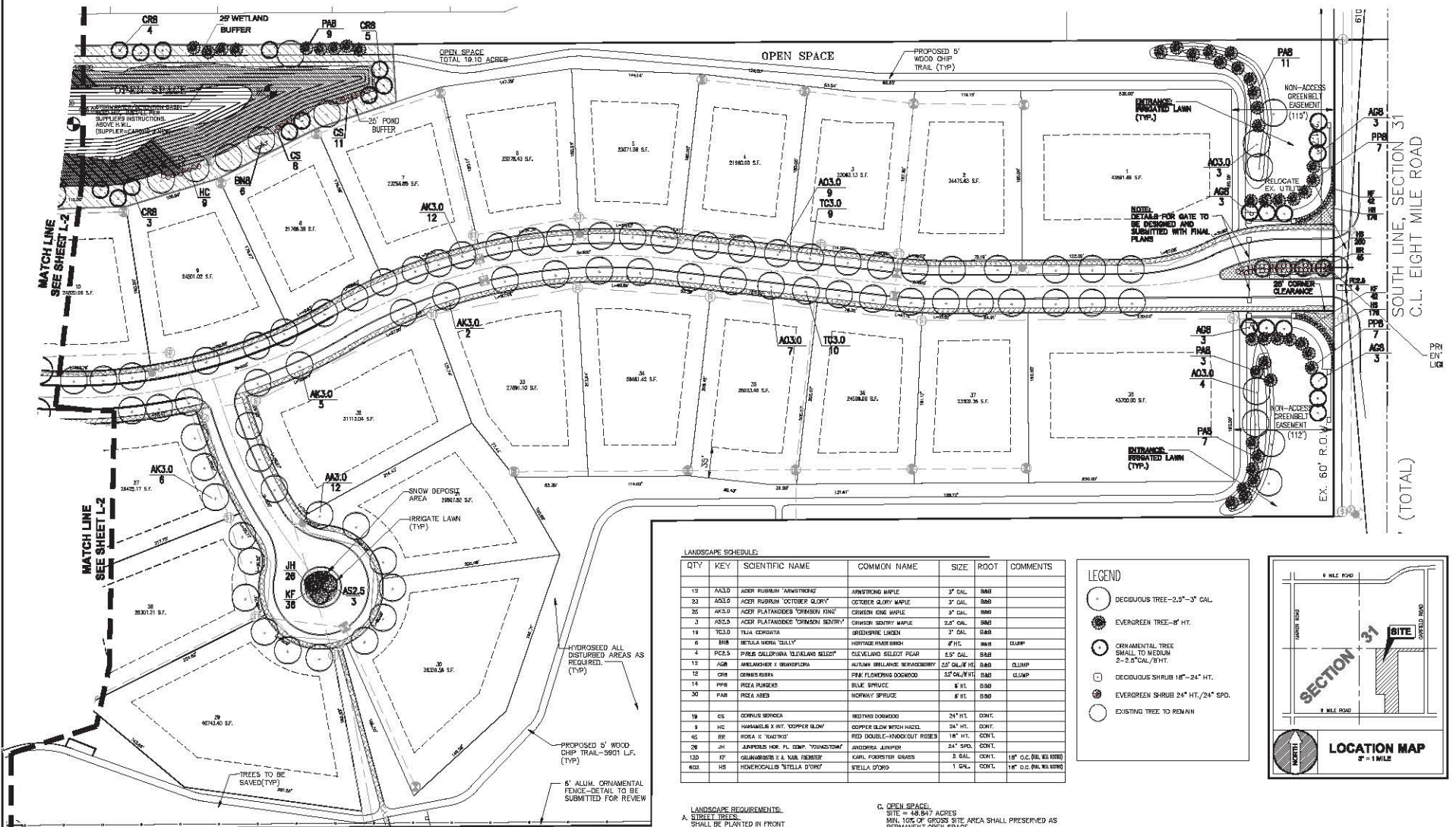
Station	Area	Volume
0+00	493.20	166.25
1+00	123.26	100.74
2+00	772.72	245.51
3+00	773.49	249.51
4+00	652.27	188.23
5+00	688.19	187.75
6+00	897.20	187.75
Total Volume Proposed		2112.74 cu ft



Volume Calculation - south

Station	Area	Volume
0+00	113.97	104.48
1+00	833.13	416.40
2+00	188.41	127.90
3+00	114.17	117.91
4+00	184.43	117.91
5+00	244.67	127.90
6+00	114.17	117.91
7+00	114.17	117.91
8+00	114.17	117.91
9+00	114.17	117.91
10+00	114.17	117.91
11+00	114.17	117.91
12+00	114.17	117.91
13+00	114.17	117.91
14+00	114.17	117.91
15+00	114.17	117.91
16+00	114.17	117.91
17+00	114.17	117.91
18+00	114.17	117.91
19+00	114.17	117.91
20+00	114.17	117.91
Total Volume Proposed		2112.74 cu ft

COVINGTON ESTATES
 PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
 CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT

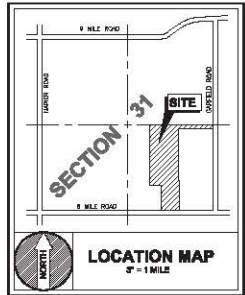


LANDSCAPE SCHEDULE:

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	ROOT	COMMENTS
12	AK3.0	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG MAPLE	3" GAL	B&B	
33	AK3.0	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	3" GAL	B&B	
25	AK3.0	ACER PLATANOIDES 'CRIMSON KING'	CRIMSON KING MAPLE	3" GAL	B&B	
3	AK3.0	ACER PLATANOIDES 'CRIMSON SEVIER'	CRIMSON SEVIER MAPLE	3.0" GAL	B&B	
18	TC3.0	TILIA CORAYATA	BREDENBURG LINDEN	3" GAL	B&B	
6	HS	STELLA OROYA 'STELLA'	HORTONIA STAR BLOSSOM	2" HT.	B&B	CLUMP
4	PCS.3	PIRUS CALLORNA 'CLEVELAND SELECT'	CLEVELAND SELECT PEAR	3.5" GAL	B&B	
12	AGB	ZWEIGLOUWER 3 BRANCHED	AUTUMN BRILLIANCE BERBERIS	25" O/L/HT	B&B	CLUMP
12	CRB	GERANIUM SIBIRIA	PINK FLOUNDER DOGWOOD	3.5" O/L/HT	B&B	CLUMP
14	PPB	PRUNUS PUMILA	BLUE SPRUCE	8" HT.	B&B	
30	PAB	PRUNUS ARES	NORWAY SPRUCE	8" HT.	B&B	
18	CS	SCORPUS BISTORCA	REDTIP DOGWOOD	24" HT.	CONT.	
8	HC	HAMAMELIS X INT. 'GOPPER GLOW'	GOPPER GLOW WITCH HAZEL	24" HT.	CONT.	
45	RR	ROSA 'COUNTRY'	RED DOUBLE-HOOKOUT ROSES	18" HT.	CONT.	
28	JH	JUNIPERUS HOR. FL. COMP. 'YOUNGSTOWN'	ANDROMEDA JUNIPER	24" SPD.	CONT.	
120	KF	COLYMBARIS 2 A. MAR. FERNESSE	KARL FOXGLOVE GRASS	3 GAL	CONT.	18" O.C. (RIL. KIL. BERS)
603	HS	HENEROCALLIS 'STELLA OROYA'	STELLA OROYA	1 GAL.	CONT.	18" O.C. (RIL. KIL. BERS)

LEGEND

- DECIDUOUS TREE—2.5"—3" CAL.
- EVERGREEN TREE—8" HT.
- ORNAMENTAL TREE SMALL TO MEDIUM 2-2.5" CAL./8" HT.
- DECIDUOUS SHRUB 18"—24" HT.
- EVERGREEN SHRUB 24" HT./24" SPD.
- EXISTING TREE TO REMAIN



LANDSCAPE REQUIREMENTS:

A. STREET TREES:
 SHALL BE PLANTED IN FRONT OF EACH LOT IN ACCORDANCE WITH THE FOLLOWING:
 > OR = 105 L.F. (LOT WIDTH) = 3 TREES
 3 TREES X 30 LOTS = 114 TREES
 3 TREES X 4 CORNER LOTS = 12 TREES

B. RETENTION BASH:
 CLUSTER OF NATIVE SHRUBS IN A DENSE PLANTING SHALL BE PLANTED ABOVE THE HIGH WATER ELEVATION AND SHALL COVER 75-75% OF BASIN RUN AREA.
 RETENTION BASH LENGTHS—134.5 L.F. + 1044 L.F. X 705'-1790 L.F.
 MIN. COVER WITH NATIVE TREES & SHRUBS.

C. OPEN SPACE:
 SITE = 48,847 ACRES
 MIN. 10% OF GROSS SITE AREA SHALL PRESERVED AS PERMANENT OPEN SPACE.
 48,847 AC X 10% = 4,885 ACRES REQUIRED
 = 18.10 ACRES PROVIDED (36%)

PRELIMINARY LANDSCAPE PLAN

DATE: 10-20-14
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: 1" = 50'

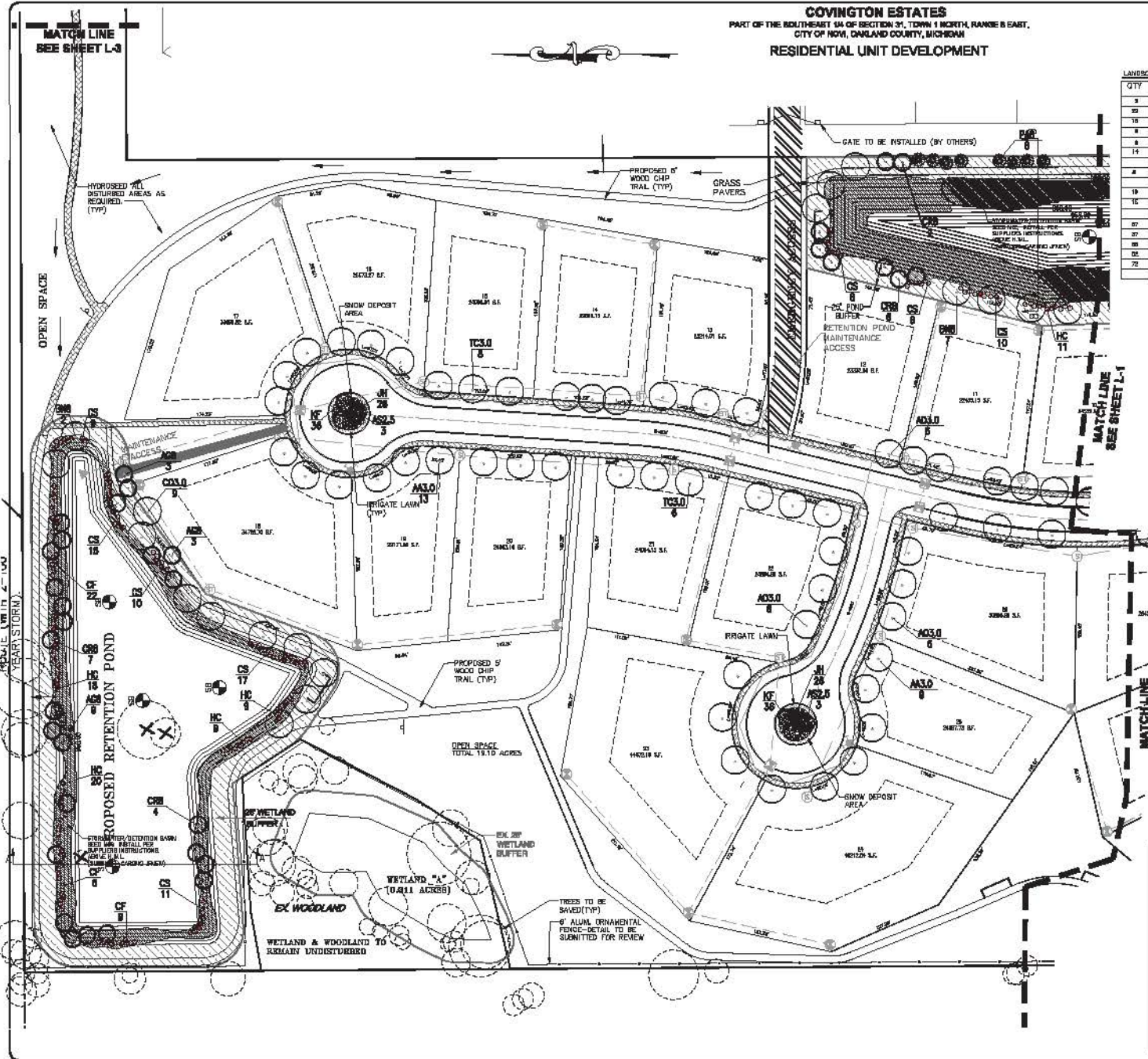
FAZAL KHAN & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 10000 W. 15 MILE RD., SUITE 100
 FARMINGTON HILLS, MI 48334
 WWW.FAZALKHAN.COM

COVINGTON ESTATES
 PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DATE: 10-20-14
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: 1" = 50'

DATE: 10-20-14
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: 1" = 50'

COVINGTON ESTATES
 PART OF THE SOUTHWEST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST,
 CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT



LANDSCAPE SCHEDULE:

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	ROOT	COMMENTS
3	CO3.0	VELTIA FLORENTINAE	WAXMYRTLE	2" GAL	BAR	H&B BRANCHED
35	AA3.0	ACER FRAXINUS 'NORTON'S RED'	WINTERBURN MAPLE	3" GAL	BAR	
18	AD3.0	ACER FRAXINUS 'NORTON'S RED'	WINTERBURN MAPLE	3" GAL	BAR	
8	AG3.0	ACER FRAXINUS 'NORTON'S RED'	WINTERBURN MAPLE	3" GAL	BAR	
8	BA1	BEULIA RUBRA 'SOLLY'	REDTIDE BERRY BUSH	2" HT.	BAR	CLAMP
14	TD3.0	TUNA CEREALIS	BECKENHOF GREEN	3" GAL	BAR	
4	PA3	PEEL APES	MIRRAY SPRAE	8" HL	EM	
19	DR3	DRUM BUSH	PIRE FLORENTINE DRUMBUSH	2" GAL	BAR	CLAMP
15	AG3	AGALAXIS 2 SUBSERPENS	AUTUMN BELLADONNA SCANDENBERY	2" GAL	BAR	CLAMP
87	HC	HAWKLANDER 2 HT. 'COPPER ALLOY'	COPPER BLEND WITCH HAZEL	24" HT.	CON L	
37	CP	CORNUS SPICATA 'PLUMBER'S'	WALLPAPER CORNUS	24" HT.	CON L	
88	CS	CORNUS SPICATA	WALLPAPER CORNUS	24" HT.	CON L	
12	AL	ALBERUS 100 FL. COFF. 'VANDERBILT'	WANDERER JASMINE	24" SPD.	CON L	
72	RT	SHAMROCK 14 TYP. 'PERSIAN'	SHR. FORTIFIED GRASS	2" GAL	CON L	10" O.C. GAL. BUSH

LEGEND

- DECIDUOUS TREE—2.5"–3" GAL.
- EVERGREEN TREE—8" HT.
- ORNAMENTAL TREE SMALL TO MEDIUM 2"–3" GAL./8" HT.
- DECIDUOUS SHRUB 24" HT.
- EVERGREEN SHRUB 24" HT./24" SPD.
- EXISTING TREE TO REMAIN



SOIL DESCRIPTION

Map Unit	Map Unit Name	Acres	Percent of AOT
130	Cliffside (over loamy sand), 0 to 9 percent slopes	0.0	0.0%
138	Arex (sandy loam), 1 to 9 percent slopes	33.6	99.4%
300	Cliffside (over loam), 0 to 9 percent slopes	0.7	2.0%
344	Cliffside (over loam), 0 to 9 percent slopes	0.0	0.0%
Subtotals for Soil Survey Area			
		34.4	100.0%
Wayne County Area, Michigan (M0907)			
Unit	Map Unit Name	Acres	Percent of AOT
130	Cliffside (over loam), 0 to 9 percent slopes	0.0	0.0%
138	Arex (sandy loam), 1 to 9 percent slopes	0.3	0.3%
Subtotals for Soil Survey Area			
		0.3	0.3%
		64.7	100.0%



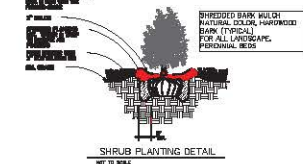
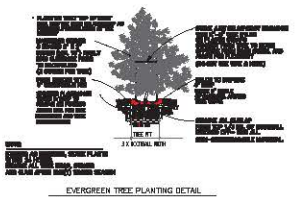
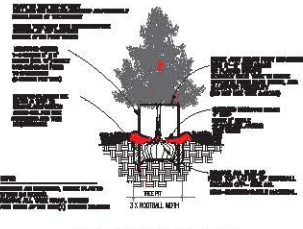
COVINGTON ESTATES
 PART OF THE SOUTHWEST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

PAZAL HANAY & ASSOCIATES, INC.
 ONE BUSINESS CENTER DRIVE
 SUITE 200
 TROY, MI 48063-1000
 TEL: 248-371-1000
 FAX: 248-371-1001
 WWW.PAZALHAY.COM

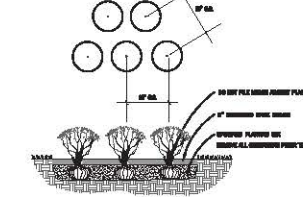
PRELIMINARY LANDSCAPE PLAN

L-2

COVINGTON ESTATES
PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 6 EAST,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
RESIDENTIAL UNIT DEVELOPMENT



NOTE:
1. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH THE CITY OF NOVI PLANTING SPECIFICATIONS AND THE MICHIGAN PLANTING ACT.
2. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH THE CITY OF NOVI PLANTING SPECIFICATIONS AND THE MICHIGAN PLANTING ACT.



- PLANTING NOTES:**
- LANDSCAPE CONTRACTOR (CONTRACTOR) SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. DATE OF OCCUPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN. CLIENTS CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
 - CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION OR HIS/HER PHASE OF WORK. ELECTRICAL, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISC DIS 1-800-482-7171. ANY DAMAGE OR INTERFERENCE 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'S STANDARD FOR NURSERY STOCK. ALL PLANT MATERIAL TO BE WINTERBURN, BROWN, AND 1" BRANCH. TREES SHALL BE STAKED, WRAPPED, WATERED AND MULCHED PER CITY OF NOVI DETAILS AND SPECIFICATIONS.
 - INSTALL SOO IN ALL AREAS INDICATED ON PLAN. SOO TO BE HELIXE AUTOMATIC IRRIGATION SYSTEM SHALL PROVIDE 100% COVERAGE ON ALL LAWN AREAS.
 - GUARANTEE OF PLANTS FOR TWO(2) YEARS SHALL BEIN AFTER ACCEPTANCE BY LANDSCAPE ARCHITECT AND/OR PROJECT REPRESENTATIVE. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS TO BE IN A HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF TWO(2) YEARS FOLLOWING ACCEPTANCE. CONTRACTOR SHALL REMOVE WITHOUT COST TO OWNER, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY PROJECT REPRESENTATIVE DURING AND AT THE END OF THE GUARANTEE PERIOD. THE TWO(2) YEAR WARRANTY PERIOD WILL BEGIN AFTER THE "CITY OF NOVI" HAS APPROVED THE TREES.
PLANT TREES & SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCES FROM PROPERTY LINES, PUBLIC UTILITIES, ROADS, AND WALKWAYS:
Property line 4'
Public utility 10'
Hydrants 10'
Roads 10'
Walkways 4'

- ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON THE APPROVED PLANS WILL BE REQUIRED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED IF REMOVED OR DIED.
- WOODLAND PRESERVATION:
TO PRESERVE WOODLAND CHARACTER OF EXISTING WOODLAND AREA, THE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL REMAIN UNTIL CONSTRUCTION IS COMPLETE. NO ACTIVITY INCLUDING STORAGE OF EQUIPMENT, VEHICULAR PARKING ETC. SHALL TAKE PLACE WITHIN THE BOUNDARIES OF THE OFF AREA.
THE OWNER SHALL PROVIDE ON-GOING MAINTENANCE AFTER CONSTRUCTION TO MAINTAIN THE OWNER SHALL PROVIDE THE USE OF LAWN MOWERS, WEED WIPERS, FERTILIZERS, AND IRRIGATION FROM IMPACTING EXISTING WOODLANDS.

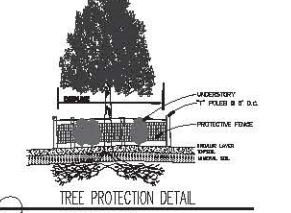
REPLACEMENT TREES:
REPLACEMENT TREES PLANTED ON-SITE, INCLUDING LANDSCAPE ARCHITECT AND LANDSCAPE CONTRACTOR WILL BECOME REGULATED.
TOTAL OF 3 REPLACEMENT TREES PROVIDED AT ENTRANCE TO DEVELOPMENT.

SHRUB REPLACEMENT TREES:

4" x 11" = 1 REPLACEMENT TREE
5" x 11" = 2 REPLACEMENT TREES
> 5" x 11" = 3 REPLACEMENT TREES
> 30" = 4 REPLACEMENT TREES

TREES TO BE KEPT:

DBH IN.	SIZE	TREE	WOODLAND REPLACEMENT REQ.
8-17	8"	BLACK CHERRY	1
8-14	8"	BLACK WALNUT	1
8-16	12"	BLACK WALNUT	7 REPL. TREES



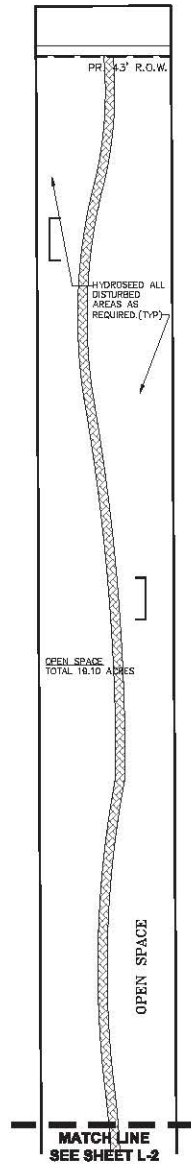
- IDENTIFY ON SITE ALL TREES OR AREAS OF TREES WHICH ARE BEING PROTECTED TO BE PROTECTED WITH FLUORESCENT ORANGE SPRAY PARTICULARLY BASE OR BY RED FLAGGING TREES.
- ERECT BARRIERS OF POLYCARBONATE HIGH IMPACT STAKES WITH METAL TUBES AND FLUORESCENT ORANGE SPRAY PARTICULARLY BASE OR BY RED FLAGGING TREES.
- PROTECTIVE BARRIERS ARE TO BE ERRECTED PRIOR TO ANY CLEARING OR CHURNING ON THE SITE, AND BARRIERS ARE TO REMAIN IN PLACE UNTIL APPROVED BY CITY TO BE REMOVED OR WITH A CHANGE OF USE OF A TREE.
- KEEP CLEAR THE INSIDE OF FILL, EQUIPMENT, AND MATERIAL FROM WITHIN THE REQUIRED PROTECTIVE BARRIERS.
- DURING CONSTRUCTION, THE OWNER, DEVELOPER, OR AGENT SHALL NOT CHURN OR PLANT WITHIN THE PROTECTIVE BARRIERS. THE CHURNING OF SOIL OR GROUP OF TREES INCLUDING BUT NOT LIMITED TO THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, AND EXCESSIVE MATERIAL, BARRIERS OF WHITE MATERIAL, OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE.
- NO DAMAGED ATTACHMENT WIRES (OTHER THAN CABLE WIRES FOR TREES) SHALL BE REMOVED OR CUT UNLESS THEY ARE IDENTIFIED BY THE OPERATOR.

- GENERAL NOTES:**
- INSTALL ALL LANDSCAPING BETWEEN MARCH 15TH AND OCTOBER 15TH OF 2018.
 - ESTABLISHMENT PERIOD FOR THE PLANT MATERIAL GUARANTEE WILL OCCUR BEGINNING AT THE FINAL CLOSURE OF OCCUPANCY INSPECTION APPROXIMATELY 3 YEARS FROM DATE. ALL PLANTINGS SHALL BE PROPERLY PLANTED AS TO BE IN A HEALTHY, GROWING CONDITION AT COMPLETION OF THE ESTABLISHMENT PERIOD AT THE END OF THE ESTABLISHMENT PERIOD. PLANTING AREAS ARE 200.00 SQ. FT. OR GREATER SHALL BE REQUIRED.
 - LANDSCAPE SHALL BE MAINTAINED IN A HEALTHY, NEAT AND ORDERLY APPEARANCE, FREE FROM WEEDS, ALL UNHEALTHY & DEAD PLANT MATERIAL SHALL BE REPLACED WITHIN 1 YEAR, OR DURING THE MOST APPROPRIATE PLANTING PERIOD.
TO INSURE PROPER MAINTENANCE AS A CONDITION OF FINAL SITE PLAN APPROVAL, THE PROPERTY OWNER SHALL ENTER INTO AN AGREEMENT WITH THE CITY OF NOVI AND THE COUNTY OF OAKLAND. THIS AGREEMENT SHALL BE A LANDSCAPE MAINTENANCE AGREEMENT, OR INCLUDE SUCH PROVISIONS AS PART OF SUBORDINATE RESTRICTIONS OR COVENANT MASTER DEED, EACH OF WHICH SHALL BE APPROVED BY THE CITY ATTORNEY. THIS INSTRUMENT SHALL IDENTIFY THE PLAN OF MAINTENANCE, THE PERSON OR ENTITY RESPONSIBLE FOR MAINTENANCE.
 - ALL LANDSCAPE AREAS SHALL HAVE AN AUTOMATIC IRRIGATION SYSTEM. TREE STAKES, GUY WIRES, AND TREE WRAP TO BE REMOVED AFTER ONE WINTER SEASON. PLANTING SHALL BE GUARANTEED FOR TWO(2) GROWING SEASONS AFTER DATE OF THE ACCEPTANCE OF THE INSTALLATION.
IF STAKES OR WRAP EXCEEDS THE HEIGHT SPECIFIED IN THE EDGE OF ORGANIZATION OR IF STAKES ARE ALLOWED TO OBSTRUCT VISION ACROSS ANY PORTION OF THE ROAD AND ARE RESPONSIBLE FOR ANY DAMAGE TO PROPERTY, THE CITY WILL ABATE SUCH VIOLATIONS AND SHALL ASSESS THE COST OF SUCH ABATEMENT MEASURES IN THE MANNER PROVIDED BY THE DEVELOPER AND APPROVED BY THE CITY IN SUCH INSTRUMENT.
 - WOODLAND PERMIT:
PERMIT REQUIRED BEFORE REMOVING ANY EXISTING ON-SITE TREE.
 - BARK MULCH SHALL BE NATURAL COLOR, FINELY BREKED HARDWOOD BARK AS REQUIRED FOR ALL PLANTINGS.
3" THICK BARK MULCH FOR TREES, IN A 4-FOOT DIAMETER CIRCLE WITH 2" PALLETS AWAY FROM TRUNK.
3" THICK BARK MULCH FOR SHRUBS AND 2" THICK BARK FOR PERENNIALS.
 - ALL SUBSTITUTIONS OR OMISSIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY THE CITY OF NOVI PRIOR TO INSTALLATION.
REMOVE ALL TREE STAKES, GUY WIRES, AND TREE WRAP AFTER ONE(1) WINTER SEASON.
 - IRRIGATION PLANS WILL BE SUBMITTED WITH FINAL LANDSCAPE PLANS.
 - MAINTENANCE:
A TWO(2) YEAR MAINTENANCE GUARANTEE IS REQUIRED FOR ALL REPLACEMENT TREES PLANTED ON-SITE AND ALL EXISTING TREES SUBJECT TO DRAWING ACTIVITY OR NEW CONSTRUCTION.

POST OPINION:
LANDSCAPE PROVIDED:

QTY	COMMON NAME	COST	TOTAL
34	ARMSTRONG MAPLE	\$48.00	\$1,632.00
41	OCTOBER GLORY MAPLE	\$40.00	\$1,640.00
25	CRIMSON KING MAPLE	\$40.00	\$1,000.00
9	CRIMSON SENYU MAPLE	\$40.00	\$360.00
33	GREENVIEW LINDEN	\$40.00	\$1,320.00
8	HACKBERRY	\$40.00	\$320.00
15	HERITAGE RIVER BIRCH	\$40.00	\$600.00
4	CLEVELAND SELECT PEAR	\$20.00	\$80.00
27	AUTUMN BRILLIANCE SEVINGEBERRY	\$20.00	\$540.00
31	PINK FLORESCING DOGWOOD	\$40.00	\$1,260.00
28	MORNING SPRAUCE	\$20.00	\$560.00
14	SLIUE SPRUCE	\$15.00	\$210.00
78	CONCEPT GLOW WINTER HAZEL	\$10.00	\$780.00
27	YELLOWING DOGWOOD	\$10.00	\$270.00
105	NETTLEWOOD DOGWOOD	\$10.00	\$1,050.00
45	RED DOUBLE-HOCKKOUT ROSE	\$20.00	\$900.00
78	ANDROMEDA JASMINE	\$20.00	\$1,560.00
192	KAME FOURSETER GRASS	\$10.00	\$1,920.00
800	STELLA ORO	\$10.00	\$8,000.00
6200 SY	SOO	\$1.00 SY	\$6,200.00
65,000 SY	HYDRO-SEED	\$1.00 SY	\$65,000.00
270 CY	REDUCED FERT. SOIL (5% SLOTTED) - 270 CY	\$50.00 CY	\$13,500.00
7000 SY	DETENTION BRAIN SEED	\$1.00 SY	\$7,000.00
TOTAL			\$97,740.00

NOTE:
AREAS FOR HYDRO-SEED AND SOO WILL VARY ACCORDING TO ACTUAL AREA DISTURBED DURING CONSTRUCTION.



FAZAL KHAN & ASSOCIATES, INC.
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
10000 WOODLAND DRIVE, SUITE 100, FARMINGTON HILLS, MI 48334
TEL: 248-859-8800 FAX: 248-859-8801
WWW.FAZALKHAN.COM

COVINGTON ESTATES
PART OF THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 6 EAST, OAKLAND COUNTY, MICHIGAN

LANDSCAPE DETAILS

L-3

PRELIMINARY	FIELD BOOK	DATE	SCALE	NO.	DATE
CONSTRUCTION	LAND LID	DATE	SCALE	NO.	DATE
PERMIT	CHANGING	DATE	SCALE	NO.	DATE