



Site Plan Checklist

(1-19-24 Version)

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Cover Sheet Requirements **(Separate Sheet)**

Note: Provide only the following on this sheet:

- ☐ Name of project
- ☐ Name of the City of Auburn Hills, Michigan
- ☐ Location Map
- ☐ Proprietor's name and address
(Include contact person, phone, and fax)
- ☐ Engineer's name and address
(Include contact person, phone, and fax)
- ☐ Architect's name and address
(Include contact person, phone, and fax)
- ☐ Landscape Architect's name and address
(Include contact person, phone, and fax)
- ☐ Table identifying sheets of site plan
(e.g., SP-1 / Tree Survey, SP-2, etc.)
- ☐ Professional seal
- ☐ Provide a brief description of the company and the scope of the project designed for City use in a press release. (Should be no longer than three (3) paragraphs in length.)

NOTE:

Is the site plan in the required sheet order?

1. Cover Sheet
2. Tree Survey/Existing Conditions Sheet(s)
3. Dimensional Site Plan
4. Engineering Site Plan(s)
5. Landscape Plan
6. Floor Plan(s)
7. Elevation Plan
8. Miscellaneous Sheets

Yes or No

Note: Site plans will not appear before the Planning Commission unless in proper order. Sheet sizes shall be 24" x36".

Tree Survey/Existing Conditions Requirements: **(Separate Sheet)**

- ☐ Wetlands, drainage courses, and flood areas per Ordinance No. 482
- ☐ Consult the Woodlands Preservation Ordinance for "Incentives for Woodlands Preservation" (§34-311) and "Incentives for Woodland Mitigation" (§34-312).
- ☐ In the field, all trees 6" d.b.h. (4-1/2' above grade) and over should be tagged with an identifying number and accurately located on the plan. If any work is off-site (including utilities), trees will need to be tagged and included in the survey within 50'.
- ☐ Indicate existing vegetation per Woodlands Preservation Ordinance Chapter 34, Article VIII (e.g., tree survey..... list of trees/create a separate column for landmark trees). Tree List should include: tag number; d.b.h.; botanical name; common name; condition; whether or not the tree is considered regulated; and whether or not the tree is considered "Landmark" or "Champion." *Landmark Trees are 24" or greater in good or better condition. For a list of Champion Trees, refer to the Michigan Botanical Club (www.michbotclub.org) and the American Forests website (www.americanforests.org).*
- ☐ Existing structures, drives, or roads on the parcel(s)

Tree Survey/Existing Conditions Requirements (Continued):

- ☐ Existing topography
- ☐ Show the following existing site features: (water main, sanitary sewer, storm sewer, ditches, culverts, public easements, private utilities, private easements, and power poles).
- ☐ For PUD developments, refer to §1830.3.D.7, §1830.6A.2.c.vi, and §1830.6.B.2 of the Zoning Ordinance.

SAMPLE:

TREE SURVEY TABLE

| Tree # | d.b.h. | Botanical Name | Common Name | Condition | Comments | Regulated (R) / Not Regulated (n) | Landmark (L) | Save (S) / Remove (x) |
|--------|-------------|--|-----------------------|-----------|------------------------------------|-----------------------------------|-----------------|-----------------------|
| 100 | 9 | <i>Acer platanoides</i> | Norway Maple | good | | R | | S |
| 101 | 26 | <i>Gleditsia triacanthos 'Inermis'</i> | Thornless Honeylocust | good | | R | L | S |
| 102 | 25 | <i>Gleditsia triacanthos 'Inermis'</i> | Thornless Honeylocust | good | | R | L | x |
| 103 | 16 | <i>Pinus nigra</i> | Austrian Pine | fair | - Leaning - Lower limbs dead | R | | x |
| 104 | 14 / 13 / 8 | <i>Malus spp.</i> | Crabapple | fair | - Dead branch(es) - Poor crotch | R | | x |
| 105 | 14 | <i>Picea pungens</i> | Colorado Spruce | good | | R | | x |
| 106 | 14 | <i>Carya ovata</i> | Shagbark Hickory | good | | R | | x |
| 107 | 8 | --- | --- | dead | | n (condition) | | x |
| 108 | 11 | <i>Picea pungens</i> | Colorado Spruce | fair | - Lower limbs dead | R | | S |
| 109 | 7 | <i>Rhamnus carthartica</i> | Common Buckthorn | good | | n (species) | | S |
| 110 | 31 | <i>Carya ovata</i> | Shagbark Hickory | poor | - Significantly dead | R | Not (condition) | S |
| 111 | 15 | <i>Tilia americana</i> | American Linden | good | | R | | S |
| 112 | 5 | <i>Picea pungens</i> | Colorado Spruce | poor | - Significantly dead | n (size) | | x |
| 113 | 6 | <i>Acer negundo</i> | Boxelder | fair | - Located in a wetland | R | | x |
| 114 | 6 / 6 / 5 | <i>Acer negundo</i> | Boxelder | fair | - Leaning - Poor crotch | n (species) | | S |
| 115 | 19 | <i>Picea pungens</i> | Colorado Spruce | fair | - Lower limbs dead | R | | S |
| 116 | 9 | <i>Ulmus pumila</i> | Siberian Elm | good | - Located in a floodplain | R | | S |
| 117 | 14 / 5 | <i>Tilia americana</i> | American Linden | fair | - Dead branch(es) - Poor crotch | R | | S |
| 118 | 14 | <i>Acer platanoides</i> | Norway Maple | good | | R | | S |
| 119 | 25 | <i>Ulmus pumila</i> | Siberian Elm | fair | - Dead branch(es) | n (species) | Not (species) | x |
| 120 | 11 | <i>Acer platanoides</i> | Norway Maple | poor | - Contorted crown / missing leader | R | | x |
| 121 | 7 | <i>Euonymus atropurpureus</i> | Eastern Wahoo | fair | - Shaded | R | | x |

NOTE: If this table is ALSO used on another sheet (e.g., on the Tree Protection Plan), then the last three columns do not need to be on this sheet, if they are included there.

Dimensional Site Plan Requirements:

(Separate Sheet from Engineering Plan) Do not show topography and utilities on this sheet

- ☐ Proprietor's name and address (Include contact person, phone, and fax)
- ☐ Name of the City of Auburn Hills, Michigan
- ☐ Date, including revisions
- ☐ Title block
- ☐ Northpoint and scale (Label scale and show scale graphically)
- ☐ Legal Description
- ☐ Location Map
- ☐ Professional seal
- ☐ **Correct sidwell identification number(s).** Check the number with City Assessor at 248-364-9436.
(Place the sidwell number(s) in the lower right-hand side of the plan; call it "part of" if part of a larger parcel under land division review)
- ☐ Provide note: Not for Construction Drawings (Place note in bold in the lower right-hand side of the plan above the sidwell number)
- ☐ Site acreage figures (Provide gross and net)
- ☐ Label property line dimensions
- ☐ Label the actual front, side, and rear setback dimensions of the building(s) (do not show dimensions of required setbacks). Provide a table on the plan showing the **required and provided** setbacks.

Dimensional Site Plan Requirements (Continued):

- ☐ Label zoning classifications of adjacent parcels
- ☐ Show adjacent lot lines and buildings within 100 feet
- ☐ Show ingress/egress (e.g., curb cuts) to all properties on the opposite side of the street
- ☐ Show proposed acceleration, deceleration, and passing lanes
- ☐ Label tie to major thoroughfare or section corner
- ☐ Label the centerline of public or private roads
- ☐ Label existing and proposed R.O.W. lines
- ☐ Provide a table showing the total building floor area and usable building floor area
- ☐ *Provide total square footage for pavement/impervious surface on site*
- ☐ Provide a table showing **required and provided** parking calculations based on usable floor area; include **required and provided** handicapped spaces (*If parking standard uses employees, show which standard is greater*)
- ☐ Label sample off-street parking space dimension, handicapped parking space dimension ... Both regular handicapped (8 ft. wide with 5 ft. stripe) and van accessible (8 ft. wide and 8 ft. stripe). (*Label van accessible handicapped spaces with "VAN" The van space is on the left-hand side of the 8 ft. stripe.*)
- ☐ Label **all** drive dimensions
- ☐ Show the loading/unloading area on the plan and provide **required and provided** calculation (*Shade gray to define the area / Calculate by using building length along the longest road frontage; Section 1701, Item p and 1806. Do not block drives or parking spaces with loading/unloading area*)
- ☐ Label greenbelts paralleling the R.O.W. and adjacent property lines
- ☐ Show dimensions of islands used to support trees (minimum 8' wide inside of curbs, and minimum of 100 square feet).
- ☐ Label internal sidewalks (*7 ft. adjacent to buildings*)
- ☐ Show and label the width of the 8 ft. pathway paralleling the R.O.W. (*Shade the pathway gray so it can be easily located on the plan*)
- ☐ Show trash receptacle location, pad size, and method of screening per Section 1825 (*Must be located 15 ft. away from building and adjacent property lines / Provide detail showing 6 ft. high masonry screen wall and wood gates. Do not forget to provide the "man door"*)
- ☐ Show sign locations and calculations
- ☐ Show 25 ft. wetland setback
- ☐ **Provide locations and notes for all traffic control signs required for the site on this sheet.** Use the Michigan Manual of Uniform Traffic Control Devices. (*e.g., stop signs, do not enter signs, one-way signs, right turn only signs, no left turn signs, etc.*)
- ☐ Provide the following **"GENERAL NOTES" - verbatim - do not place "FIRE DEPARTMENT NOTES" on this sheet. - if you have other relevant notes, place them in a separate area and call them "ADDITIONAL NOTES":**
 1. All lighting shall be shielded and directed downward and away from adjacent properties. Lighting shall meet the requirements of Zoning Ordinance No. 372.
 2. Signs shall meet the requirements of Zoning Ordinance No. 372.
 3. No outside storage will be allowed, which includes pallet storage, overnight vehicles, or trailer storage.
 4. Ground-mounted transformers and roof-mounted mechanical equipment shall be screened per Zoning Ordinance No. 372.
 5. Parking spaces shall be double-striped per Zoning Ordinance No. 372.

Dimensional Site Plan Requirements (Continued):

6. Provide an indication of whether or not an Environmental Impact Statement is required as Note #6 under "general notes." (Required for sites which are 20 acres or greater)
7. Provide an indication whether or not a Land Division or Combination is required as Note # 7 under "general notes."
8. Provide an indication of whether or not Special Land Use permit application(s) are required as Note # 8 under "general notes." (**List all Special Land Use permits requested and the relevant Sections of the Zoning Ordinance No. 372**)
9. No alterations, amendments, modifications, or revisions shall be made to the approved site plan during engineering and building plan submittal and review or during construction without prior approval from Community Development.

(If applicable, include note number 10 below)

10. The Developer has agreed to prep the parking lot with the installation of electric stubs for future electric vehicle charging station locations adjacent to the barrier-free parking spaces and run conduit from the power source to the stubs to support future installation. The spaces are designated with EV on the plan and will be posted if and when charging stations are installed.

Engineering Plan Requirements: (Create a Separate Sheet from General Site Plan)

***DO NOT FORGET TO PLACE FIRE DEPT. NOTES
AND STANDARD NOTES ON THIS SHEET!!!!***

General Information

- ☐ Basic information is required for the General Site Plan. Do **NOT** provide "**GENERAL NOTES**" on this sheet
- ☐ Provide required "**CITY OF AUBURN HILLS STANDARD NOTES**" and "**FIRE DEPARTMENT NOTES**"...**Verbatim ... see attached.**
- ☐ Show the following existing site features: (water main, sanitary sewer, storm sewer, ditches, culverts, public easements, private utilities, private easements, and power poles)
- ☐ Provide a minimum of 10' horizontal separation between all proposed and existing utilities.
- ☐ Show all existing above-ground flammable and combustible liquid storage tanks (to remain and any new tanks proposed).
- ☐ Show the limits of wetland areas and quantify any impacts.

Water Main

- ☐ Label the size of all existing and proposed water mains. The minimum size of the mainline water main shall be 8". The water main shall extend across the property frontage to service neighboring properties. If viable and/or practical, the water main shall be looped
- ☐ Label the existing and proposed minimum 12' wide public water main easement. All public water main shall be centered within the easement
- ☐ Provide a hydrant and gate valve and well at the end of all dead end water main. The maximum dead-end lengths are as follows:
 - 75' for 6" fire hydrant lead
 - 450' for 8" water main
 - 1,000' for 12" water main
- ☐ Show the location of the proposed domestic and fire protection (if required) services and valves. The valves shall be contained within the public water main easement. Domestic and fire protection services shall be allowed on 8" to 16" water main only.
- ☐ Show the location of all proposed fire hydrants. Hydrants shall be positioned so that any exterior point of the building is within 300' of a hydrant or at a maximum spacing of 500' within a residential development. Contact John Burmeister of the Fire Department at (248) 364-6755 to set up a meeting to confirm proper fire hydrant spacing.
- ☐ Provide a note indicating that cover over existing and proposed water main must be maintained at 5.5'

Engineering Plan Requirements (Continued):

Sanitary Sewer

- ☐ Label the size of all existing and proposed mainline sanitary sewer. The minimum size of the mainline sanitary sewer shall be 10". The sanitary sewer shall extend across property frontage to service neighboring properties
- ☐ Label the existing and proposed minimum 20' wide public sanitary sewer easement. All public sanitary sewer shall be centered within the easement. Wider easements will be required for deeper sewer to maintain a 1:1 excavated side slope within the easement
- ☐ Label the size, type, and slope of the proposed sanitary sewer lead. The minimum requirements are as follows:
 - 6" diameter
 - SDR 23.5
 - 1% slope
- ☐ Provide a note indicating that cover over existing and proposed sanitary sewer must be a minimum of 4'.

Storm Sewer

- ☐ Label all existing and proposed storm sewer.
- ☐ Provide a note indicating that cover over existing and proposed storm sewer must be a minimum of 2.5'.
- ☐ Provide calculations showing the capacity of the existing storm sewer system if a connection is proposed.
- ☐ Indicate the ultimate storm sewer outlet (County Drain, Galloway Creek, Clinton River, etc.) The storm sewer outlet shall be in accordance with the City of Auburn Hills Master Storm Drain Plan.

Detention/Retention

- ☐ Show the location and side slopes of the proposed detention basin. Side slopes shall not exceed 1:3 and all slopes exceeding 1:6 shall be fenced. A 1' freeboard area must be provided and indicated at top of bank of the detention basin. If a fence is necessary, it is recommended to be constructed of a black wrought-iron look material.
- ☐ Provide calculations for the sizing of the detention basin or inline storm sewer used as detention. All systems must be sized for a 100-year storm event, according to the Oakland County Simplification Method. The calculations should include the C-factor for the site, Discharge rate representative of the drainage district that the site is located, and the volume of storage required and provided for the site.
- ☐ If connecting to an existing detention basin, provide calculations showing the total volume of the existing basin, the C-factor used to size the existing basin, the amount of storage volume dedicated for the site and the amount of storage volume required for the site.
- ☐ Indicate the stormwater overflow route.

Paving

- ☐ Provide pavement cross sections for on-site, public right of way, loading zone, pedestrian pathway, and sidewalk paving. The minimum pavement cross-sections required are as follows:
 - Residential/Multi-Family – 3" asphalt on 8" 21 AA limestone aggregate base or 7" concrete on 6" 21 AA limestone aggregate base.
 - Commercial/Light Industrial – 4" asphalt on 8" 21 AA limestone aggregate base or 8" concrete on 6" 21 AA limestone aggregate base.
 - Industrial – 9" asphalt on 8" 21 AA limestone aggregate base or 9" concrete on 8" 21 AA limestone aggregate base.
 - Loading zone/dumpster pad – 8" concrete on 6" 21 AA limestone aggregate base.
 - Pedestrian pathway (8' wide) – 3" asphalt on 4" 21 AA limestone aggregate base.
 - Sidewalk (5' wide) – 4" concrete on 4" Class II sand.

Engineering Plan Requirements (Continued):

- ☐ Label drive entrance radii. The minimum radius should be 35'.
- ☐ Provide curb and gutter for the entire perimeter of paved area and include a cross-sectional detail.

Site Grading

- ☐ Provide existing grades on the site and a minimum of 100' beyond property lines or as necessary to determine the impact on drainage.
- ☐ Provide proposed spot elevations and/or contours. Elevations shall be provided at, though not limited to, the following:
 - Top of curb and/or edge of pavement
 - Edge of walk
 - Top and bottom of walls
 - Property corners
 - Finished floor
 - Storm structures
 - Detention basin high water
- ☐ Provide proposed spot elevations. Pavement slopes must be between 1% and 4% for parking areas and 1% and 6% for drives. Slopes to adjacent properties shall not exceed 1:4.
- ☐ Show the location and indicate the type of all existing and proposed retaining walls and provide a cross-sectional detail.
- ☐ Indicate "grading limits," including disruption for utilities and off-site work.

Tree Protection

(Can be on a separate sheet as long as at same scale as Engineering and Utility Plans)

- ☐ Show the location of the "grading limits" line.
- ☐ Show the location of the "protective tree fencing" line (recommended at the limits of the grading lines).
- ☐ Graphically indicate on the plan trees to be removed and trees to remain.
- ☐ Provide required "**TREE PROTECTION DETAILS**" and "**TREE PROTECTION NOTES**"... verbatim... see attached.
- ☐ The City Council may require more substantial fencing, such as chain link, to protect: champion trees; plants that are threatened, endangered, or of special concern; or areas where trees being protected are in sensitive areas such as steep slopes.
- ☐ Indicate the location of any existing or proposed easements.
- ☐ Indicate if proposing to use the "Incentive For Woodlands Preservation" (§34-311) or "Woodland Mitigation" (§34-312) options. If using the Incentive For Woodlands Preservation, refer to the "Suggested Vegetation List - Woodlands Mitigation."

Fire Department Site Plan Checklist:

Water Supply:

- ☐ Identify all water-main locations and sizes shown on plans.
- ☐ Fire hydrants shall be spaced every 300', as measured along an apparatus access road by an approved route around the exterior of the building and the entrance drive.
- ☐ New fire hydrants shall be supplied by not less than an 8" NOMINAL main (the tap from the main to the hydrant is NOT LESS THAN 6").
- ☐ The Fire Department Connection (FDC) shall be located within 100' of a fire hydrant (4" storz required).

Fire Apparatus Access:

- ☐ All driveways, roadways, and parking lot lanes shall not be less than 20' CLEAR WIDTH FOR FIRE DEPARTMENT ACCESS.
- ☐ All fire access roadways have a minimum vertical clearance of 13'-6".
- ☐ Is an additional fire apparatus access road required?
- ☐ Fire apparatus access roads shall extend to within 150' of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building.
- ☐ Fire department access roadways shall be designed to support the load of fire apparatus. The road surface shall be paved to provide all-weather driving capabilities.
- ☐ A minimum road width of 26' is required where a fire hydrant is located on a fire apparatus access road and/or any building or portion of a building is more than 30' in height.
- ☐ The grade of the fire department access roadway shall not be more than 10%.
- ☐ Dead-end fire apparatus access roads exceeding 150' shall provide a turnaround designed to accommodate all fire apparatuses.
- ☐ Gate-secured fire apparatus access roads shall be at least 20' in width. (Electric gates shall be equipped with a means of opening by the fire department)
- ☐ Dumpsters shall be located at least 15' from any building or structure.

Fire Department Notes:

- ☐ The Fire Department notes shall be placed verbatim on the Engineering Plan.

This checklist is intended to be a guide and may not contain all requirements needed to obtain approval from the Auburn Hills Fire Department.

For any questions, contact the Auburn Hills Fire Department office at 248-370-9461.

Basic Landscape Plan Requirements:

(Separate Sheet)

- ☐ For General Landscape Requirements, refer to §1808. Additional requirements may also be found in: Corner Clearance, §1902; Screening of Mechanical Equipment, §1905; Schedule of Regulation, Article 17; Screening of waste receptacles, §1825, Planned Unit Developments, §1830; or refer to the specific Zoning District in the Zoning Ordinance.
- ☐ Basic information required on Dimensional Site Plan ... **Do NOT provide "GENERAL NOTES" or "FIRE DEPARTMENT NOTES" on this sheet.**
- ☐ Same scale as Engineering Site Plan
- ☐ Show utilities and proposed topography.
- ☐ Provide the following in **TABLE FORMAT** showing landscape calculations per Section 1808 in the following order: ... **show table on site plan as follows:**

| Total Site Area | | Show actual acreage Example: 4.30 ac – gross 4.25 ac - net |
|------------------------------|--|--|
| Requirement | Required | Provided |
| Net Landscape Area | <u>Commentary:</u> Show the percent of net area <u>required</u> . (25% of the net area in B-1 and 20% of the net area in all other applicable districts shall be landscaped, exclusive of R.O.W., subaqueous areas, and retention/detention ponds. 50% of wetlands may be used toward landscaping credit.) <u>Show Calculation:</u> Example: 4.25 ac x .20 = 0.85 ac or 37,026 sq. ft. required | Show the percent of the net area provided. |
| Site Area Landscaping | <u>Commentary:</u> Approximate 50/50 mix of evergreen and deciduous trees is for each 1,000 sq. ft. of required landscape area <u>Show Calculation:</u> Example: 37,026 sq. ft. /1,000 = 38 trees (round up) | Show actual provided |
| Frontage Landscaping | <u>Commentary:</u> 1 tree for every 30 lineal ft. of greenbelt length along public or private roads. <u>Show Calculation:</u> Example: Squirrel Rd. - 150 ft. /30 = 5 trees Auburn Rd. - 300 ft. /30 = 10 trees (round up) | Show actual provided |
| Parking Interior Landscaping | <u>Commentary:</u> 1 tree for every 20 spaces in a row in parking interior island. Use only deciduous trees. This provision does <u>not</u> apply to parking adjacent to greenbelts or buildings, only in parking areas that are between drives that exceed 20 spaces (e.g., in the middle of a parking lot). If this standard does not apply, write "N/A" under this part of the table <u>Show Calculation:</u> Example: 3 islands = 3 trees | Show actual provided |
| Total Landscape Trees | Show total required | Show total provided |
| Total Replacement Trees | Show total required | Show total provided |

Basic Landscape Plan Requirements (Continued):

- ☐ Regarding Frontage Landscaping requirements, along public or private roads, a 15-foot wide greenbelt is required in all zoning districts, except 25-foot wide greenbelt is required in T&R zoning districts.
- ☐ Regarding Frontage Landscaping requirements, along Public Access Drives, a 10-foot wide greenbelt is required.

NOTE: If this development is non-residential, and it is adjacent to a Residential zoning district:

- A minimum 15' buffer area is required.
- One (1) deciduous or evergreen tree is required for each 20 lineal feet (rounded up).
- 5' high continuous screening is required (masonry wall, fence, plant material, berm, or combination of above).

NOTE: Berm side slopes to be no greater than 1 on 3, with a minimum of 2 foot flat area on top. Plant material on the top of the berm or on the side of the berm facing the exterior of the site. Also, shall not alter drainage on adjacent properties, or obstruct vision for safety of ingress or egress.

- ☐ Provide a **SEPARATE** table showing quantity, key, botanical name, common name, size, species percentage, and genus percentage for all trees. Show the total number of trees at the end of the table.

Diversity requirements for trees:

| | |
|---------------------|------------------------|
| 1 to 10 trees..... | N/A |
| 11 to 50 trees..... | 25% species, 50% genus |
| 51 to 100 trees.... | 20% species, 40% genus |
| 101+ trees..... | 10% species, 20% genus |

SAMPLE:

PLANT MATERIAL LIST:

LANDSCAPE TREES

DIVERSITY REQUIREMENTS:

One genus to contribute no more than 40% of the Trees (90 Trees x 0.40 = 36 Trees)

One species to contribute no more than 20% of the Trees (90 Trees x 0.20 = 18 Trees)

| QTY | KEY | BOTANICAL NAME / COMMON NAME | SIZE / ROOT (MINIMUM) | PERCENTAGE | |
|-----|-------|--|-----------------------|------------|-------|
| | | | | SPECIES | GENUS |
| 8 | AR | Acer rubrum' October Glory' (OCTOBER GLORY RED MAPLE) | 2.5" cal. B&B | 9% | 17% |
| 7 | AS | Acer saccharum' Green Mountain' (GREEN MOUNTAIN SUGAR MAPLE) | 2.5" cal. B&B | 8% | |
| 8 | GS | Ginkgo biloba' Saratoga' (SARATOGA MAIDENHAIR TREE) | 2.5" cal. B&B | 9% | 9% |
| 6 | GT | Gymnocladus dioica (KENTUCKY COFFEETREE) | 2.5" cal. B&B | 7% | 7% |
| 8 | PA | Platanus acerifolia (LONDON PLANETREE) | 2.5" cal. B&B | 9% | 9% |
| 8 | QA | Quercus alba (WHITE OAK) | 2.5" cal. B&B | 9% | 9% |
| 8 | TC | Tilia cordata' Chancellor' (CHANCELLOR LITTLELEAF LINDEN) | 2.5" cal. B&B | 9% | 14% |
| 5 | TA | Tilia americana 'Redmond' (REDMOND AMERICAN BASSWOOD) | 2.5" cal. B&B | 6% | |
| 6 | AB | Abies balsamea (BALSAM FIR) | 8' ht. B&B | 7% | 14% |
| 7 | AC | Abies concolor (CONCOLOR FIR) | 8' ht. B&B | 8% | |
| 6 | PA | Picea abies (WHITE SPRUCE) | 8' ht. B&B | 7% | 10% |
| 3 | PG | Picea glauca 'Densata' (BLACK HILLS SPRUCE) | 8' ht. B&B | 3% | |
| 6 | PR | Pinus resinosa (RED PINE) | 8' ht. B&B | 7% | 11% |
| 4 | PS | Pinus strobus (WHITE PINE) | 8' ht. B&B | 4% | |
| 90 | TOTAL | | | | |

Basic Landscape Plan Requirements (Continued):

- ☐ Provide a **SEPARATE** table for shrubs showing quantity, key, botanical name, common name, and size. Show the total number of shrubs at the end of the table.

SAMPLE:

PLANT MATERIAL LIST:

SHRUBS / PERENNIALS

| QTY | KEY | BOTANICAL NAME / COMMON NAME | SIZE / ROOT |
|-----|-----|---|----------------------|
| 10 | EA | Euonymus alatus 'Compactus' (COMPACT BURNINGBUSH) | 24" ht. Cont. |
| 170 | HB | Helictotrichon sempervirens (BLUE OAT GRASS) | No 2 Cont., 10" o.c. |
| 50 | HS | Hemerocallis 'Stella de Oro' (STELLA DE ORO DAYLILY) | No 2 Cont., 10" o.c. |
| 29 | JH | Juniperus horizontalis 'Plumosa Compacta Youngstown' (YOUNGSTOWN ANDORRA JUNIPER) | 18" spd. Cont. |
| 70 | PA | Pennisetum alopecuroides 'Hameln' (DWARF FOUNTAIN GRASS) | No 2 Cont., 8' o.c. |
| 36 | PF | Potentilla fruticosa 'Pink Beauty' (PINK BEAUTY POTENTILLA) | 18" ht. B&B |
| 245 | RT | Rudbeckia triloba (BROWN-EYED SUSANS) | No 2 Cont., 10" o.c. |
| 14 | SB | Spiraea x bumalda 'Anthony Waterer' (ANTHONY WATERER SPIRAEA) | 24" ht. Cont. |
| 14 | TD | Taxus media 'Densiflora' (DENSE YEW) | 24" ht. B&B |
| 25 | TH | Taxus media 'Hicksii' (HICKS YEW) | 30" ht. B&B |

- ☐ Provide basic tree planting details.
- ☐ Utility lines are shown, and trees should not conflict.
- ☐ Provide the following **ONLY** if proposing to transplant trees (previously planted trees only):
- Provide the size of trees to be transplanted, and indicate the size of the rootball as specified in the latest edition of the American Standard for Nursery Stock.
 - Provide a note indicating that transplanted trees will be done in accordance with the latest edition of the American Standard for Nursery Stock.

Tree Replacement

- ☐ On the Landscape Plan, summarize the calculations of how many replacement trees are required, and show the location of replacement trees. Applicable notes should be shown, saved trees should be on the plan, and the location of the Tree Protection Fence may also be shown here.
- ☐ If this site plan is part of an original City tree removal permit approval (e.g., mass grading, site condominium, subdivision, etc.), show how the trees are being placed back on the site in terms of the overall development. Hypothetically, a ten (10) acre industrial property is mass-graded, owing 1,000 replacement trees. The site is divided into four (4) lots. The lot you are building on comprises 20% of the total acreage of the four (4) lots. Therefore, you would owe 200 replacement trees (1,000 x 20%), plus any other trees you remove from your site not previously mass graded.
- ☐ Show replacement tree calculation for "Landmark Trees" (protected trees greater than 24" d.b.h.) and "Champion Trees" removed.
- ☐ Show replacement tree calculations:
- For Regulated Trees that are not "Landmark" or "Champion" trees, replace at 1:1 basis
 - For "Landmark" trees, replace at 25% of the total d.b.h. of trees removed. (e.g. 3 trees removed are each 30" d.b.h. Take 25% of 90' = 22.5 ÷ 2.5 (caliper of replacement trees) = 9 replacement trees).

Sample Tree Replacement Table:

| Description | Surveyed Trees | Replacement Trees |
|--------------------------------|----------------|-------------------|
| Non-Regulated Trees | 10 | 0 |
| Removed – Landmark Trees (90") | 3 | 9 |
| Removed – Regulated Trees | 7 | 7 |
| Previous Mass-Grading | --- | 200 |
| Saved Trees | 12 | 0 |
| Totals | 42 | 216 |

Basic Landscape Plan Requirements (Continued):

- ☐ For a list of non-regulated trees, refer to the definition of Non-Protected Tree in the Woodland Preservation Ordinance, §34-307.
 - ☐ Provide required **"LANDSCAPE/TREE REPLACEMENT NOTES"...** verbatim...see attached.
 - ☐ For acceptable tree species, refer to "Suggested Tree List - Landscape and Replacement Trees" available from the Community Development Department.
-

Basic Floor Plan Requirements:

(Separate Sheet)

- ☐ Show gross and usable square feet for each floor and a total of all floors
 - ☐ Provide a plan for each floor
 - ☐ Provide a Minimum Building Code Compliance Chart per Jeff Spencer, Building Official (248-364-6940)
 - Use group classifications
 - Gross sq. ft. for all floors and number of stories, including lower levels or basements
 - Construction type classification
 - Is the structure sprinkled and is it a N.F.P.A 13 system, 13R system, or 13D system
 - What mixed-use options are being used for the design of the structure?
-

Basic Elevation Plan Requirements:

(Separate Sheet)

- ☐ **Review the City's Architectural Design Policy.**
- ☐ **Review the City's Green Building Policy.**
- ☐ Show north, south, east, and west elevations.
- ☐ Label the height of the building for each elevation. **Measure the height to the top of the parapet.**
- ☐ Label the height of each floor of the building for each elevation.
- ☐ Show the method of screening for rooftop mechanical equipment on the elevation plan.
- ☐ Show sign locations and calculations.
- ☐ **Attach a letter or a legal-size colored copy of the facade design with the submittal.**
- ☐ Provide the following note: **"Any modifications to the facade plan (including color) must be resubmitted to the City of Auburn Hills for revised approval. The use of neon, flags, or any other type of unapproved signage shall be prohibited per site plan review.**

CITY OF AUBURN HILLS GENERAL NOTES
(Provide on Dimensional Site Plan Only)

1. All lighting shall be shielded and directed downward and away from adjacent properties. Lighting shall meet the requirements of Zoning Ordinance No. 372.
2. Signs shall meet the requirements of Zoning Ordinance No. 372.
3. No outside storage will be allowed, which includes pallet storage, overnight vehicles, or trailer storage.
4. Ground-mounted transformers and roof-mounted mechanical equipment shall be screened per Zoning Ordinance No. 372.
5. Parking spaces shall be double-striped per Zoning Ordinance No. 372.
6. Provide an indication whether or not an Environmental Impact Statement is required as Note #6 under "general notes." (*Required for sites which are 20 acres or greater*)
7. Provide an indication whether or not a Land Division or Combination is required as Note # 7 under "general notes."
8. Provide an indication of whether or not Special Land Use permit application(s) is/are required as Note # 8 under "general notes." (***List all Special Land Use permits requested and the relevant Sections of the Zoning Ordinance No. 372***)
9. No additions, alterations, modifications, or revisions shall be made to the approved site plan during engineering and building plan submittal and review or during construction without prior approval from Community Development.

(If applicable, include note number 10 below)

10. The Developer has agreed to prep the parking lot with the installation of electric stubs for future electric vehicle charging station locations adjacent to the barrier-free parking spaces and run conduit from the power source to the stubs to support future installation. The paces are designated with EV on the plan and will be posted if and when charging stations are installed.
-

CITY OF AUBURN HILLS STANDARD NOTES

CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF AUBURN HILLS' STANDARDS.

NO WORK SHALL BE PERFORMED WITHOUT INSPECTION.

A PERMIT FROM THE DPW IS REQUIRED FOR ALL CONSTRUCTION WITHIN CITY ROW. NO EQUIPMENT OR MATERIAL STORAGE WILL BE PERMITTED IN THE ROW.

ALL CITY STREETS MUST BE MAINTAINED DURING CONSTRUCTION. STREETS SHALL BE KEPT FREE OF MUD, DIRT, CONSTRUCTION DEBRIS, DUST AND THE LIKE. IF CLEAN-UP IS NOT PERFORMED WITHIN 24 HOURS OF NOTIFICATION, THE CITY RESERVES THE RIGHT TO PERFORM THE WORK AND CHARGE THE DEVELOPER ACCORDINGLY.

WORKING HOURS (INCLUDING RUNNING OF ANY MACHINERY) SHALL BE RESTRICTED TO MONDAY THROUGH SATURDAY, 7:00 AM TO 7:00 PM; SUNUP TO SUNDOWN; WHICHEVER IS LESS. CONSTRUCTION OPERATIONS BEYOND THE PERIODS MENTIONED ABOVE SHALL BE PERMITTED ONLY AFTER WRITTEN APPROVAL OF THE CITY MANAGER OR HIS DESIGNEE.

ALL MATERIALS AND MANUFACTURERS SHALL CONFORM TO THE STANDARD DETAILS.

UTILITY STRUCTURES SHALL NOT BE LOCATED IN DRIVEWAYS, AND WHERE POSSIBLE, SHALL NOT BE LOCATED IN PAVED AREAS.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH ACT 53 OF P.A. OF 1974 AND ALSO CONTACT OAKLAND COUNTY UTILITY AND PROTECTION SERVICE (MISS DIG 1-800-482-7171) THREE (3) WORKING DAYS BEFORE THE START OF ANY CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE NECESSARY SIGNS, BARRICADES AND LIGHTS TO PROTECT TRAFFIC AND THE WORK AS DIRECTED BY THE ENGINEER. SUCH DEVICES SHALL BE PLACED PRIOR TO STARTING WORK IN AFFECTED AREAS.

ALL SOIL EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE OAKLAND COUNTY STANDARDS AND DETAILS. THE CONTRACTOR SHALL FOLLOW LOCAL RULES AND REGULATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL FOR ALL MATERIALS THAT ARE DISPOSED OF OFF OF THE PROJECT SITE.

ALL SOIL EROSION MEASURES MUST BE PROPERLY PLACED PRIOR TO GRADING OR OTHER CONSTRUCTION ACTIVITIES.

FIELD CHANGES TO THE APPROVED PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE INSPECTOR ON SITE, WHO WILL DETERMINE WHETHER THE CHANGE IS CONSIDERED "SIGNIFICANT". "SIGNIFICANT" FIELD CHANGES SHALL BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER. THE CITY SHALL NOT BE HELD RESPONSIBLE FOR DELAYS IN APPROVAL OF CHANGES TO THE APPROVED SITE IMPROVEMENT (ENGINEERING) PLAN.

WHERE POSSIBLE, PUBLIC UTILITIES SHALL NOT BE PLACED UNDER PAVEMENT. THE CITY OF AUBURN HILLS SHALL NOT BE RESPONSIBLE FOR PAVEMENT, CURB, OR OTHER RESTORATION OF PERMANENT FACILITIES LOCATED WITHIN THE MUNICIPAL EASEMENT.

3 WORKING DAYS PRIOR TO STARTING CONSTRUCTION, CONTACT THE CONSTRUCTION DEPARTMENT OF ORCHARD, HILTZ & McCLIMENT, INC. AT (734) 466-4539 TO SCHEDULE INSPECTION. OHM SHALL INSPECT ALL SITE IMPROVEMENTS INCLUDING UNDERGROUND UTILITY INSTALLATION, EARTHWORK OPERATIONS, RETAINING WALLS, PAVEMENT IN CITY R.O.W., ALL SIDEWALKS OR SAFETY PATHS IN ANY PUBLIC R.O.W., AND ANY ADDITIONAL ITEMS NOTED DURING REVIEW OR AT THE PRE-CONSTRUCTION MEETING. FINAL OCCUPANCY MAY BE AFFECTED IF PROCEDURES ARE NOT FOLLOWED FOR PROPER INSPECTION.

PERMANENT STRUCTURES OF ANY TYPE, INCLUDING BUT NOT LIMITED TO, TREES, LIGHT POLES, DRAINAGE STRUCTURES, SANITARY STRUCTURES, BENCHES, TRASH RECEPTACLES, ETC., WILL NOT BE ALLOWED WITHIN THE INFLUENCE OF THE PUBLIC WATER MAIN OR SANITARY SEWER EASEMENTS.

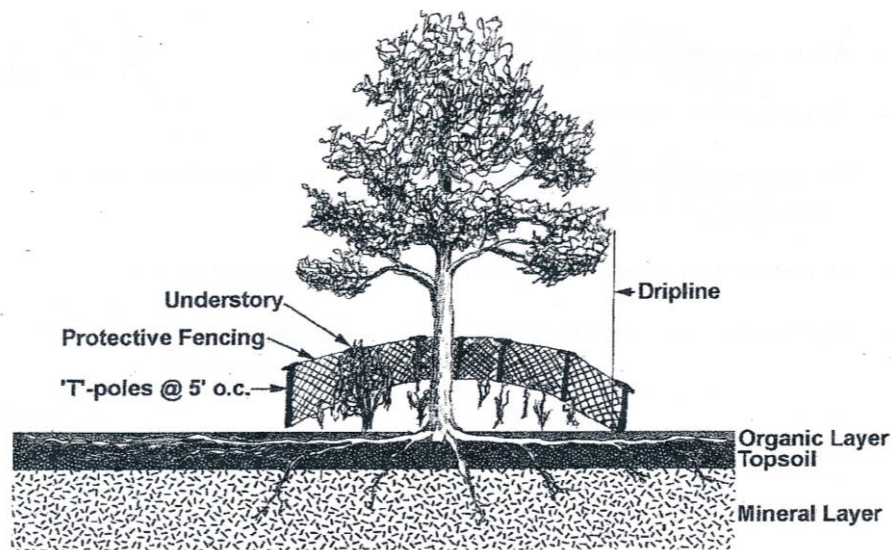
Place Verbatim on Engineering Plan

FIRE DEPARTMENT NOTES

1. THE FOUR (4) INCH STEAMER CAPS ON ALL HYDRANTS WILL BE PAINTED ACCORDING TO THE FOLLOWING:
WHITE-ON 4.00 INCH MAINS
RED-ON 6.00 INCH MAINS
ORANGE-ON 8.00 INCH MAINS
GREEN-ON 12.00 INCH MAINS
BLUE-ON 16.00 INCH OR LARGER MAINS
2. NO PARKING SHALL BE PERMITTED AND/OR NO OBSTRUCTIONS SHALL BE PLACED OR CONSTRUCTED WITHIN FIFTEEN (15) FEET OF ANY FIRE HYDRANT OR FIRE DEPARTMENT CONNECTION, PUBLIC OR PRIVATE.
3. THE FIRE DEPARTMENT CONNECTION MUST BE LOCATED WITHIN ONE HUNDRED (100) FEET OF A FIRE HYDRANT AND WITHIN FIFTY (50) FEET OF A MINIMUM TWENTY (20) FOOT WIDE PAVED DRIVEWAY OR STREET.
4. GAS METERS, PROPANE TANKS, OVERHEAD ELECTRICAL SERVICE, AND TRANSFORMERS MUST NOT BE LOCATED ON THE SAME SIDE OF THE BUILDING OR STRUCTURE AS THE FIRE DEPARTMENT CONNECTION UNLESS A CLEAR DISTANCE OF ONE HUNDRED FIFTY (150) FEET CAN BE MAINTAINED BETWEEN UTILITIES AND THE FIRE DEPARTMENT CONNECTION.
5. ALL DRIVE AREAS MUST BE POSTED AS FIRE LANES WITH UNIFORM SIGNS IN KEEPING WITH THE STANDARD ESTABLISHED IN THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. SIGNS MUST BE ERECTED ON BOTH SIDES OF THE FIRE LANES WITH SPACING BETWEEN SIGNS NOT TO EXCEED ONE HUNDRED (100) FEET.
6. DESIGNATED EXIT DOORS ONTO DRIVES OR PARKING AREAS MUST BE PROTECTED WITH GUARD POSTS OR PARKING BLOCKS.
7. A WHITE HIGH VISIBILITY STRIP SHALL BE PAINTED ON THE UPPER FLANGE OF ALL FIRE HYDRANTS.

Place Verbatim on Engineering Tree Protection Plan

TREE PROTECTION DETAIL



TREE PROTECTION NOTES

- Identify on site all trees or areas of trees which are being proposed to be preserved with fluorescent orange spray paint (chalk base) or by red flagging tape.
- Erect barriers of four (4) foot high fencing staked with metal "T-posts" five (5) feet on center or all such trees or groups of trees proposed to remain
- Protective barriers are to be erected prior to any clearing or grubbing on the site, and barriers are to remain in tact until approved by the City to be removed, or when a Certificate of Occupancy is issued.
- Keep clear all debris or fill, equipment, and material from within the required protective barrier.
- During construction, the owner, developer, or agent shall not cause or permit any activity within the fence line of any protected tree or group of trees, including, but not limited to, the storage of equipment, dumpsters, boulders, dirt, and excavated material, building or waste material, or any other material harmful to the life of a tree.
- No damaging attachment, wires (other than cable wires for trees), signs, or permits may be fastened to any tree protected by this Ordinance.

Place Verbatim on Landscape Plan

LANDSCAPE/TREE REPLACEMENT NOTES

- All installed trees are to have a straight trunk.
- All installed trees are to be northern grown.
- All installed trees are to be State Department of Agriculture Nursery Grade No. 1 or better.
- All replacement trees are considered protected regardless of size.
- All trees shall be guaranteed for a minimum of two years.
- All landscaped areas shall be irrigated with an underground sprinkler system.

Suggested Tree List – Landscape and Replacement Trees

The following is a suggested plant list and minimum size requirements for landscape trees required by the Zoning Ordinance and replacement trees required by the Woodlands Preservation Ordinance. The plant list is intended as a guide. Final plant selection shall be based upon specific site conditions. The tree size specifications are not negotiable.

Evergreen Trees To Be Planted At 5' Height

| | |
|-----------------------------|-------------------------------------|
| Abies balsamea | Balsam Fir |
| Abies balsamea phanerolepis | Canaan Fir |
| Abies fraseri | Fraser Fir |
| Abies procera | Noble Fir |
| Abies veitchii | Veitch Fir |
| Picea engelmannii | Engelmann Spruce |
| Picea mariana | Black Spruce |
| Picea orientalis | Oriental Spruce |
| Picea rubens | Red Spruce |
| Pinus ponderosa | Ponderosa Pine; Western Yellow Pine |
| Tsuga canadensis | Canada Hemlock; Eastern Hemlock |

Evergreen Trees To Be Planted At 8' Height

| | |
|----------------------------|-------------------------------------|
| Abies concolor | Concolor Fir; White Fir |
| Chamaecyparis nootkatensis | Nootka Falsecypress; Alaska-cedar |
| Picea abies | Norway Spruce |
| Picea glauca | White Spruce; American White Spruce |
| Picea omorika | Serbian Spruce |
| Picea pungens | Colorado Spruce |
| Picea pungens glauca | Colorado Blue Spruce; Blue Spruce |
| Pinus nigra | Austrian Pine |
| Pinus resinosa | Red Pine |
| Pinus strobus | White Pine; Eastern White Pine |
| Pinus sylvestris | Scotch Pine |
| Pinus thunbergiana | Japanese Black Pine |
| Pseudotsuga menziesii | Douglas fir |

Canopy, Deciduous Trees To Be Planted at 2'' Caliper

| | |
|------------------------|--|
| Acer nigrum | Black Maple |
| Aesculus hippocastanum | Horsechestnut; Horse Chestnut |
| Betula alleghaniensis | Yellow Birch |
| Carya cordiformis | Bitternut Hickory |
| Carya glabra | Pignut Hickory; Pignut |
| Carya ovata | Shellbark Hickory; Shagbark Hickory |
| Eucommia ulmoides | Hardy Rubber Tree |
| Fagus grandifolia | American Beech |
| Fagus sylvatica | European Beech |
| Nyssa sylvatica | Tupelo; Sourgum; Pepperidge; Black Gum; Black Tupelo |
| Quercus alba | White Oak |
| Quercus bicolor | Swamp White Oak |
| Quercus coccinea | Scarlet Oak |
| Quercus ellipsoidalis | Northern Pin Oak; Hill's Oak |
| Quercus imbricaria | Shingle Oak |
| Quercus macrocarpa | Burr Oak; Mossy Cup Oak |

| | |
|------------------------------|---|
| <i>Quercus muehlenbergii</i> | Chinkapin Oak; Yellow Chestnut Oak |
| <i>Quercus rubra</i> | Red Oak |
| <i>Quercus shumardii</i> | Shumard's Oak |
| <i>Quercus stellata</i> | Post Oak; Upland White Oak; Iron Oak |
| <i>Quercus velutina</i> | Black Oak; Champlain Black Oak; Yellow-bark Oak |
| <i>Sassafras albidum</i> | Red Sassafras; Sassafras |

Canopy, Deciduous Trees To Be Planted at 2.5'' Caliper

| | |
|--|--|
| <i>Acer platanoides</i> | Norway Maple |
| <i>Acer pseudoplatanus</i> | Sycamore Maple; European Sycamore; Planetree Maple |
| <i>Acer rubrum</i> | Red Maple; Scarlet Maple; Swamp Maple |
| <i>Acer saccharinum</i> ⁽¹⁾ | Silver Maple |
| <i>Acer saccharum</i> | Sugar Maple |
| <i>Acer x freemanii</i> ⁽¹⁾ | Silver/Red Hybrid Maple |
| <i>Aesculus octandra</i> (flava) | Sweet Buckeye; Yellow Buckeye |
| <i>Betula nigra</i> | River Birch |
| <i>Celtis occidentalis</i> | Hackberry |
| <i>Ginkgo biloba</i> - male | Maidenhair Tree; Ginkgo (male) |
| <i>Gleditsia triacanthos inermis</i> (male only) | Thornless Honeylocust; Thornless Locust |
| <i>Gymnocladus dioica</i> | Kentucky Coffeetree; Kentucky Coffeebean |
| <i>Larix decidua</i> | European Larch; Larch; Common Larch |
| <i>Larix kaempferi</i> (leptolepis) | Japanese Larch |
| <i>Larix laricina</i> | Eastern Larch; American Larch; Tamarack; Hackmatack |
| <i>Liquidambar styraciflua</i> | Sweetgum; Sweet Gum |
| <i>Liriodendron tulipifera</i> | Tuliptree; Tulip Magnolia; Yellow Poplar; Tulip Poplar |
| <i>Magnolia acuminata</i> | Cucumber Magnolia; Cucumber Tree |
| <i>Metasequoia glyptostroboides</i> | Dawn Redwood |
| <i>Phellodendron amurense</i> | Amur Cork-tree |
| <i>Platanus occidentalis</i> | American Sycamore |
| <i>Platanus x acerifolia</i> | London Planetree |
| <i>Pyrus calleryana</i> (cultivars) | Callery Flowering Pear |
| <i>Quercus palustris</i> ⁽²⁾ | Pin Oak |
| <i>Quercus prinus</i> | Chestnut Oak; Basket Oak |
| <i>Quercus robur</i> | English Oak; Truffle Oak; Pedunculate Oak |
| <i>Quercus variabilis</i> | Oriental Oak |
| <i>Sophora japonica</i> | Pagoda Tree; Japanese Pagodatree; Scholar-tree |
| <i>Taxodium distichum</i> | Bald Cypress; Deciduous Cypress; Common Baldcypress |
| <i>Tilia americana</i> | American Basswood; American Linden |
| <i>Tilia cordata</i> | Littleleaf Linden |
| <i>Tilia heterophylla</i> | White Basswood; Beetree Linden |
| <i>Tilia platyphyllos</i> | American Linden; Linden; Lime; Bigleaf Linden |
| <i>Tilia tomentosa</i> | Silver Linden; White Linden; Silver-leaved Linden |
| <i>Tilia x euchlora</i> | Crimean Linden |
| <i>Zelkova serrata</i> | Zelkova; Graybark Elm; Japanese Zelkova |

(1) Plant only in wetland areas and/or a minimum of 50' from a structure. (2) Supply a soil test which shows that the pH is acceptable to the species.

Woodlands Preservation Ordinance

Suggested Vegetation List – Woodland Mitigation

Notes:

1. Suggested plant list for woodland mitigation based on plant indigenous to the Great Lakes Region and their soil preferences. This list is intended as a guide. Final plant selection shall be based upon specific site conditions.
2. Plants indicated with an asterisk (*) may be used on a limited scale and can not be more than ten percent (10%) of the total trees used in the mitigated area.

Herbaceous Understory and Ground Covers

The herbaceous understory is used to minimize soil erosion and invasion by weed species. It should be established by seed or plant plugs throughout the mitigated area. Seed mixes for varied site conditions can be obtained through a number of suppliers. Each supplier has its own selection of mixes for: dry, mesic or wet soils; tall or low growing species; woodland shade or full sun; and utility functions such as detention basins, slope stabilization, and swales. Please specify the appropriate seed mix or composition of plant plugs appropriate for the site conditions. Seeding rates and plug density should follow industry standards.

Dry sandy soils

Canopy trees

| | |
|-----------------------|-------------------|
| Acer saccharum | Sugar Maple |
| Juniperus virginiana | Eastern Red Cedar |
| Pinus strobus | White Pine |
| Quercus alba | White Oak |
| Quercus ellipsoidalis | Northern Pin Oak |
| Quercus macrocarpa | Burr Oak |
| Quercus muehlenbergii | Chinkapin Oak |
| Quercus velutina | Black Oak |
| Sassafras albidum | Sassafras |
| Tilia americana | American Linden |

Understory trees

| | |
|------------------------|--------------------|
| Amelanchier canadensis | Serviceberry |
| Hamamelis virginiana | Witchhazel |
| Crataegus crus gali | Cockspur Hawthorne |

Understory shrubs

| | |
|----------------------|----------------|
| Ceanothus americanus | New Jersey Tea |
| Cornus racemosa | Gray Dogwood |
| Rosa setigera | Michigan Rose |
| Rosa carolina | Pasture Rose |
| Rhus aromatica | Fragrant Sumac |
| Rhus glabra | Smooth Sumac |
| Rhus typhina | Staghorn Sumac |

Upland mesic soils

Canopy trees

| | |
|-------------------------|---------------------|
| Acer rubrum | Red Maple |
| Acer saccharum | Sugar Maple |
| Fagus grandifolia | American Beech |
| Gymnocladus dioica | Kentucky Coffeetree |
| Liriodendron tulipifera | Tuliptree |
| Picea glauca | White Spruce |
| Pinus strobus | White Pine |
| Populus grandidentata | *Big Toothed Aspen |
| Quercus alba | White Oak |
| Quercus bicolor | Swamp White Oak |
| Quercus macrocarpa | Burr Oak |
| Quercus rubra | Red Oak |
| Quercus shumardii | Shumard's Oak |
| Tilia americana | American Linden |

Understory trees

| | |
|------------------------|------------------|
| Amelanchier canadensis | Serviceberry |
| Carpinus caroliniana | Eastern Hornbeam |
| Cornus alternifolia | Pagoda Dogwood |
| Hamamelis virginiana | Witchhazel |
| Ostrya virginiana | Hop Hornbeam |

Understory shrubs

| | |
|----------------------|---------------------------|
| Cornus racemosa | Gray Dogwood |
| Diervilla lonicera | Northern Bush Honeysuckle |
| Rhus typhina | Staghorn Sumac |
| Sambucus canadensis | Elderberry |
| Viburnum acerifolium | Mapleleaf Viburnum |

Floodplain and poorly drained soils

Canopy trees

| | |
|-----------------------|------------------------|
| Acer rubrum | Red Maple |
| Acer saccharinum | *Silver Maple |
| Celtis occidentalis | Hackberry |
| Gymnocladus dioicus | Kentucky Coffeetree |
| Larix laricina | Larch |
| Nyssa sylvatica | Blackgum |
| Platanus occidentalis | Sycamore |
| Populus tremuloides | *Quaking Aspen |
| Quercus bicolor | Swamp White Oak |
| Quercus palustris | Pin Oak (pH sensitive) |

Understory trees

| | |
|----------------------|--------------------|
| Carpinus caroliniana | Eastern hornbeam |
| Cornus alternifolia | Pagoda Dogwood |
| Crataegus crus gali | Cockspur Hawthorne |
| Lindera benzoin | Spicebush |

Understory shrubs

| | |
|---------------------------|-------------------------|
| Aronia melanocarpa | Black Chokeberry |
| Cephalanthus occidentalis | Buttonbush |
| Cornus racemosa | Gray Dogwood |
| Cornus sericea | Redosier Dogwood |
| Ilex verticillata | Winterberry Holly |
| Physocarpus opulifolius | Ninebark |
| Salix discolor | Pussy Willow |
| Sambucus canadensis | Elderberry |
| Viburnum dentatum | Arrowwood |
| Viburnum lentago | Nannyberry |
| Viburnum trilobum | American Cranberry Bush |