NOTICE
OSHTEMO CHARTER TOWNSHIP
PLANNING COMMISSION

Regular Meeting
Thursday, November 14, 2019
6:00 p.m.
AGENDA

1. Call to Order
2. Pledge of Allegiance
3. Approval of Agenda
4. Public Comment on Non-Agenda Items
5. Approval of Minutes: October 24, 2019

6. Public Hearing: Landscape Ordinance
   Consideration of the draft Landscape Ordinance for recommendation to the Township Board.

7. Public Hearing: Setback Ordinance
   Consideration of the draft Residential Setbacks Ordinance for recommendation to the Township Board.

8. Old Business
   a. Draft Livestock and Honey Bees Ordinance review

9. Other Business
   a. BTR 2.0 Design Guidelines – Consideration of approval
   b. Draft Accessory Buildings Ordinance review

10. Planning Commissioner Comments

11. Adjournment
Policy for Public Comment
Township Board Regular Meetings, Planning Commission & ZBA Meetings

All public comment shall be received during one of the following portions of the Agenda of an open meeting:

a. Citizen Comment on Non-Agenda Items or Public Comment – while this is not intended to be a forum for dialogue and/or debate, if a citizen inquiry can be answered succinctly and briefly, it will be addressed or it may be delegated to the appropriate Township Official or staff member to respond at a later date. More complicated questions can be answered during Township business hours through web contact, phone calls, email (oshtemo@oshtemo.org), walk-in visits, or by appointment.

b. After an agenda item is presented by staff and/or an applicant, public comment will be invited. At the close of public comment there will be Board discussion prior to call for a motion. While comments that include questions are important, depending on the nature of the question, whether it can be answered without further research, and the relevance to the agenda item at hand, the questions may not be discussed during the Board deliberation which follows.

Anyone wishing to make a comment will be asked to come to the podium to facilitate the audio/visual capabilities of the meeting room. Speakers will be invited to provide their name, but it is not required.

All public comment offered during public hearings shall be directed, and relevant, to the item of business on which the public hearing is being conducted. Comment during the Public Comment Non-Agenda Items may be directed to any issue.

All public comment shall be limited to four (4) minutes in duration unless special permission has been granted in advance by the Supervisor or Chairperson of the meeting.

Public comment shall not be repetitive, slanderous, abusive, threatening, boisterous, or contrary to the orderly conduct of business. The Supervisor or Chairperson of the meeting shall terminate any public comment which does not follow these guidelines.

(revised 5/14/2013)
(revised 1/8/2018)

Questions and concerns are welcome outside of public meetings during Township Office hours through phone calls, stopping in at the front desk, by email, and by appointment. The customer service counter is open from Monday-Thursday 8:00 am- 5:00 pm, and on Friday 8:00 am-1:00 pm. Additionally, questions and concerns are accepted at all hours through the website contact form found at www.oshtemo.org, email, postal service, and voicemail. Staff and elected official contact information is provided below. If you do not have a specific person to contact, please direct your inquiry to oshtemo@oshtemo.org and it will be directed to the appropriate person.

Township Department Information

<table>
<thead>
<tr>
<th>Township Department Information</th>
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<tbody>
<tr>
<td><strong>Assessor:</strong> Kristine Bidle</td>
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<td><strong>Fire Chief:</strong> Mark Barnes</td>
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<td><strong>Ordinance Enf:</strong> Rick Suwarsky</td>
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<td><strong>Parks Director:</strong> Karen High</td>
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<td><strong>Planning Director:</strong> Julie Johnston</td>
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<td><strong>Public Works:</strong> Marc Elliott</td>
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<th>Oshtemo Township Board of Trustees</th>
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<tr>
<td>Supervisor Libby Heiny-Cogswell</td>
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<tr>
<td>Clerk Dusty Farmer</td>
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<tr>
<td>Treasurer Grant Taylor</td>
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<td>Trustees Cheri L. Bell</td>
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<tr>
<td>Deb Everett</td>
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<td>Zak Ford</td>
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<td>Ken Hudok</td>
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A meeting of the Oshtemo Charter Township Planning Commission was held Thursday, October 24, 2019, commencing at approximately 6:00 p.m. at the Oshtemo Charter Township Hall.

ALL MEMBERS WERE PRESENT: Bruce VanderWeele, Chair
Ollie Chambers
Ron Commissaris
Dusty Farmer, Secretary
Keshia Dickason
Micki Maxwell
Mary Smith, Vice Chair

Also present were Julie Johnston, Planning Director, James Porter, Township Attorney, and Martha Coash, Meeting Transcriptionist. Five other persons were in attendance.

Call to Order and Pledge of Allegiance

Chairperson VanderWeele called the meeting to order at approximately 6:00 p.m. and invited those present to join in reciting the “Pledge of Allegiance.”

Approval of Agenda

The Chair said he would like to change the meeting order by switching item #8: Nonhazardous Materials Treatment Facility – draft ordinance with #7: Maple Hill South Overlay Zone as the Overlay Zone discussion would likely be longer. The group agreed with that change.
Public Comment on Non-Agenda Items

Chairperson VanderWeele asked if anyone in the audience cared to address the Board on a non-agenda item. As no one came forward, he moved to the next item.

Approval of the Minutes of the Meeting of October 10, 2019

The Chair asked if there were additions, deletions or corrections to the Minutes of the Meeting of October 10, 2019. Hearing none, he asked for a motion.

Mr. Commissaris made a motion to approve the Minutes of the Meeting of October 10, 2019 as presented. Mr. Chambers supported the motion. The motion was approved unanimously.

Chairperson VanderWeele moved to the next agenda item and asked Ms. Johnston for her presentation.

PUBLIC HEARING: VILLAGE THEME DEVELOPMENT PLAN
CONSIDERATION OF THE DRAFT VILLAGE THEME DEVELOPMENT PLAN FOR RECOMMENDATION TO THE TOWNSHIP BOARD

Ms. Johnston said within the Township, the historic Oshtemo Village area developed at the intersection of Stadium Drive and 9th Street. This community was often referred to as a village, although it never incorporated as such.

In 2017, the Downtown Development Authority (DDA) began to become concerned with the lack of new development happening within the Village, which is within the boundaries of the Authority. Development seemed to be occurring in other areas of the Township, but not in the Village. Discussions related to the Village Form-Based Code Overlay and its possible impact on new development was outlined as a primary concern. The Village Form-Based Code Overlay is intended to re-create the Village area based on traditional urban design standards of a walkable, mixed-use community.

She indicated the Village Form-Based Code was a result of the Village Theme Development Plan, which was originally adopted in 2006. The DDA felt that a review of the 2006 Plan was needed due to the public process utilized to create the Plan and ultimately the Village Form-Based Codes. The DDA wanted to give the public, property owners, business owners, etc. from within the Village, as well as throughout Oshtemo Township, the opportunity to weigh in on any possible changes to the Plan.

Ms. Johnston said the draft of the Village Theme Development Plan is intended as an update to the 2006 Plan and represents a critical review of the original Plan and sought to consider and accomplish the following:

1. Gather citizen and stakeholder opinions to confirm the preferred vision for the village and evaluate the effectiveness of the Plan.
2. Investigate the perception that development within the village has been limited, in comparison to development elsewhere in the Township and region, since the original adoption of the Plan.

3. Review changing conditions that may impact development within the village, such as economic trends, demographic/lifestyle preferences, traffic/recent road improvements, and pedestrian connectivity efforts.

4. Recognizing that the local road network is under the jurisdiction of the County, consider the impact that County street design policies have on the existing and planned character of development within the village.

5. Evaluate and outline necessary changes to currently adopted zoning regulations to ensure that such regulations facilitate development which contributes to the desired mixed-use character of the village.

Public input was garnered throughout the review and development of the Plan. A subcommittee of four members from the DDA and four members of the Planning Commission was formed to help guide the public input process, review the draft plans, and make recommendations on changes.

Ms. Johnston noted stakeholder interviews were held in May of 2017. Some of these were one-on-one interview sessions and some were in small groups. The stakeholders represented varying interests, including citizens, township leaders, property owners, business owners, and real estate / development community representatives. The interviews were designed to garner input on the effectiveness of the 2006 Village Theme Development Plan and Village Form-Based Codes.

Two workshops were also held. The first occurred in June of 2017, which was focused on visioning exercises for the Village area. The second was in October of 2017 and provided a series of development/redevelopment scenarios for the Village area, asking participants to evaluate the merits of each scenario.

At the conclusion of the public process in October of 2017, the draft of the Village Theme Development Plan was completed. In order to ensure the Planning Commission and Township Board were up to date on the direction of the Plan, it was presented at a joint Board meeting in February of 2018. At that meeting, there was some concern related to lessening the requirements to construct buildings immediately adjacent to the street right-of-way and allowing parking within the front yard. The current Form-Based Codes require buildings to construct to a build-to line, which is generally the edge of the street right-of-way and parking lots are prohibited in the front yard.

Ms. Johnston said based on the input gathered at the joint Board meeting, there was a difference between those who wanted the original Village theme ideas and those who wished to loosen the regulations to allow some limited front yard parking. This small change in the Plan, and ultimately the Form-Based Code, would alter the desired
appearance of the Village area by permitting some distance between the buildings and the street right-of-way. As is often seen in traditional downtowns, buildings are constructed immediately adjacent to the sidewalk, which is part of the road right-of-way.

At the conclusion of the joint meeting, it was decided that the Village Theme Development Plan should be included in the Planning Commission’s work plan. It was determined the subcommittee had taken the Plan as far as it could, and it was time for the Commission to complete their review. Due to work loads, the Plan was not included on the Commissions agenda until now. In July of this year, the DDA specifically requested the Planning Commission review the Plan, make any possible changes or additions needed, and forward it to the Township Board for approval.

The Planning Commission began their review at the September 12th meeting. Discussion was held about the impacts of allowing the Form-Based Code to ultimately be altered if the Village Theme Development Plan was adopted. At the conclusion of the meeting, additional information was requested on the effect of the possible zoning changes recommended by the draft Village Theme Development Plan. This information was provided at the September 26th meeting.

Ms. Johnston said final changes to the draft Village Theme Development Plan based on Planning Commission input were presented at the October 10th meeting, as follows:

- The acknowledgements page was updated.
- Information from the GO! Green Oshtemo Plan was included on page 18.
- The DDA streetscape plan information was updated on page 19.
- The zoning amendment recommendations were added to page 49.

Ms. Johnston outlined the recommendations of the Plan, which included incentives for infill development, zoning changes, developing branding for the Village, and investing in a market study. She indicated efforts that should be continued include placemaking, streetscape improvements and the façade development program.

Objectives important to the Steering Committee and integrated into the Plan recommendations included allowance of mixed-use development, high-quality architectural design standards, walkability, and site design flexibility.

Chairperson VanderWeele asked if there were comments from the public on the draft plan.

Mr. Rich MacDonald, DDA and Steering Committee member, part of the Hinman Company, which is an owner of properties within the DDA area, spoke to the Board. He supported the proposed changes as well as the very involved process that was followed to develop the Plan. The Plan simplifies the very long and complex Form-Based Code and will allow modifications without having to seek variances. If approved, he hopes it will lead to some great projects.
Hearing no further comments, the Chair closed the public hearing. After determining there were no Board comments, he requested a motion.

Ms. Dickason made a motion to recommend the Village Theme Development Plan as presented to the Township Board for approval. Ms. Farmer supported the motion. The motion was approved unanimously.

Chairperson VanderWeele asked Ms. Johnston for her presentation on the next agenda item.

OTHER BUSINESS

a. Nonhazardous Materials Treatment Facility – draft ordinance review

Ms. Johnston said Taplin, Inc., an environmental services firm within Oshtemo Township, wishes to add a structure to process nonhazardous materials so that they can become recyclable within their facility located at the corner of Drake Road and Michigan Avenue, just west of Bud and Doug Walter Auto Sales. The owners of the firm met with Township staff in early August to discuss the possibility of constructing this facility.

Staff informed Mr. Taplin the use requested is not permitted within the Township Zoning Ordinance. After discussion of the requested project, Staff investigated the use to determine if ordinance language could be written to allow this development.

Staff conducted internet searches of requirements for nonhazardous material management through Environmental Protection Agency and the Michigan Department of Environment, Great Lakes and Energy. In addition, staff reviewed other treatment companies to determine if special requirements must be met. Finally, a search of ordinance language related to nonhazardous treatment facilities was conducted.

Results of these searches determined the treatment should occur within an enclosed building and a secondary containment system must be provided. This system is designed to ensure results of processing within the facility will not impact ground water.

She said the draft ordinance recommended placing this type of facility within the 1-2: Industrial District as a special use. This would allow Planning Commission an opportunity to ensure all ordinance requirements are being met and any compatibility concerns addressed. She recommended review of the language to determine if its location in the I-2 District is appropriate, that all concerns have been addressed through the regulatory requirements, and that special use approval should be required.
Ms. Johnston said Taplin, Inc. is an environmental remediation facility and she believes the materials they would like to process are currently shipped elsewhere for treatment.

Board members had several concerns and questions regarding noise, what types of materials would be processed, a definition of non-hazardous materials, what regulations are applicable, and whether approval must be given.

Attorney Porter said if the request is for a lawful use, the Board generally has to try to accommodate the use unless there is no place for it in the community or unless it can be accommodated in another way.

The Board agreed to postpone this item and to invite Mr. Taplin to a future meeting to address the Board and answer their questions.

**OLD BUSINESS**

a. Maple Hill South Overlay Zone – draft ordinance review

Ms. Johnston said at the September 24th meeting, the Planning Commission discussed the difference between net and gross acreage and its impact on the density and open space requirements of the draft Ordinance. No final decisions were made at the September meeting.

She recommended beginning discussion on residential maximum densities and density bonuses. Extended discussion followed, with a decision that a maximum density not to exceed 8 dwelling units per acre be established for the Ordinance. It was also decided a “sliding” density bonus would be established for densities between 10 and 16 with the inclusion of amenities as follows:

- 10 dwelling units: 4 amenities.
- 12 dwelling units: 4 amenities, including a public option
- 14 dwelling units: 5 amenities, including a public option
- 16 dwelling units: all 6 amenities

Ms. Johnston will make those changes and return the document for further consideration and review.

**PLANNING COMMISSIONER COMMENTS**

Ms. Johnston informed the Board the Livestock/Honey Bee ordinance will be returned to the Planning Commission from the Township Board for further consideration.

There were no comments from Commissioners.
ADJOURNMENT

With there being no further business to consider, Chairperson VanderWeele adjourned the meeting at approximately 8:00 p.m.

Minutes prepared:
October 26, 2019

Minutes approved:
____________, 2019
October 24, 2019

Mtg Date: November 14, 2019

To: Planning Commission

From: Julie Johnston, AICP
Acting Planning Director

Subject: DRAFT Landscape Ordinance Public Hearing

In 2016, the Planning Commission worked for several months developing a new Landscape Ordinance. Time was spent in the field reviewing constructed sites to see how landscaping was being developed and other community ordinances were examined for comparisons. A revised draft Landscape Ordinance was developed, which staff applied to existing sites around Oshtemo and reviewed with the Commission.

At the conclusion of the draft ordinance review, staff knew the Planning Commission would be working on revising and reorganizing the entirety of the Zoning Ordinance and therefore, decided to table the new Landscape Ordinance to become a part of that project instead of holding the public hearings for adoption. As time constraints persisted, the revised/reorganized Zoning Ordinance project was reduced to being primarily a “reorganization” project. Sweeping changes to the Ordinance, which were originally envisioned, were tabled until after the reorganization was complete.

The Planning Commission resumed its review of the Landscape Ordinance in July of this year. Several meetings were held where additional amendments were completed. This is a complete rewrite of the current ordinance and therefore does not have the typical red and strikethrough language.

The draft Ordinance presented for public hearing differs from the Township’s existing ordinance in the following ways:

1. The draft Ordinance requires an overall percentage of the site be landscaped, which is generally slightly less in square footage than the current ordinance landscaping requirements.

2. The current ordinance is very specific where landscaping must occur – at the property lines and in parking lots. The draft ordinance requires landscaping in the parking lots and along public and private rights-of-way but allows the design professional to determine where the rest of the required landscaping will be planned on the site.

3. The total number of required trees is slightly less than the current ordinance, which will hopefully allow tree species a better opportunity to survive on the site.

4. There are very specific requirements for opaque screening between incompatible land uses in the recommended ordinance, which can include a variety of berms, fences, walls, landscape materials, etc. But the screening must be six feet in height and opaque. The current ordinance
requires larger buffer zones between incompatible uses, but the plant materials are generally
trees, which do not provide much screening when the lower branches reach a height beyond five
feet.

5. For certain landscape plans, the seal of an architect is required in the recommended ordinance.
This is to ensure that if someone is requesting tree credits or wishes to submit an alternate
approach to the landscaping requirements, a landscape design professional is creating the plans.

Further comparison of the two ordinances is detailed below:

<table>
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<tr>
<th></th>
<th>Current Landscaping Ordinance</th>
<th>Draft Ordinance</th>
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<tbody>
<tr>
<td><strong>Interior Landscaping</strong></td>
<td>No</td>
<td>10 percent</td>
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<tr>
<td><strong>Screening</strong></td>
<td>No</td>
<td>Between nonresidential and residential and between multi-family and single-family. 6-foot opaque visual barrier.</td>
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<tr>
<td><strong>Buffer zones</strong></td>
<td>At every property line. Size dependent on adjacent uses.</td>
<td>30 feet between nonresidential and residential and between multi-family and single-family.</td>
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<td><strong>Parking lots</strong></td>
<td>Percentage based on number of spaces. Percentage requirement has tiers. A 50-space lot must have 15 square feet of landscaping for every space.</td>
<td>25 square feet per parking lot space (for lots over 10 spaces).</td>
</tr>
<tr>
<td><strong>Street Rights of Way</strong></td>
<td>Part of buffer zone around site</td>
<td>Yes – 20 feet for public, 15 for private.</td>
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Two changes have been made to the draft Ordinance since the Planning Commission’s review at their October 10th meeting. The first was a modification within the parking lot landscaping section, returning to the use of canopy trees instead of understory trees within the required landscaped areas. The concern with understory trees was that very small trees could be planted (maximum growth at 8 to 10 feet), which would not give the visual aesthetic we are trying to reach or provide shade within the parking lot areas.

The second change was to the native planting requirements. The amendment increased native plantings for all other landscape material to 50 percent where 30 percent was previously required. The 75 percent native planting requirement for trees remained the same.

After receiving public input, staff would advocate forwarding the draft Landscaping Ordinance to the Township Board for approval.

Thank you.
ARTICLE 53: LANDSCAPING AND SCREENING

53.10 Intent

The intent of this Article is to promote the public health, safety, and welfare and improve the visual appearance of the Township by requiring landscaping for each development for which site plan review is required. It is further the intent of this Article to achieve the following:

- Increase compatibility between uses and provide buffering between dissimilar land uses.
- Improve the overall aesthetics and appearance of public rights-of-way.
- Improve air quality and provide shade.
- Decrease wind velocity, reduce soil erosion and increase surface water retention.
- Reduce glare from buildings, cars, night lighting, and other sources.
- Screen unattractive features.
- Reduce noise.
- Define safe access and circulation.
- Enhance or focus attention toward a feature (building, entrance, sign, etc.).
- Provide visual relief from monotonous features such as building walls, large parking lots and streets.
- Add natural color and texture and provide habitat for wildlife.
- Enhance and maintain the natural character and appearance of the community.

53.20 Application of Requirements

These requirements shall apply to all uses subject to site plan review as defined in Article 64 of this ordinance. No site plan shall be approved unless a landscape plan is provided which meets the requirements set forth herein.

53.30 General Provisions

A. Minimum Requirements - The requirements in this Article are minimum requirements and shall not preclude the developer and the Township from mutually agreeing to additional landscaping.

B. Landscape plan preparation – Landscape plans are required for all developments requiring site plan approval. However, site plans that meet one or more of the following must submit a Landscape Plan that is sealed by a landscape architect:

1. 70 or more parking spaces
2. Screening between land uses
3. Request tree preservation credits
4. Request credits for preserving native vegetation
5. Request to submit an alternative landscape plan to restore pre-settlement vegetation

C. Site coverage – Developed portions of the site not devoted to building floor area, parking, access ways or pedestrian use shall be appropriately landscaped with live plant material and maintained in a neat and orderly manner. Developed portions of the site shall mean the physical extension and/or construction of any man-made change or alteration to an improved or unimproved property.
D. Visibility - Landscaping material and structures shall be placed in such a manner to not interfere with cross-visibility, public safety, or the safe movement of vehicles and pedestrians. A triangular clear view zone area shall be established at the intersections of street rights-of-way and internal circulation drives intended for continued movement within a site and between properties. The clear zone shall be 25 linear feet for street rights-of-way and 15 linear feet for internal circulation drives drawn along each right-of-way from their point of intersection, creating a triangular clear corner. No plant materials above a height of two feet, at maturity, from the established street grades shall be permitted within the clear view zone area.

E. Land clearing - Land clearing shall be limited to that needed for the construction of buildings, structures, parking lots, street right(s)-of-way, drainage and utility areas, other site improvements, and any grading necessary to accommodate such construction. No grading or removal of the following trees shall be permitted in the area of the parcel, lot or building site not developed:

1. Trees that are native to Michigan with a diameter of 2-inches or greater at 4-feet in height.
2. Trees that are not native to Michigan with a diameter of 8-inches or greater at 4-feet in height.

F. Public right-of-way/private easement greenspace – the land area lying between the paved portion of a public right-of-way/private easement and the property line shall be neatly maintained with grass or groundcover.

G. Maintenance – installation, maintenance, and completion

1. All landscaping required by this Article shall be planted before obtaining a certificate of occupancy or the appropriate financial guarantee such as cash placed in an escrow account, letter of credit, and/or performance bond in the amount of the cost of landscaping to be released only after landscaping is completed.
2. All landscaping and landscape elements shall be planted, and earth moving or grading performed, in a sound workmanlike manner, according to accepted planting and grading procedures.

3. Landscaping required by this Article shall be maintained in a reasonably healthy condition, free from refuse and debris. All unhealthy and dead material shall be replaced within one (1) year of damage or death or the next appropriate planting period, whichever comes first. All landscaped areas shall be provided with a readily available and acceptable water supply.

4. Any areas that become disturbed for any reason shall be restored in accordance with the original landscape plan unless approved otherwise in writing by the Township.

53.40 Screening Between Land Uses

A. A landscape buffer shall be constructed to create a visual screen between the following land use types:

1. Nonresidential land use or zoned property along all adjoining boundaries of a residential land use or zoned property.

2. Multi-family or manufactured home community along all adjoining boundaries of a residential land use or zoned property.

B. The landscape buffer shall be a minimum of 30 feet in width.

C. The landscape buffer must create a visual barrier at least six (6) feet in height that provides opacity to the adjacent property owner.

D. The landscape buffer must contain two (2) canopy trees, two (2) evergreen trees and (2) understory trees for every 100 linear feet of required buffer length. Evergreens may be substituted for canopy and understory trees at a 1:1 ratio.

E. The landscape buffer must also include a combination of one or more of the following to provide the required 6-foot opaque visual barrier:

1. Berms – landscaped undulating earthen berms with varying heights as measured from the grade of the abutting property.

2. Walls or fences – Walls or fences must be a minimum of six (6) feet in height as measured on the side of the proposed wall or fence having the higher grade. A required wall or fence shall be located on the lot line except where underground utilities interfere and except in instances where conformity with front yard setback is required. Upon review of the landscape plan, the reviewing body may approve an alternate location of a wall or fence. The Planning Department shall review and the Zoning Board or Appeals or Planning Commission shall approve the construction materials of the wall or fence which may include face brick, poured-in-place simulated face brick, precast brick face panels, stone, or wood. Chain link fences with opaque slats are not permitted.
3. Plant materials – Landscape planting materials may consist of a variety of materials but must provide opacity to the adjacent property. For plant materials, the height requirement is based upon reasonably anticipated growth over a period of three (3) years.

F. Where there is a need to provide a greater noise or dust barrier or to screen more intense development as determined by the reviewing body, a solid wall or fence with additional landscape materials shall be required.

53.50 Parking Lot Landscaping

A. Parking lot landscaping shall include islands or peninsulas to delineate on-site circulation, ensure adequate sight distance at the intersection of aisles and interior roadways, and to prevent diagonal vehicular movement through parking lots. Features shall be designed with sufficient radii to ensure drivers are able to make turns without encroaching upon landscaping or adjacent traffic lanes.

B. Total parking lot landscaping shall be based on the following:

1. Parking lots with 10 parking spaces or fewer shall be exempt from parking lot landscaping requirements.

2. Parking lots with 11 spaces or more shall provide landscaping at 25 square feet per parking lot space. Total square footage shall be dispersed into separate landscape features, such as islands or peninsulas, within parking lots so as to break up the broad expanse of pavement, guide the circulation of vehicular and pedestrian traffic, and to provide shade and visual relief from pavement.

C. There shall be a minimum of one (1) canopy tree and two (2) low growing shrubs for every 200 square feet of required parking lot landscaping.

D. The minimum size of any parking lot landscape feature shall be no less than six (6) feet in any single dimension and no less than 200 square feet in area.

E. To reduce the impacts of extensive concrete or asphalt, a parking lot landscape feature must be provided at least every 200 linear feet of parking spaces.

F. All parking lot landscaping shall be neatly maintained with plant material or mulch.

G. Parking lot landscape features shall be protected by the installation of a raised concrete or asphalt curb, anchored landscape timbers around of the border, or other suitable means. A minimum distance of three (3) feet shall be established between proposed trees and the backside of the protection device.

53.60 Street Rights-of-Way Greenbelts

A. Greenbelts shall be 20 feet wide along public rights-of-way and 15 feet wide along private rights-of-way, measured from the right-of-way line.
B. The greenbelt shall be landscaped with a minimum equivalent of one (1) canopy tree and two (2) understory trees for every 100 linear feet, or fraction thereof, of frontage abutting a street right-of-way.

C. Parking lots adjacent to street rights-of-way shall provide shrubs at a ratio of 1.5 shrubs for every one (1) parking space. Shrubs that reach a mature height of at least three (3) feet shall be utilized and they shall be in groupings spaced at least three (3) feet on center to screen the parking lot from the right-of-way.

D. In addition to the required plantings within the greenbelt, the remainder of the greenbelt shall be landscaped with grass, ground cover, shrubs, and other organic landscape materials.

E. Access drives from public rights-of-way through required greenbelts shall be permitted, but such drives shall not be subtracted from the linear dimension used to determine the minimum number of trees required.

F. The clear view zone outlined in Section 53.30.D must be met for all access drives.

G. Trees may be placed in groupings within the greenbelt.

53.70 Interior Site Landscaping

A. In addition to the parking lot and greenbelt landscaping, a minimum of 10 percent of the developed area of the parcel, lot or building site must be landscaped. The developed area of the parcel, lot or building site shall mean the physical extension and/or construction of any man-made change or alteration to an improved or unimproved property.

B. Interior site landscaping shall be located adjacent to buildings and in at least one side or rear yard distributed throughout the developed area of the parcel, lot or building site.

C. In addition to the other tree requirements outlined herein, one (1) canopy tree will be required for every 1,500 square feet and one (1) understory tree will be required for every 2,500 square feet of the interior site landscaping.

D. Interior site landscaping shall be provided to enhance the appearance of the site and screen potentially objectionable site features such as, but not limited to, retention/detention ponds, transformer pads, air conditioning units, and loading areas.

53.80 Loading/Unloading Areas

Loading areas shall be landscaped in such a manner as to screen the area from view of public rights-of-way or private access easements.

53.90 Screening of Trash and Recycling Containers

A. Outside trash and recycling disposal containers shall be screened on all sides with an opaque fence or wall and gate at least as high as the container, but no less than six (6) feet in height, and shall be constructed of material that is compatible with the architectural materials used
in the site development. The Planning Commission or Zoning Board or Appeals, at its discretion, may approve alternative methods of screening that meet the intent of this Article.

B. Containers and enclosures shall be located away from public view insofar as possible, and enclosures shall be situated so that they do not cause excessive nuisance or offense to occupants of nearby buildings.

C. Screening and gates shall be of a durable construction. Chain link fences with opaque slats are not permitted.

53.100 Landscape Elements

A. Native plant materials – At least 75 percent of required trees shall be native to Lower Michigan. At least 50 percent of all other required landscape material within each Plant Material Type shall be native to Lower Michigan. For information on native plants and lists of trees and shrubs, see the following websites:

1. www.nativeplants.msu.edu
2. www.plant.native.org
3. www.wildflower.org/collections/Michigan

B. Composition -

1. The use of a single species is prohibited. Except for plantings used for evergreen screening, no one species of tree or shrub may make up more than 50 percent of the total amount of required landscaping material.

2. Any species known to have structural weakness or excessive bearing of fruit or nuts shall not be used in areas of vehicular or pedestrian traffic.

3. Species not permitted within street rights-of-way greenbelts and should be used with caution when placed in proximity to any existing or proposed building, structure, walkway, or parking area are listed in the below table:

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer negundo</td>
<td>Box Elder</td>
</tr>
<tr>
<td>Acer saccharinum</td>
<td>Silver Maple</td>
</tr>
<tr>
<td>Aesculus hippocastanum</td>
<td>Horse Chestnut</td>
</tr>
<tr>
<td>Ailanthus altissima</td>
<td>Tree of Heaven</td>
</tr>
<tr>
<td>Catalpa speciosa</td>
<td>Catalpa</td>
</tr>
<tr>
<td>Ginkgo biloba (Female)</td>
<td>Female Ginkgo</td>
</tr>
<tr>
<td>Populus spp.</td>
<td>Poplars, Cottonwood, Aspen</td>
</tr>
<tr>
<td>Liquidambar styraciflua</td>
<td>Sweet Gum</td>
</tr>
<tr>
<td>Botanical Name</td>
<td>Common Name</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Salix spp.</td>
<td>Willows</td>
</tr>
<tr>
<td>Ulmus spp.</td>
<td>Elms</td>
</tr>
<tr>
<td>Fraxinus</td>
<td>Ash</td>
</tr>
</tbody>
</table>

4. Invasive species - To protect species indigenous to the Township, the use of invasive species which naturalize are prohibited. Those invasive species not permitted are listed on the Midwest Invasive Species Information Network at www.misin.msu.edu.

5. Hardy plant materials - All landscaping material shall be hardy to the area and appropriate to the situation in which it is proposed, free of disease and insects, and conform to the American Standard for Nursery Stock of the American Association of Nurserymen.

C. Minimum size requirements - Where landscaping is required, the following minimum size requirements for representative landscape materials shall be applicable. Height of a plant is measured from the top of the root ball or top of the container soil to the top of the leader, the primary stem of the plant.

<table>
<thead>
<tr>
<th>Plant Material Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy Tree - Single Stem</td>
<td>2&quot; caliper*</td>
</tr>
<tr>
<td>Canopy Tree - Multi-Stem Clump</td>
<td>10 feet (height)</td>
</tr>
<tr>
<td>Understory Tree</td>
<td>8' to 10' (height)</td>
</tr>
<tr>
<td>Evergreen Tree</td>
<td>5 feet (height)</td>
</tr>
<tr>
<td>Shrub - Deciduous</td>
<td>24 inches (height)</td>
</tr>
<tr>
<td>Shrub - Evergreen</td>
<td>18 inches (height)</td>
</tr>
<tr>
<td>Shrub - Low Growing</td>
<td>2-gallon pot</td>
</tr>
</tbody>
</table>

*2" caliper as measured in conformance with the American Standard for Nursery Stock.

D. Berms – Any proposed berms shall be constructed with slopes not to exceed a one to three (1:3) gradient. Berm slopes shall be protected with sod, seed, or other form of natural ground cover.

E. Coordination with utilities - Provision shall be made to coordinate landscaping with existing and proposed underground and overhead utility lines so as to avoid interference with plant growth.

F. Storm water retention and detention ponds - The integration of storm water retention and detention ponds in the overall landscape concept is recommended. Ponds with a natural or free form shape, rather than square or rectangular design and appearance, shall be required. If site constraints dictate a more engineered shape, the design and appearance must be approved by the reviewing body. Any fenced areas that are visible from an adjacent property, public right-of-way or private access easement shall be landscaped to screen them from view.
Landscape materials may consist of a variety of plantings that provide generally consistent screening of the fence. For plant materials, the height requirement is based upon reasonably anticipated growth over a period of three (3) years.

53.110 Tree Preservation Credits

A. Tree preservation credits shall be given for trees preserved within the developed portion of a parcel, lot or building site. The location of preserved trees shall determine which specific landscape requirement shall be reduced.

B. Credit shall be awarded for preserving canopy trees. The number of credits awarded for tree preservation shall be in accordance with the table presented below. Trees intended to be preserved shall be indicated on the landscape plan and type and size shall be noted.

<table>
<thead>
<tr>
<th>Diameter of Preserved Tree*</th>
<th>Number of Trees credited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 24 inches</td>
<td>4</td>
</tr>
<tr>
<td>12 inches to 24 inches</td>
<td>3</td>
</tr>
<tr>
<td>8 inches to 11.9 inches</td>
<td>2</td>
</tr>
<tr>
<td>2 inches to 7.9 inches</td>
<td>1</td>
</tr>
</tbody>
</table>

* Diameter measured at 4’ above ground level.

C. In the event that healthy trees which are used to meet the minimum requirements of this section or those labeled to remain are cut down, destroyed, damaged, or excavated at the dripline, as determined by the Township, the contractor shall replace them with trees which meet Ordinance requirements.

53.120 Tree Protection prior to and during Construction.

A. Before any site work begins, the developer or builder shall erect tree protection fencing that will shield and protect all trees designated to be preserved. Fencing should be placed no closer than ten feet from the trunk of a tree or five feet beyond the drip line of a tree or group of trees, whichever is greater.

B. Fencing shall be a minimum of 48 inches high.

C. Tree protection fencing shall be maintained during construction and all construction materials, supplies, and equipment shall be kept out of the protected areas.

D. Paving, or other site improvements, shall not encroach upon the dripline of the existing trees to be preserved.

E. Location of tree protection fencing must be shown on the approved landscape plan.
53.130 Preservation of Existing Native Vegetation.

Credit shall be awarded for preserving existing vegetation native to Lower Michigan, including shrubs and grassland species. By preserving existing native vegetation, tree and shrub planting requirements can be reduced. The number of credits awarded shall be recommended by Township planning staff and approved by the reviewing body based on a natural features inventory prepared by an environmental professional or landscape architect that describes existing species and the intended function of the required tree and shrub plantings.

53.140 Incentives for Restoring Pre-Settlement Vegetation

A. Oshtemo Township’s pre-settlement vegetation types were primarily Oak Savanna, Oak Forest, and Beech-Sugar Maple Forest, with smaller areas of Prairie, Marsh, Bur Oak Opening, and Southern Swamp Forest. A map of pre-settlement vegetation showing the geographic location of these vegetation types is on file in the Township office. It includes a description of the predominant plant species for each vegetation type.

B. To encourage restoration of pre-settlement vegetation, all uses subject to site plan review may opt to submit a landscape restoration plan in lieu of a landscape plan. A landscape restoration plan shall use native vegetation types to meet the intent of screening and buffering requirements while at the same time strive to restore the pre-settlement vegetation of the immediate area. Even though the exact number of each landscape element may not be provided, approval of such a plan shall be granted so long as the overall intent is satisfied. Township planning staff shall recommend and the reviewing body shall approve a landscape restoration plan.

53.150 Provisions for Existing Sites

A. Street rights-of-way greenbelts and screening between land uses shall be required for any existing site where the renovation, expansion or alteration increases the structure by more than 25 percent of the existing floor area or is greater than 2,000 square feet.

B. Landscape requirements for parking lots shall apply when expansions increase the number of parking spaces by 25 percent or at least eleven (11) parking spaces. Parking lot landscaping requirements shall be based on, and only apply to, the new spaces developed.

C. If site constraints prevent the application of these requirements, the reviewing body may grant an alternate approach or reduction in the landscape requirements through the site plan review process.

53.160 Modifications or Reductions

If an unusual physical circumstance exists on or affects a property, the reviewing body may approve modifications to the planting material requirements of this Article. These modifications may include the approval of plantings and visual screening such as hedges, fences, walls, and/or combinations thereof, which provides an alternate approach the reviewing body deems appropriate to ensure compliance with the spirit, purpose and intent of this Article.
If existing topography and vegetation are determined by the reviewing body to provide equal or better landscape and buffering effect, reductions in plantings may also be approved if the spirit, purpose and intent of this Article is met.
Recently, there was some concern about how the Township was regulating accessory buildings on residential properties. Specifically, where they were permitted to be located on a parcel, lot, or building site. After a careful review of the Accessory Buildings and Setback Ordinances, it was determined that some amendments were needed to ensure the two regulations worked in concert.

Attached are the recommended changes to Section 50.60: Setback Provisions, B. Agricultural and Residence Districts. The majority of the modifications are organizational, allowing the ordinance to be more readable. The main changes are as follows:

- The term “primary structure” was added to the setback requirements. Without this clarification, it was ambiguous as to whether accessory structures would be allowed in the front yard.

- The term “structure” was added to the setback regulations for accessory uses. A structure is clearly defined in the Zoning Ordinance, assisting with clarity.

- A reference to Section 57.100 was added to assist readers with understanding there are additional requirements for accessory buildings.

The amended ordinance was reviewed by the Township Attorney and Zoning Administrator to ensure the changes resolved the regulatory concerns for accessory buildings. The Planning Commission reviewed the amendments at their October 10th meeting. No additional changes were requested.

At the conclusion of the public hearing on November 14th, the Planning Commission may consider a motion to forward the amended Ordinance to the Township Board.

Thank you.
50.60 SETBACK PROVISIONS

B. Agricultural and Residence Districts, which shall include the in “AG” Agricultural Districts, “RR” Residence Districts, “R-1” Residence Districts, “R-2” Residence Districts, “R-3” Residence Districts, “R-5” Residence Districts, “R-C” Residential, Conservation Districts and with respect to buildings having two stories or less in “R-4” Residence Districts.

1. Front yard setbacks for primary structures.
   a. A setback of 30-feet shall be required there shall be a setback from all street rights-of-way lines and outlots and/or planned future public street extensions of not less than 30 feet for all buildings unless a larger setback is otherwise required in the Township Zoning Ordinance.
   b. If a new building primary structure is constructed within 300 feet of a building existing on the effective date of this Ordinance provision (December 24, 1966) which is closer than the 30-foot setback requirement, in which case such the setback may be decreased according to the schedule set forth in Section 50.60.A hereof.
   c. If the a new building primary structure is constructed within 100 feet of a building existing on the effective date of this Ordinance provision which is further than the 30-foot setback requirement, the minimum setback requirement shall be equal to the average of the closest existing buildings on either side of the new building.

2. Interior side and rear yard setbacks for primary structures.
   a. "AG" Agricultural Districts, "RR" Rural Residential Districts, "R-1" Residence Districts, "R-2" Residence Districts, "R-3" Residence Districts, and "R-C" Residential, Conservation Districts:
      i. The minimum setback distance between any primary structure building, pools, and associated decks whether attached or detached and any interior side property line in the "AG" Agricultural Districts, "RR" Residence Districts, "R-1" Residence Districts, "R-2" Residence Districts, "R-3" Residence Districts, and "R-C" Residential, Conservation Districts shall be ten feet for all buildings, pools, and associated decks whether attached or detached unless a larger setback is otherwise required in the Township Zoning Ordinance.
      ii. The minimum setback distance between any primary structure building, pools, and associated decks whether attached or detached and any rear property line in the "AG" Agricultural Districts, "RR" Residence Districts, "R-1" Residence Districts, "R-2" Residence Districts, "R-3" Residence Districts, and "R-C" Residential, Conservation Districts shall be not less than 15 feet unless a larger setback is otherwise required in the Township Zoning Ordinance.
   b. "R-5" Residence Districts, and, with respect to buildings having two stories or less in "R-4" Residence Districts:
      i. The minimum setback distance between any building and any rear or interior side property line in the "R-5" Residence Districts, and, with respect to buildings having two stories or less in "R-4" Residence Districts, shall be ten feet or the height of the abutting side of the building at its highest point as measured from the grade of the property line, whichever is greater.
c. The setbacks for buildings exceeding two stories in the "R-4" Residence Districts are set forth in Section 50.60.C.

d. The rear and interior side property line setbacks for nonresidential buildings in the above zoning districts shall satisfy the requirements of Section 50.60.C.

3. Accessory buildings

a. Accessory buildings exceeding 200 square feet shall be set back from interior side and rear property lines a minimum of ten feet or the height of the accessory building at its highest point as measured from the grade of the property line, whichever is greater, unless a larger setback is otherwise required in the Township Zoning Ordinance.

b. The minimum setback distance between any Accessory building not exceeding 200 square feet in area and shall be set back from any interior side and rear or interior side property lines in the "AG" Agricultural Districts, "RR" Residence Districts, "R-1" Residence Districts, "R-2" Residence Districts, "R-3" Residence Districts, "R-4" Residence Districts, "R-5" Residence Districts, and "R-C" Residential, Conservation Districts shall be a minimum of three feet, unless a larger setback is otherwise required in the Township Zoning Ordinance.

c. Reference Section 57.100 for additional accessory building requirements.

4. Essential services. In "AG" Agricultural Districts, "RR" Residence Districts, "R-1" Residence Districts, "R-2" Residence Districts, "R-3" Residence Districts, "R-4" Residence Districts, "R-5" Residence Districts, and "R-C" Residential, Conservation Districts there shall be a setback of not less than 25 feet from all street right-of-way lines and outlots and/or planned future public street extensions for all parcels, lots or building sites with buildings or regulator stations for essential services unless a larger setback is otherwise required in the Township Zoning Ordinance.

5. Separation between buildings. With respect to residential buildings of four dwelling units or less, there shall be a 20-foot separation between buildings located on the same parcel, lot, or building site (except buildings accessory thereto), unless otherwise required in the Township Zoning Ordinance. Separation shall be measured in the same manner as a building setback.

6. Lawful nonconforming residential buildings existing as of the date March 11, 1996. Any residential building constructed as of the date of March 11, 1996, which is set back less than the distance required by Section 50.60.A or Section 50.60.B (whichever is applicable) from the street right-of-way lines shall be considered a lawful nonconforming structure under Section 63.40 for purposes of the application and enforcement of the setback provisions of Sections 50.60.A and 50.60.B. Structures rendered lawfully nonconforming by this section shall not be utilized to decrease the setback required under the reduction schedule contained within Section 50.60.A.
At the Township Board first reading of the amended Keeping of Livestock and Honey Bees Ordinance, two questions were posed:

1. How large can the bee hives be?
2. Why can't hives be placed in the front yard?

After some discussion amongst the Board members, it was decided the draft Ordinance should be returned to the Planning Commission to allow them to consider these questions and any potential amendments.

Staff has made several changes for the Planning Commission to deliberate:

1. The term “colonies” has been inserted to replace “hives” in the acreage requirement for bees. One colony will likely live in three hive boxes, making the use of the term “hive” difficult when determining how many are allowed per property.

2. The acreage requirement for bee colonies was removed from the acreage requirements for animals and given its own subheading. The acreage allowances for animals has minimum requirements for each animal. As an example, a 5-acre parcel would allow 2 acres for 2 horses, 1.5 acres for six sheep, and 1.5 acres for seven chickens. We did not expect bee colonies to fall into these acreage exclusion requirements. On 5 acres, a property owner could have the animals noted above, plus the allotted number of hives.

3. All buildings and structures would now be required to follow the Accessory Buildings Ordinance, which does not permit these types of structures in the front yard, unless approved by the Planning Director or the Zoning Board of Appeals. This would stop someone from placing a chicken coop in the front yard unless it was deemed appropriate by either the Planning Director or the Zoning Board of Appeals.

4. Language has now been added to allow hives within the front yard, but with a 100-foot setback. This number was used to discourage the placement of hives in the front yard of parcels, lots, or building sites that weren’t at least an acre in size.
5. Hive size has now been added to the Ordinance. Based on staff research, the Langstroth hive is the most popular hive configuration, which is stacked boxes of various heights that come in three depths: deep, medium, and shallow, and two widths: 10-frame or 8-frame. In order to cover all possible hive configurations, we have included language that would allow a maximum of three 10-frame deep hive boxes per colony.

Staff would recommend discussion of these potential changes at the November 14<sup>th</sup> meeting. If approved, a new public hearing will be required, which could take place at the December Planning Commission meeting.

Thank you.
57.80 KEEPING OF POULTRY, SWINE, HORSES, OR LIVESTOCK AND HONEY BEES

The keeping of poultry, swine, livestock, or horses, rabbits, sheep, goats, chickens and other similar animals livestock (collectively referred herein as animals), and bees for noncommercial purposes as pets or for educational purposes, is permitted under the following conditions:

A. Activities shall be conducted on less than a commercial scale for the private enjoyment of the property owners conducted for noncommercial purposes.

B. Acreage requirements. Acreage requirements are exclusive of each animal size, meaning the property must have the minimum required acreage for each animal.
   1. Large animals. There shall be a minimum of One acre for each large animal (more than 200 pounds at maturity), including horses, cattle, and swine, or similar animals.
   2. Moderate-sized animals. One-quarter acre for each small moderate-sized animal (under 35 to 200 pounds at maturity), including sheep, goats, or similar animals.
   3. Small animals. exclusive of those set forth above and for chickens, ducks, turkeys, and rabbits- (collectively referred [to] herein as specified animals). All parcels, lots, and building sites shall be permitted up to five specified animals; roosters are prohibited. Parcels, lots, and building sites larger than one acre shall be permitted one additional specified animal for each one-quarter acre in excess of one acre. All parcels, lots, and building sites up to one acre shall be permitted up to five small animals (under 35 pounds at maturity), including chickens, ducks, turkeys, rabbits, or similar animals. One additional small animal shall be permitted for each additional one-quarter acre of property.

C. Acreage requirements for honey bees. All parcels, lots, and building sites up to one-quarter acre shall be permitted two hives colonies to a maximum of six hives colonies for the first acre. One additional hive colony is allowed for each additional one-quarter acre of property in excess of one acre.

D. Structure requirements and location.
   1. At minimum, a fenced-in enclosure, other than the residence, shall be placed for the housing of animals A structure or shelter is required based on the Generally Accepted Agricultural Management Practices (GAAMPS) for the care of animals.
   2. All buildings and structures must meet the requirements of Section 57.100: Accessory Buildings.
   3. All buildings, structures, or other enclosures, or hives shall be within either the side or rear yards and may not be within the required front setback yard for the subject property. Hives may be placed in the front yard of a parcel, lot, or building site if the hives can be setback a minimum of 100 feet from the public right-of-way.
4. The size of a single bee hive, which shall accommodate one bee colony, shall be a maximum of three 10-frame deep boxes measured at 19 7/8 inches in length, 16 ¾ inches in width, and 9 5/8 inches in depth.

E. Building setbacks. A building, other than the residence, structure, shelter, or hive used to shelter for animals or bees and/or any area used to store, dispose of, or compost manure, other than the primary residential dwelling, shall not be located closer than comply with the following setbacks:

1. Large animals. 50 feet for large or small animals from any property line and 150 feet to from any pre-existing dwelling on an adjacent premise property. under different ownership.

2. Moderate-sized animals. 50 feet from any property line and 100 feet from any pre-existing dwelling on an adjacent property.

3. Small animals. and ten feet or the height of the building, whichever is greater, for specified animals to any property line and not nearer than 150 feet for large or small animals and 20 feet for specified animals to any pre-existing dwelling on adjacent premises under different ownership. 25 feet from any property line and 50 feet from any pre-existing dwelling on an adjacent property.

4. Honey bees. 15 feet from any property line and 50 feet from any pre-existing dwelling on an adjacent property.

F. Fenced enclosure requirements.

Large and small animals (excluding specified animals) shall be controlled in a suitable manner to prevent their approaching closer than 100 feet to any preexisting dwelling on adjacent premises under different ownership. Specified animals shall not be allowed free roam, must be contained within a six-foot fence or other fully enclosed structure at all times, and shall be controlled in a suitable manner to prevent their approaching closer than 20 feet to any preexisting dwelling on adjacent premises under different ownership. A sight fence or other screening is required if specified animals are visible from any other residential property or any public rights-of-way. All fences for specified animals shall be within either the side or rear yards and may not be within the required front setback for the subject property.

1. Animals shall not be allowed free roam, but must be contained within a fully enclosed fenced area at all times. Fencing must meet the requirements of Section 57.60.

2. Fencing shall prevent animals from approaching any pre-existing dwelling on an adjacent property per the following requirements:
   a. Large animals – 100 feet
   b. Moderate-sized animals – 75 feet
   c. Small animals – 40 feet

3. Fencing shall be designed to prevent animal trespass onto neighboring property.

G. Additional requirements for the keeping of honey bees.
1. Hives shall be placed in such a way that the hive entrance is positioned internal to the property so that bees must fly across the property.

2. A flyaway barrier at least six feet in height shall shield any part of the property line that is within 25 feet of a bee hive. Such flyaway barrier must consist of a solid fence per Section 57.60, dense vegetation, or combination thereof to redirect a bee’s flight pattern to be above six feet in height at the property line. The Planning Director may approve an additional barrier type if it meets the intent of assisting the bees to gain altitude before leaving the property.

3. A constant supply of water shall be provided to all hives.

H. Prohibitions.

1. The keeping of poultry, swine, horses, or livestock Animals is further prohibited where conditions of maintenance are such to cause:

   a. Unpleasant odors to be generated sufficiently strong to be discernible upon property of others for continuous periods of longer than six days, or

   b. Noise to be generated sufficiently loud to penetrate indoors upon property of others for continuous periods in excess of four hours, or

   c. Flies, insects or rodents to be attracted to the place where said animals and/or fowl are kept and are thereafter permitted to multiply and escape upon adjoining property.

2. Said animals or fowl, alive or dead, or any refuse therefrom shall not trespass or be carried upon adjoining property.

3. Roosters that crow are prohibited.

4. Any undomesticated animal or dangerous animal classified as wild, which includes, but is not limited to alligators, bears, monkeys, wolves, coyotes, venomous or constrictor reptiles, panthers, cougars, tigers, lions, and other wild felines. It shall also include any hybrid between a wild animal and a domesticated animal, such as a dog and a wolf or a cat and a bobcat.
November 9, 2019

Mtg Date: November 14, 2019

To: Planning Commission

From: Julie Johnston, AICP
Acting Planning Director

Subject: BTR 2.0 Design Guidelines

The BRP: Business and Research Park District requires a set of design guidelines be created for any coordinated development on property zoned this classification. The Western Michigan University (WMU) Business Technology and Research Park (BTR 2.0) located at the northwest corner of Drake Road and Parkview is zoned under this District.

Throughout much of 2016 and 2017, WMU worked with the Township and interested citizens to create the development plan for BTR 2.0. This plan was not required to be approved by the Township due to state laws related to property owned by universities. However, the University worked closely with Township staff to ensure a plan that met Ordinance requirements.

To comply with Section 20.50.B of the BRP District, WMU has provided a set of design and maintenance standards for the park. Staff has the following recommendations:

1. Consider adding the Township Planning Director to the membership of the Design Review Committee. This should be an ad-hoc position as the Planning Director has no authority to approve plans which will ultimately be presented to the Planning Commission. However, by allowing the Planning Director on the Committee, they can be informed on upcoming projects, provide information on zoning related requirements, provide insight on any potential concerns, but not vote on the plans directly.

2. The Site Design Standards section, which begins on page 8, has a section related to Landscaping (page 11). The first standard includes language that native plant materials shall be used to the greatest extent practical to minimize water and fertilizer requirements. The Landscape Ordinance has specific requirements related to native landscaping as follows:

   “At least 75 percent of required canopy trees shall be native to lower Michigan. At least 30 percent of all other required landscape material within each Plant Material Type shall be native to lower Michigan.”

We recommend this section be changed to “Native trees, shrubs, plants, and low maintenance turf grasses must, at a minimum, meet Oshtemo Township Zoning Ordinance requirements for native plantings, and be used to the greatest extent practicable to minimize water and fertilizer requirements.”
3. The landscape standards go on to say that one tree shall be required for every 10 parking spaces. Staff is not sure if this condition is in addition to the parking lot landscaping required by the Township Zoning Ordinance. If not, then the guideline will not meet Ordinance requirements, which are one canopy tree and two shrubs for every 200 square feet of required landscaping. Please consider the following calculations:

**Township Zoning Ordinance Requirements:**
50 space parking lot = 1,250 square feet of parking lot landscaping
1,250 square feet of landscaped area = 6 canopy trees and 12 shrubs

**BTR 2.0 Design Guidelines:**
50 space parking lot = 10 trees and no shrubs

Language should be added to this section clarifying whether the parking lot trees required by the Guidelines are in addition to the Township Zoning Ordinance, or the language should be changed to reflect Township Landscape Ordinance requirements.

4. In the Site Design Standards there are guidelines for items that have Zoning Ordinance implications. In most of these sections, language has been added that the Oshtemo Township Zoning Ordinance requirements must be met. This language is not found in the Landscaping section. We would recommend adding “Landscaping shall conform to the requirements of the Oshtemo Township Zoning Ordinance” to the end of the Landscaping section.

5. The Architectural Design Standards (beginning on page 17) has a section related to mechanical and electrical equipment (page 19). The language reads:

> “Mechanical and electrical equipment, whether on a roof or next to a building, should be screened from view…”

We would recommend strengthening this language to “shall be screened.” The term “should” indicates that it is not required. If mechanical equipment is placed on the ground, we would recommend some landscape screening, at minimum.

6. Page 23 of the Design Guidelines has requirements for Step 3 approval. Staff recommends the following amendments:

> “After approval of the Preliminary Plan, a refined plan shall be prepared to illustrate greater detail; two copies shall be submitted to the BTR Park Phase 2 Representative on the Design Review Committee. Because Site Plan Review and approval will be required from Oshtemo Township, this plan shall contain all information required for site plan submittal per the Site Plan, Landscape, and BRP District chapters of the Oshtemo Township Zoning Ordinance...”

With these recommended changes, staff would advocate the Planning Commission approve the BTR 2.0 Design Guidelines.

Thank you.
WESTERN MICHIGAN UNIVERSITY

Business, Technology & Research Park
Phase 2

BTR 2.0

Design and Maintenance Standards

FINAL DRAFT – October 2018
Table of Contents

Introduction
1. Design Review
2. Site Design Standards
   A. Entries
   B. Signage/Entity Identification
   C. Site Lighting
   D. Building Siting and Open Spaces
   E. Landscaping
   F. Irrigation
   G. Drainage
   H. Soil Erosion and Sedimentation Control
   I. Topography
   J. Parking Lot Design/Location
   K. Fencing and Walls
   L. Utilities/Park Road R.O.W. Corridor
   M. Sustainable Products
3. Architectural Design Guidelines
   A. Building Design Intent and Context
   B. Architectural Concept
   C. Building Articulation
   D. Building Materials
   E. Building Entries
   F. Mechanical and Electrical Equipment
   G. Service Areas
4. Design and Plan Review Procedures
5. Landscape and Maintenance Standards – Common Areas

Appendix
BTR Park Phase 2 Master Plan
Overall Stormwater Management Plan
Landscape Materials
Parking Lot Shading Guidelines and Calculations
Signage Standards
Lighting Standards
WMU Business, Technology & Research Park – Phase 2
Site Design and Maintenance Standards
FINAL DRAFT – October 2018

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INTRODUCTION

The Western Michigan University Business, Technology and Research Park – Phase 2 is the second phase of a mixed-use project that integrates technologically sophisticated business, technology development and research with the various Colleges of the University in a sustainable, environmentally sensitive site design. The University will actively seek out prospective BTR Park Phase 2 users whose research and development programs can establish mutually beneficial linkages within the University.

The Master Plan (see Appendix) sets a coherent basis for development of the BTR Park Phase 2. It is important that a unified image be maintained throughout the Park. Development throughout the Park will be expected to enhance and contribute to a positive image for the Park. The overall character of the Park and its natural setting is supportive of high technology businesses. It shall be the design intent of each proposed project to maintain and strengthen this character as well. With the advent of independent generation of electricity by wind or solar means, special attention will be given to the installation of generating equipment to maintain the intent of these Design Standards.

While it is important that the Park be perceived as a unit, a ‘whole’ within the Kalamazoo Community, it is equally important that individual expression of specific users within the Park not be precluded. A balanced approach of providing unity and flexibility in development control is the goal. The design philosophy to achieve this goal dictates that treatment affecting the common areas of the Park be well defined while those dealing with individual building and site design are more flexible.

To achieve a unified Park image, Site Design and Maintenance Standards have been developed for those design elements which are exposed to public view and have the greatest impact on the overall Park image. Architectural Design Guidelines are proposed for the individual sites and buildings that recommend an approach for cohesion with overall Park character but allow individual expression.
1. DESIGN REVIEW

A Design Review Committee and a design review process have been established to ensure that development within the BTR Park Phase 2 is consistent with all applicable standards, guidelines, restrictions, and with existing uses within the Park, and that adjoining properties will not be adversely affected.

A. Membership of the Design Review Committee:

1. An At-large Member of the University; appointed by the University President.
2. Licensed or retired licensed Architect or Engineer, recommended by the University Architect; appointed by the University President.
3. Licensed or retired licensed Architect or Planner, recommended by the University Architect; appointed by the University President.
4. Licensed or retired licensed Landscape Architect, recommended by the University Architect; appointed by the University President.
5. BTR Park Phase 2 Representative (see “Declaration” for selection guidelines).

B. Function of the Design Review Committee:

i. To ensure that projects are developed that fit the BTR Park Phase 2 concept, the Design Review Committee will have primary responsibility for interpretation of the standards and guidelines.

ii. The Design Review Committee is authorized to review and act on all development proposals in accordance with the review procedures, applying its judgement in accordance with criteria set forth by the Declaration of Restrictions, Covenants and Design Standards (“Declaration”).

iii. Administrative Responsibility: At its discretion, the Committee may retain the services of professional or technical advisers such as Engineers, Architects, Landscape Architects, or Planners to assist in evaluating submissions based on design and other technical considerations.
C. Design Review Process:

The Design Review Process is a three-step process that shall be followed by all applicants. The steps are:

1. Pre-design Conference.
2. Preliminary Plan Review.

See Appendix for a detailed explanation of the process.
2. SITE DESIGN STANDARDS

The following Design Standards, guidelines, and site considerations have been created to establish the basis for a cohesive character throughout the BTR Park Phase 2. It is intended that this document serve as a general introduction. Its purpose is twofold. The first is to complement the Declaration of Restrictions, Covenants and Design Standards and Oshtemo Township zoning ordinances for use by individual tenants of the Park during their site planning and development process. Secondly, the Design Standards establish criteria for use by the Review Committee when considering approval of any Park development.

In addition to compliance with these Design Standards, Site Plan Review and approval will be required from Oshtemo Township for all development in BTR Park Phase 2. The BTR Park Phase 2 is zoned BRP – Business and Research Park District in Oshtemo Township. All development shall comply with the requirements of the Oshtemo Township Zoning Ordinance.

A. Entries

The Park Road in the BTR Park Phase 2 has been created to provide common access to all privately developed sites. The following Development Standards for site entrance drives off the Park Road are intended to help create a high-quality image for the entire development, and to simplify ‘way finding.’

1. No access drives will be permitted from Drake Road or Parkview Avenue.
2. Access to all individual sites will occur off the internal BTR Park Phase 2 Road. Adjacent sites are encouraged to share entry drives.
3. Entry points shall be coordinated with and approved by the Design Review Committee and in accordance with the Road Commission of Kalamazoo County (RCKC) regulations
4. A commercial driveway permit will be required from the RCKC.
5. Spacing between drive ways must be a minimum of 130 feet center to center of drives to comply with RCKC guidelines.
6. Each entry drive shall utilize the same curb and gutter design as the Park Road, at least to the Park Road right-of-way.
B. Signage/Entity Identification

Identification of individual entities on site represents a very important visual design element that has a significant impact on the image and perceived quality of the Park. Signs are the obvious means to identify individual site occupants along the Park Road. They are required to be uniform in size, shape, location, and material as defined in these standards. Buildings will be identified by the approved BTR Park monument sign (See Appendix for details).

The building, not the tenant(s) shall be named on the monument sign, although in the case of a single occupant the name can be the same. All other signs shall be located on the buildings.

Additionally, the design of site specific signs for direction and information shall conform to the following standards:
1. Back lighted signs will not be permitted.
2. The use of graphic corporate logos is encouraged on informational, directional, and regulatory signs.
3. Not more than one identification sign per site will be permitted along the Park Road.
4. The business identification sign on the Park Road shall be incorporated into landscaping.
5. Business entities are encouraged to share signs.
6. All signs must also conform with the specific standards for signage in the Oshtemo Township Zoning Ordinance.

C. Site Lighting

Site lighting for parking lots, entry drives, and general area lighting shall match the appearance and performance of the standard pole, fixture, and luminaire selected for the BTR Park Phase 2 internal Park road. The location of the site lighting shall be designed to avoid glare, spill light, and poor color rendition of objects in the landscape. (See Appendix for detailed standards.)

The following standards define the requirements for site lights:
1. Sharp cut-off down lights are required in all areas.
2. Exterior lighting shall be provided by light emitting diode (LED) products and shall be oriented to pedestrians as well as to vehicles.
3. Bollard lighting, (under 6' high), low-wattage garden or pathway lighting is recommended for pedestrian areas.
4. While safety is the responsibility of the individual site owner, a minimum light intensity of ½ foot candle is required in all use areas and an average light intensity value of no more than one foot-candle is recommended.

5. Pole heights should be selected appropriately to match the context of the site. Pole heights must be a minimum of 15-feet in compliance with the Township Zoning Ordinance.

6. The public roadway lighting systems comply with Sustainable SITES Certification – HHWB Credit 6.8: Reduce Light Pollution. Site lighting for new developments should be consistent with this approach.

7. See also specific standards for lighting in the Oshtemo Township Zoning Ordinance.

D. Building Siting and Open Spaces

Western Michigan University has committed to preserve an open, natural character and maintain a rate of stormwater runoff into the adjacent Asylum Lake not greater than currently exists as undeveloped land.

The BTR Park Phase 2 is organized to have individual sites developed along the Park Road and that drain to a common stormwater management system. The individual private sites shall be developed to visually and physically link with the Park Road and the Park stormwater management system.

The following site development standards shall be observed:

1. The total impermeable lot coverage (buildings, drives and parking) shall not exceed 80%. The maximum coverage allowed for buildings is 40%, while the minimum open space required is 20%.

2. Buildings shall be placed so that building and landscaping together visually buffer parking areas from US-131, Parkview Avenue and Drake Road.

3. Buildings shall be designed so that loading docks and service areas will not be easily visible from US-131, Parkview Avenue and Drake Road.

4. Buildings shall be sited to respect the existing and/or created land forms and drainage patterns.

5. Existing individual and grouped trees are important features and shall be preserved and maintained in all building placement. No existing tree shall be removed without the written approval of the review committee.
E. Landscaping

For many decades, the site was part of the working Colony Farm operated by the State of Michigan Kalamazoo State Hospital. Trees and tree masses at the perimeter and on the steep slope in the north part of the site that separates the developable area of the Park from the drainage-way into Asylum Lake and its floodplain represent significant vegetation features that have been retained.

Oak savannah plant community comprised of native plants, shall be the predominant landscape type. A free-flowing strip of varying width along the right-of-way of the Park Road has been planted with low maintenance grass (fescue) and will be mowed on a regular basis. Native oak savannah trees, forbs, and grasses have been planted within the buffer zone and shall be retained. Near the Park road rain gardens have been established to filter stormwater runoff; the rain gardens have been planted with native plants suitable to the water regime expected in this location and shall be maintained for this purpose.

The vision for the development of the individual and collective sites is to develop and utilize natural systems in the landscape as much as possible.

1. Native trees, shrubs, plants, and low maintenance turf grasses shall be used to the greatest extent practical to minimize water and fertilizer requirements.

2. Planting design near buildings can utilize a broader palette of ornamental species, but the plants shall be selected for low water and fertilizer requirements as well as their ornamental value.

3. One tree (minimum 3-1/2” diameter) will be required for each ten parking spaces on a site. Tree islands and edge planting that creates low capacity parking rooms are desired (See Section ‘J’ ‘Parking Lots’).

4. Providing shade (within 15 years) for a minimum of 25% of parking surface area is encouraged. See Appendix - Parking Lot Shading Guidelines and Calculations for the technique for calculating shaded areas.

5. The use of fertilizer, herbicides, and pesticides shall be avoided, especially outside the buildable area of each site.

6. Turf areas that are to be mowed shall be planted with low maintenance low nitrogen-dependent turf grasses such as a combination of wet and dry tolerant fescues which require 50-60% lower water, fertilizer and pesticide applications than most turf grasses.
7. Grasped swales and turf filter strips shall be mowed regularly to maintain vigorous growth.

8. A partial list of recommended plants and a list of invasive plants that are not permitted is included in Appendix.

F. Irrigation

Within those portions of a developed site needing irrigation, maximize the efficiency of the irrigation system to reduce water consumption and infiltration of water into soils.

1. Irrigation systems shall be limited to turf areas.

2. Any irrigation system shall utilize high efficiency irrigation technologies.

G. Drainage

Stormwater management for the entire BTR Park Phase 2 has been integrated within the plan for development. Provisions for accommodating stormwater for each individual parcel in the BTR Park have been considered in the Stormwater Management Plan based on the following concepts:

Three infiltration basins have been provided for the future development of the BTR Park Phase 2. Each basin has an allocated area and total amount of imperviousness which is allowed to drain to each specific basin. The drainage area for each basin is shown on the Overall Stormwater Management Plan provided in Appendix. Each basin was sized to accommodate parcel development to 80% impervious cover. Any areas draining to the basin which exceed this 80% or contribute storm water from an adjacent drainage divide must provide onsite infiltration for the excess amount. The onsite infiltration basin must be sized for 100-year storm and in accordance with the Kalamazoo County Drain Commission storm water regulations.

1. To the greatest extent possible, all stormwater from impervious surfaces (roofing and paving) should be directed over the ground surface across vegetated surface areas and into vegetated swales.

2. The vegetated swales shall be directed to the common stormwater management basins constructed in strategic locations within the Park.
3. All stormwater is to be routed to the basins allocated for each drainage area. No stormwater is allowed to be connected to the Park Road storm sewer system.

4. Any excess stormwater runoff routed to the Park infiltration basins that they were not sized for shall comply with the following design specifications:
   a. In accordance with the Kalamazoo County Drain Commission.
   b. Onsite retention basin sized for the 100-year storm.
   c. Velocities, capacities, and friction losses shall be based on Manning's formula.
   d. A minimum “n” value of 0.035 shall be used as the roughness coefficient for open channels, unless special treatment is given to the bottom and sides (riprap or paving).
   e. Minimum bottom width for grassed waterways shall be one foot. Minimum bottom slope shall be 0.50%.
   f. Side slopes shall be no steeper than 3:1 (H:V).

5. Use erosion control blanket and/or rock linings where concentrated flow shear stresses exceed the strength of the vegetated channel under 10-year design storm conditions. The maximum 10-year design storm velocity shall be four feet per second (4 ft/s) for grass lined channels. Riprap protection or equivalent erosion control measures shall be used where velocity exceeds 4 ft/s, up to a maximum velocity of 8 ft/s. The minimum velocity of vegetated channels shall be 1.5 ft/s.

6. Where maximum velocities are exceeded due to channel slope, rock check dams, or grade control structures shall be used to reduce overall flow velocities.

7. Erosion control blankets shall be used to protect bare channels.

8. A minimum vertical clearance of 4 feet is required between vegetated swale, ditch inverts, and water and sanitary utilities unless special provisions are approved. In no case, will less than 2 feet of clearance be allowed.

9. Vegetated filter strips shall be used whenever possible to treat stormwater runoff. Size of filter strips shall be based on the following criteria:
   a. Percent of the ½-year frequency storm that can be infiltrated based on the soil permeability.
   b. Sediment trapping efficiency: The slope and length of filter strips are critical as they largely determine the pollutant capabilities.
i. For 70% sediment trapping efficiency, 15 linear feet of grass filter strip per one percent of slope is required (i.e., slope=2%, use a 30 linear feet filter).

ii. For 90% sediment trapping efficiency, 45 linear feet of filter strip per one percent of slope is required (i.e., 2% slope, 90 linear feet filter length).

12. The minimum width-to-percent slope ratio should be 4:1. (i.e., for a 2% slope the minimum width shall be 8 feet).

13. Concentrating the flow into a channel across the filter strip shall be avoided. Level spreaders are to be used in most instances to prevent concentration of flow.

14. Grass filter strips used for parking lot runoff are to be planted with seed mixtures that are salt tolerant.

H. Soil Erosion and Sedimentation Control

During construction, and until areas are permanently vegetated, erosion control measures will be enforced to prevent sedimentation from entering the Park Road rain garden area.

I. Topography

Work has been completed along the Park Road to enhance the character of the typically gentle gradients of the individual sites. Berms were installed along the south and west edges of the Park property. These berms contain contaminated soils and are capped and protected from surficial contact and are not to be disturbed.

Topography and grading Development Standards:

1. Utilize the standards provided in Drainage, Section G of these standards.

2. Follow these gradient standards:
   a. Parking lots: Minimum 1.5%, maximum - follow barrier free development standards to comply with Americans with Disability Act requirements.
   b. Walks: 5% maximum without handrails; 8.33% with handrails; 2% maximum cross slope.

3. Meet adjoining property lines at grade.

4. Establish all grading limits and excavations at existing tree masses (or individual trees) to be saved a distance equal to one (minimum) to two (preferred) times the distance from the trunk to the drip line.
Parking lots are an important functional element in the BTR Park Phase 2. They must be convenient, efficient, and safe. Development within the Park should be designed to reduce or mitigate the heat island effect that develops when large expanses of dark, non-reflective surfaces are used for parking. Breaking up parking areas reduces the cumulative heating effect of large expanses of dark pavement. The planted areas between parking lots provide wildlife habitat and enhance the area.

The design philosophy of the Park is to maintain a naturalized character to the greatest extent possible. Parking lots therefore should be designed to have a minimal visual impact and a stormwater handling plan that can be managed within the total BTR Park Phase 2 system. To achieve this end, the following standards are required.

1. Parking lots shall be subdivided into a collection of smaller parking “rooms” by tree canopy, planting islands, and pedestrian ways.
2. Each individual parking area shall not have a capacity over 50 cars; a 30-car capacity is preferred.
3. Parking lots shall be located in such a manner on individual sites that buildings and landscaping together visually buffer the lot from the Park Road, Drake Road, and US-131.
4. Providing shade (within 15 years) for a minimum of 25% of parking surface area is encouraged. See Appendix - Parking Lot Shading Guidelines and Calculations for the required technique for calculating shaded areas.
5. Landscaping, drainage, and lighting have been addressed in separate sections of the standards. They are all factors that must be carefully followed in the design of parking facilities.

Parking lot design, including dimensions and number of parking spaces provided, shall conform to the requirements of the Oshtemo Township Zoning Ordinance.

K. Fencing and Walls

The vision for the BTR Park Phase 2 is to create a cohesive environment with high quality spaces. To accomplish this, the design within individual sites shall recognize that property boundaries are legal definitions that shall not be reinforced by fencing, walls, or any three-dimensional barriers. Specifically, the following standards apply:
1. Fencing may be used for specific purposes as an extension of a building or to enclose a secure area, but fencing shall not be used to define property lines.

2. No wood rail, rustic wood fences, or chain link fences shall be used unless they are immediately adjacent to, built as part of, or reflect the character of the primary use structure on site.

3. Dumpsters, utilities, and service areas shall not be located on a street frontage. They shall be screened from view and separated from pedestrian use areas (see also Building Guidelines).

L. Utilities/Park Road R.O.W. Corridor

A utility corridor has been established as part of the construction of the Park Road and described within the dedicated street right-of-way. All utility service currently available to the BTR Park Phase 2 sites has been assigned a specific path within this corridor. All Park utilities have been installed underground; all utilities for individual parcels shall also be installed underground.

M. Sustainable Products

A. As required by Oshtemo Township zoning, one or more of the following sustainable products and/or methodologies shall be incorporated into each property within the BTR Park Phase 2:
   a. Installation of green roof systems;
   b. Development in compliance with Sustainable SITES-certification or LEED-certification standards;
   c. Installation of renewable energy (solar, wind, etc.) technology;
   d. Other products or methodologies proposed to and approved by the Oshtemo Township Planning Commission.

B. While compliance with Sustainable SITES Certification or LEED Certification is not mandatory, designs consistent with those programs are encouraged. The BTR Park Phase 2 is expected to be Sustainable SITES Certified and set up for LEED Certification.
3. ARCHITECTURAL DESIGN GUIDELINES

A. Building Design Intent and Context

The design intent for the BTR Park Phase 2 is to maintain a cohesive appearance that supports a high technology environment for the Park and its users, and to enhance and contribute to a positive image for the Township. “State-of-the-art,” “cutting-edge,” and “21st Century” are terms that reflect this intent.

In order to reduce the size of the building “footprint” and increase the size of open green space, building design is encouraged to utilize multi-story floor plans. A maximum of four stories shall be permitted.

To give the Park a degree of consistency, the design of individual buildings shall take into consideration the existing development within the Park. Buildings are to be contextual, succeeding not because they stand apart, but because they add to the coherence of the entire BTR Park, Phase 1 and Phase 2.

Compatible architectural features, fenestration (window) patterns, and building proportions help integrate buildings into context. “Contextual Patterns” are established through:
  - Similar articulation.
  - Similar scale and proportion.
  - Similar or complementary architectural style.
  - Similar building details and fenestration patterns.
  - Similar or complementary materials.

B. Architectural Concept

Building design elements, details and massing should create a well-proportioned and unified building form and exhibit an overall architectural concept. Details and features shall relate to the structure and not appear as add-ons.

Building design, whether part of an individual or a multiple-site development, shall reinforce the BTR Park image. Clustered or otherwise articulated and differentiated forms will be recommended over monolithic forms.
C. Building Articulation

The pattern and proportion of a building’s windows and doors and the modulation of its form are important in determining a building’s architectural character as well as adding visual interest. Following the proportion and pattern of neighboring buildings will increase the consistency of the Parkscape.

Facade modulation, stepping back or extending forward a portion of the facade can add character and scale. Changes in roof lines help to modulate a building’s form.

Large expanses of blank walls with little or no articulation are discouraged.

D. Building Materials

The selection and use of exterior materials is a key ingredient in determining how a building will look. Some materials, such as masonry, can give a sense of permanence or can provide texture and scale to a building facade. Other materials, such as glass and metal panels or siding, can help give a “high tech” image appropriate to the BTR Park.

Building exteriors are to be constructed of durable and maintainable materials that are attractive even when viewed up close. Materials that have texture, pattern, or lend themselves to a high quality of detailing are encouraged.

Materials that are often used to look like something they are not, such as EFIS Systems, are discouraged.

In general, colors should be natural or muted with bright colors used only as accents. Glass with low reflectance is preferred.

E. Building Entries

Building entries are very important for visitor orientation. A well-designed entry gives a welcoming impression and contributes to a positive image.

1. Buildings shall have at least one formal entry, visible from the site entrance off the Park Road.
2. Entries shall be clearly defined and attractive. A canopy or protective element is preferred.
3. Liberal use of glass will help make the entry inviting.
F. Mechanical and Electrical Equipment

Mechanical and electrical equipment, whether on a roof or next to a building, should be screened from view unless it is a well-coordinated design element and supports the architectural design intent for the building and site.

G. Service Areas

Dumpsters, utilities, and service areas shall not be located on a street frontage. They shall be screened from view and separated from pedestrian use areas.
4. Design and Plan Review Procedures

A. Design Review Committee Membership

i. “At-large” Member of the University; appointed by the President of the University.

ii. Licensed or retired licensed Architect or Engineer recommended by the University Director of Planning; appointed by the President of the University.

iii. Licensed or retired licensed Architect or Planner recommended by the University Director of Planning; appointed by the President of the University.

iv. Licensed or retired licensed Landscape Architect recommended by the University Director of Planning; appointed by the President of the University.

v. BTR Park Phase 2 Representative (see “Declaration” for selection guidelines).

B. Function of the Design Review Committee

i. To ensure that projects are developed that fit the BTR Park Phase 2 concept, the Design Review Committee will have primary responsibility for interpretation of the standards and guidelines.

ii. The Design Review Committee is authorized to review and act on all development proposals in accordance with the review procedures, applying its judgment in accordance with criteria set forth by the Declaration of Restrictions, Covenants and Design Standards (“Declaration”).

iii. Administrative Responsibility: At its discretion, the Committee may retain the services of professional or technical advisers such as Engineers, Architects, Landscape Architects, or Planners to assist in evaluating submissions based on design and other technical considerations.
C. Plan Compliance

No improvement shall be commenced, erected, or constructed, nor shall any addition thereto, or change or alterations therein be made (except the interior of a building), until there has been full compliance with the plan review procedures as set forth in this document.

D. Plan Submittal and Approval

All required plans shall be submitted to the Design Review Committee for review at least ten working days prior to any meetings scheduled to review the drawings. The Committee reserves the right to approve or disapprove, in writing, the plans relative to all particulars therein including, but not limited to, the location and method of construction of any improvement; the quality, type of materials, and colors used; harmony of external design with adjacent existing or planned improvements and landscaping; and location as the same relates to existing vegetation, topography, setbacks, grade, driveways, parking lots, and size of building(s).

Digital copies of all plans shall be provided on suitable media, e.g., CD-ROM, flash drive, or via email. All plans must also be submitted on 24” x 36” sheets at a scale of no smaller than 1” = 50’ for site plans, landscape and irrigation plans, and building plans at a scale of ¼” = 1’-0” (or other similar, mutually agreed upon scale), with printing capable of being reduced by 50% while retaining legibility. In instances where the required scale will not fit on the sheet size noted the next larger standard size sheet may be mutually agreed to.

E. Design Review Process

The Design Review Process is a three-step process that shall be followed by all applicants. The steps are:
Step 1 – Pre-Design Conference

Prior to committing to any site plan or building design and as a method of project orientation, it is required that the applicant and a representative from the applicant’s design team participate in a Pre-Design Conference. It is expected that the applicant will outline the project in terms of land use, approximate building size, number of potential employees, business operations, hours, and products produced, project budget, and a preliminary timeline for development and construction. Preliminary, rough sketch plans of the proposed project to facilitate discussion are strongly recommended but not required.

The Design Committee shall explain its role as Park liaison, provide a copy of the Development Standards, review the covenants and guidelines, and indicate the proper procedure to follow through the design review process.

Step 2 – Preliminary Plan Review

The applicant or his/her representative shall transmit two copies of Schematic Design Plan drawings of the proposed building(s) and site improvements to the BTR Park Phase 2 Representative on the Design Review Committee. Drawings shall be submitted at least ten working days prior to scheduled review meeting. The Schematic Design Plans shall illustrate the relationship of new building(s), parking, and other site improvements to existing topography, vegetation, adjacent buildings, and off-site views, including the following:

1. Building location(s).
2. Future expansion area(s).
3. Proposed exterior architectural treatment, including building height, use, materials, and colors.
4. Tabulation of square footage for all construction.
5. Location of entrance drive(s).
6. Location and preliminary layout of parking lots, service areas, and drives.
7. Proposed grading concept and erosion control measures.
8. Proposed drainage concept, including methods of conveying site stormwater to overall BTR Park Phase 2 stormwater system.
9. Proposed utility locations, including easements.
11. Sustainable Design Strategies
12. Construction timetable.
13. Any other information as may be required to determine the acceptability or appropriateness of the proposal.

Once Preliminary Plan approval is given, the project Site Plan Review documents shall be prepared by the applicant.

**Step 3 - Site Plan Review and Approval**

After approval of the Preliminary Plan, a refined plan shall be prepared to illustrate greater detail; two copies shall be submitted to the BTR Park Phase 2 Representative on the Design Review Committee. Because Site Plan Review and approval will be required from Oshtemo Township, this plan shall contain all information required in the Site Plan, Landscape, and BRP District chapters of the Oshtemo Township Zoning Ordinance. In addition to the above, and in compliance with these Development Standards, plans shall include:

1. Applicant/Developers name, address, and telephone number; the name, address, and telephone number of the firm(s) preparing the
plan; the lot designation; scale and north arrow; the date of submission; property legal description; and site statistics including lot calculations as indicated by the covenants and Design Standards.

2. Layout plan of the proposed improvements, dimension of front, side, and rear yards and other related site development information and calculations including the following.
   i. Right-of-way lines of existing and proposed streets immediately adjoining and within the proposed lot, and the names of all proposed streets and all property set back lines for the proposed site and those adjacent.
   ii. Location of curb cuts off public the roadway.
   iii. Location, dimension and proposed use of all paved areas.
   iv. Location of all building entrances.
   v. Site improvement locations such as walls, steps, fences, walks, bike racks, pedestrian benches, site lights, etc.

3. Grading and drainage plan showing existing and proposed topographic contours at one-foot intervals, spot elevations at important points on the site, and a soil erosion and sedimentation control plan with appropriate measures indicated. The plan shall also indicate the proposed method of handling stormwater runoff from buildings and paved areas via overland flow. Existing plant materials of significant value shall be shown, with an indication of whether they will remain or are to be removed.

4. Stormwater drainage calculations by a qualified professional.

5. Utilities plan showing sanitary sewer, water, gas, electric, telephone, cable television, fiber optics, industrial waste disposal method, and lighting for the building exterior, parking lot, and landscaping. The final submissions shall include catalog cuts with photometric distribution and mounting details for all exterior light fixtures.
6. Landscape plan and irrigation intent indicating existing and proposed plant material, including quantity, species, and sizes of plant material, and water sources for all areas to be irrigated. Plan shall identify vegetation to be preserved as well as vegetation proposed to be removed.

7. Drives and parking lots indicating parking stalls, including required barrier free parking spaces, access isles, service drives, service areas, and loading drives and docks, and refuse container locations.

8. The site plan should clearly show the relationship of all proposed site improvements to those of adjacent sites as it relates to the buildings, parking, landscaping, and stormwater conveyance system. Location of all proposed site and immediately adjacent existing lighting facilities, fences, street furniture, and directional signs as well as common areas should also be indicated.

9. Where appropriate, cross sections of the applicant’s site (and those adjacent sites containing improvements) at a scale of 1” = 20’ in longitudinal and transverse directions, indicating the relationship of the buildings and parking lots and major grading to the street and major landscaping. The plan and sections shall be sufficiently accurate to permit analysis of building mass, visual screening, erosion control, drainage, tree protection, and landscape architectural design.

10. Drawing(s) showing the proposed layout of the internal floor plan, location of all building entrances, loading and service areas, and mechanical equipment.

11. Elevations of buildings from all sides at an appropriate scale sufficient to clearly indicate the placement and massing of the buildings. The following improvement details shall also be provided:
a. Heights of all improvements. The final submission shall indicate, by a two-dimensional drawing and graphic representation, the mounting heights of all lighting fixtures.

b. Windows, doors, and other fenestration.

c. All exterior materials and colors.

12. Samples or accurate representations in color of all exterior building materials to be utilized showing textures, colors, fenestration, and other detailing necessary to accurately depict the finished building and its lot.

13. Roof Plan: At an appropriate scale indicating the location and sizes (including height) of all roof mounted equipment and proposed method for screening all equipment.

14. Drawings of the signage system, showing all sign locations and details, including elevation, dimension, materials, lettering, color and lighting.

15. A plan for project traffic, showing anticipated number and types of vehicles and how they will be routed. Include estimated number of employees, vehicles, and expected types and times of service delivery.

16. A site landscape maintenance plan indicating the schedule and methods for the establishment and care of the landscape plant materials indicated on the landscape design plan(s) submitted.

17. Pedestrian pathway connections to the building and adjacent common areas.

18. Outline specifications for the proposed construction.

19. A report describing the proposed operation relative to environmental questions of noise, odor, glare, vibration, smoke, dust, ashes, radiation, hazardous or noxious wastes, hazardous materials or chemicals to be used at the site, and any other impact factors
20. Such other reasonable information as may be required by the Design Review Committee.

F. Approval of Plans

1. All plans and specifications, including grading and landscaping plans, for the construction of any building, the exterior alteration of any building, and all exterior uses or improvements, including type and color of construction materials and landscaping and screening, shall be submitted to and be approved by the Design Review Committee prior to commencement of construction.

2. The Design Review Committee may reject all or any portion of plans submitted or require the modification or resubmission of any such plans. The Design Review Committee shall have the right to refuse to approve any such plans and specifications, including type and color of construction materials, and grading and landscaping plans, which are not suitable, in its opinion, for aesthetic or other reasons. In so passing upon such plans and specifications, the Design Review Committee shall have the right to take into consideration the suitability of the proposed improvements and the harmony thereof with the natural features of the Property and with any other improvements that have been constructed on other portions of the Property. Alteration or expansion of a previously approved plan requires review and approval.

3. Prior to beginning construction of any building or site improvements, Site Plan Review and approval must be obtained from Oshtemo Township.
G. **Basis for Approvals**

1. Operation is consistent with covenants and restrictions and existing uses in the Park.
2. Project will create no negative impacts on adjoining property.
3. Site and building plans are complementary to other development, on and off site.
4. Site and building plans are consistent with Park Development Standards, Master Plan, and are in compliance with covenants and restrictions.

H. **Variances**

The Design Review Committee may grant alterations or changes from the standards set forth herein, so long as the general intention of these standards shall be substantially achieved. In addition, the Oshtemo Township Zoning Board of Appeals must approve any proposed variance from the Oshtemo Township Zoning Ordinance.
5. LANDSCAPE AND SITE MAINTENANCE STANDARDS – COMMON AREAS

The common areas of the BTR Park – Phase 2 will be maintained by the Property Owners Association (Association). The goal is to establish in the common areas a landscape similar to the pre-European settlement vegetation believed to have occupied the site: a bur oak savanna analogous to that being established at the Asylum Lake Preserve (ALP) east of Drake Road from the BTR Park Phase 2. To meet this goal, the remaining old fields and wooded portions of the common areas will be managed with the goal of creating a reasonable likeness of the original bur oak savanna and the woodlot on the slope at the north end of the property will be managed in a fashion similar to the management practices in the woodlot on the ALP. While invasive species will be removed to prevent their spread, these maintenance standards are not intended to accomplish the recreation of an exact replica of the bur oak savanna. Rather these standards are intended to help create and maintain the image of a high-tech business park set within the character of a bur oak savanna. The following areas shall be maintained as described below.

A. Woodlots

1. **Goals**: To promote ecosystem services, passive recreation, and opportunities for education and research. In addition to plant health, work in woodlots must address public safety concerns including sight lines and hazards from falling limbs. The policy shall be to leave standing dead timber that poses no immediate public hazard as assets for wildlife habitat that provide aesthetics, shade, screen, and wind block.

2. **Tasks**: Woodlots shall be surveyed for trash and falling limb hazards on a regular schedule. Fallen timber shall also be left in place unless this poses an obstacle to pedestrian or motorized traffic. To maintain ecosystem health periodic removal of herbaceous and woody invasive species shall be scheduled. Pruning to maintain sight lines along roads and paths and to protect site improvements and infrastructure from damage by falling limbs.
shall be evaluated by a certified arborist. As trees fail or are removed new trees shall be selected to meet the desired goals of biodiversity and habitat improvement. An arborist should evaluate and schedule all major tree related issues.

B. Landscape Trees

1. **Goals:** Individual trees intentionally planted in common areas of the BTR Park Phase 2 add to the landscape for aesthetics, shade and design intent. These trees are to be maintained at a higher resource level than woodlot trees that are considered natural features. An arborist shall be consulted on all issues related to landscape trees prior to application of any management treatments.

2. **Tasks:** Plant new trees of similar species when landscape trees have failed. Water as needed until new tree is established. Prune dead or dying branches to maintain health and natural character of landscape trees.

C. Bur Oak Savanna

1. **Goals:** As stated above, the goal is to create and maintain a reasonable likeness of the original bur oak savanna. The savanna is designed to create an aesthetic, require low maintenance, assist with stormwater runoff and erosion control and provide wildlife habitat. The intent is to create a vegetation community with a diverse population of native species, a limited number of trees and shrubs, and limited populations of invasive exotic species. While fire is an integral component of the natural bur oak savanna landscape, in the context of the BTR Park Phase 2 fire will be replaced by mowing (and possibly grazing) to control the species mix of the savanna.

2. **Tasks:** The bur oak savanna shall be mowed (and possibly grazed or treated with prescribed burns) to encourage grasses and forbs native to the savanna community. Burning will require permit from Oshtemo Township Fire Department and the Design Review Committee. Only trees and
shrubs native to the savanna community shall be encouraged, while
trees, shrubs, and other plantings not adapted to savanna management
shall be removed. Invasive woody and herbaceous vegetation shall be
managed by mowing, using hand and/or powertools, and limited herbicides
in specific applications. To maintain biodiversity and health of the savanna
community, exotic plants, shrubs and trees shall be selectively cut or sprayed
to limit seeding.

Controlling weeds is the biggest priority the first three years following planting
of the bur oak savanna. The following schedule will be implemented during
this period.

**First Year:** Mowing is the primary tool to control weeds the first year.
Vegetation shall be mowed to a height of 4”-6” when the vegetation
reaches a height of 10”-12”. The savanna shall be mowed about once each
month during the growing season, depending on rainfall. No mowing shall
occur after the end of the growing season (September). Hand pulling of
weeds is not recommended; spraying herbicides is discouraged. If aggressive
weeds such as Canada thistle or spotted knapweed are found, spot
treatment with herbicides may be required. Careful spot spraying may be
performed by a person with experience in the use of herbicides and
knowledge in the identification of all the plant species present. For some
plant species, hand wicking with herbicide may be most effective.

**Second Year:** Mowing is the primary tool to control weeds in the second year
as well. Vegetation shall be mowed to a height of about 8” when the
vegetation reaches a height of 12”-18”. While some native plants may be up
and blooming, it is worth sacrificing their flowers at this stage to achieve
successful establishment of the oak savanna community in the long term.
Common competitive weeds in the second year include spotted knapweed,
Canada thistle, burdock, wild parsnip, sweet clover, and Queen Anne’s lace.
Mowing shall be scheduled when they are in full bloom to set them back and prevent them from setting and dropping seed. Hand pulling weeds and spot treating with herbicide shall be performed as needed to control these most competitive weeds.

**Third Year and Beyond:** Beginning the third year and each year thereafter, oak savanna areas shall be mowed annually. Vegetation shall be mowed to a height of about 6" in early spring (February thru April). Note that some ground nesting grassland birds nest as early as April, so the earlier the better. Spot treating with herbicides shall be performed as needed to control weeds that persist.

**D. Low Mow Turf Areas**

1. **Goals:** The low mow turf areas at the BTR Park Phase 2 are planted in strips adjacent to the Park road, walks, and paths; they are cool season low maintenance turf grass areas that shall be periodically mowed shorter to maintain a controlled appearance. They serve as transitional spaces between the oak savanna and rain garden plantings and other landscape types.

2. **Tasks:** Remove all woody vegetation (except as planted for design purposes) and cut all tall grasses and weeds that grow above the low mow turf species. Spray broadleaf herbicide as needed to reduce populations of unwanted species. Woody and invasive species shall be removed as needed to maintain the low mow turf monoculture. Cutting of invasive species shall focus on preventing seeding and shading caused by taller weeds. Cut invasive plants at onset of flowering or prior to seed set. Mow with high setting of deck (6"-8") one to three times per year to encourage cool season turf grass; first mowing shall occur at end of winter (March-April); second mowing to occur in late summer or early fall (August-September). Care shall be taken to avoid irrigation infrastructure when mowing.
E. Irrigation System

1. **Goals:** The irrigation system at the main entrance drive into the BTR Park Phase 2 is important to establish and maintain long term health of the plants in that area. on-going use of the system may be expected to decrease in future years following successful establishment.

2. **Tasks:** An irrigation specialist shall be responsible for the repair and maintenance of the irrigation system who shall be responsible for adjustments to the system. Care shall be taken to avoid irrigation infrastructure when mowing. All valves, hydrants, back-flow preventers and other infrastructure shall be located and exposed by mowing or pruning back obstructing vegetation.

F. Hardscapes

1. **Goals:** Hardscape improvements – walks, decorative pavements, decks, interpretive signage – shall be maintained to allow safe use by pedestrians.

2. **Tasks:** Hardscapes shall be kept clear of snow and ice, branches, the accumulation of leaves and other debris. Interpretive signage shall be maintained to be accessible to pedestrians, interpretive information legible, and sign frames kept free of rust and periodically painted.

G. Parking Lots

1. **Goals:** Parking lots shall be maintained to allow safe use by vehicles or pedestrians.

2. **Tasks:** Parking lots shall be kept clear of snow and ice, branches, the accumulation of leaves and other debris. The use of rock salt (sodium chloride) is discouraged. Alternative materials (e.g., beet juice, pickle brine, sand) and methods are encouraged to help protect water quality in nearby Asylum Lake. Directional and informational
H. Enforcement

The Association shall be responsible to implement the Landscape and Site Maintenance Standards. The Association shall contract with appropriate individuals, firms or organizations who have the experience and expertise to implement the Standards for each of the above components. In all cases, compliance with the Oshtemo Township Zoning Ordinance, including but not limited to the BRP - Business Research Park District standards, is required. In addition, the DRC shall monitor compliance by the Association to ensure the common areas are maintained in a manner consistent with these Standards.
APPENDIX

• BTR Park Phase 2 Master Plan
• Overall Stormwater Management Plan
• Landscape Materials
• Parking Lot Shading Guidelines and Calculations
• Signage Standards
• Lighting Standards
BTR Park Phase 2 Master Plan

- Following is the Master Plan for BTR Park Phase 2 development.
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Overall Stormwater Management Plan

- Following is the Overall Stormwater Management Plan for BTR Park Phase 2 development.
Landscape Materials

The following is a partial list of native trees, shrubs, and groundcovers that are acceptable for landscaping. The design intent is to promote the establishment of the historic bur oak savanna native plant communities as the dominant landscape type.

Native plants not listed in the Site Design Standards may be approved by the Design Review Committee.

Foundation plantings or plants near buildings can be as described in Section 2 “Site Design Standards” paragraph E., subject to approval by the Design Review Committee.

Deciduous Trees

Oak savanna Dominant species:

White Oak       Quercus alba

Oak savanna Co-dominant species:

Bur Oak         Quercus macrocarpa
Chinkapin Oak   Quercus muehlenbergii

Oak savanna Canopy associates:

Red Oak         Quercus rubra
Black Oak       Quercus velutina
Pignut Hickory  Carya glabra
Shagbark hickory Carya ovata

Other Native Trees:

Red Maple       Acer rubrum
Common Paw Paw  Asimina triloba
Serviceberry    Amelanchier spp.
Alternate Leaf Dogwood Comus altemifolia
Hackberry       Celtis occidentalis
Black Gum       Nyssa sylvatica
American Hophombeam Ostrya virginiana

Evergreen Trees

Eastern Red Cedar Juniperus virginiana
Eastern White Pine Pinus strobus
### Shrubs

**Oak savanna common species:**

- Lead plant: *Amorpha canascens*
- American Hazelnut: *Corylus americana*
- New Jersey Tea: *Ceanothus americanus*
- Gray dogwood: *Cornus racemose*
- Wild plum: *Prunus americana*
- Smooth sumac: *Rhus glabra*

**Other Native Shrubs:**

- Red Chokeberry: *Aronia arbutifolia*
- Red Stem Dogwood: *Cornus sericea*
- Bush Honeysuckle: *Diervilla lonicera*
- Ninebark: *Physocarpus opulifolius*
- Fragrant Sumac: *Rhus aromatica*
- Blackhaw Viburnum: *Viburnum prunifolium*
- American Cranberry Bush: *Viburnum trilobum*

### Grasses / Ornamental Grasses

**Oak savanna common grasses:**

- Big Bluestem: *Andropogon gerardii*
- Little Bluestem: *Schizachyrium scoparium*
- Indian Grass: *Sorghastrum nutans*

**Other Native Grasses:**

- Sedges: *Carex spp.*
- Tumble Grass: *Eragrostis spectabilis*
- Bottlebrush Grass: *Hystrix patula*
- Switch Grass: *Panicum virgatum*
- Prairie Dropseed: *Sporobolus heterolepis*
Forbs

Oak Savanna Prevalent Forbs:

Hog Peanut  
Thimbleweed  
Butterflyweed  
Smooth Aster  
Frost Aster  
Prairie Coreopsis  
Showy Tick Trefoil  
Daisy Fleabane  
Flowering Spurge  
Northern Bedstraw  
White Gentian  
False Boneset  
Veiny Pea  
Bush Clover  
Wild Bergamot  
Mountain Mint  
Black-eyed Susan  
Starry Campion  
Early Goldenrod  
Yellow Pimpelem  
Horse Gentian  
Culvers Root  
Golden Alexandra  

Amphicarpa bracteata  
Anemone cylindrica  
Asclepias tuberosa  
Aster laevis  
Aster pilosus  
Coreopsis palmata  
Desmodium canadense  
Erigeron annuus  
Euphorbia carollata  
Galium boreale  
Gentiana flavida  
Kuhnia eupatorioides  
Lathyrus venosus  
Lespedeza hirta  
Monarda fistulosa  
Pycnanthemum virginianum  
Rudbeckia hirta  
Silene stellata  
Solidago juncea  
Taenidia integrerma  
Triosteum perfoliatum.

Veronicastrum virginicum  
Zizia aurea
Prohibited Plants

List of plant species that will not be accepted by the Design Review Committee. Non-native plants, invasive species, plants susceptible to diseases, and plants deemed not to be in character with the Oak savanna. Plants not listed may also be rejected by the Design Review Committee.

Deciduous Trees

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amur Maple</td>
<td>Acer ginnala</td>
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<tr>
<td>Box Elder</td>
<td>Acer negundo</td>
</tr>
<tr>
<td>Norway Maple</td>
<td>Acer platanoides and cultivars</td>
</tr>
<tr>
<td>Silver Maple</td>
<td>Acer saccharinum</td>
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<tr>
<td>Tree-of Heaven</td>
<td>Ailanthus altissima</td>
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<tr>
<td>Black Alder</td>
<td>Alder glutinosa</td>
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<tr>
<td>Russian Olive</td>
<td>Elaeagnus angustifolia</td>
</tr>
<tr>
<td>Ash</td>
<td>Fraxinus spp and cultivars</td>
</tr>
<tr>
<td>Mulberry</td>
<td>Mulberry spp.</td>
</tr>
<tr>
<td>Poplar</td>
<td>Populus spp.</td>
</tr>
<tr>
<td>Black locust</td>
<td>Robinia pseudocacia</td>
</tr>
<tr>
<td>Mountain Ash</td>
<td>Sorbus spp.</td>
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<tr>
<td>Chinese Elm</td>
<td>Ulmus parvifolia</td>
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<tr>
<td>Siberian Elm</td>
<td>Ulmus pumila</td>
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</table>

Evergreen Trees

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway Spruce</td>
<td>Picea abies</td>
</tr>
<tr>
<td>Colorado Blue Spruce</td>
<td>Picea pungens glauca</td>
</tr>
</tbody>
</table>

Shrubs

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Scientific Name</th>
</tr>
</thead>
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<tr>
<td>Japanese Barberry</td>
<td>Berberis thunbergii</td>
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<tr>
<td>Autumn Olive</td>
<td>Elaeagnus umbellata</td>
</tr>
<tr>
<td>Burning bush</td>
<td>Euonymus alata</td>
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<tr>
<td>Winter creeper</td>
<td>Euonymus fortunei</td>
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<tr>
<td>Privet</td>
<td>Ligustrum spp. and cultivars</td>
</tr>
<tr>
<td>Exotic Bush Honeysuckles and their cultivars</td>
<td>Lonicera maacki</td>
</tr>
<tr>
<td></td>
<td>Lonicera x bella</td>
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<tr>
<td></td>
<td>Lonicera tatarica</td>
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<tr>
<td></td>
<td>Lonicera morrowii</td>
</tr>
<tr>
<td></td>
<td>Lonicera japonica</td>
</tr>
<tr>
<td>Buckthorn</td>
<td>Rhamnus spp.</td>
</tr>
<tr>
<td>Black Jetbead</td>
<td>Rhodotypos scandens</td>
</tr>
<tr>
<td>Multiflora Rose</td>
<td>Rosa multiflora</td>
</tr>
<tr>
<td>Japanese Spirea</td>
<td>Spiraea japonica</td>
</tr>
<tr>
<td>Japanese Yew</td>
<td>Taxus cuspidata</td>
</tr>
</tbody>
</table>
Vines

Bittersweet  Celastrus spp.
English Ivy  Hedera helix and cultivars
Hall’s Honeysuckle  Lonicera japonica ‘Halliana’
Boston Ivy  Parthenocissus tricuspidata
Periwinkle  Vinca spp.

Herbaceous Perennials and Grasses

Garlic Mustard  Alliaria petiolate
Smooth Brome  Bromus inermis
Asiatic Sand Sedge  Carex kobomugi
Spotted Knapweed  Centaurea stoebe
Lily of the Valley  Convallaria majalis
Crown Vetch  Coronilla varia
Oxe-eye Daisy  Chrysanthemum vulgare
Queen Anne’s Lace  Daucus carota
Tall Fescue  Festuca arundinacea
Baby’s Breath  Gypsophila paniculata
Dames Rocket  Hesperis matronalis
Common St. John’s Wort  Hypericum perforatum
Purple Loosestrife  Lythrum salicaria
Japanese Stiltgrass  Microstegium vimineum
Wild Parsnip  Patinaca sativa
Mile-a-Minute Weed  Persicaria pefoliata
Kudzu  Pueraria montana var. lobate
Reed Canary Grass  Phalaris arundinacea
Giant Knotweed  Polygonum sacalie
WMU Business, Technology & Research Park – Phase 2
Site Design and Maintenance Standards
FINAL DRAFT – October 2018

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Parking Lot Shading Guidelines and Calculations

The parking lot standard requires that all new parking lots include tree plantings designed to result in 25% shading of parking lot surface areas within 15 years.

Shading Calculations:

1. If a site has two or more unconnected parking areas, shade is calculated separately for each area.
2. The amount of shade provided by a given tree is determined by using the appropriate percentage and area of the tree crown. Shading credit is given in 25% increments based on the amount of the tree crown that shades the parking area as shown in Exhibit A in this Appendix.
3. Overlapping shade does not count twice.
4. Street trees and existing onsite trees that shade parking lots will be given credit.
5. Parking areas under covered stalls (carports) and in garages may be counted toward the amount of required shading provided if these areas are included as part of the total square footage of the surfaced area to be used in the shading calculations. Calculations of how these areas meet shade requirements must be shown, and all areas and their dimensions used in shading calculations must be shown on the shading and/or landscaping plan.
6. Provide shade calculations and shade legend. The planting plan may be used as the shade plan provided all required information is listed and the trees are drawn to scale.
7. Shade calculations should indicate:
   a. Tree type.
   b. Tree quantity.
   c. Surfaced area (including carports, garages, etc.).
   d. Shade area required.
   e. Shade area proposed.
   f. Shading credit accorded to each tree (100% = 491 square feet (sq. ft.), 75% = 368 sq. ft., 50% = 246 sq. ft., or 25% = 123 sq. ft.).
Sample Parking Lot Shade Calculation Table:

\[ A = \text{Area of the pavement only (the area of islands is not included)} = 19,840 \text{ Sq. Ft.} \]

\[ 25\% \text{ of } A = 4,960 \text{ Sq. Ft.} \]

Use a 25-foot diameter tree and calculate provided shading as follows:

- 3 trees at 25\% \text{, 123 sq. ft.} = 369 \text{ sq. ft.}
- 11 trees at 50\% \text{, 246 sq. ft.} = 2706 \text{ sq. ft.}
- 4 trees at 100\% \text{, 246 sq. ft.} = 1964 \text{ sq. ft.}

\[ \text{Total} \quad 5,039 \text{ sq. ft.} \]

Thus, 79 sq. ft. more shading is provided than required (4,960 sq. ft.).
Exhibit A - Shaded Parking Lot

Notes: Trees may receive 100%, 75%, 50%, or 25% credit as shown. Shade overlap is not counted twice. This diagram is intended to reflect the manner in which shade is credited under various conditions. It is not necessarily an illustration of 25% shading or limiting parking area to 50 spaces per lot.
Signage Standards

- Following are the signage standards for identification of individual entities BTR Park Phase 2 development.
MONUMENT TENANT SIGNS 1 SIDED

Concrete sandblasted base with routed urethane foam signs & numbers

Stone Creations
Simulated Stone Products

TYPICAL SIGN
Approved for: ____________________________ Date: ____________
By: ____________________________

Western Michigan University
Lighting Standards

- Following are the site lighting standards for lighting of individual entities in BTR Park Phase 2 development. Lighting standards throughout the BTR Park Phase 2 shall be developed in coordination with the lighting standards established for the new park road, Robert Jones Way. Final selections shall be made in conjunction with Consumers Energy, the University and Oshtemo Township. All lighting design, selection and installation shall follow Oshtemo Township zoning ordinance requirements and all related guidelines found in these Design and Maintenance Standards.
October 30, 2019

Mtg Date: November 14, 2019
To: Planning Commission
From: Julie Johnston, AICP
Acting Planning Director
Subject: DRAFT Accessory Buildings Ordinance

Recently, there was some concern about how the Township was regulating accessory buildings on residential properties. Specifically, where they were permitted to be located on a parcel, lot, or building site. After a careful review of the Accessory Buildings and Setback Ordinances, it was determined that some amendments were needed to ensure the two regulations worked in concert. The Planning Commission has already reviewed the Setback Ordinance amendments and will be holding a public hearing at the November 14th meeting.

Attached are the recommended changes to Section 57.100: Accessory Buildings. The primary changes to this section relate to where accessory building shall be permitted on the parcel, lot, or building site; when accessory buildings require an extra level of review through a required plan; and, the criteria in which those accessory buildings will be reviewed. The intent of the amendments is to assist staff with approval procedures for those accessory buildings which do not fit the norm or exceed ordinance standards.

The amended ordinance was reviewed by the Township Attorney and Zoning Administrator to ensure the changes resolved the regulatory concerns of placement of accessory structures. At this time, staff is requesting Planning Commission review of the recommended changes.

Thank you.

Attachments: Section 57.100: Accessory Buildings – original ordinance
Section 57.100: Accessory Buildings – recommended changes
ZONING ORDINANCE

ARTICLE 57

57 – MISCELLANEOUS PROTECTION REQUIREMENTS

57.100 ACCESSORY BUILDINGS

All references to accessory building in this Section shall apply only to residential accessory buildings exceeding 200 square feet in area, including private garages, pole buildings, carports and barns/stables. This section does not apply to agricultural uses meeting the requirements of Section 4.10.

A. No accessory building shall:
   1. Be used for human habitation unless the provisions of Section 50.20.A and the Building Code are satisfied.
   2. Be used for purposes other than those accessory and customarily incidental to permitted residential use of the property by the owner or occupant of same.
   3. Be used for any business use or home occupation unless approval is granted pursuant to Section 48.60 or 49.110.
   4. Violate the setback requirements of Section 50.60.
   5. Exceed a height of 20 feet on lots, parcels or building sites of 30,000 square feet or less, or a height of 25 feet on lots, parcels or building sites larger than 30,000 square feet unless approval for same is granted by the Zoning Board of Appeals pursuant to Section 57.100.B. Height shall be measured from the abutting grade to the highest point of the building.
   6. Precede the dwelling upon the subject property unless approval for same is granted by the Zoning Board of Appeals pursuant to Section 57.100.B.
   7. Have a width greater than one-third of the lot, building site or parcel width or 24 feet, whichever is greater.

B. Accessory Buildings Subject to Site Plan Review and Approval of the Planning Director or Designee:
   1. Property is vacant.
   2. Aggregate floor area of accessory buildings exceeds ground floor area of dwelling, excluding attached garages, covered porches, and breeze ways.
   3. Total floor area of all buildings exceeds 20 percent of lot, building site or parcel area.
   4. Accessory building is placed between the dwelling and the front property line. For purposes of this Section, corner properties shall be considered to have two front property lines.
   5. Height exceeds the provisions of Section 57.100.A.5.
To ensure harmonious relationships and to minimize conflicts between adjacent uses, the Planning Director or designee shall consider the proposed characteristics and uses of the building in relation to the following: size of property, size of dwelling, proposed placement on property, existing land uses in area and future land uses as reflected in the Master Land Use Plan.

The Planning Director or designee may attach requirements to such accessory building and use when it deems necessary to avoid or mitigate adverse impacts on surrounding properties which may include a reduction in the size of the building.

The Planning Director or designee shall have the right to refer any proposed accessory building to the Zoning Board of Appeals for Site Plan review and approval.

All applications requiring Site Plan review and approval shall be accompanied by a drawing of the subject property, drawn to scale, containing the following information:

a. A North arrow and graphic scale.

b. All property lines and their dimensions.

c. Location and dimensions of all existing and proposed structures (including height of all proposed accessory buildings) on the subject property and any existing buildings on adjacent properties within 50 feet of the subject property.

d. Building elevations including building and roofing materials and color.

An application hereunder shall also include a signed statement setting forth the purpose(s) for which the proposed accessory building(s) will be used and a completed Acknowledgment of Zoning Restriction, signed by the property owner(s), on a form provided by the Township, indicating that the building may not be used for commercial purposes. The Township shall record said Restriction following construction of the building. No accessory building allowed pursuant to this subsection shall be used for a purpose other than that approved by the Planning Director, Planning Commission or Zoning Board of Appeals as appropriate.
57.100 ACCESSORY BUILDINGS

All references to accessory building in this Section shall apply only to residential accessory buildings exceeding 200 square feet in area, including private garages, pole buildings, carports and barns/stables. This section does not apply to agricultural uses accessory buildings meeting the requirements of Section 4.10.

A. Accessory building restrictions. No accessory building shall:

1. Be used for human habitation unless the provisions of Section 50.20.A and the Building Code are satisfied.

2. Be used for purposes other than those accessory and customarily incidental to the permitted residential use of the property by the owner or occupant of same.

3. Be used for any business use or home occupation unless approval is granted pursuant to Section 48.60 or 49.110.

4. Violate the setback requirements of Section 50.60.

5. Exceed a height of 20 feet on lots, parcels or building sites of 30,000 square feet or less, or a height of 25 feet on lots, parcels or building sites larger than 30,000 square feet unless approval for same is granted by the Zoning Board of Appeals pursuant to Section 57.100.B. Height shall be measured from the abutting grade to the highest point of the building.

6. Precede the dwelling Be located within the front yard of upon the subject property unless approval for same is granted by the Zoning Board of Appeals pursuant to Section 57.100.B.

7. Be constructed on any property prior to the construction of the primary dwelling, unless building permits are obtained for both structures concurrently.

8. Have a width greater than one-third of the lot, building site or parcel width or 24 feet, whichever is greater.

B. Accessory buildings may be approved by the Planning Director of their designee under the following conditions subject to site plan review and Approval of the Planning Director or designee:

1. Property where no primary dwelling is present or for which a building permit has been issued.
   a. Only permitted on parcels for an agricultural purpose.
   b. Must meet all building setback requirements.

2. Aggregate floor area of accessory buildings exceeds ground floor area of dwelling, excluding attached garages, covered porches, and breeze ways.
   a. Total floor area does not exceed 20 percent of the total parcel, lot, or building site.
   b. If approved for placement in the front yard, front yard setbacks for the primary dwelling must be observed.
   c. For lots or building sites, the total height of the accessory structure may not exceed the height of the primary dwelling.
3. Total floor area of all buildings exceeds 20 percent of the parcel, lot, or building site. For lots or building sites, the total height of the accessory structure may not exceed the height of the primary dwelling.

   a. The parcel, lot, or building site must be at least 22,000 square feet.
   b. For each percentage of floor area in excess of 20 percent, an additional 10 feet of setback for every yard must be provided.
   c. For lots or building sites, the total height of the accessory structure may not exceed the height of the primary dwelling.

4. Accessory building is placed between the dwelling and the front property line. For purposes of this Section, corner properties shall be considered to have two front property lines.

   a. Prohibited on lots or building sites.
   b. Permitted on parcels of at least 1.5 acres in size.
   c. Must, at a minimum, meet front yard setback requirements for the primary dwelling. The Planning Director or their designee may require a larger front yard setback to ensure compatibility with adjacent properties.

5. Height exceeds the provisions of Section 57.100.A.5.

C. Application requirements.

1. All applications requiring plan review shall be accompanied by a drawing of the subject property, drawn to scale, containing the following information:

   a. A North arrow and graphic scale.
   b. All property lines and their dimensions.
   c. Location and dimensions of all existing and proposed structures (including height of all proposed accessory buildings) on the subject property and any existing buildings on adjacent properties within 50 feet of the subject property.
   d. Building elevations including building and roofing materials and color.

2. Use statement. A signed statement setting forth the purpose(s) for which the proposed accessory building(s) will be used.

3. Acknowledgement of Zoning Restrictions. A completed Acknowledgment of Zoning Restriction, signed by the property owner(s), on a form provided by the Township, indicating that the building may not be used for commercial purposes. The Township shall record said Restriction following construction of the building.

D. Plan Review considerations. To ensure harmonious relationships and to minimize conflicts between adjacent uses, the Planning Director or designee shall consider the proposed characteristics and uses of the building in relation to the following: size of property, size of dwelling, proposed placement on property, existing land uses in area and future land uses as reflected in the Master Land Use Plan.
The Planning Director or designee may attach requirements to such accessory building and use when it deems necessary to avoid or mitigate adverse impacts on surrounding properties which may include a reduction in the size of the building.

E. Appeal to the Zoning Board of Appeals. If the Planning Director or their designee denies an accessory building based on the considerations outlined in Section 57.100.D noted above, the property owner shall have the right to refer appeal this decision any proposed accessory building to the Zoning Board of Appeals. The Zoning Board of Appeals shall hold a public hearing at their next available meeting, complying with all noticing requirements for a public hearing. All applications requiring Site Plan review and approval shall be accompanied by a drawing of the subject property, drawn to scale, containing the following information:

1. A North arrow and graphic scale.
2. All property lines and their dimensions.
3. Location and dimensions of all existing and proposed structures (including height of all proposed accessory buildings) on the subject property and any existing buildings on adjacent properties within 50 feet of the subject property.
4. Building elevations including building and roofing materials and color.

An application hereunder shall also include a signed statement setting forth the purpose(s) for which the proposed accessory building(s) will be used and a completed Acknowledgment of Zoning Restriction, signed by the property owner(s), on a form provided by the Township, indicating that the building may not be used for commercial purposes. The Township shall record said Restriction following construction of the building.

F. No accessory building allowed pursuant to this subsection shall be used for a purpose other than that approved by the Planning Director, Planning Commission or Zoning Board of Appeals as appropriate.