



PLANNING COMMISSION MEETING

LOCATION: TOWNSHIP ANNEX, 7527 HIGHLAND ROAD, WHITE LAKE, MI 48383
THURSDAY, OCTOBER 15, 2026 – 6:30 PM

White Lake Township | 7525 Highland Rd | White Lake, MI 48383 | Phone: (248) 698-3300 | www.whitelaketwp.com

AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES
 - A. [October 1, 2026](#)
6. CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)
7. PUBLIC HEARING
8. CONTINUING BUSINESS
9. NEW BUSINESS
 - A. [Discussion of Ordinance Amendments](#)
10. LIAISON'S REPORT
11. PLANNING CONSULTANT'S REPORT
12. DIRECTOR'S REPORT
13. OTHER BUSINESS
14. COMMUNICATIONS
15. NEXT MEETING DATE: November 5, 2026
16. ADJOURNMENT

Procedures for accommodations for persons with disabilities: The Township will follow its normal procedures for individuals with disabilities needing accommodations for effective participation in this meeting. Please contact the Township Clerk's office at (248) 698-3300 X-7 at least five days in advance of the meeting. An attempt will be made to provide reasonable accommodations.

**WHITE LAKE TOWNSHIP
PLANNING COMMISSION
OCTOBER 1, 2026**

Item A.

CALL TO ORDER

Commissioner Carlock called the meeting to order at 6:30 P.M. She then led the Pledge of Allegiance.

ROLL CALL

Present:

T. Joseph Seward

Pete Meagher

Robert Seeley, Vice Chair

Scott Ruggles, Township Board Liaison

Mona Sevic

Merrie Carlock, Chairperson

Absent:

Debby Dehart

Others:

Sean O'Neil, Community Development Director

Matthew Ivory, Chief of Police

Mike Leuffgen, DLZ

Hannah Kennedy-Galley, Recording Secretary

APPROVAL OF AGENDA

It was MOVED by Commissioner Seeley, seconded by Commissioner Meagher to approve the agenda as presented. The motion carried with a voice vote: (6 yes votes).

APPROVAL OF MINUTES

A. September 17, 2026

It was MOVED by Commissioner Seward, seconded by Commissioner Seeley to approve the minutes as presented. The motion carried with a voice vote: (6 yes votes).

CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)

None.

PUBLIC HEARING

A. Ginko Storage

located southwest of White Lake Road and Andersonville Road intersection. Identified as parcel ID: 12-01-127-004. Consisting of approximately 2.13 acres. Currently zoned as LM-1 (Light Industrial).

Applicant: Ginko Investment, LLC

Request: 1. Special Land Use
2. Final Site Plan Amendment

Chairperson Carlock opened the public hearing at 6:38 P.M. Seeing none, she closed the public hearing at 6:38 P.M.

WHITE LAKE TOWNSHIP
PLANNING COMMISSION
OCTOBER 1, 2026

Director O'Neil presented the application by Ginko Investment, LLC for a Special Land Use and combined preliminary/final Site Plan Amendment for a self-storage facility located southwest of White Lake Road and Andersonville Road, parcel 12-01-127-004, approximately 2.13 acres, zoned LM-1. It was noted that the original Special Land Use (approved February 1, 2024) and Final Site Plan (approved February 20, 2024) had expired after twelve months, necessitating renewed approval. Changes from the original approval include relocation of the access drive further east (made possible by the applicant's acquisition of the adjacent parcel), reduction of Building 3 from 15,300 to 12,850 square feet, exclusively exterior (rather than interior-corridor) access to storage units, and a maximum building height of 16.5 feet.

Mr. Leuffgen summarized a review letter identifying comments related to grading and storm drainage, noting these did not affect site layout and could be resolved administratively.

Applicant representative Jim Butler, PEA Group, Auburn Hills, Michigan, addressed the Commission regarding access control (keypad/kiosk entry, unstaffed), landscape buffering coordination with neighboring residents, and confirmed intent to meet the 20-foot landscape buffer referenced in the Carlisle review letter. Staff confirmed a prior condition from the February 1, 2024 approval restricting hours of operation (facility closed from 10:00 PM to 6:00 AM) remains applicable and the applicant confirmed compliance.

It was MOVED by Commissioner Seward, seconded by Commissioner Sevic to approve special land use for Ginko Storage, identified as parcel ID #12-07-127-004, subject to the facility being closed from 10 PM to 6 am and subject to Board approval. The motion carried with a roll call vote: (6 yes votes) (Sevic/yes, Ruggles/yes, Seward/ Carlock/yes, Seeley/yes, Meagher/yes).

It was MOVED by Commissioner Meagher, seconded by Commissioner Seeley to recommend the Township Board approve the final site plan amendment to Ginko Storage, identified as parcel ID #12-01-127-004, subject to: (1) a waiver of the opposite-side driveway spacing requirement; (2) compliance with the 20-foot landscape buffer per the Carlisle review letter; (3) a finding regarding the required non-obscuring fence; (4) acceptance of the proposed site lighting; and (5) continued compliance with the hours-of-operation restriction (closed 10:00 PM to 6:00 AM). The motion carried with a roll call vote: (6 yes votes) (Meagher/yes, Seeley/yes, Carlock/yes, Seward/yes, Ruggles/yes, Sevic/yes).

B. 2027-2032 Capital Improvement Plan (CIP)

1. Discussion of Police Department
2. Discussion of Parks and Recreation
3. Consideration of approval

Police Department: Chief of Police Matt Ivory presented a proposal to outfit the newly constructed firearms range at the public safety building with tactical range infrastructure (ballistic baffles, bullet trap/drum system, ballistic roll-up door), citing officer safety and training needs, current reliance on an outside range (Multi-Lakes Conservation Area) at significant daily cost, and potential revenue-sharing opportunities with neighboring police departments. Estimated cost was described as just over a million, with limited grant funding potentially available. A separate placeholder line item for a Mobile Command Post, unchanged since approximately 2009, was discussed as outdated; Chief Ivory offered to research and update the cost estimate for future CIP cycles.

Parks and Recreation: Director O'Neil presented CIP projects, noting the majority (approximately 9 of 13) relate to pathways/trails, continued reliance on grant funding (Federal Land and Water Conservation Fund, Michigan Natural Resources Trust Fund, Ralph C. Wilson Jr. Foundation, Kroger), and a newly operational Corridor Improvement Authority as an additional funding source. It was noted the current Parks and Recreation Master Plan expires in 2027 and a new plan will need to be developed to maintain grant eligibility for a 2028 start. Recent successes, including the Farm Festival (40th anniversary) and ongoing work at Bloomer Park and Stanley Park, were also noted.

Discussion occurred regarding the CIP project rating/prioritization methodology; it was clarified that ratings reflect a determination of need by department heads based on their subject-matter expertise, not a budget, and that all expenditures remain subject to separate Township Board approval.

Chairperson Carlock opened the public hearing at 7:12 P.M. Seeing none, she closed the public hearing at 7:12 P.M.

It was MOVED by Commissioner Seeley, seconded by Commissioner Meagher to adopt the 2027-2032 Capital Improvement Plan, subject to subject to correcting the adoption date and adding reference to the Federal Land and Water Conservation Fund grant programs. The motion carried with a roll call vote: (6 yes votes)

(Sevic/yes, Ruggles/yes, Seward/yes, Carlock/yes, Seeley/yes, Meagher/yes).

Commissioner Ruggles stated he disagreed with the rating schedule of the Fire Department's top three items in the CIP.

CONTINUING BUSINESS

None.

NEW BUSINESS

A. Hidden Pines Condominium

Request: 1. Final Site Plan Amendment

Mary Earley, 5925 Pine Ridge Court, requested an amendment to the 1995 Final Site Plan to remove a notation requiring "no parking" signs on Irene Boulevard. The HOA Board voted 3-0 in favor of removal; one unnamed co-owner has objected. Staff confirmed the Fire Department does not require the signage under current fire code and the Police Department cannot enforce parking restrictions on the private road.

It was MOVED by Commissioner Sweley, seconded by Commissioner Sevic to recommend the Township Board approve the final site plan recommendation for Hidden Pines Condominium: to remove the requirement for No Parking Signs on Irene Boulevard. The motion carried with a voice vote: (6 yes votes).

WHITE LAKE TOWNSHIP
PLANNING COMMISSION
OCTOBER 1, 2026

LIAISON'S REPORT

Trustee Ruggles reported a leadership change at the Fire Department was reported; following a resignation, Justin Templeton, previously the department's first Deputy Chief, has been named Interim Chief. A joint meeting with the Fire Department was scheduled for September 29, 2026 to address budget needs, equipment replacement, and Advanced Life Support (ALS) services, but it was canceled. An update was provided on the Fire Department's recent open house and ongoing move-in activities at the new Township Hall/Public Safety Building, with delays attributed to county-level coordination issues affecting phone, radio, and equipment systems; full occupancy was anticipated by year's end, with a public open house tentatively planned for spring. Unresolved title/property-transfer issues involving a defunct Building Authority were noted as needing resolution before the public safety building property can be formally conveyed to the Township.

A Parks and Recreation Committee update was provided: no committee meeting was held this month; the Farm Festival (40th anniversary) was reported as highly successful with increased attendance; the Hess Hathaway Farm Harvest Happenings event was also noted. The Committee plans to begin work on an updated Recreation Plan and new grant applications.

DIRECTOR'S REPORT

Director O'Neil provided an update on the ongoing rewrite of the Township Zoning Ordinance, transitioning from the "Clear Zoning" platform to Giffels Webster at a budgeted cost of approximately \$150,000, to include review of use standards, lot size standards, zoning districts, and data center regulations. The data center ordinance moratorium expires in mid-February; draft language has been reviewed by legal counsel and will be presented to the Commission for discussion at the next meeting, with a recommendation to the Township Board anticipated in November and two readings before the Board expected in December/January.

OTHER BUSINESS

- A. Conceptual Discussion for Sunset Cove Lakefront Condominium**
located at 8300 Pontiac Lake Rd. Identified as parcel ID: 12-13-451-011. Consisting of approximately 3.31 acres. Currently zoned as PG (Pontiac Gateway).
Applicant: Michael Zeer

The item was not discussed due to the applicant not being present.

COMMUNICATIONS

NEXT MEETING DATE: October 15, 2026

ADJOURNMENT

It was MOVED by Commissioner Seeley, seconded by Commissioner Sevic to adjourn at 7:44 P.M.
The motion carried with a voice vote: (6 yes votes)

WHITE LAKE CHARTER TOWNSHIP

Community Development Department – Planning Division

MEMORANDUM

TO: White Lake Charter Township Planning Commission
FROM: Community Development Department – Planning Division
DATE: October 5, 2026
RE: Draft Data Center Ordinance – Initial Planning Commission Discussion

PURPOSE OF THIS MEMORANDUM

The purpose of this memorandum is to introduce the Planning Commission to the Township's draft Data Center Ordinance and identify the principal issues for discussion.

The October 15 meeting is intended as a work session and first Planning Commission review. Staff is not asking the Commission to make a final recommendation at this meeting. Rather, staff is looking for feedback on whether the proposed approach is generally headed in the right direction and whether there are areas where the Commission would like additional information or professional review before the ordinance advances.

A separate supplemental memorandum provides additional background regarding the research, comparative ordinances, professional resources, and review process that informed the draft.

WHERE WE ARE IN THE PROCESS

On February 17, 2026, the Township Board adopted Resolution #26-004, establishing a temporary moratorium on the issuance of approvals or permits for data processing centers to provide time for ordinance research and development. On July 21, 2026, the Board adopted Resolution #26-021, extending the moratorium through **February 12, 2027**.

Since that time, Township staff and Carlisle/Wortman Associates have worked collaboratively through several versions of the ordinance. That work has been supplemented by independent staff research, review of data center regulations and development experience in other communities, professional planning and technical resources, and legal review.

The current draft has been reviewed by attorney Debra Walling, who assisted Township Attorney Lisa Hamameh's office with this review and provided detailed comments and revisions. Ms. Walling is expected to attend the October 15 work session to assist with legal questions.

Several technical provisions remain under review. On October 5, staff contacted three acoustical and vibration consulting firms seeking professional review of the proposed noise and vibration standards. The purpose of that review is to ensure that the standards ultimately recommended are technically defensible, measurable, and practical to enforce. If consultant comments are received before October 15, they may be forwarded to the Commission separately.

Staff is preparing for a Planning Commission public hearing on **November 5, 2026**, subject to direction received during the October 15 work session. To allow adoption before the moratorium expires, the ordinance would need to reach the Township Board for first reading in December, with second reading and adoption at the Board's January meeting. The November 5 public hearing keeps that schedule achievable but leaves limited room for additional Planning Commission meetings if substantial revisions are needed.

OVERVIEW OF THE DRAFT ORDINANCE

The ordinance is intended to treat a data center as an infrastructure-intensive land use with potential impacts extending beyond the building itself. The principal areas addressed by the draft include:

- location and Special Land Use review;
- a proposed Data Center Overlay District;
- campus and phased development;
- electrical and utility capacity;
- water use, cooling systems, wastewater, and groundwater;
- noise, low-frequency sound, and vibration;
- residential compatibility and site design;
- generators, substations, fuel storage, and Battery Energy Storage Systems;
- construction traffic and roadway impacts;
- emergency-response planning;
- independent technical review;
- annual reporting and continuing operational compliance; and
- decommissioning and financial security.

The draft also requires applicants proposing a phased campus to identify the anticipated ultimate buildout so that the Township can understand the potential full impact of the project rather than reviewing each phase in isolation.

APPROVAL PATHWAY

Under the draft, a data center would require several approvals. A rezoning to the LM District (where needed) and designation within the Data Center Overlay District would be decided by the Township Board following a Planning Commission recommendation. The Special Land Use would be decided by the Planning Commission, which remains the sole approving body for Special Land Uses. Site plan review would proceed under Section 6.8, which, following Zoning Ordinance Amendment 26-002 (adopted July 21, 2026), provides for final site plan approval by the Township Board on recommendation of the Planning Commission. Later campus phases would follow the same Special Land Use and site plan review process.

ITEMS FOR PLANNING COMMISSION DISCUSSION

Staff would like the Commission to review the draft with a few basic questions in mind.

1. Location of Data Centers

The draft proposes limiting data centers to locations identified through a Data Center Overlay District and then requiring Special Land Use review. The Overlay District text and map have not yet been drafted. Staff would prepare them only if the Planning Commission and Township Board support the Overlay concept.

For discussion: *Is the Commission comfortable with this approach, or would you like additional information about how the Overlay District would work or how other communities determine appropriate locations?*

2. Separation from Residential Property

The draft currently proposes a minimum 300-foot separation between residential property and major data center buildings and equipment, together with landscaping, screening, noise standards, and the ability to require greater separation where site conditions warrant.

For comparison, the City of Wixom's recently adopted ordinance uses a 1,500-foot separation. The White Lake draft instead pairs a 300-foot minimum with measurable noise and vibration standards, pre- and post-construction verification, and authority to require greater separation where site conditions warrant. Staff believes enforceable performance standards, rather than distance alone, are the more reliable means of protecting nearby residents. The pending acoustical review will help confirm that the proposed standards can be measured and enforced as intended.

For discussion: *Is the Commission comfortable using 300 feet as the current starting point, or would you like staff to provide additional comparisons, technical information, or consultant input before that distance is finalized?*

3. Large Campuses and Future Phases

The draft requires an applicant to show the anticipated full buildout of a data center campus even if the project will be constructed in phases. Each later phase would still require review.

For discussion: *Does this approach provide enough information for the Township to understand the long-term project, or is there additional information the Commission would want from an applicant before approving the first phase?*

4. Water Use and Natural Resources

The ordinance requires applicants to identify how much water will be used, where it will come from, how cooling water will be handled, and whether groundwater withdrawals could affect wells, lakes, wetlands, or other water resources.

For discussion: *Is the Commission comfortable with the level of protection proposed, or are there particular water-related issues where you would like additional information from an engineer, hydrogeologist, EGLE, or another technical resource?*

5. Noise and Vibration

The draft contains detailed requirements for studying noise before construction, verifying actual conditions after construction, evaluating low-frequency sound and generator testing, and correcting

problems if standards are exceeded. Because this is a highly technical subject, staff is already seeking review from a qualified acoustical consultant.

For discussion: *Is the Commission comfortable with the overall approach? Are there particular noise or vibration concerns you would like the consultant to address before the ordinance returns for final consideration?*

6. Monitoring After a Facility Opens

The draft requires annual reporting and allows the Township to require testing or independent professional review where there is a credible complaint or evidence that a facility may not be operating as approved.

For discussion: *Is the Commission comfortable with this approach to continuing oversight, or would you like additional information about how these requirements would work in practice?*

7. Decommissioning

The ordinance requires financial security equal to 125 percent of the estimated cost of decommissioning and provides a process for addressing a building or phase that has stopped operating for an extended period.

For discussion: *Is the Commission comfortable with this approach, or would you like additional information regarding the amount of financial security, when decommissioning should be triggered, or how similar communities address abandoned facilities?*

OVERALL QUESTION FOR THE COMMISSION

Staff does not expect the Planning Commission to resolve every technical question during the October 15 work session. The broader question is:

Does the Commission believe the draft is generally addressing the right issues and moving in the right direction?

Where the Commission is uncomfortable with a provision or believes additional expertise is needed, staff would appreciate identifying those areas now so that additional research, consultant input, or legal review can be completed before the ordinance advances.

NEXT STEPS

Following the October 15 discussion, staff anticipates:

1. Revising the draft based on Planning Commission comments;
2. Obtaining additional information or professional review in areas identified by the Commission;
3. Completing specialized acoustical and vibration review;
4. Continuing ordinance refinement with Carlisle/Wortman Associates;
5. Completing remaining legal review with attorney Debra Walling;
6. Preparing the ordinance for the anticipated November 5, 2026 public hearing;

7. Following the public hearing, making any additional revisions necessary before a Planning Commission recommendation is forwarded to the Township Board; and
8. If the Planning Commission and Township Board support the Overlay concept, preparing the Data Center Overlay District text and map for separate review.

WHITE LAKE CHARTER TOWNSHIP

Community Development Department

SUPPLEMENTAL MEMORANDUM

TO: White Lake Charter Township Planning Commission
FROM: Community Development Department – Planning Division
DATE: October 5, 2026
RE: Data Center Ordinance – Research and Background

PURPOSE

This supplemental memorandum provides additional background regarding the research, comparative ordinances, professional resources, and review process that informed the Township’s proposed Data Center Ordinance.

It is intended to supplement the shorter staff memorandum prepared for the October 15 Planning Commission work session and provide additional context for Commissioners who would like to better understand how the draft developed and the information considered during that process.

DEVELOPMENT OF THE WHITE LAKE DRAFT

Development of the ordinance began shortly after the Township established its data center moratorium in February 2026 and has been a collaborative effort between Township staff and Carlisle/Wortman Associates from the outset.

In early March 2026, the Township’s planning consultant began sharing data center research and regulatory information with staff. Staff and the consultant then worked through the basic land-use framework and the issues that would need to be addressed through a White Lake ordinance.

Early working drafts established many of the concepts that remain recognizable in the current ordinance, including:

- Special Land Use review;
- utility-capacity verification;
- electrical-demand information;
- cooling and water-use analysis;
- pre- and post-construction noise and vibration review;
- generator-testing restrictions;
- residential separation;
- infrastructure mitigation;
- financial security for decommissioning; and
- provisions intended to allow eventual reuse of the property.

The April working draft also documents active discussion with the planning consultant regarding issues such as low-frequency and tonal sound, generator-testing standards, decommissioning security, infrastructure obligations, and White Lake's relatively limited inventory of Light Manufacturing land.

As the ordinance progressed, staff continued conducting independent research between drafts. That work was used both to test concepts already contained in the ordinance and to identify additional issues that warranted regulation. Among the subjects added or substantially expanded during successive drafts were:

- full-campus and ultimate-buildout planning;
- cumulative impacts of phased development;
- groundwater and surface-water protection;
- baseline well and water-resource monitoring;
- low-frequency sound;
- construction routing and roadway-condition documentation;
- independent technical review;
- annual operational reporting;
- post-construction verification;
- complaint investigation and corrective action; and
- continuing compliance after a facility begins operating.

By Version 2, the ordinance contained Master Utility and Master Development Plan requirements, detailed groundwater provisions, expanded noise provisions, roadway mitigation, annual reporting, and independent technical review.

The expanded ordinance was then returned to Carlisle/Wortman for additional substantive review and redlining. Version 3 contains consultant comments throughout provisions addressing phased development, water and utility requirements, the Master Development Plan, acoustical testing, community impacts, architecture, operational reporting, compliance, and decommissioning.

A significant later recommendation from the planning consultant was the use of a Data Center Overlay District. Earlier drafts contemplated allowing Data Centers as a Special Land Use within the LM District generally. The proposed Overlay District provides an additional geographic planning tool for identifying locations where the use could be considered. Overlay District text and mapping have not yet been prepared; staff would develop them only if the Planning Commission and Township Board support the concept.

The ordinance was subsequently provided for legal review. Attorney Debra Walling, assisting Township Attorney Lisa Hamameh's office, provided detailed redlined comments in September 2026 and is expected to participate in the October 15 Planning Commission work session.

The current draft therefore represents an iterative staff-consultant work product, supplemented by independent staff research, legal review, and specialized technical review where appropriate.

WHITE LAKE TOWNSHIP INFORMATION REVIEWED

The starting point for the ordinance was White Lake Township itself. Data center regulations need to function within the Township's existing zoning structure and reflect local land-use, infrastructure, and environmental conditions. Local information considered during ordinance development included:

- the White Lake Township Master Plan and Future Land Use Map;
- Light Manufacturing zoning;
- the Township's existing Special Land Use procedures;
- site-plan review procedures;
- Section 5.18 noise and vibration standards;
- recent amendments to the Township's general noise standards;
- recent amendments concerning site-plan approval procedures;
- existing and planned public water and sanitary sewer infrastructure;
- areas dependent upon private wells and septic systems;
- groundwater resources;
- lakes, streams, wetlands, ponds, springs, canals, and other groundwater-connected resources;
- residential development near industrially planned land;
- roadway and construction-access conditions;
- emergency-service considerations; and
- the amount and location of land planned or zoned for industrial development.

The ordinance has been structured to operate within the Township's existing Special Land Use and site-plan review system rather than creating a separate development-review process for data centers.

MICHIGAN COMMUNITIES AND ORDINANCES

Staff and the planning consultant reviewed ordinances, proposed regulations, moratoria, planning materials, and development experiences from Michigan communities addressing data centers or closely related issues. Communities considered during the research process included:

- City of Wixom
- Solon Township
- City of Mason
- Pavilion Township
- Briley Township
- Saline Township
- Clark Township
- Lyon Township
- and other Michigan communities addressing emerging data center development.

The purpose of this review was not to select a single model ordinance. Instead, the various approaches were used to identify recurring issues, alternative regulatory approaches, and potential problems that should be considered in White Lake.

Materials associated with an active data center development in Lyon Township were also reviewed, particularly in relation to acoustical modeling, tonal sound, low-frequency sound, generator operations, and the practical difficulties involved in evaluating and enforcing acoustical studies.

Information received from Lyon Township in July prompted staff to return to the then-current White Lake draft, review four additional technical documents concerning low-frequency noise and infrasound, and reexamine the Township's existing Special Land Use and site-plan procedures before preparing another ordinance revision.

NATIONAL COMMUNITY RESEARCH

Staff also reviewed national examples from communities that have considerably more experience with large-scale data center development. Attention was given to communities in Virginia, where data center development has occurred at a scale sufficient to provide useful lessons concerning:

- land-use compatibility;
- noise;
- electrical infrastructure;
- substations and transmission facilities;
- generator operation;
- water demand;
- campus-scale development;
- building design and screening; and
- cumulative effects of multiple phases or facilities.

One of the more comprehensive resources reviewed was the Fairfax County, Virginia Data Centers Report and Recommendations, which examines land use, energy, water, noise, design, equipment placement, and community compatibility.

National examples were used primarily to identify issues that may not yet have been widely encountered in Michigan but have emerged in communities where data centers have been operating for a longer period.

PROFESSIONAL PLANNING RESOURCES

Professional planning research also helped inform the ordinance. Resources reviewed included the American Planning Association's October 2025 issue of Zoning Practice, "The Physical Footprint of Artificial Intelligence." The publication discusses the growing land-use implications of data centers, including electrical demand, water use, noise, infrastructure requirements, and the limitations of simply treating the use as conventional warehousing or light industry.

Professional planning conference sessions and other APA and Michigan planning resources concerning data centers and emerging technology were also considered.

These materials reinforced the importance of clearly defining the use, considering where it should be located, understanding infrastructure requirements, and establishing standards tailored to the actual operating characteristics of modern data centers.

PRACTITIONER EXPERIENCE

The research process also included information from planners and professionals familiar with communities where data centers are already operating or under development. Professional discussions and presentations involving experience in Michigan, Virginia, and Iowa provided practical information regarding issues including:

- multi-year construction periods;
- very high electrical demand;
- phased campus development;
- substations and electrical transmission facilities;
- generator testing;
- cooling-system noise;
- water consumption;
- relatively low employment levels compared with building size;
- heavy construction traffic; and
- the importance of maintaining enforceable standards after construction is complete.

These experiences helped shift some of the ordinance's emphasis from simply reviewing the initial site plan to considering the entire operating life of the use.

NOISE, LOW-FREQUENCY SOUND, AND VIBRATION

Noise has been one of the more technically complex areas of ordinance research. Subjects reviewed have included:

- A-weighted sound;
- C-weighted sound;
- low-frequency sound;
- infrasound;
- tonal sound;
- one-third-octave-band analysis;
- predictive acoustical modeling;
- generator-testing scenarios;
- post-construction testing;
- equipment changes and aging;
- vibration; and
- complaint investigation.

Staff also reviewed technical and scientific literature concerning methods for identifying and evaluating low-frequency sound. The purpose of this research was not to establish a local health standard based upon any single study. Rather, the research helped identify potential limitations of relying exclusively upon conventional A-weighted sound measurements and helped inform the measurement and study requirements contained in the ordinance.

Because several of the proposed standards involve specialized acoustical measurements, staff and legal counsel determined that additional professional review was appropriate. On October 5, 2026, staff contacted three acoustical and vibration consulting firms seeking proposals to review the proposed standards. Issues identified for professional review include:

- proposed dBA and dBC limits;
- appropriate averaging periods;
- tonal penalties;
- low-frequency sound measurement;
- vibration standards;
- continuous monitoring;
- predictive modeling;
- post-construction verification;
- generator-testing conditions; and
- the relationship between performance standards and residential separation.

WATER AND NATURAL-RESOURCE RESEARCH

Water use was another major area of research because cooling technology and water demand can vary significantly between data centers. Subjects reviewed included:

- air-cooled systems;
- closed-loop cooling systems;
- hybrid cooling;
- water-dependent cooling systems;
- average and peak water demand;
- consumptive water use;
- groundwater withdrawals;
- private wells;
- aquifer conditions;
- groundwater-connected lakes and wetlands;
- wastewater and cooling-water discharge;
- baseline monitoring;
- continuing monitoring; and
- contingency and mitigation planning.

Michigan’s water-withdrawal regulatory framework, including the Water Withdrawal Assessment Tool and EGLE review process, was also considered when developing the groundwater provisions.

The resulting ordinance does not assume that every data center will use the same cooling technology or have the same water demand. Instead, an applicant would be required to identify the proposed system, quantify anticipated demand, and demonstrate that adequate water and wastewater capacity or resources exist.

ELECTRICITY, BACKUP POWER, AND ENERGY STORAGE

Large data centers can have electrical demands substantially different from conventional industrial or commercial development. Research therefore considered:

- anticipated electrical demand in MW and MVA;
- utility-capacity verification;
- substations;
- transformers;
- switching equipment;
- transmission infrastructure;
- backup generators;
- fuel storage;
- redundancy and resiliency systems; and
- Battery Energy Storage Systems.

The ordinance requires the electrical infrastructure associated with a facility to be considered as part of the overall project rather than treating these components as unrelated accessory equipment. Battery Energy Storage System provisions were also developed with reference to applicable building and fire-code requirements and NFPA 855.

CAMPUS AND PHASED DEVELOPMENT

Research demonstrated that large data centers may develop as campuses constructed over multiple years rather than as a single building completed at one time. This raised the concern that reviewing only the first phase could prevent the Township from understanding the scale and potential impacts of the eventual development.

The ordinance therefore evolved to require a Master Development Plan showing anticipated ultimate buildout and to require studies to consider both the immediate phase and cumulative campus impacts. Later phases would still require review rather than receiving automatic approval through the initial Master Development Plan.

CONSTRUCTION, TRAFFIC, AND ROADWAY IMPACTS

Research also identified a distinction between the traffic associated with an operating data center and the traffic generated during its construction. Although permanent employment and operational traffic may be relatively modest, large facilities can involve prolonged construction periods, heavy-truck traffic,

oversized equipment, and substantial material deliveries. The ordinance therefore includes provisions addressing:

- construction duration;
- haul routes;
- oversized loads;
- pre-construction roadway-condition documentation;
- post-construction roadway assessment;
- roadway restoration; and
- financial guarantees where appropriate.

CONTINUING OPERATIONAL COMPLIANCE

One of the recurring lessons from the research was that ordinance administration should not end when a Certificate of Occupancy is issued. Data center equipment may be replaced, expanded, or reconfigured. Additional phases may be constructed. Cooling systems and operational characteristics may change over time. The current draft therefore contains provisions addressing:

- annual reporting;
- water-use reporting;
- groundwater monitoring;
- equipment modifications;
- complaint investigation;
- independent technical review;
- corrective action;
- periodic audits where warranted; and
- an operational-compliance escrow to fund reasonable third-party professional review.

The intent is to provide the Township with practical tools to verify continuing compliance throughout the life of the facility.

DECOMMISSIONING AND LONG-TERM SITE VIABILITY

Decommissioning has been part of the ordinance discussion since the early drafts. The current approach requires a financial guarantee equal to 125 percent of the estimated cost of decommissioning, with the estimate and guarantee periodically updated and expanded as later phases are constructed. The draft also establishes a 12-month period of continuous inactivity as a potential decommissioning trigger.

At the same time, the ordinance recognizes that a building capable of being reused for another permitted purpose does not necessarily need to be demolished simply because the data center operation has ceased.

LEGAL REVIEW

Following successive rounds of staff and consultant development, the draft was submitted for formal legal review. Attorney Debra Walling provided detailed redlined comments in September 2026. Legal review has addressed issues including:

- statutory authority;
- enforceability;
- integration with existing Special Land Use and site-plan procedures;
- conditions of approval;
- administrative versus Planning Commission authority;
- financial guarantees;
- technical-review provisions; and
- implementation of the proposed Data Center Overlay District.

Legal review has also helped identify areas where additional technical expertise should be obtained rather than relying solely upon planning or legal judgment.

WHERE THE RESEARCH HAS LED

The research did not identify a single model ordinance that could simply be adopted for White Lake Township. Instead, the review demonstrated that data centers can vary significantly in scale, technology, utility demand, cooling systems, site context, and potential impacts. The current draft therefore emphasizes:

- site-specific review;
- disclosure of anticipated full-campus development;
- consideration of cumulative impacts;
- utility and infrastructure capacity;
- protection of nearby residential uses;
- groundwater and surface-water protection;
- measurable performance standards;
- independent professional review where appropriate;
- verification of conditions after construction;
- continuing operational compliance; and
- planning for eventual decommissioning or reuse.

The ordinance remains a working draft. Planning Commission discussion on October 15, legal and technical review, and the anticipated November 5, 2026 public hearing will provide additional opportunities to identify areas where further information or refinement is appropriate before the Commission makes a recommendation to the Township Board.

PLANNING COMMISSION FIRST DRAFT — FOR DISCUSSION ONLY**Prepared for the Planning Commission meeting of Thursday, October 15, 2026**

Draft dated October 5, 2026 • Not adopted • Subject to revision

Section X.XX – Data Centers

White Lake Charter Township Zoning Ordinance

Discussion draft. This is a working draft for Planning Commission review and discussion. It has not been recommended for adoption by the Planning Commission or adopted by the Township Board. Text, section numbering, and cross-references are subject to change.

A. PURPOSE AND INTENT

The purpose of this Section is to establish standards for the review and approval of Data Centers in order to protect public health, safety, and welfare; ensure adequate utility and infrastructure capacity; mitigate adverse impacts related to noise, vibration, traffic, water use, groundwater withdrawals, visual character, emergency operations, and infrastructure demand; promote compatibility with surrounding land uses; protect groundwater and surface-water resources; ensure long-term site viability and appropriate decommissioning; and provide for the orderly development of Data Center facilities and associated infrastructure.

B. DEFINITIONS

Note: The following definitions will be inserted into Chapter 2 of the Zoning Ordinance.

Data Center

A facility or group of buildings whose primary function is the housing, operation, and maintenance of computer servers, data-storage systems, telecommunications equipment, and associated infrastructure used for the processing, storage, or transmission of digital information. Such facilities may include backup power generation, cooling systems, fuel storage, Battery Energy Storage Systems, substations, and security infrastructure. This term does not include a server room or data-processing facility that is accessory, incidental to and housed entirely within a permitted principal use, and requires no additional approvals from a utility provider with respect to electrical or water usage.

Battery Energy Storage System (BESS)

One or more devices, assemblies, or containers capable of storing electrical energy for later use through electrochemical technologies, including associated control systems, inverters, transformers, cooling systems, fire-suppression equipment, and related infrastructure.

Sensitive Receptor

A residence, school, child-care facility, health-care facility, public park, or other land use or location identified by the Township where occupants may be particularly affected by noise, vibration, lighting, or similar operational impacts.

C. USE REGULATIONS AND REVIEW

1. Special Land Use and Site Plan Review

Data Centers shall be permitted only as a Special Land Use within the Data Center Overlay District. An application shall be reviewed concurrently with a site plan in accordance with Section 6.8 and shall be subject to the general standards and procedures for Special Land Uses contained in Sections 6.10 and 6.11. The standards of this Section are additional, use-specific standards applicable to Data Centers. Approval require affirmative findings that the proposed use complies with Section 6.10, this Section, and all other applicable provisions of this Ordinance. Where two substantive standards apply to the same matter, the more restrictive standard shall govern.

2. Campus and Phased Development

Should a Data Center development be proposed as part of a phased development, each proposed phase shall be reviewed as a separate site plan and special land use application. During the initial proposed phase of the development, a concept Master Development Plan shall be provided showing anticipated complete buildout, potential cumulative impacts, and any other information requested by the Planning Commission. Approval of an initial phase shall not constitute final site plan approval of a future phase that has not been reviewed under Section 6.8. Each later phase and any material amendment to the Special Land Use or Master Development Plan shall be reviewed by the Planning Commission in accordance with Sections 6.8 and 6.11, as applicable.

D. REQUIRED APPLICATION MATERIALS

In addition to the application materials required by Sections 6.8, 6.10, and 6.11, an application for a Data Center shall include the following:

1. Utility Capacity Verification

Written documentation from the electric utility provider confirming available capacity and identifying any required system upgrades. The applicant shall also provide documentation to the Township or other applicable authority verifying water-supply and wastewater capacity. The documentation shall identify existing available capacity, planned improvements, and the anticipated schedule for delivering capacity sufficient to serve the proposed development and ultimate buildout. The Planning Commission shall not approve the Special Land Use unless it affirmatively finds that adequate electric, water, wastewater, emergency-service, transportation, and other required public-service capacity is available, or will be made available through an enforceable improvement or phasing plan, without materially reducing service levels or increasing costs to existing users.

2. Electrical Demand Statement

An estimate of average and maximum electrical demand, expressed in kilowatts (kW), megawatts (MW), and megavolt-amperes (MVA), as applicable, including anticipated demand by phase and at ultimate buildout and a description of redundancy and resiliency systems.

3. Cooling and Water Use Plan / Water Discharge Plan

A description of the cooling technologies to be used; estimated average and maximum daily water use by phase and at ultimate buildout; identification of potable, non-potable, groundwater, surface-water, and reclaimed-water sources, as applicable; estimated consumptive use and discharge; and proposed water-conservation, metering, and reuse measures. Plan shall include data establishing that water drawn from either the public water system or ground well will not:

- adversely affect water quality or pressure for existing properties.
- be insufficient for on-site Fire Department suppression needs.
- displace or impair foreseeable users.

Water Discharge Study, Plan, and Report Required: Municipal sanitary sewer system access may only be made available if it is determined that capacity is available to service the Data Center without adversely affecting existing residents and businesses within the Township as outlined within this section.

Applicant shall provide a plan showing the proposed method for water discharge from cooling systems. The report shall indicate the daily average and maximum water discharge volume and rates, potential discharge contaminants, average and maximum water temperature discharge, and other items that may impact the existing natural environment and surroundings due to the discharge of used water. Any discharge shall comply with applicable state and county permits.

Approval by the Township shall be contingent upon written confirmation from the applicable utility and regulatory agencies that the proposed discharge will not adversely impact existing users, system capacity, groundwater resources, or downstream infrastructure.

If water discharge from mechanical equipment is not permitted into the municipal sanitary sewer system, water reuse and/or onsite treatment and ground discharge plans will be required.

Township approval shall be conditioned upon a finding that the proposed discharge plan:

- will not exceed available system or aquifer capacity at full build-out.
- will not displace or impair existing or reasonably foreseeable users.
- has been approved by the applicable utility and regulatory agencies.

4. Master Utility Plan

A plan depicting all existing and proposed electrical infrastructure, substations, switching stations, transformers, transmission facilities, telecommunications and fiber infrastructure, water and wastewater infrastructure, Battery Energy Storage Systems, utility corridors, and utility interconnection facilities necessary to support the proposed development and ultimate buildout.

5. Concept Master Development Plan

A concept Master Development Plan depicting the ultimate anticipated buildout of the Data Center site is required for projects that anticipate future expansion. The plan shall identify all existing and proposed buildings, expansion areas, substations, generators, fuel-storage facilities, cooling infrastructure, Battery Energy Storage Systems, utility corridors, telecommunications infrastructure, stormwater facilities, access drives, parking areas, screening, landscaping, and other major site improvements. The plan shall identify anticipated electrical demand, water demand, wastewater generation, development phasing, and the principal operating characteristics of the Data Center Campus at ultimate buildout.

The concept Master Development Plan shall establish the baseline record of the ultimate buildout, phasing, infrastructure demands, site arrangement, major equipment, and operating characteristics represented by the applicant and referenced by the Planning Commission when conducting Special Land Use review for each subsequent phase. A later application shall clearly identify and explain any material difference between the proposed or actual development and the concept Master Development Plan, including why the change is requested and how its impacts differ from those previously reviewed.

The concept Master Development Plan shall be maintained as part of the record and may be used by the Planning Commission, Township Board, and Township staff when reviewing later phases, amendments, site plans, infrastructure commitments, public incentives, monitoring results, and other subsequent decisions affecting the Data Center Campus.

All required studies shall evaluate each proposed phase individually as well as the cumulative impacts associated with ultimate buildout. Acceptance of the concept Master Development Plan shall not constitute final site plan or building-permit approval for an unconstructed future phase. Each future phase shall require site plan review under Section 6.8. The Planning Commission shall determine whether the phase remains substantially consistent with the concept Master Development Plan and Special Land Use approval. A material amendment or significant deviation shall require Planning Commission review and approval under Sections 6.8 and 6.11, as applicable.

6. Noise and Vibration Impact Study

The required acoustical review shall consist of an existing-conditions and predictive impact study submitted with the application and a post-construction verification study submitted following construction of each approved phase.

a. Existing Conditions and Predictive Impact Study

The applicant shall submit a site-specific Noise and Vibration Impact Study that documents existing ambient sound and vibration conditions and predicts sound and vibration generated by the proposed Data Center. The study shall evaluate each proposed phase and the cumulative impacts associated with ultimate buildout and shall demonstrate compliance with Section 5.18, Section H of this Section, and all other applicable requirements of this Ordinance.

b. Noise and Vibration Sources

The study shall evaluate all significant sound- and vibration-generating equipment and activities, including generators, cooling towers, chillers, air-handling and HVAC equipment, pumps, fans, transformers, substations, switchgear, Battery Energy Storage Systems and associated inverters and cooling equipment, on-site loading and vehicle activity where material, and any other mechanical or electrical equipment associated with the facility.

c. Operating Scenarios

The study shall separately evaluate, at a minimum:

- (1) Normal operation at peak design information-technology, electrical, and cooling load;
- (2) The reasonably foreseeable worst-case simultaneous operation of equipment permitted by the facility's design and operating protocols;
- (3) Routine maintenance and testing activities, including operation of the maximum number of generators or other equipment that may be tested simultaneously;
- (4) Emergency operation during a utility power outage or other reasonably foreseeable emergency condition; and
- (5) Each proposed phase and ultimate buildout of the Data Center Campus.

Emergency-operation scenarios shall be evaluated and disclosed even where temporary emergency operation may be exempt from one or more numerical noise limits.

d. Measurement and Analysis Requirements

The existing-conditions survey shall be of sufficient duration to characterize representative daytime and nighttime ambient sound conditions and shall include not less than one continuous twenty-four-hour monitoring period at each representative continuous-monitoring location identified or approved by the Township or its independent acoustical consultant. Compliance shall be evaluated at every potentially affected lot line under Section 5.18.A and at every residentially zoned or residentially used property line subject to the additional standards of Section H.

The study shall report, as applicable:

- (1) Equivalent continuous sound levels (Leq), maximum sound levels (Lmax), and background sound levels, including L90, for the applicable daytime and nighttime periods;
- (2) Overall A-weighted and C-weighted sound levels, expressed as dBA and dBC;
- (3) Unweighted or Z-weighted one-third-octave-band sound-pressure levels at nominal center frequencies from 6.3 Hz through at least 200 Hz;
- (4) Tonal, impulsive, intermittent, cyclical, fluctuating, and low-frequency sound characteristics;
- (5) Ground-borne and structure-borne vibration; and

(6) Meteorological conditions and other factors affecting the validity or representativeness of the measurements.

The predictive analysis shall use manufacturer-provided maximum or guaranteed sound-emission data, including frequency-band sound-power data where available. The study shall identify all equipment quantities, locations, elevations, operating assumptions, barriers, enclosures, silencers, structures, topographic conditions, reflective surfaces, atmospheric assumptions, modeling inputs, and anticipated measurement or modeling uncertainty.

Predicted sound levels shall include an appropriate allowance for equipment-data and modeling uncertainty, as determined acceptable by the Township's independent acoustical consultant.

Measurements shall be made using Class 1 sound-level instrumentation and Class 1 octave-band or fractional-octave-band filters appropriate for the required frequency range. Instruments shall be field-calibrated immediately before and after each measurement period. Low-frequency sound and infrasound measurements shall be conducted in accordance with the applicable edition of ANSI/ASA S12.9, Part 7, or a successor standard accepted by the Township. Other measurement, instrumentation, and analysis practices shall conform to applicable ANSI, ASA, IEC, or successor standards and generally accepted professional acoustical practices.

The study shall calculate and evaluate the difference between concurrent C-weighted and A-weighted sound levels as a screening indicator for potential low-frequency sound conditions. The C-weighted minus A-weighted difference shall not, by itself, constitute compliance or noncompliance but shall be evaluated together with the one-third-octave-band data, source characteristics, ambient conditions, and applicable numerical limits.

e. Evaluation Locations and Propagation Conditions

The study shall evaluate sound and vibration at all potentially affected property lines where the standards of this Ordinance apply and at representative Sensitive Receptors identified by the Township or its independent acoustical consultant.

The study shall account for equipment elevations, intervening buildings and barriers, topography, bodies of water, reflective surfaces, prevailing and downwind propagation conditions, and other site-specific conditions that may materially affect sound or vibration at an applicable property line or receptor. Compliance with the numerical standards of this Ordinance shall be demonstrated at each location to which those standards apply.

f. Post-Construction Verification

Post-construction acoustical testing shall be completed following construction of each approved phase and before issuance of a temporary or final Certificate of Occupancy for that phase. Testing shall include representative daytime and nighttime operating conditions, including, but not limited to, load bank testing or power outages, and the highest reasonably achievable operating load and equipment configuration existing at the time of testing.

The post-construction study shall use the same sound metrics and substantially the same evaluation locations used in the approved predictive study, unless alternative locations are

approved by the Township or its independent acoustical consultant. The study shall document actual equipment operation and facility load during each measurement period.

Where post-construction testing identifies noncompliance, the applicant shall implement corrective measures and complete additional verification testing demonstrating compliance.

g. Consultant Qualifications and Independent Review

The Noise and Vibration Impact Study and all post-construction verification studies shall be prepared and certified by an INCE-USA Board Certified professional with demonstrated experience in predictive industrial noise analysis, environmental noise, low-frequency sound, and vibration, or by another individual with equivalent qualifications approved by the Township after consultation with its independent acoustical consultant. Employment by a National Council of Acoustical Consultants member firm may be considered evidence of firm qualifications but shall not replace the individual qualification requirement.

The Township shall retain an independent qualified acoustical consultant to review the predictive and post-construction studies, methodologies, assumptions, equipment data, modeling, measurements, and conclusions. The cost of the independent review shall be borne by the applicant through an escrow account or other mechanism approved by the Township.

All studies shall contain sufficient documentation, data, calculations, electronic modeling files, equipment information, and measurement results to allow the Township's independent acoustical consultant to reproduce and verify the analysis and conclusions.

7. Backup Power and Fuel Storage Plan

A plan identifying the number, size, rating, fuel type, and location of generators; the type and volume of fuel storage; secondary containment; emergency shutoff procedures; air-emission controls; fire-suppression measures; and the intended operating modes of each generator, including emergency, maintenance, testing, demand-response, peak-shaving, or grid-support operation. The applicant shall document and provide all applicable air permits, operating permits, registrations, exemptions, and other approvals required by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or its successor agency.

8. Traffic, Delivery, and Construction Logistics Analysis

An analysis of anticipated construction and operational traffic, including employee and contractor vehicles, routine and fuel deliveries, emergency vehicles, oversized loads, primary and secondary haul routes, peak traffic periods, turning movements, sight distance, access management, construction duration, pedestrian and nonmotorized access required under Section 6.8, and measures to avoid or mitigate impacts on residential streets, public safety, and roadway operations.

9. Security and Emergency Response Plan

A plan prepared in coordination with the White Lake Township Fire Department and other applicable emergency-service providers addressing emergency access, controlled access points, site hazards, Battery Energy Storage Systems, fuel storage, fire protection, emergency shutoff

procedures, emergency contacts, incident notification, and response protocols. Security lighting and fencing shall also be described.

10. Decommissioning Plan

A plan describing procedures and schedules for facility shutdown, removal of Data Center-specific equipment and infrastructure, site restoration, and estimated decommissioning costs.

11. Community Impact Statement

A Community Impact Statement as outlined in Section 6.6 shall be required with all data center special land use and site plan applications including amended site plans.

12. Independent Technical Review

During application review, the Planning Commission may require independent review of any application material, study, plan, report, analysis, or technical documentation submitted under this Section. Following approval, the Zoning Administrator or other Township official responsible for administering this Ordinance may require independent review of monitoring data, compliance information, or other technical documentation where reasonably necessary to verify compliance with the approved Special Land Use. The cost of such review shall be borne by the applicant or operator through an escrow account or other mechanism approved by the Township.

E. SITE AND DESIGN STANDARDS

1. Residential Separation

Data Centers shall comply with Section 3.1.20 and all other applicable provisions of this Ordinance. No Data Center principal structure, cooling infrastructure, generator, Battery Energy Storage System, electrical substation, switching station, fuel-storage area, or other associated mechanical or utility equipment shall be located within three hundred (300) feet of a residentially zoned property or property used for residential purposes. The separation shall be measured as the shortest horizontal distance between the applicable structure or equipment and the residential property line.

The applicant shall demonstrate through the required Noise and Vibration Impact Study and other applicable studies that all standards of this Ordinance will be met. The Planning Commission may require a greater separation where necessary to address site-specific impacts and satisfy the standards for Special Land Use approval.

2. Screening and Landscaping

An enhanced landscape buffer meeting Section 5.19 shall be provided between the Data Center and any residentially zoned property, residential use, public park, school, or other Sensitive Receptor. Mechanical equipment, generators, fuel-storage facilities, Battery Energy Storage Systems, transformers, substations, cooling towers, and similar equipment shall be screened from public view and adjacent properties. The Planning Commission may require berms, walls, increased planting density, preservation of existing vegetation, or other measures necessary to achieve effective year-round screening.

3. Architectural Design

Buildings that contain façade elevations in excess of 250 horizontal feet shall incorporate architectural articulation, color variation, building offsets, or similar design features to reduce the appearance of uninterrupted wall planes and overall structural massing. Architectural elevations and renderings shall be submitted for review. Buildings, equipment screens, sound barriers, and accessory structures shall be designed as a coordinated and durable architectural composition. The Planning Commission may waive all or some architectural standards where it deems sufficient year-round visual screening has been provided.

4. Parking

One (1) parking space shall be provided per employee on the peak shift, plus not more than twenty (20) spaces for visitors, contractors, and corporate vehicles unless additional spaces are demonstrated to be necessary. The Planning Commission may require land-banked parking where future demand is reasonably anticipated. Land-banked areas shall be maintained as approved open space or landscaping until constructed.

5. Lighting

Dark sky-friendly lighting solutions shall be implemented, and all lighting shall be designed to direct light downward. The facility must produce zero footcandles of light at the property line.

F. ELECTRICAL, ENERGY STORAGE, BACKUP POWER, AND FUEL

1. Electrical Infrastructure

Electrical substations, switching stations, transformers, switchgear, transmission facilities, above or below ground electrical transmission line pathways, and related utility infrastructure may be approved as accessory facilities. The applicant shall identify anticipated electrical demand, substation capacity, utility interconnections, and infrastructure necessary to support the proposed phase and ultimate buildout. Such facilities shall be included in the required Noise and Vibration Impact Study and shall comply with all screening, setback, and site-design requirements.

2. Battery Energy Storage Systems

Battery Energy Storage Systems shall comply with the applicable building and fire codes, NFPA 855 as adopted or otherwise required by the applicable enforcing authority, and all other applicable laws and regulations. Emergency response procedures for Battery Energy Storage Systems shall be incorporated into the approved Security and Emergency Response Plan.

3. Fuel Storage

Fuel storage shall comply with all applicable local, state, and federal requirements and may be subject to additional setbacks, screening, fire protection, leak detection, and secondary-containment requirements imposed through Special Land Use or Site Plan approval.

4. Energy Usage

Data centers shall be designed and operated in compliance with the energy code requirements specified in whichever of the following is most stringent:

- i. The latest adopted Michigan Energy Code;
- ii. The latest published ASHRAE Standard 90.4; or
- iii. Michigan-specific data center energy code requirements adopted by rule, which may include more detailed criteria.

G. WATER USE AND RESOURCE PROTECTION

1. Cooling Systems and Water Conservation

Air-cooled, hybrid, or closed-loop cooling systems shall be used unless the applicant demonstrates that an alternative system is necessary and will not create unacceptable impacts on water supplies, water resources, wastewater capacity, or surrounding properties. Should municipal water supply be proposed for data center operations, the Planning Commission may establish maximum daily or annual water-use limits, require conservation or reuse measures, require implementation of approved mitigation measures, or phase development based on available capacity.

The operator shall install and maintain metering sufficient to document water withdrawals, purchases, consumption, discharge, and reuse, as applicable. Required annual water-use reporting shall be included in the annual report under Section J.

2. Groundwater Impact Assessment

Where groundwater is proposed as a primary or supplemental water source, the applicant shall submit a Groundwater Impact Assessment prepared by a qualified hydrologist, hydrogeologist, or professional engineer. The assessment shall evaluate the proposed phase and ultimate buildout and address potential impacts on aquifers, public and private wells, lakes, streams, wetlands, springs, vernal ponds, canals, groundwater-dependent ecosystems, and other potentially affected resources.

3. Baseline Groundwater, Surface-Water, and Well Assessment

Before commencement of groundwater withdrawals, the applicant shall establish baseline conditions for potentially affected groundwater elevations, groundwater quality, representative private wells, public wells where applicable, lakes, streams, wetlands, vernal ponds, springs, canals, and other groundwater-connected surface waters. Baseline information from private wells shall be obtained from a representative sample drawing from the same aquifer system to the extent access is granted by participating property owners.

4. Water Withdrawal and Well Approvals

The applicant shall obtain all water-withdrawal registrations, permits, site-specific reviews, alternative analyses, well-construction permits, and water-supply approvals required by EGLE, the Oakland County Health Division, or another agency with jurisdiction. Where a new or increased large-quantity withdrawal is proposed, the applicant shall provide the Township with the applicable

Water Withdrawal Assessment Tool registration receipt, EGLE site-specific review, approved alternative analysis, water-withdrawal permit, or other documentation authorizing the withdrawal.

5. Groundwater Monitoring Program

Annual monitoring shall be conducted by an independent contractor and at the expense of the data center operator. Monitoring shall evaluate groundwater elevations, withdrawal volumes, groundwater quality, and well performance in accordance with an approved monitoring plan. Monitoring reports shall be submitted to the Township. The Zoning Administrator may require additional monitoring of wells, lakes, streams, wetlands, ponds, springs, canals, or other groundwater-dependent resources where monitoring results, complaints, or observed conditions indicate a potential impact, provided that the additional monitoring is reasonably related to verifying compliance with the approved plan and conditions.

6. Groundwater Contingency and Mitigation Plan

The applicant shall submit a contingency plan identifying investigation, notification, and corrective measures if actual impacts exceed those anticipated in an approved study, if a required permit or registration is violated, or if monitoring indicates a significant adverse impact. Potential measures may include water conservation, cooling-system modifications, reduced withdrawals, alternative water supplies, connection to a public water system with available capacity, well replacement or remediation where legally authorized, or other mitigation measures. The Zoning Administrator may require implementation of mitigation measures already contained in an approved contingency plan where the stated trigger has occurred. A new or materially different mitigation requirement shall be imposed by the Planning Commission in accordance with Section 6.11.E.

H. NOISE AND VIBRATION STANDARDS

1. Maximum Sound Levels

Data Centers and all associated equipment and operations shall comply with the maximum allowable noise levels of Section 5.18.A at every applicable lot line. Where this Section establishes a more restrictive standard, the more restrictive standard shall apply.

In addition, noise generated by the Data Center shall not exceed fifty-five (55) dBA Leq and seventy (70) dBC Leq between the hours of 7:00 a.m. and 9:00 p.m., or forty-five (45) dBA Leq and sixty (60) dBC Leq between the hours of 9:00 p.m. and 7:00 a.m., when measured or calculated at any residentially zoned or residentially used property line. Octave bands (dBZ) must be maintained at acceptable levels.

Compliance with the applicable dBA Leq and dBC Leq limits shall be evaluated over any contiguous twenty-four-hour period during which the applicable equipment or operation is occurring. For an intermittent operating condition lasting less than twenty-four hours, the averaging period shall be the duration of the operating event or another representative period approved by the Township's independent acoustical consultant. Sound generated during an operating event shall not be

averaged together with periods when the applicable source is not operating for purposes of demonstrating compliance.

If data center equipment produces tonal sound, a 6-dB penalty will be deducted from the dBA and dBC limits noted in this section. The presence of tonal noise shall be determined using a recognized objective acoustical methodology accepted by the Township's independent acoustical consultant.

The Zoning Administrator may require continuous monitoring for twenty-four (24) hours or a longer period where reasonably necessary to evaluate a complaint, possible noncompliance, or a condition identified in an approved study. Data collected through continuous monitoring shall be evaluated separately for the applicable daytime and nighttime periods and required averaging intervals. Cost of such monitoring shall be at the expense of the data center operator.

Where existing ambient sound materially interferes with direct measurement of the Data Center's contribution, the facility-generated contribution shall be determined through source-on and source-off measurements, frequency analysis, operational data, acoustical modeling, or another recognized method accepted by the Township's independent acoustical consultant.

2. Sound Barriers

A rooftop-mounted sound barrier shall not exceed fifteen (15) feet in height above the surrounding roof surface and shall not be included in the maximum height measurement of the principal structure. A ground-mounted sound barrier shall not exceed twenty-five (25) feet in height above grade.

Sound barriers shall be architecturally compatible with the principal building and constructed of durable, weather-resistant, and corrosion-resistant materials. Standard concrete block, poured-concrete, or precast-concrete walls shall not be used unless approved by the Planning Commission, which may require architectural facing, articulation, landscaping, or other design modifications.

3. Equipment Design, Operation, and Vibration

All mechanical and electrical equipment shall be designed, selected, located, installed, operated, and maintained in accordance with the approved Noise and Vibration Impact Study and all approved mitigation measures to minimize tonal sound, low-frequency sound, impulsive sound, structure-borne sound, and vibration.

All Data Center operations and equipment shall comply with the vibration standards of Section 5.18.B at every applicable lot line. Where a conflict exists between this Section and Section 5.18, the more restrictive standard shall apply.

- (a) No Data Center shall be operated, maintained, or tested in a manner that generates a ground-borne vibration level exceeding a Peak Particle Velocity (PPV) of 0.01 inches per second (in/s) at any point along the Data Center's property line. This limit applies across all vibration frequencies between 1.0 Hz and 100 Hz. The 0.01 in/s PPV threshold applies to measurements taken in any of the three mutually perpendicular axes (vertical, longitudinal, or transverse). If any single axis exceeds 0.01 in/s, the Data Center is in violation.

Note to Planning Commission: The Township Attorney requested that staff look into how compliance with the ground-borne vibration limit in item (a) would be tested and verified. On October 5, 2026, Township staff contacted three sound and vibration consulting firms for quotes on their review of this standard. As of the date of this draft, their comments have not been received. If comments are received before the October 15, 2026 meeting, they may be sent to the Planning Commission separately.

- (b) Generators must be equipped with vibration isolation and mitigation systems.
- (c) Data Centers must have continuous vibration monitoring at spacing of no less than 500 feet along all property lines which sit within 1,000 feet of the property line of any Sensitive Receptor.

4. Backup Generator Operation

Routine testing and scheduled maintenance of backup generators shall be limited to the hours of 9:00 a.m. to 5:00 p.m., Monday through Friday, excluding holidays. Testing and maintenance shall be limited to the minimum duration and number of generator units reasonably necessary to complete the applicable procedure as stated in the special land use permit application and site plan. Simultaneous testing of multiple generators shall not exceed the number evaluated and approved through the Noise and Vibration Impact Study and as indicated in the approved special land use permit and site plan.

Routine generator testing and scheduled maintenance shall comply with the applicable noise limits of Section 5.18.A and this Section and shall not qualify for the temporary or infrequent landscaping, construction, or property-maintenance exemption contained in Section 5.18.A.

Testing outside the permitted hours may occur only when specifically required by a governmental agency, utility provider, manufacturer, or applicable regulation. The operator shall provide advance notice to the Zoning Administrator where reasonably practicable, and testing shall be limited to the duration and number of units required.

Temporary operation of backup generators during an actual utility power outage or other emergency requiring backup electrical power may be exempt from the numerical noise limits only for the duration reasonably necessary to respond to the emergency. All approved mufflers, enclosures, barriers, vibration-control systems, and other noise-control measures shall remain installed and operational during emergency use.

The emergency exemption shall not apply to routine testing, scheduled maintenance, planned load management, peak shaving, demand-response participation, elective grid-support operation, or another nonemergency use of backup generators.

I. INFRASTRUCTURE, CONSTRUCTION TRAFFIC, AND ROADWAY MITIGATION

1. Infrastructure Improvements

The Planning Commission may require utility upgrades, road improvements, infrastructure improvements, financial guarantees, development agreements, and phased development tied to

available utility capacity. The applicant shall be responsible for the cost of on-site and off-site utility and infrastructure improvements required to serve or mitigate the impacts of the proposed development, to the extent authorized by law.

2. Construction Traffic and Roadway Impact Assessment

The applicant shall identify primary and secondary haul routes, construction traffic volumes, oversized-load movements, anticipated construction duration, and measures to manage roadway, traffic, dust, noise, and safety impacts.

3. Pre-Construction Roadway Condition Assessment

A roadway condition assessment shall be completed within ninety (90) days before the commencement of construction and shall document existing roadway conditions through engineering evaluations, photographs, video, or other methods acceptable to the Township Engineer and applicable road authority.

4. Post-Construction Roadway Condition Assessment

A post-construction roadway condition assessment shall be completed within ninety (90) days following substantial completion of construction or an approved phase.

5. Roadway Restoration

Where roadway deterioration, damage, or accelerated wear is attributable to Data Center construction activities, the applicant shall repair, restore, or replace affected roadway improvements as determined necessary by the Oakland County Road Commission, Township Engineer, or other applicable road authority.

6. Financial Guarantee

The Planning Commission may require a bond, escrow, letter of credit, or other financial guarantee to ensure completion of roadway restoration obligations.

J. ANNUAL REPORTING AND OPERATIONAL COMPLIANCE

1. Annual Report

The owner or operator shall submit an annual report to the Township no later than March 1 of each year covering the preceding calendar year and identifying:

- (a) Annual water purchases, withdrawals, consumption, discharge, and reuse, as applicable;
- (b) Groundwater withdrawal volumes and monitoring results;
- (c) Average and peak electrical demand;
- (d) Major infrastructure modifications and material changes to sound- or vibration-generating equipment or operating characteristics*;
- (e) Compliance with approved mitigation measures, monitoring programs, and conditions of approval;

- (f) Noise or vibration complaints received and the investigation, response, and corrective measures associated with each complaint;
- (g) Any violation or enforcement action issued by a governmental agency during the preceding year; and
- (h) Current emergency contact information.

** Such modifications to infrastructure and/or mechanical equipment may require prior administrative or Planning Commission and Township Board approval.*

2. Operational Compliance Escrow

Before issuance of a Certificate of Occupancy for a Data Center, the owner or operator shall establish and continuously maintain a cash operational-compliance escrow account with the Township. The escrow shall be used solely to reimburse the Township for actual and reasonable Township employee costs and third-party professional costs incurred in administering and enforcing the approved Special Land Use and this Section.

Eligible costs may include Township employee and professional services necessary to investigate a credible complaint or other reasonable evidence of potential noncompliance; review monitoring data, corrective-action plans, or proposed mitigation; conduct or review sound, vibration, groundwater, surface-water, utility, traffic, fire-safety, Battery Energy Storage System, or other technical evaluations; verify compliance following corrective measures; and obtain legal or technical assistance directly related to an investigation or compliance review.

The initial escrow deposit shall be not less than one hundred thousand dollars (\$100,000). The Planning Commission may require a greater amount, not ordinarily exceeding two hundred fifty thousand dollars (\$250,000), where justified by the size, phasing, equipment, operating characteristics, water use, surrounding land uses, or other technical complexity of the Data Center Campus. Any amount exceeding the minimum shall be based on the estimated cost of reasonably foreseeable professional review and compliance activities.

The Township may withdraw funds from the escrow to pay eligible costs without first establishing a final violation, provided that the expenditure is based on a credible complaint, monitoring result, observed condition, or other reasonable evidence warranting professional investigation or review. The Township shall provide the owner or operator with an itemized accounting of amounts withdrawn and the professional services for which the funds were used.

The owner or operator shall restore the escrow to its required amount within sixty (60) days after written notice of an expenditure. If the remaining balance is less than twenty-five thousand dollars (\$25,000), or if additional immediate professional services are reasonably anticipated, the Zoning Administrator may require restoration of the escrow within ten (10) business days.

Failure to establish, maintain, or timely replenish the required escrow shall constitute a violation of this Ordinance. Until the required balance is restored, the Township may suspend its review or issuance of permits, later-phase approvals, administrative modifications, or other discretionary approvals associated with the Data Center Campus, except where review or action is necessary to

address an emergency, existing violation, or threat to public health or safety. The Township may also initiate legal proceedings to obtain compliance.

The required escrow amount shall be reviewed before approval of each additional phase and at least once every five (5) years thereafter. The Planning Commission may increase or reduce the required balance based on the facility's operating history, changes in campus development or equipment, consultant cost estimates, unresolved complaints, or demonstrated compliance. Any unused balance shall be returned after permanent cessation and decommissioning of the Data Center Campus, payment of all outstanding Township costs, and resolution of all pending compliance matters.

3. Periodic Audits

The Zoning Administrator may require periodic third-party audits of acoustical compliance, utility usage, approved mitigation measures, and other operational requirements where reasonably necessary to verify continuing compliance. An audit shall be conducted by a qualified independent consultant selected by the Township, at the operator's expense.

4. Equipment Modifications

Before operating a material modification, expansion, replacement, or reconfiguration of generators, cooling systems, rooftop mechanical equipment, transformers, substations, Battery Energy Storage System cooling equipment, or other significant sound- or vibration-generating equipment, the operator shall notify the Zoning Administrator and provide sufficient equipment and acoustical information to determine whether the modification may increase sound or vibration at an applicable lot line or Sensitive Receptor.

Where a potential increase is identified, the Zoning Administrator may require updated acoustical modeling, certification, field testing, mitigation already required by the approval, or independent technical review before the modified equipment is placed into operation. An in-kind replacement may be administratively accepted without an updated acoustical study where the operator documents that the replacement equipment has sound-power levels, frequency characteristics, vibration characteristics, location, elevation, operating conditions, and hours of operation equal to or less impactful than the approved equipment. A material amendment or significant deviation shall be reviewed by the Planning Commission under Section L.

5. Complaint Investigation and Corrective Action

Upon receipt of a credible noise or vibration complaint, or upon other evidence of potential noncompliance, the Zoning Administrator may require investigation, short-term testing, continuous monitoring, source-on and source-off testing, or another acoustical evaluation reasonably necessary to determine compliance. Testing and analysis shall be performed or independently reviewed by a qualified acoustical consultant retained or approved by the Township, at the operator's expense.

Monitoring may be conducted at applicable lot lines and Sensitive Receptors. With the consent of the property owner or occupant, supplemental indoor measurements may be conducted where necessary to investigate a low-frequency sound or vibration complaint. Indoor measurements shall

be used as diagnostic information unless an applicable approval condition or ordinance standard expressly establishes an indoor compliance limit.

If noncompliance is identified, the operator shall submit and implement a corrective-action plan within the time established by the Zoning Administrator. Corrective measures may include equipment repair or replacement, operational changes, silencers, barriers, enclosures, vibration isolation, limits on simultaneous equipment operation, or other measures necessary to achieve compliance with the Ordinance and approved Special Land Use. Additional verification testing shall be required after implementation of corrective measures.

K. DECOMMISSIONING

1. Financial Guarantee

Before issuance of a building permit for the initial phase, the applicant shall post a financial guarantee in a form acceptable to the Township equal to one hundred twenty-five percent (125%) of the estimated decommissioning cost for the portions of the Data Center development then constructed or authorized for construction. Before issuance of a building permit for each later phase, the estimate and guarantee shall be updated to include that phase. The estimate shall be prepared by a qualified professional acceptable to the Township, shall not deduct anticipated salvage value unless expressly approved by the Township, and shall include removal, disposal, transportation, restoration, professional services, and reasonable contingency costs.

The cost estimate and financial guarantee shall be reviewed and updated at least once every five (5) years and adjusted for inflation and changes in facility configuration or decommissioning cost.

2. Trigger and Completion

Decommissioning shall be required for any individual Data Center building, approved phase, or other discrete operational portion of a Data Center Campus identified in the approved Master Development Plan that has ceased operations for a continuous period of twelve (12) months or is otherwise abandoned. Where one or more other buildings, phases, or portions of the Data Center Campus remain in active operation, only the inactive or abandoned building, phase, or portion shall be subject to the decommissioning obligation. All remaining portions shall continue to be operated and maintained in accordance with the approved Master Development Plan, site plan, conditions of approval, and all applicable requirements of this Ordinance. Required decommissioning activities shall be completed within twelve (12) months after the obligation arises unless the Planning Commission grants an extension based on circumstances beyond the operator's reasonable control and approves a binding schedule for completion.

3. Restoration

Restoration shall include removal of Data Center-specific equipment, including servers, generators, fuel-storage facilities, Battery Energy Storage Systems, and associated infrastructure, and restoration of the site in accordance with the approved Decommissioning Plan. Buildings may

remain for future permitted uses unless removal is required by the approved plan or due to safety, environmental, nuisance, or property-maintenance conditions.

L. APPROVAL, CONDITIONS, AMENDMENTS, AND CONTINUING COMPLIANCE

1. Planning Commission Decision

The Planning Commission may approve, approve with conditions, or deny a Data Center Special Land Use in accordance with Sections 6.10 and 6.11. The decision shall include findings and conclusions addressing the general Special Land Use standards, the standards of this Section, and all other applicable requirements of this Ordinance. Approval under this Section does not relieve the applicant, owner, or operator from obtaining and maintaining all permits, registrations, licenses, and approvals required by another governmental agency or enforcing authority.

2. Incorporated Approval Materials

All approved site plans, Master Development Plans, studies, reports, monitoring programs, mitigation measures, financial guarantees, development agreements, and other application materials relied upon by the Planning Commission shall be incorporated into and become part of the Special Land Use approval.

3. Conditions of Approval

The Planning Commission may impose conditions in accordance with Section 6.11.E. Conditions may address phasing, infrastructure capacity, traffic and roadway mitigation, water use, natural-resource protection, emergency response, noise and vibration mitigation, monitoring, financial guarantees, and other matters reasonably necessary to satisfy the standards of this Ordinance.

4. Continuing Compliance

The applicant, owner, and operator shall comply with all approved plans, studies, reports, monitoring programs, mitigation measures, financial guarantees, and conditions of approval throughout the life of the use.

5. Administrative Review and Enforcement

Administrative review, monitoring, testing, and enforcement conducted by the Zoning Administrator or another Township official under this Section shall be limited to determining and securing compliance with this Ordinance and the approved Special Land Use. An administrative determination shall not amend or waive an approved plan, mitigation measure, or condition of approval.

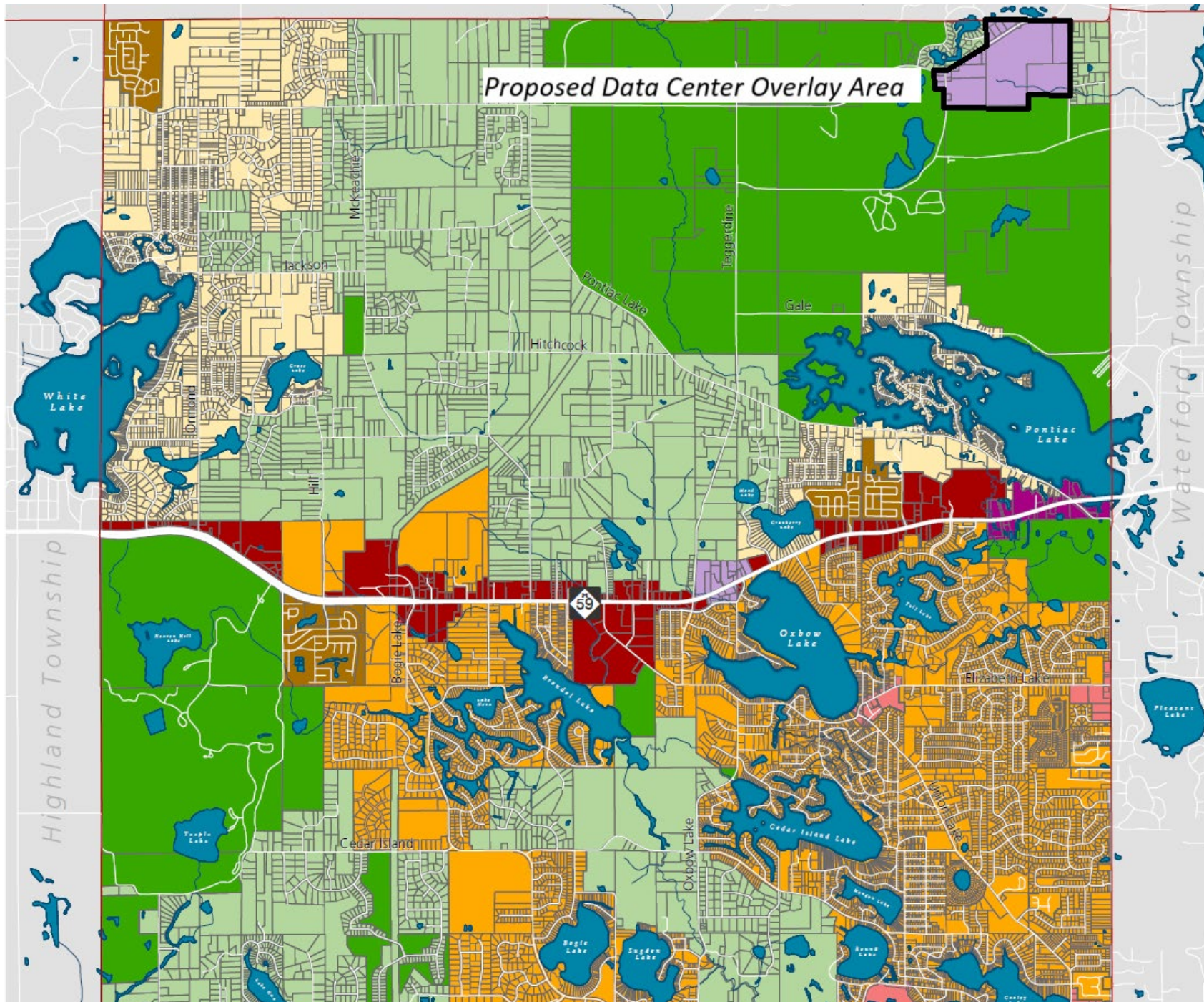
6. Changes and Amendments

A proposed change shall be evaluated in relation to the approved Master Development Plan, site plan, studies, operating characteristics, mitigation measures, and conditions of approval. The applicant shall identify the proposed change, explain why it is requested or necessary, and describe how its impacts differ from those previously represented and reviewed.

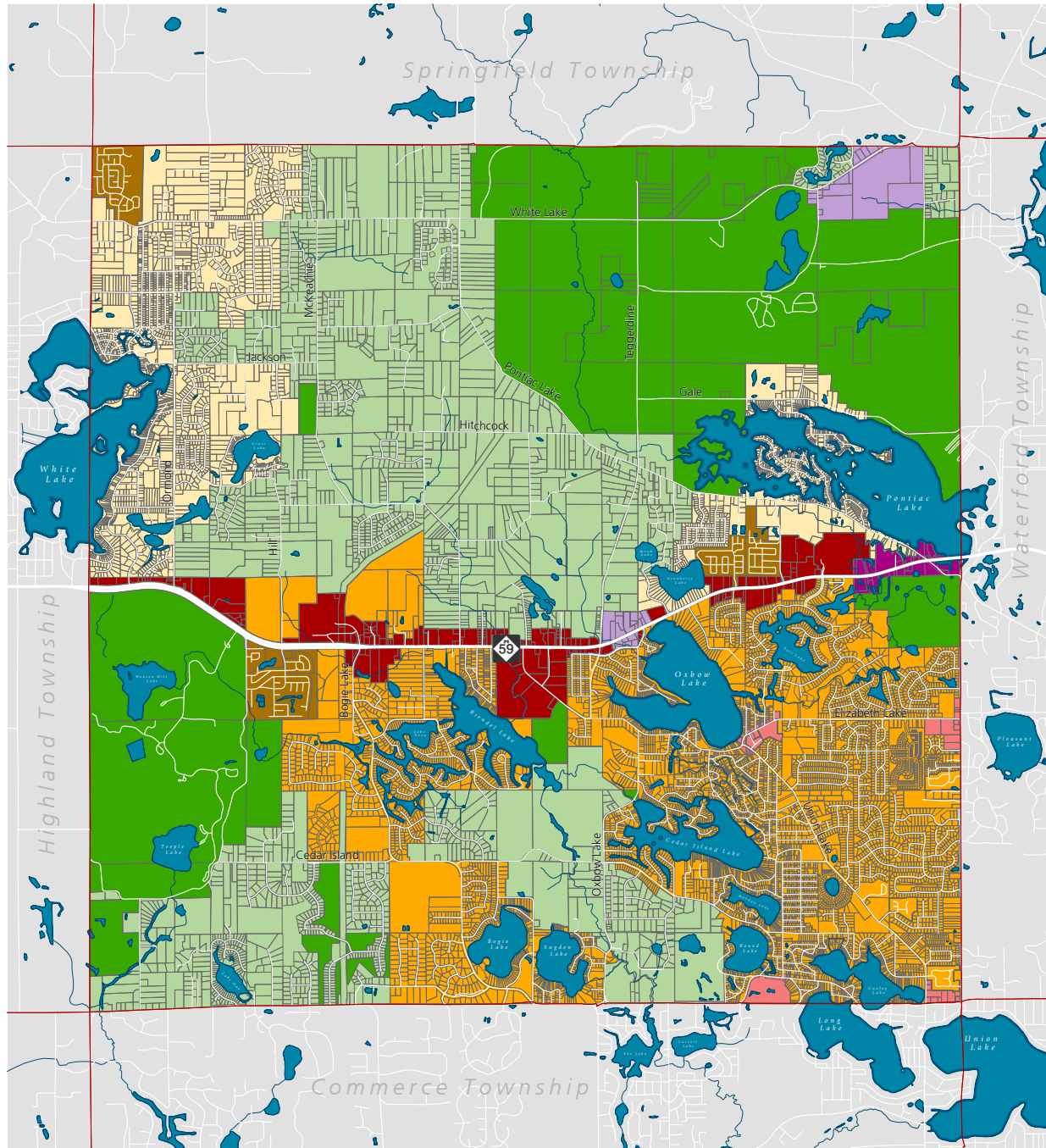
The Zoning Administrator may administratively accept an in-kind replacement or other minor change that is demonstrably equal to or less impactful than the approved condition and does not alter a condition of approval. A material amendment or significant deviation from an approved plan, equipment configuration, phasing program, operating characteristic, mitigation measure, or condition of approval shall require Planning Commission review under Sections 6.8 and 6.11, as applicable.

7. Transfer of Ownership

No transfer in ownership of a Data Center shall occur prior to providing 60 days' written notice to the Township. The Township Board will review the information provided to verify that the new owner has the ability and means to carry out the terms of the special land use approval, Master Development Plans, and site plan approval. The transferee shall agree in writing to carry out such terms.

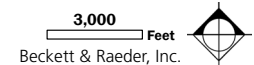
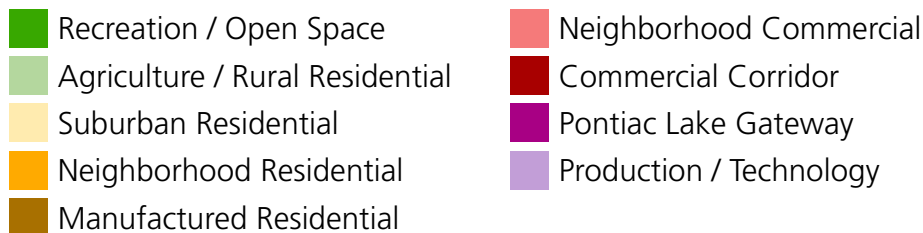


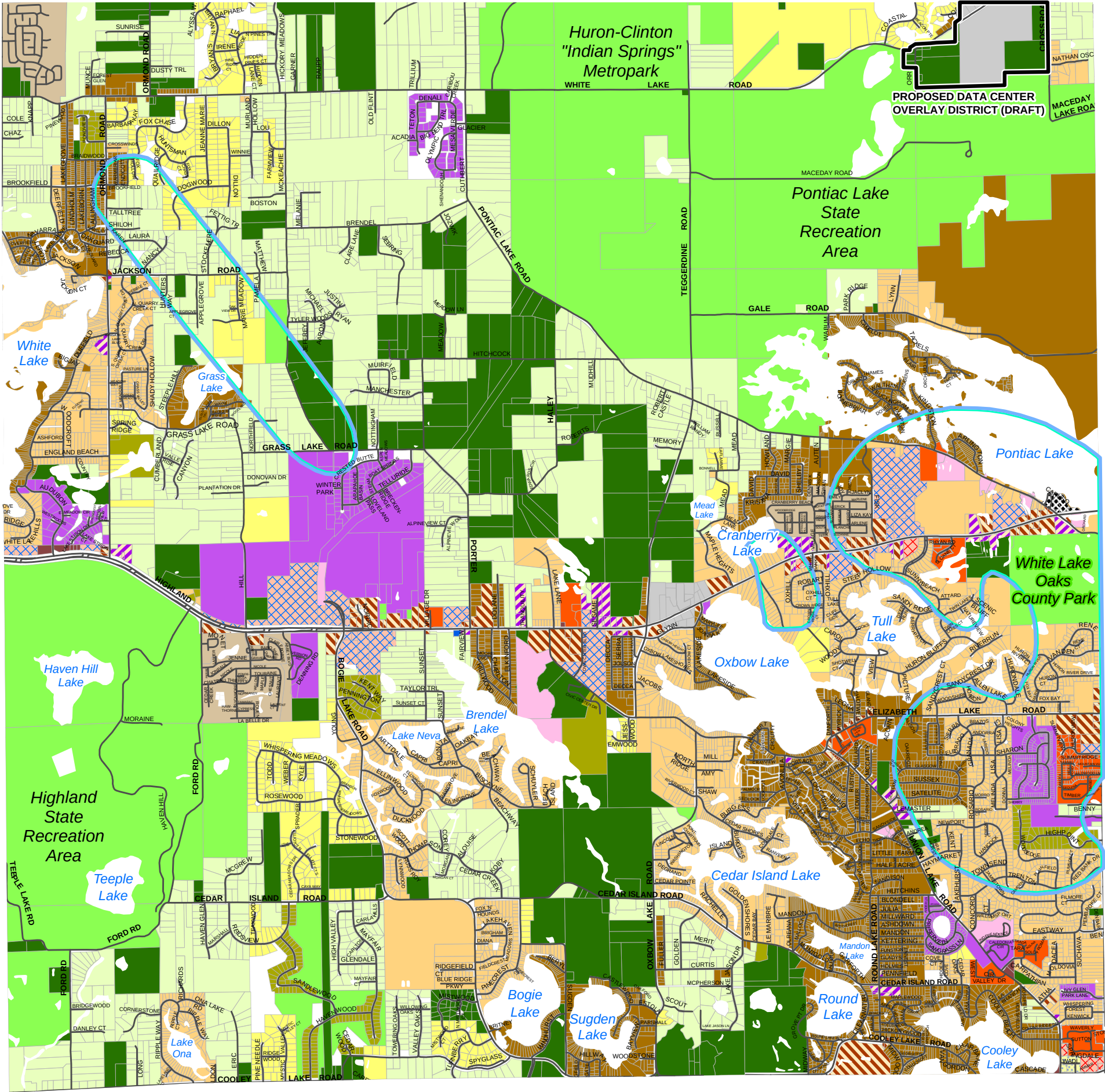
Map 14: Future Land Use Map



Future Land Use Framework

Sources: Michigan Open Data Portal, Oakland County, White Lake Township





Base Map Source: Oakland County GIS

Document Path: X:\Shared\Office\Wat\GIS\Kyle\WLT Street Index and Zoning Map Updates\Zoning Map Updates.aprx

- WELLHEAD PROTECTION AREAS
- ZONING 2025
- AG AGRICULTURAL
- SF SUBURBAN FARM
- R1-A SINGLE FAMILY RESIDENTIAL
- R1-B SINGLE FAMILY RESIDENTIAL
- R1-C SINGLE FAMILY RESIDENTIAL
- R1-D SINGLE FAMILY RESIDENTIAL
- RM-1 ATTACHED SINGLE FAMILY RESIDENTIAL
- RM-2 MULTIPLE FAMILY RESIDENTIAL
- LB LOCAL BUSINESS
- GB GENERAL BUSINESS
- RB RESTRICTED BUSINESS
- PB PLANNED BUSINESS
- MHP MOBILE HOME PARK
- NB-O NEIGHBORHOOD OFFICE
- ROS RECREATION & OPEN SPACE
- LM LIGHT MANUFACTURING
- PD PLANNED DEVELOPMENT
- ROP RESEARCH OFFICE PARK
- PG PONTIAC GATEWAY
- NMU NEIGHBORHOOD MIXED USE
- TC TOWN CENTER

Zoning Map

White Lake Township

Oakland County, Michigan

White Lake Township Planning Commission

Originally Adopted: April 15, 2003
Effective: June 6, 2003
Updated: May 23, 2025



PROPOSED DATA CENTER OVERLAY DISTRICT

Draft for the October 15, 2026 Planning Commission work session. Boundary is approximate, based on the Production/Technology area of the Future Land Use Map, and will be refined with parcel data. Underlying zoning is unchanged.