



DEPARTMENT OF PUBLIC WORKS

Fred Abadi, PhD, PE, Director

fabadi@ci.waukesha.wi.us



ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday September 28, 2016

Time: 6:30 p.m.

Place: Waukesha City Hall, 201 Delafield Street, Council Chambers

- I. Call to Order
- II. Pledge of Allegiance
- III. Roll Call
- IV. Approval of Minutes

ID#16-1349 Minutes for the Meeting of September 14, 2016.

- V. Consent Agenda

PC16-0078 Kwik Trip Express Store 527 Conversion, 1700 Pewaukee Road –
Preliminary Site Plan & Architectural Review

- 1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
 - b. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
 - c. Permits to be submitted include:
 - i. Provide area of site disturbance. Wisconsin DNR NOI permit is needed if over 1 acre of disturbance is proposed.
 - ii. City storm water erosion control permit.
 - iii. City street opening permit
 - iv. Private sanitary sewer approval.

☒ **ENGINEERING
DIVISION**
Alex Damien, P.E.
City Engineer
130 Delafield St
Waukesha, WI 53188
262-524-3600
Fax – 262-524-3898

☐ **MUNICIPAL PARKING
SERVICES**
Patti Cruz
Parking Supervisor
241 South St
Waukesha, WI 53188
262-524-3622
Fax – 262-650-2573

☐ **STREETS
DIVISION**
300 Sentry Dr
Waukesha, WI 53186
262-524-3615
Fax – 262-524-3612

☐ **WASTEWATER
TREATMENT PLANT**
Jeff Harenda
WWTP Manager
600 Sentry Dr
Waukesha, WI 53186
262-524-3625
Fax – 262-524-3632

☐ **WAUKESHA METRO
TRANSIT**
Brian Engelking
Transit Director
2311 Badger Dr
Waukesha, WI 53188
262-524-3594
Fax – 262-524-3646

- d. Add pavement marking plan.

Sheet T-100 Title Sheet

1. No comments.

Sheet C-100-Erosion Control Plan

1. Add construction sequence.
2. 32.09(c)1 Access Drives and Tracking. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMP(s) such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding the access drive.
3. 32.09(c)3 Inlet Protection. Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
4. 32.09(c)9 Site Dewatering. Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.
5. 32.09(c)10 Dust Control. Prevent excessive dust from leaving the construction site through construction phasing and timely stabilization or the use of BMPs such as site watering and mulch - especially with very dry or fine sandy soils.
6. 32.09(c)13 Sediment Cleanup. By the end of each workday, clean up all off-site sediment deposits or tracked soil that originated from the permitted site. Flushing shall not be allowed unless runoff is treated before discharge from the site.
7. 32.09(c)14 Final Site Stabilization. All previous cropland areas where land disturbing activities will not be occurring under the proposed grading plans, shall be stabilized upon permit issuance. Stabilize all other disturbed areas within 7 days of final grading and topsoil application. Large sites shall be treated in stages as final grading is completed in each stage. Any soil erosion that occurs after final grading or the application of stabilization measures must be repaired and the stabilization work redone.
8. 32.09(c)15 Temporary Site Stabilization. Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary stabilization measures such as soil treatment, temporary seeding or mulching. For purposes of this subsection, "inactive" means that no site grading, landscaping or utility work is occurring on the site and that precipitation events are not limiting these activities. Frozen soils do not exclude the site from this requirement.
9. 32.09(d)(2.)(B.)(xii) Location of proposed utilities, including: standard cross-section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;
10. 32.09(d)(2.)(B.)(xiii) Final site stabilization instructions for all other disturbed areas, showing areas to be stabilized in acres, depth of applied

- topsoil, seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMP(s) used to stabilize the site;
11. 32.09(d)(2.)(B.)(xiv) Detailed construction notes clearly explaining all necessary procedures to be followed to properly implement the plan, including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use, and maintenance of BMP(s) proposed in the plan;
 12. 32.10(c)21. Location and descriptive notes for any existing or proposed easements, right-of-ways, vision corners or other known site restrictions. Road right-of ways and building setbacks shall be in compliance with all applicable administrative codes, adopted plans and ordinances;
 13. The erosion control plan should be updated to comply with City Ordinance 32.09.
 14. Existing easements on the site should be shown Chapter 32.09(c)(9): Dewatering specifications should be added to the plan.
 15. Chapter 32.09(d)(2)(xiii): Final site stabilization instructions should be included in the plan set including seed rates, methodology, fertilizer and erosion matting locations and specifications, and maintenance requirements.
 16. Chapter 32.09(d)(2)(xiv): Detailed construction notes for the dewatering plan should be included on the plan.
 17. Chapter 32.09(d)(2)(iv): All woodland areas, those proposed to be lost or transplanted during construction and acres or numbers of each. For woodlands proposed to be lost, show individual trees larger than eight (8) inches in diameter that are located within twenty (20) feet of proposed grading boundaries.
 18. Chapter 32.09(d)(2)(xiv): The dates for the grading work should be added to the Drawing.
 19. Chapter 32.09(d)(2)(xiv): The dates for the grading work should be added to the Drawing.
 20. 32.10(e)10. A detailed construction inspection plan, outlining the critical elements in the plan that need to be surveyed or inspected by a representative of the project engineer, or the Authority, and the timing and notification requirements involved.

Sheet C101 Erosion control notes

1. Submit maintenance plan for catch basins and environmental catch basins.

Sheet C-200 Existing site and removals plan

1. The Wisconsin DNR BRRTS website states that the some continuing obligations are applicable to this location (e.g. an asphalt cap or other

- barrier covering the contamination). Provide written approval from DNR that this proposed work is shown to be properly completed within these drawings and the Cap Maintenance Plan is being followed.
2. Add Note: Removal limits of repair in Gascoigne Road are approximate and will be determined in the Field by the City.
 3. Remove south driveway approach along Pewaukee Road. Review traffic safety of proposed site layout with City Engineering staff.

Sheet C-300 Proposed site and Utilities Plan

1. Show sanitary sewer lateral from building to main. Label box structure in parking lot. Confirm if this is a grease trap. Confirm if a grease trap should be added to drawing.
2. The building will have a sanitary sewer lateral connecting the City's sewer main. Please provide a sewer lateral video to City for review and approval. Contact the City Engineering Department for the video format. If lateral maintenance is needed, then the lateral improvements may need to be included as part of this project. The lateral pipe and connection to the main may need to be lined or relayed to reduce infiltration into the City's sanitary sewer system or improve the structural integrity.
3. Televiser sanitary sewer lateral and storm sewer lateral from building to mains.
4. The DNR BRRT site shows an inactive sanitary sewer to west side of property from Peters Drive. Confirm with City staff if this lateral should be abandoned at main and work added to the Drawing.
5. Site runoff should be directed to environmental catch basins and connected to on-site storm sewer. Runoff should be directed to an environmental catch basin. Fueling and vehicle maintenance areas shall have BMP(s) designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.
6. Confirm how runoff from building roof and canopy will be drained from site to storm sewer.
7. Curb and gutter transition detail should be labeled on both sides of driveway.
8. Pewaukee Road is also labeled as CTH F. Confirm that the County jurisdiction ends further to the north, and update plan.
9. 32.10(d)(6.)G. Storm sewers. All storm sewers shall be designed in accordance with the City of Waukesha's technical standards and specifications.
10. Label all driveway widths.
 - a. Chapter 6.13 Driveways (4): The driveway width should not be greater than 35' at the curb and 30' at the sidewalk, unless the property is in a district zoned for industrial use. In a district zoned for industrial use, the driveway width cannot be greater than 50' at the curb and 45' at the property line. The total frontage of all driveways servicing the premises in any district cannot exceed 90' without approval of the Council. The driveways exceed 90 feet.

11. 22.53(1) TRAFFIC VISIBILITY. (Am. #38-02) In all districts no structures, fences, or vegetation shall be permitted on a corner lot within twenty (20) feet of the point of intersection of the right-of-way lines (the "corner") which obstructs or interferes with traffic visibility.

Sheet C-301 Truck movement Plan

1. No comments.

Sheet C-400 Grading Plan

1. Site runoff should be directed to environmental catch basins. Please confirm.
2. The cross slope of proposed City sidewalk should be designed at 1.5%.
3. The concrete sidewalk at the apron and the apron should be 7 inch thick concrete sidewalk.
4. Show grades for match point of curb removal and replacement.
5. Show removal limits for whole street from flange to flange. The street will need to be milled and paved.
6. Add Note: Removal limits of repair in Gascoigne Road are approximate and will be determined in the Field by the City.
7. Add City driveway detail.
8. Add City standard curb and gutter detail.
9. Runoff should be directed to an environmental catch basin.

Sheet C-401 ADA Grading Plan

1. Site runoff should be directed to environmental catch basins. Please confirm.
2. The cross slope of proposed City sidewalk should be designed at 1.5%.
3. The concrete sidewalk at the apron and the apron should be 7 inch thick concrete sidewalk.
4. Show grades for match point of curb removal and replacement.
5. Show removal limits for whole street from flange to flange. The street will need to be milled and paved.
6. Add Note: Removal limits of repair in Gascoigne Road are approximate and will be determined in the Field by the City.
7. Add City driveway detail.
8. Add City standard curb and gutter detail.
9. Runoff should be directed to an environmental catch basin. Fueling and vehicle maintenance areas shall have BMP(s) designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Sheet C500 Site Details

1. Add City curb and sidewalk details.

Sheet C-600 Restoration Plan

1. Provide written DNR confirmation that the restorations will comply with the DNR cap maintenance plan.

Sheet C-601 Planting Plan

1. Provide written DNR confirmation that the restorations will comply with the DNR cap maintenance plan.
2. 22.53(1) TRAFFIC VISIBILITY. (Am. #38-02) In all districts no structures, fences, or vegetation shall be permitted on a corner lot within twenty (20) feet of the point of intersection of the right-of-way lines (the "corner") which obstructs or interferes with traffic visibility.

Sheet E-600 Photometric Plan

1. No comments.

Storm Water Maintenance Agreement

1. Use City template and follow City ordinance 32.12.

PC16 -0079 277 W. Main Street – Conditional Use Permit
1. No comment.

PC16 -0072 Cesarz, Charapata, & Zinnecker Funeral Home, 237 N. Moreland Blvd. – Conditional Use Permit with Final Site Plan & Architectural Review
General
1. The following items should be submitted:
a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
b. Storm water management plan and Agreement.
2. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
3. Permits will be needed for the project. Provide copies of approved project permits to the City for filing. Needed permits include but are not limited to:
a. Wisconsin Department of Natural Resources NR 216 N.O.I. Permit.
b. City of Waukesha Construction Permit
c. City of Waukesha Storm Water Permit
d. Private sanitary sewer approval

General

1. The following items should be submitted:
b. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
i. Impact fees

- ii. Letter of Credits
 - c. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
 - d. Waukesha Water Utility approval.
- 2. Permits will be needed for the project. Provide copies of approved project permits to the City for filing. Needed permits include but are not limited to:
 - a. Wisconsin Department of Natural Resources NR 216 N.O.I. Permit.
 - b. City of Waukesha Construction Permit.
 - c. City of Waukesha Storm Water Permit.
 - d. Private sanitary sewer approval.

Sanitary Sewer

1. The building will have a sanitary sewer lateral connecting the City's sewer main. Please provide a sewer lateral video to City for review and approval. Contact the City Engineering Department for the video format. If lateral maintenance is needed, then the lateral improvements may need to be included as part of this project. The lateral pipe and connection to the main may need to be lined or relayed to reduce infiltration into the City's sanitary sewer system or improve the structural integrity.
2. All utilities in Moreland Boulevard in this project limits should be shown and the proposed connection points and design information.
3. Specifications for public sanitary sewer work should be added.
4. Show proposed sanitary sewer lateral connecting to existing lateral behind right of way line.

Subdivision and Platting

1. A current land survey in accordance with Wisconsin Administrative Code A-E 7 should be provided for review and approval. The submitted survey is from 2007.

Street Design

Sheet C-1 Site Plan

1. In accordance with Wisconsin Administrative Code A-E 2.02(4): Each sheet of plans, drawings, documents, specifications and reports for architectural, landscape architectural, professional engineering, design or land surveying practice should be signed, sealed, and dated by the registrant or permit holder who prepared, or directed and controlled preparation of, the written material.
2. Provide turning movement analysis for fire trucks, delivery trucks through parking lot and drive through.
3. Show existing underground pipes on site and adjoining site, and in public right of ways.
4. Show existing easements.

5. A current title report should be obtained and submitted to the City for both parcels including all restrictions, covenants, and easements of record.
6. More detail is needed to show where the proposed drainage is intended to be directed. Confirm how the site runoff will be collected from conveyed off site. Additional storm sewer measures are needed.
7. It appears that the building is shown within the building setback. Please confirm.
8. Many more spot grades are needed around the development site to confirm drainage problems are not being created.
9. Existing easements on the site should be shown including source documentation.
10. A note should be added: Repair limits in street will be determined in field at the time of permanent repair.
11. The concrete sidewalk at the apron and the apron should be 7 inch thick concrete sidewalk.
12. Show grades for match point of curb removal and replacement.
13. Show removal limits for whole street from flange to flange. The street will need to be milled and paved.
14. Add Note: Removal limits of repair are approximate and will be determined in the Field by the City.
15. Add City driveway detail. Indicate 7 inch thick concrete.
16. Add City standard curb and gutter detail.

Storm Water

Sheet C-2 Grading and Erosion Control Plan

1. Submit area of site disturbance.
2. Prepare storm water management plan, as applicable to DNR requirements and City Ordinance.
3. The erosion control/master grading plan should include a table listing the minimum basement elevation based on the existing water table for each building.
4. 32.09(c)1 Access Drives and Tracking. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMP(s) such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding the access drive.
5. 32.09(c)3 Inlet Protection. Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
6. 32.09(c)9 Site Dewatering. Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.

7. 32.09(c)10 Dust Control. Prevent excessive dust from leaving the construction site through construction phasing and timely stabilization or the use of BMPs such as site watering and mulch - especially with very dry or fine sandy soils.
8. 32.09(c)13 Sediment Cleanup. By the end of each workday, clean up all off-site sediment deposits or tracked soil that originated from the permitted site. Flushing shall not be allowed unless runoff is treated before discharge from the site.
9. 32.09(c)14 Final Site Stabilization. All previous cropland areas where land disturbing activities will not be occurring under the proposed grading plans, shall be stabilized upon permit issuance. Stabilize all other disturbed areas within 7 days of final grading and topsoil application. Large sites shall be treated in stages as final grading is completed in each stage. Any soil erosion that occurs after final grading or the application of stabilization measures must be repaired and the stabilization work redone.
10. 32.09(c)15 Temporary Site Stabilization. Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary stabilization measures such as soil treatment, temporary seeding or mulching. For purposes of this subsection, "inactive" means that no site grading, landscaping or utility work is occurring on the site and that precipitation events are not limiting these activities. Frozen soils do not exclude the site from this requirement.
11. 32.09(d)(2.)(B.)(xii) Location of proposed utilities, including: standard cross-section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;
12. 32.09(d)(2.)(B.)(xiii) Final site stabilization instructions for all other disturbed areas, showing areas to be stabilized in acres, depth of applied topsoil, seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMP(s) used to stabilize the site;
13. 32.09(d)(2.)(B.)(xiv) Detailed construction notes clearly explaining all necessary procedures to be followed to properly implement the plan, including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use, and maintenance of BMP(s) proposed in the plan;
14. 32.10(c)21. Location and descriptive notes for any existing or proposed easements, right-of-ways, vision corners or other known site restrictions. Road right-of ways and building setbacks shall be in compliance with all applicable administrative codes, adopted plans and ordinances;
15. 32.09(d)(2.)(B.)(xii) Location of proposed utilities, including: standard cross-section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;

16. 32.09(d)(2.)(B.)(xiv) Detailed construction notes clearly explaining all necessary procedures to be followed to properly implement the plan, including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use, and maintenance of BMP(s) proposed in the plan;
17. 32.09(d)(2.)(C.)(iii) Open channel design and stabilization data to support the selected BMP(s) for stabilization;
18. 32.10(d)2. Total Suspended Solids. A. By design, each storm water management plan shall meet the following post-development total suspended solids reduction targets, based on average annual rainfalls, as compared to no runoff management controls:
19. 32.10(d)(2)(A.)(ii.) For redevelopment, 40% reduction of total suspended solids load;
20. 32.10(d)6. Site Drainage. Measures shall be implemented to ensure proper site drainage, prevent property damage and protect public health and safety, including the following minimum requirements:
21. 32.10(d)(6.)B. Site grading. Site grading shall ensure positive flows away from all buildings, roads, driveways and septic systems, be coordinated with the general storm water drainage patterns for the area, and minimize adverse impacts on adjacent properties.
22. Show tributary drainage basin areas to site.
23. 32.10(d)(6.)G. Storm sewers. All storm sewers shall be designed in accordance with the City of Waukesha's technical standards and specifications.
24. The storm sewer will likely need to connect to Wisconsin DOT storm sewer and need approval.

PC16 -0047 Doggy Paradise, 2510 W. Sunset Drive – Conditional Use Permit

1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
 - b. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
 - c. Sanitary Sewer Lateral Video
 - i. The existing building has a sanitary sewer lateral connecting the City's sewer main. Please provide a sewer lateral video to City for review and approval. Contact the City Engineering Department for the video format. If lateral maintenance is needed, then the lateral improvements may need to be included as part of this project. The lateral pipe and connection to the main may need to be lined or relayed to reduce infiltration into

the City's sanitary sewer system or improve the structural integrity.