



DEPARTMENT OF PUBLIC WORKS

Fred Abadi, PhD, PE, Director

fabadi@ci.waukesha.wi.us



ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday June 8, 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#16-0778](#) Minutes for the Meeting of May 11, 2016.

V. Business Items

[ID#16-0816](#) Conversion of Riverfront Plaza to a public street and rename to Riverfront Street

- 1. This street already is listed as a public street in the State of Wisconsin WISLR database for the City of Waukesha.

[ID#16-0013](#) Fox Lake Circle Condominiums, Fox Lake Circle - PUD Amendment and 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).
 - b. Permits and approvals
 - i. DNR NOI, if over 1 acre of disturbance
 - ii. City Storm Water Permit

ENGINEERING DIVISION
 Paul G. Day, PE
 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

- c. Condominium Plat. Based on review of the Waukesha County GIS, there is not a recorded condominium plat for the lands proposed to be developed.
2. Sanitary Sewer
 - a. The existing development has a private sanitary sewer main 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 or main maintenance is needed, then the lateral or main 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.
 - b. The on site sanitary sewer will be private. The sanitary sewer in the public right-of-way will be public. Confirm that all sewer is already installed.
 - i. A copy of the DSPS private sewer approval should be submitted to the City for filing.
 3. 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.
 4. ~~Storm Water Management~~
 - a. ~~The Storm water management plan for the overall development was designed using a curve number of 75 to represent 1/4 acre single family lot sizes with Hydrologic Group B Type soils in this section of the proposed condition basin maps. Please confirm what the proposed curve number is for this section of the proposed storm water management plan basins. Typically, for condominiums or townhouses the curve number would be 85 with 1/8 acre or less density. The storm water management plan will need to be updated. Please confirm.~~
 - b. Chapter 32.10(d)(6)(B): Site grading should minimize adverse impacts on adjacent properties. Please verify that no adverse impacts to adjacent properties could be encountered during catastrophic storm events.
 - i. Provide the storm water ponding elevation behind lots 8 and 9 in the 100-year storm to confirm that the ponding limits are within the drainage easements that appear to be shown.
 - c. Label the existing drainage and storm sewer easements by source document.
 - d. Chapter 32.10(d)(6)(G) as referenced by Chapter 32.09(c)(17): Sizing calculations and basin maps for the on site storm sewer should be prepared.
 - e. Chapter 32.10(c)(18): Location and descriptive notes for existing and proposed structures, including sanitary sewer, storm sewer pipes, culverts and existing utilities should be shown. Elevations and pipe sizes should be listed.
 - f. Chapter 32.10(b)(I): Storm water plan designs should distribute storm water bio-retention and infiltration BMP(s), if appropriate. Roof runoff should be infiltrated, if possible.
 - i. The overall storm water management plan was not able to meet the goal of providing infiltration to meet the requirements but only to the maximum extent practicable. The design should incorporate infiltration of clean roof runoff to the maximum extent practicable. Rain gardens or bio-retention areas should be added to the site layout as much as practicable.
 - g. Confirm if these unit owners need to be added to the storm water maintenance agreement responsibilities according to the original recorded storm water maintenance agreement.
 5. An Erosion Control Plan should be submitted that meets Chapter 32.09.

Sheet C1

1. The existing sidewalk should be shown.
2. The proposed sidewalk around the street should be shown.

3. Several existing inlets and long sections of storm sewer pipe are shown to be removed that do not align with the revised layout of the buildings. The limits of removal for the pipe should be more clearly shown.
4. Fox Lake Circle should be labeled as a private roadway.
5. The water main, storm sewer, and sanitary sewer are all shown on the same plan sheet. Additional sheets should be provided for the storm sewer to more clearly show what is existing and proposed work. The existing storm sewer line work should be a lighter line type than the proposed storm sewer work on the separate sheet.
6. Chapter 32.10(d)(6)(e): Basement floor surfaces shall be built 1 foot above the seasonal high water table.
7. Vehicle turning templates should be run through the site plan to verify a fire truck can safely drive through the site.
8. Verify number and dimensions of parking stalls and ADA parking stalls needed for the site.
9. If applicable, existing sanitary sewer laterals that are not proposed to be reused should be abandoned at the sanitary sewer main and filled with slurry.

PC16 -0006 Mad Rooster Restaurant, NW Barstow & Bank Street - 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 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
 - d. Waukesha Water Utility approval.
 - e. Property Survey per Wisconsin Administrative Code AE-7
 - f. Erosion Control Plan per City Ordinance
 - g. Storm Water Management Plan
 - h. Certified Survey Map (CSM). A CSM is needed to update the boundary description and remove the historical lot lines in this parcel.
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.
3. A preconstruction meeting is needed prior to starting work.

Cover Sheet 1.0

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.

Master Site & Utility Plan 1.1

1. 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.
 - a. Label each driveway width. It appears that the total driveway width exceeds the maximum amount.
2. 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.
3. Confirm if grease trap should be replaced.
4. Specifications for connecting to the City's sanitary sewer will need to be added to the Drawings.
5. Show existing and proposed storm sewer.
6. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Site grading should ensure positive flows away from all buildings, roads, driveways, and be coordinated with the general storm water drainage patterns for the area, and minimize adverse impacts on adjacent properties.
 - a. Verify that the FEMA 100-year high water elevation adjacent pond and FEMA floodplain elevation of Fox River.
 - b. Show floodplain limits and elevations on drawings.
7. Chapter 32.10(e)(8): Location of soil evaluations with surface elevations and unique references to supplemental soil evaluations report forms in accordance with section 32.11(e).
8. Show proposed contours, existing spot grades and proposed spot grades in parking lot.
9. Label if pipes are existing or proposed.

Landscape Plan 1.3

1. Show correct lot line locations.

Existing Floor Plans 2.0

1. No comments.

Proposed Floor Plans 2.1

1. No comments.

Plans General:

1. Need a plan sheet that has grades for the proposed walk adjacent to the building.
(MAL)
2. Curb ramps at ADA path. (MAL)

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. The existing buildings 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.
 - d. Erosion Control Plan per City Ordinance
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., if applicable.
 - b. City of Waukesha Storm Water Permit

Site Plan C-1.0

1. Confirm area of proposed disturbance.
2. Add curb and gutter with 6-inch curb head to new parking lot. Add detail for private curb and gutter detail.
3. 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.
4. A 3 foot high retaining wall is shown. Confirm if a fence should be added along the wall for safety purposes.
5. Confirm if parking lot setbacks are met.
6. Confirm if proposed parking in existing easements will violate easement terms and conditions.
7. 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.
 - a. Label driveway widths.
8. Show location of existing building sanitary lateral locations from building to main.
9. Confirm amount of additional proposed impervious area for site. All site runoff is proposed to discharge across the parking lot to the lot to the north. Confirm if the downstream storm water measures are adequately sized to handle the storm water from this site. Provide drainage basin map.

Erosion Control Plan

1. A construction sequence should be added.
2. Chapter 32.09(c)(9): Dewatering specifications should be added to the plan.
3. 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.
4. Chapter 32.09(d)(2)(xiv): Detailed construction notes for the dewatering plan should be included on the plan.
5. 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.
6. Chapter 32.09(d)(2)(xiv): The dates for the grading work should be added to the Drawing.
7. The erosion control plan should be updated to comply with City Ordinance 32.09.
8. 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.
9. Show inlet protection, silt fence, etc.

PC16 -0043 Sunset Outlot B, Multi-Tenant Building - 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 or Chapter 32.08(c). Development fees will be owed to the City for this project.
 - i. Impact fees
 - ii. Letter of Credits
 - 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
 - d. Waukesha Water Utility approval.
 - e. No Certified Survey Map (CSM) was ever completed to create an outlot. Please confirm if it's intended to have this building on a separate lot. If yes, a CSM is needed and the maintenance agreement may need an addendum, and access easements would be needed.
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.

ALTA Survey

1. The survey is dated December 15, 2014 and does not show the additional site improvements that have occurred.

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. Provide copies of existing cross-access easements on adjoining parcels for City filing.
5. Provide on-site cross-access easements to adjoining parcels. Prepare documents for City review and approval. Developer to record access easements after City approval.
6. Confirm proposed plan does not violate terms of existing storm sewer easements.

Sheet C-2 Grading and Erosion Control Plan

1. The erosion control/master grading plan should include a table listing the minimum basement elevation based on the existing water table for each building.
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;

Sheet C-3 Paving and Utility Plan

1. The east edge of the proposed building is shown along the west edge of the existing City storm sewer easement. It appears that the building should be moved west. The footings may encroach into the City easement. Also, if the storm sewer pipe were relaid in the future, it appears that the building foundation structure could be compromised.
2. The word "grave" is shown on building. Please confirm.

C-4 Standard Details

1. No comments.

PC16 -0045 Griffin Ford Warehouse, 1706 Pearl Street - Final 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 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. 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.

Sheet C2.0 Paving and 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. Show sanitary sewer lateral location.

Sheet C2.1 Grading Plan

1. 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.
 - a. A storm sewer outlet is shown along the west side of the building. Additional downstream contours should be shown to confirm the drainage will move offsite without causing a drainage problem.
2. 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.
 - a. 32.10(d)(6.)F. Open channels. All open channel drainage systems shall at a minimum be designed to carry the peak flows from a 10-year, 24-hour design storm using planned land use for the entire contributing watershed area. Side slopes shall be no steeper than 3h:1v unless otherwise approved by the Authority for unique site conditions. Open channels that carry runoff from more than 130 acres shall at a minimum be designed to carry the peak flows from a 25-year, 24-hour design storm.
3. Chapter 32.10(d)(4)(E): Subsurface drainage. Lowest building floor surfaces shall be built one (1) foot above the seasonal high water table elevation, as documented in the soil evaluations and shall avoid hydric soils.
4. 32.10(e)6. Location and dimensions of proposed drainage easements;
 - a. The proposed work storm sewer outfall extends off the property boundary shown on the CSM and site plan. Confirm if easements exist for the proposed work. If no easements exist, prepare storm sewer easement with adjoining land owner for review and approval by City.
5. 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.
6. A storm water/erosion permit will be needed from the City.
7. 32.09(c)7 Outlet Protection. Protect outlets from erosion during site dewatering and storm water conveyance, including velocity dissipation at pipe outfalls or open channels entering or leaving a storm water management facility.
8. 32.09(c)8 Overland Flow. Trap sediment in overland flow before discharge from the site using BMPs such as silt fence and vegetative filter strips.
9. 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.
10. Confirm disturbance area for project.
11. 32.10(e)(12.)J. For sites where changes are proposed in storm water flow paths, or where proposed storm water discharges may otherwise have a significant negative impact on downstream property owner(s), the Authority may require the applicant to submit written authorization or complete other legal arrangements with the affected property owner(s); and

Final 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 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. 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.
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 Storm Water Permit
 - c. ~~State of Wisconsin Private sanitary sewer approval~~
 - d. ~~City of Waukesha Engineering Division Construction Permit~~
 - e. ~~City of Waukesha Engineering Division Street Opening Permit~~

Sheet A1.1

1. No comments.

Sheet 1 of 11

- ~~2. No comments.~~

Sheet 2 of 11

- ~~1. It appears that this improvement was already coordinated with Waukesha County since work on CTH FT is shown. The developer will need permits from Waukesha County for work on CTH FT. (mfg)~~
- ~~2. Will a new sidewalk be required? (mfg)~~
- ~~3. No other traffic related items are needed. (mfg)~~

Existing Site Plan

1. No comments.

Proposed Site Plan

1. The first phase of this project included the design and construction of a wet pond in 2008. The first phase previously accounted for the additional impervious areas to be added with this proposed work in the currently proposed phase 2.
2. In accordance with FAA Advisory Circular 150 5200-33B:
 - a. Dry ponds should be used in lieu of wet ponds with standing water within 10,000 feet of the airport.

- b. We understand that additional measures are needed to be added to the Drawings as required by the FAA in order to allow wet ponds within the airport setback area.
 - c. Provide written approval from FAA for current design that no additional measures are needed or waiver from FAA for design and installation of wet pond within the required FAA airport wet pond setback.
3. Provide pdf copy of storm water management plan for City filing.
 4. Chapter 32.10(d)(6)(A) as referenced by Chapter 32.09(c)(17): Perpetual drainage easements or other deed restrictions should be recorded to preserve major storm water flow paths and permanent storm water BMPs.
 - a. The full storm water maintenance agreement remains to be completed for this site.
 - b. The City has a storm water maintenance agreement template that will be sent to the design Engineer.