

DEPARTMENT OF PUBLIC WORKS



Fred Abadi, PhD, PE, Director

fabadi@ci.waukesha.wi.us

ENGINEERING COMMENTS
FOR
PLAN COMMISSION
AGENDA
Wednesday
March 9, 2016
REVISED

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 -133 Minutes for the Meeting of February 24, 2016.

- V. Consent Agenda
- VI. Business Items

PC16 -0007 Steven C. Koch, Saylesville Road-Certified Survey Map

1. No comments.

<u>PC16 – 0008</u> Medico-Mart, Inc., 2323 Corporate Drive, 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.

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

- 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.
- 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. City of Waukesha Storm Water Permit.
 - b. Private sanitary sewer approval.

Site Plan C1.00

1. Confirm if new building will use existing sanitary sewer lateral as shown.

Grading & Erosion Control C1.01

- 1. Erosion control plan should include requirements on drawing from City Ordinance Chapter 32.09.
- 2. 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.

Proposed storm sewer is showing connected to the building. Please confirm intent of 8-inch pipe.

PC16 -0010 Mission Breakout LLC, 2335-2337 Silvernail Road – 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.
- 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. N/A

PC16 – 0016 Waukesha Memorial Hospital, 725 American Avenue – Certified Survey Map

- 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.
 - d. The existing public sanitary sewer and public storm sewer should be conveyed to the Hospital to be private sanitary sewer and private storm sewer in the areas of Dopp Street right of way to be vacated. A formal deed document and bill of sale document will need to be prepared by the Applicant for review and approval.
 - 1. Prepare Exhibit and boundary description for extent of sanitary sewer to be conveyed by Deed and Bill of Sale.
 - 2. Prepare Exhibit and boundary description for extent of storm sewer to be conveyed by Deed and Bill of Sale.
- 2. Prepare CSM in accordance with Wisconsin State Statute 236.34.
- 3. Prepare CSM in accordance with the City Subdivision Ordinance.
- 4. Wisconsin State Statute 236: Show set property corners.

- 5. Wisconsin State Statute 236: Show found property corners. Confirm full right of way width is provided to City.
- 6. The CSM shows Washington Avenue has a 55 feet wide right of way. Confirm if the existing City infrastructure such as sidewalks, etc. are contained within the 55 foot width. If not, additional right of way may be needed.
- 7. Confirm if all adjoining right of ways have been formally dedicated. If not, the right of ways should be formally dedicated.
- 8. Add detail to legibly show lot line at southwest corner of Lot 1 Ross Subdivsion.
- 9. Confirm all interior right of ways have been formally dedicated, if shown as vacated. The City Staff have located some documents and will review documents that can be found. List document numbers for recorded street vacations within CSM boundary.
- 10. Existing easements on the site should be shown including source documentation, if applicable.
 - a. Provide water main easement and conditions along former Dopp Street.

PC16 – 0014 City of Waukesha Pump Station Control Buildings – Conditional Use

River Place Pump Station:

- 1. Prepare erosion control plan in accordance with City Storm water Ordinance 32.09.
- 2. 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.

MacArthur Pump Station:

- 1. Prepare erosion control plan in accordance with City Storm water Ordinance 32.09.
- 2. 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.

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.

- 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.

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)

PC16 – 0012 WI Independent Learning College, 1936 McArthur Road – 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.

<u>PC16 – 0011</u> Clinton Street Properties, 732, 734, 736 Clinton 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. 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.
- 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. N/A

PC16 – 0009 Culver's, 840 W. Sunset Drive – Preliminary Site Plan & Architectural Review

- 2. 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.
 - 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. 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.
- 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. City of Waukesha Storm Water Permit.
 - b. Private sanitary sewer approval.

<u>PC15 – 0205</u> Courtyards at Prairie Song, Summit Avenue – PUD Amendment and 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. Waukesha Water Utility approval
 - d. Certified Survey Map. A CSM is needed to combine the two existing lots into one lot.
- 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 Right of Way Opening Permit
 - c. City of Waukesha Storm Water Permit
 - d. Private sanitary sewer approval from State of Wisconsin
 - e. Wisconsin DOT approval to construct intersection at Koenig Drive and Summit Avenue.

Sheet T1-Cover Sheet

1. No comments.

Overall Concept Plan

- 1. The existing City right-of-way known as Koenig Drive is shown. The proposed ultimate extension of this street does not align with the existing right-of-way and includes a proposed dead end.
- 2. An Isolated Natural Resource area line is shown on the Drawing. A note stating the date of marking of this information should be added to the Drawing.
- 3. Existing easements on the site should be shown including source documentation. Existing easements may affect site development.
- 4. The proposed buildings are located very close to an existing drainage swale passes through the site that conveys off-site drainage. Show the measures to accommodate the flows through and past the downstream site. Confirm the flow height for the 100-year storm. A 30 foot wide drainage easement is likely needed.
- 5. Chapter 23.06(2)(2): Proposed streets shall be extended to the boundary lines of the tract to be subdivided, unless prevented by topography or other physical conditions or unless, in the opinion of the Commission, such extension is not necessary or desirable for the coordination of the layout or the most advantageous future development of adjacent tracts. Dead end streets of a length of not over 500 feet will be approved where, in the opinion of the Commission, they are appropriate for the type of development contemplated. A properly sized cul-de-sac will be needed since the timing of development of the lands to the south is unknown at this time. The cul de sac radius should meet City standards.
- 6. COMPLETE-A 90 degree bend is shown in Prairie Song Drive approximately 180 feet south of Summit Avenue. In accordance with Chapter 23.06(5)(d)(1): The radii of curvature, measured at the center line, shall not be less than the following:
 - a. Local streets, 100 feet.
- 7. A section of Koenig will need to be vacated to provide a continuous alignment in the location the Developer is proposing.
- 8. We understand that the lands where the street would be extended to the south are not available for purchase at this time.
- 9. The driveway for the parcel to the east should be connected to the proposed Koenig Drive and removed from Summit Avenue (USH 18). The existing driveway should be removed.
- 10. COMPLETE The appropriate acceleration and deceleration lanes should be shown on the Drawing.
- 11. Sidewalk should be shown on both sides of Koenig Drive.
- 12. One proposed pond is shown in Koenig Drive. The ponds should be removed and relocated to on the development site, unless this area of right-of-way is vacated. The ponds should be located on private property. Confirm owner of each side of right of way after vacation would occur. Pond location may need to change.

- 13. Proposed public storm sewer is shown in Koenig Drive. The overall drainage basins will need to be prepared and submitted to determine the ultimate proposed flow patterns through the site.
- 14. A sidewalk ramp is shown at the private driveway. The sidewalk ramp should be located at the intersection of Koenig Drive and Summit Avenue (USH 18).
- 15. Proposed sidewalk should be shown along Summit Avenue (USH 18) and connect into the sidewalk to the west of this parcel.
- 16. Adequate snow storage areas should be provided adjacent to the parking lot.
- 17. Proposed easements including utility easements should be shown.
- 18. Confirm if the Isolated Natural Resource Area is properly shown.
- 19. The INRA Non-Disturbance Area should be labeled as a "Non-Disturbance Area Easement". An easement document will be needed. Applicable notes describing the easement covenants, conditions, and restrictions should become part of the easement. The easement should include an access easement stating, "The City of Waukesha, or their designee are authorized access in these areas for purposes of inspecting the Non-Disturbance Easement area practices or enforcing the terms of the Easement." A note should be added stating, "The City of Waukesha, or their designee are authorized access in the areas of the Isolated Natural Resource Area designated on the Plat for purposes of inspecting the Isolated Natural Resource Area practices or enforcing the terms of the Isolated Natural Resource Area restrictions."
- 20. An access easement should be added to the Plat for the City of Waukesha or their designee to access each Non-Disturbance Easement Area for inspections. The easement note can read, "The City of Waukesha or their designee is authorized access to these areas for purposes of inspecting the Isolated Natural Resource Areas in the Non-Disturbance Area Easements or enforcing the terms of the Isolated Natural Resource Areas in the Non-Disturbance Area Easements."
- 21. The north end of Prairie Song Drive at Summit Drive has not been updated to the City standard cross section. The work should be included as part of this plan set. The proposed curb line on the Drawings should be revised to allow the extension of Prairie Song Drive as shown.
- 22. Chapter 23.06(5): A preliminary vertical street profile should be shown for the future portions of Prairie Song Drive to verify that the horizontal location of the proposed street will not contain slopes that exceed the City maximum slopes. A local street cannot exceed an 8% grade.
- 23. A preliminary site development layout for the lands to the south should be provided to confirm that the new location of the street alignment appears to be feasible.

- 24. Chapter 23.06(3)(d) and Chapter 23.06(4)(d): All dead end streets shall terminate with a circular cul-de-sac with a minimum diameter of 120 feet, unless the Commission approves or suggests a "T" or "Y" shaped paved space in place of the required turning circle. The current design shows two proposed dead end streets.
- 25. The lot owners to the east have voiced their concerns over flooding that occurs at the lot line of their property from storm water passing through this parcel proposed to be developed. The storm water plan should show information related to the flow rates, volumes, existing and proposed drainage patterns through the two proposed sites to be developed to review the impact of this development on the parcels to the east.
- 26. The street names in this area should be reviewed for approval. Confirm with City Staff.
- 27. Existing sanitary sewer main is shown. The existing pipe inverts and slopes should be shown at the manholes. Gravity sanitary sewer flow should be verified. Design drawings for the public sanitary sewer in Koenig Drive should be prepared in accordance with City requirements.
- 28. Chapter 23.06(3)(d) and Chapter 23.06(4)(d): All dead end streets shall terminate with a circular cul-de-sac with a minimum diameter of 120 feet, unless the Commission approves or suggests a "T" or "Y" shaped paved space in place of the required turning circle. The current design shows two proposed dead end streets.
- 29. The proposed right-of-way width of Prairie Song Drive is 60 feet. In accordance with Chapter 23.06(3)(c): The minimum right-of-way of collector streets is 70 feet. Confirm that the future extension of the proposed street design will adequately be contained with the 60 foot wide to connect with the adjoining side slopes.
- 30. Proposed storm water facilities are shown on the Drawing that include a wet forebay, infiltration basin, dry pond, and rain gardens.

 Depending upon the final design of the storm water facilities and grades, the site layout may need to change to accommodate the size and locations of the storm water facilities.
- 31. Locations of soil test pits should be shown.
- 32. The Non-Disturbance area within the Primary Environmental Corridor area should be labeled and protected with the appropriate boundary fencing during construction and cedar post fencing for permanent monumentation.
- 33. A note should be added: Repair limits in street will be determined in field at the time of permanent repair.
- 34. The concrete sidewalk at the apron and the apron should be 7 inch thick concrete sidewalk.
- 35. Show City details for:
 - a. Concrete Curb and Gutter.

- b. Sidewalk.
- c. Pavement Cross-Section.
- d. Curb Ramp the City follow WISDOT detail.
- e. Drive Approach.
 - 1. Use City driveway detail for driveway layout.
 - 2. Show spot grades for sidewalk every 25-Ft.
 - 3. Storm water facility easements will be needed.
 - 4. Public street specifications will need to be added.
 - 5. Proposed Public Road Profile with grades for sidewalk, curb and gutter, pavement centerline every 25-Ft
 - 6. Grades at Curb ramps at top and bottom of ramp.
 - 7. Cross Section every 25-Ft will need to be prepared.
- 36. Provide confirmation that the DOT is aware of the proposed intersection improvement. Provide copy of DOT approval.

Utility Plan Sheet

- 1. Specifications for infrastructure including materials and installation procedures for all work should be added to the Drawings including outlet structure material, bedding, backfill, sanitary sewer, frames and lids, sidewalk construction, etc. The City requires polypropylene chimney rings on City manhole construction. These specifications can be sent to the Engineer.
- 2. Show limits of public versus private sanitary sewer.
- 3. Confirm ultimate extension of public sanitary sewer to south with City Staff. Show sanitary stub to south.
- 4. At sanitary MH #1, elevation drop from the west invert to the north invert should be at least 0.25 feet because of the 90 degree change in direction.
- 5. It appears the sewer line labeled east should be west at sanitary MH #1
- 6. It appears the sewer line labeled northwest should be southwest at sanitary MH #3.
- 7. There does not appear to be a northwest connection as noted to sanitary MH #4.

Grading and Drainage Plan/Erosion Control Plan

- 1. Adequate snow storage should be provided. The cul-de-sac should be extended further south to allow more room for snow storage.
- 2. A construction sequence should be added.
- 3. Chapter 32.09(c)(9): Dewatering specifications should be added to the plan.

- 4. 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.
- 5. Chapter 32.09(d)(2)(xiv): Detailed construction notes for the dewatering plan should be included on the plan.
- 6. 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.
- 7. Chapter 32.09(d)(2)(xiv): Inspection requirements should be added to verify that critical elements of the plan are successfully accomplished such as protecting the wetland areas, marking and protecting trees in the Primary Environmental Corridor Areas from damage from the Contractors, installation of the rain gardens.
- 8. Chapter 32.09(d)(2)(xiv): The dates for the grading work should be added to the Drawing.
- 9. Chapter 32.09(d)(2)(C)(iii): Open channel design and stabilization data should be prepared to support the selected BMP(s) for stabilization.
- 10. Chapter 32.09(d)(2)(xiv): The dates for the grading work should be added to the Drawing.
- 11. Chapter 32.09(d)(2)(xv): Location of soil evaluations with surface elevations and unique references to supplemental soil evaluations report forms in accordance with section 32.11(c). A separate map should show estimated seasonal water table depths down to planned excavation depths with references to the proposed site plan.
 - a. Also confirm if bedrock exists in future street area.
 - a. A minimum 1-foot vertical separation between the seasonal high groundwater table elevation and the basement floor surface should be included in the design.
 - b. Two soil borings are needed in each proposed rain garden.
- 12. 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.
- 13. The erosion control/master grading plan should include a table listing the minimum basement elevation based on the existing water table for each unit. A note on the Condominium Plat should reference to this information.
- 14. The Non-Disturbance area within the Primary Environmental Corridor area should be labeled and protected with the appropriate boundary fencing.
- 15. The sidewalk should be rounded at the southwest corner of Summit and Koenig.

General Comments

- 1. Specifications for public sanitary sewer work should be added to Sheet.
- 2. Add City driveway detail. Indicate 7 inch thick concrete.
- 3. Add City standard curb and gutter detail.
- 4. Specifications for infrastructure including materials and installation procedures for all work should be added to the Drawings including outlet structure material, bedding, backfill, sanitary sewer, frames and lids, sidewalk construction, etc. The City requires polypropylene chimney rings on new construction. These specifications can be sent to the Engineer.
- 5. Chapter 32.10(e)(4)(c): A scaled cross section of the pond, soil tests, and outlet structure detail should be shown.
- 6. A landscape plan should be prepared. Proposed landscaping of the rain gardens should be included in the Plan.

Storm Water Management 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. Confirm that lots 91, 92 and 99 aren't also tributary to this site.
- 3. The appropriate tailwater elevations should be used.
- 4. Chapter 32.10(d)(6)(G): Provide storm sewer design computations. Confirm sizing of existing storm sewer system.
- 5. Confirm that existing drainage patterns are being maintained.
- 6. Cost estimates for the installation of proposed storm water BMPs shall be provided.
- 7. Chapter 32.10(d)(2): For new land development, 80% reduction is total suspended solids should be provided.
- 8. Verify the ultimate drainage discharge path through the site.

Storm Water Maintenance Agreement

- 1. Chapter 32.12: The storm water agreement should comply with said Section. The City's storm water facility easement agreement template can be sent to the Engineer.
- 2. Submit maintenance plan for for catch basins and environmental catch basins.
- 3. Chapter 32.10(e)(12)(i): Cost estimates for the installation of the proposed BMPs.
- 4. Chapter 32.12(b): For subdivisions, all storm water BMPs shall be located on outlots. For all privately owned outlots, ownership shall be

by proportional undividable interest for all properties that are within the control of the applicant and drain to the BMP. However, the applicant may combine ownership of more than one BMP within the site. Ownership of storm water facilities shall be the same as those assigned maintenance responsibilities.

- a. Preparation of the storm water maintenance agreement will include describing the ownership boundaries of the storm water easement facilities.
- 5. Chapter 32.12(b)(5): Authorization for vehicle access, including a minimum 15-foot wide access easement dedicated to the local municipality and connecting to a public road right-of-way to allow for future BMP maintenance work.

Landscape Plan

1. No comments.

PC16 – 0013 Fox Lake Circle Condominiums, Fox Lake Circle – 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).
 - b. Permits and approvals
 - i. DNR NOI, if over 1 acre of disturbance
 - ii. City Storm Water Permit
 - 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 ¼ 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.