

DEPARTMENT OF PUBLIC WORKS



Fred Abadi, PhD, PE, Director fabadi@ci.waukesha.wi.us

ENGINEERING COMMENTS
FOR
PLAN COMMISSION
AGENDA
Wednesday

July 23, 2014

Time: 6:30 p.m.

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

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

ID#14 0708 Minutes for the Meeting of July 9, 2014.

- IV. Business Items
 - A. PC14 0055 Timber View Estates Preliminary Plat: 37 single family lots.

Timber View Estates

An Updated resubmittal has not been received for all submittal items.

General

- 1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds, Fees or Agreements required by the Plan Commission and Council or Chapter 32.08(c).
 - b. Erosion Control Plan per Waukesha Ordinance Chapter 32.09(c).
 - c. Permits needed for the project will include:
 - i. City of Waukesha Storm Water/Erosion Control permit.
 - ii. City Construction Permit. (pavement repairs)
 - iii. A copy of the approved Wisconsin Department of Natural Resources NR 216 Notice of Intent permit should be submitted to the City for filing when received.

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

- d. As-built Drawings should be submitted for the utilities listed below. The requirements for the as-builts were previously sent to the Land Surveyor and Engineer.
 - i. Modified infrastructure including storm sewer and sanitary sewer
- e. Developer's Agreement. This Agreement will need to be updated by City Staff and signed prior to the City signing the Plat.
- f. 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.

Master Grading Plan Sheet C1 and C2

- 1. No erosion control plan was resubmitted. It is unclear if the Master Grading Plan is also intended to be the Erosion Control Plan.
- 2. The Erosion Control Plan should include all items as listed in City of Waukesha Ordinance Chapter 32.09(c).
- 3. Chapter 32.09(c)(1): The haul route for trucking is proposed very near the Isolated Natural Resource Area. Once the INRA is added to the Drawings, verify that the haul route is located outside of the INRA.
- 4. Chapter 32.09(c)(3): Note #2 on the plan states, "Install inlet protection in all existing inlets down slope of the construction site and silt fence per plan (Protect non-disturbance area)." The locations for all proposed inlet protection should be shown on the erosion control plan.
- 5. Chapter 32.09(c)(4): Locations of soil stockpiles should be shown, if applicable. Any soil stockpile that remains on the site for more than 30 days should be stabilized.
- 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. Trees within the INRA should be shown if greater than 6 inches.
- 7. Chapter 32.09(d)(2)(vii): The plan proposes the trenching of silt fence along the boundary of the Isolated Natural Resource Areas. This proposed erosion control method seems to cause more damage than is needed along the areas of environmental significance. Instead of silt fence, staked waddles or erosion control rolls would also accomplish the sediment barrier and reduce the trenching near the INRA areas.
- 8. Chapter 32.09(d)(2)(vii): The plan proposes the trenching of silt fence across the tracking pad entrance. The line work should be revised.
- 9. Chapter 32.09(d)(2)(ix): Temporary soil stockpiles indicating setbacks from environmental corridors and the proposed erosion methods.
- 10. Chapter 32.09(d)(2)(xi): Final stabilization measures for the open channel along the back of lots 15 to 18. The swale on Lot 15 appears to direct runoff from the back of Lots 15 to 18 towards the house location on Lot 15. Please verify.
- 11. Chapter 32.09(d)(2)(xii): The proposed utility easements should not be in conflict with the drainage swale along the back of Lots 15 to 18.

- 12. 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 Non-Disturbance easement areas, marking and protecting trees in the Isolated Natural Resource Areas from damage from the Contractors.
- 13. Chapter 32.09(d)(2)(xiv): The dates for the grading work should be added to the Drawing.
 - a. The email dated April 14th from Steve DeCleene to Dave Buechl includes times for completing the proposed mass grading work. The area to the north (lots 25 to 29) will be graded within a few months of filling the Plat. The remaining lots (15 to 18) are expected to be graded the following year.
 - b. As discussed previously, building permits cannot be issued if the mass grading has not been completed in the applicable areas.
- 14. 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. A minimum 1-foot vertical separation between the seasonal high groundwater table elevation and the basement floor surface should be included in the design.
- 15. 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.
- 16. A note on the Plat states, "Basement Restriction-Groundwater. Although all lots in the Subdivision have been reviewed and approved for development with single-family residential use in accordance with Section 236 Wisconsin Statutes, some lots contain soil conditions that, due to the possible presence of groundwater near the surface, may require additional soil engineering and foundation design with regard to basement construction. It is recommended that either a licensed professional engineer or other soils expert design a basement and foundation that will be suitable to withstand the various problems associated with saturated soil conditions on basement walls or floors or that other special measures be taken. Soil conditions should be subject to each owner's special investigation prior to construction and no specific representation is made herein."
 - 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. The erosion control/master grading plan should include a table listing the minimum basement elevation based on the existing water table for each lot. A note on the Final Plat should reference to this information.
- 17. Clear cutting of trees in the areas of the Isolated Natural Resource Area is not allowed. The landscape plan should include provisions for replanting of new trees to replace trees to be cut as part of the mass grading.
- 18. An upfront construction phasing note should be added to the Plan to mark the INRA limits adjoining grading areas. Sample wording could include,"Field mark limits of Isolated Natural Resource area prior to construction that are proposed to not be disturbed adjacent to proposed mass grading areas."
- 19. Construction Phasing note #6 states, "Manufacturer to provide wall specifications and detail." The wall cross-section, design material specifications, base design, drain pipes, and installation specifications should be included on this Plan.

- 20. General construction note specification note #4 states, "All activities on the site shall be conducted in a logical sequence." The Design Engineer should state the sequence for the work on the Plan.
- 21. Chapter 23.06(4)(d): The pavement of a turning circle at the end of a dead-end street shall have a minimum outside diameter of 90'. Mark Elena stated the diameter is 88 feet which does not meet the minimum diameter of 90 feet.
 - a. The cul-de-sac radius of Marie Circle was supposed to have been increased from 44 feet when constructed as a private road to a 45 foot radius when reconstructed to become a public cul-de-sac and meet City standards as part of construction drawings prepared by Ellena Engineering Consultants, LLC.

Storm Water Management Plan Addendum

- 1. In order to move forward with this development, the City stated that an addendum to the original storm water management plan be prepared by the Owner/Developer stating the amount of impervious area that was decreased as part of the site changes. The assumption is that if the area of impervious area has decreased with the site changes, then the storm water management facilities would not be receiving higher volumes and flow of runoff.
- 2. The amount reduced impervious area was calculated by Mark Ellena to be 9,193 square feet on the 1st submittal dated March 18, 2014 and then was revised to 2,733 square feet on the 2nd submittal dated April 14, 2014. The reduced impervious area has now been revised to 550 square feet on the 3rd submittal letter dated May 12, 2014 and Exhibit A dated March 20, 2014.

Final Plat

- 1. An updated Final Plat has not been received.
- 2. Chapter 23.05(11): Verify if deed restrictions will be required as part of approval of the Plat.
- 3. Chapter 23.06(3)(g) Subdivision and Platting: Easements across centered on rear or side lot lines should be provided for utilities where necessary and shall be at least 10' wide. These easements shall permit the utilities to extend their services within this area. Please coordinate with the applicable utilities and add the easements as requested by said utility companies to the Plat. Drainage easements should not overlap utility easements to the maximum extent practicable. If a crossing is needed, drainage easements and utility easements should cross perpendicular to each other.
 - a. Utility easements should be added to the Plat. The rights, conditions, and covenants for the Easements should also be added to the Plat.
- 4. Show the Isolated Natural Resource Areas (INRA) on the Plat and the source of the information.
- 5. Any references to the Timber view Estates Home Owners Association should be supplemented with the specific Condominium Units Numbers and Lot numbers. In case the Homeowner Association would dissolve in the future, the unit and lot owners would continue to be responsible for ownership and maintenance of the areas described in the applicable notes.

- 6. The storm water facilities serving the lots in this Plat are not located within the boundary of this Plat. A general note should be added to the Plat listing the ownership and maintenance responsibilities of the lot owners in the Plat and that a more detailed Storm Water Facility Maintenance Agreement describing the rights, covenants, and conditions is included in a separately recorded Storm Water Facility Maintenance Agreement.
- 7. Sample wording could include, "The titleholders of lots 1 through 37 of Timber View Estates and the Condominium Units _ to _ of ___ shall each hold a 1/_ undivided and nontransferable interest in Outlot 1, where the storm water management practices are located. There are one or more separate documents recorded on the property title through the Waukesha County Register of Deeds entitled, "Storm Water Management Practice Maintenance Agreement" ("Maintenance Agreement") that apply to Outlot 1. The maintenance agreement subjects this subdivision plat, and all lot owners therein, to covenants, conditions, and restrictions necessary to ensure the long-term maintenance of the storm water management practice. The agreement also outlines a process by which the City of Waukesha may levy and collect special assessments or charges for any services the community might provide relating to enforcement of the Maintenance Agreement."
- 8. 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.
 - b. Preparation of the storm water maintenance agreement will include describing the ownership boundaries of the storm water easement facilities.
 - c. Options may include expanding the boundaries of this Plat, preparing another Plat, or preparing a Certified Survey Map (CSM) to subdivide the storm water facilities into Outlots that can be assigned maintenance and ownership responsibilities as part of the Timberview Estates Final Plat.
- 9. The Non-Disturbance Area should be labeled as a "Non-Disturbance Area Easement" both on the Lot areas on Sheet 1 and the Easement and INRA notes on Sheet 2. Applicable notes describing the easement covenants, conditions, and restrictions should be added to the Preservation restrictions shown on Sheet 2 of the Plat. A note should be added 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 Areas 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."
- 10. Dimensions to the Non-Disturbance Easement from the lot lines should be added to the Plat so the area can be retraced in the field at a later date.

- 11. 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 are 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."
- 12. The Non-Disturbance Area Easement on Lot 11 should be added to the Plat.
- 13. Chapter 22.53(1): In all districts, no structures, fences, or vegetation should 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. No driveways shall be permitted within the vision corner.
- 14. A note on the Plat states, "Basement Restriction-Groundwater. Although all lots in the Subdivision have been reviewed and approved for development with single-family residential use in accordance with Section 236 Wisconsin Statutes, some lots contain soil conditions that, due to the possible presence of groundwater near the surface, may require additional soil engineering and foundation design with regard to basement construction. It is recommended that either a licensed professional engineer or other soils expert design a basement and foundation that will be suitable to withstand the various problems associated with saturated soil conditions on basement walls or floors or that other special measures be taken. Soil conditions should be subject to each owner's special investigation prior to construction and no specific representation is made herein."
 - a. The note should be changed to: "Basement Restriction-Groundwater. Basement floor surface elevations shall not be lower than the proposed basement floor elevations shown in the table below due to potential for seasonal high water table. Minimum basement floor elevation changes may only be authorized upon further analysis compliant with the City of Waukesha Storm Water Ordinance and such analysis must be approved by the City of Waukesha Engineering Department."
- 15. 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. A minimum 1-foot vertical separation between the seasonal high groundwater table elevation and the basement floor surface should be included in the design.
 - a. The Final Plat should include a table listing the minimum basement elevation based on the existing water table.
- 16. If clarify is compromised in adding information to the Plat, an additional sheet can be added to the Plat.
- 17. The City Clerk's name should be updated on the City of Waukesha Certificate.
- 18. The City Clerk's name should be updated on the City of Waukesha Treasurer Certificate.
- 19. Verify if the water main easements been released.

Storm Water Facility Maintenance Agreement

- 1. Exhibit G needed to terminate storm water permit. Add to Page 1 of 17 and overall agreement.
- 2. Exhibit "F" should be stamped and signed by Professional Engineer.
- 3. Exhibit "E" which is the as-built survey is not legible. The individual pond as-built surveys should individually be shown on additional sheets.
- 4. Document any design or construction changes from the originally approved construction drawings in exhibit D or E that the Engineer is requesting approval for. Elevations differences between existing and proposed greater than 0.5 feet should be noted.

Tentative Punch list

- 1. The areas of asphalt pavement removals and replacements will be determined when the Contractor doing the asphalt work is issued a Construction Permit. This permit can be obtained at the City Hall Annex Engineering Department. Please contact Al Shook.
- B. PC14 0085 Schoolcare Learning Center, 101 W. Sunset Conditional Use Permit
 - 1. No comments.
- C. PC14 0086 Waukesha State Bank, 151 E. St. Paul Avenue 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, Fees or Agreements required by the Plan Commission and Council or Chapter 32.08(c).
 - b. Landscape Plan
 - 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.** PC14 0087 Rolling Oaks II, Addition No. 1 Extraterritorial Plat Review
 - 1. No comments.
- E. PC14 0088 Associated Bank, 2815 N. Grandview Blvd. Preliminary 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. 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.

- 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. The Site Plan should be prepared by a Professional Engineer licensed in Wisconsin.
- 3. Permits will be needed for the project. Provide copies of approved project permits to the City for filing. Permits that are needed include but are not limited to:
 - a. City of Waukesha Storm Water Permit (for erosion control)

Landscape Plan, Sheet L100

1. No comments.

Site Plan, Sheet C100

- 1. The following items should be added to the Drawings: pavement sawcut lines to identify disturbance limits, parking lot setbacks.
- 2. Chapter 32.10(c)(21): The existing easements are shown. Submit digital copies of all easement documents for City review and filing.
 - a. Submit the access road maintenance agreement to the City for review and filing.
- 3. 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.
- 4. Vehicle turning templates should be run through the site plan driveway areas to verify a fire truck, garbage trucks and delivery trucks can safely drive through the site.

Grading and Erosion Control Plan, Sheet C200

- 1. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Site grading should ensure positive flows away from all buildings and minimize adverse impacts on adjacent properties.
 - a. Verify how parking lot will drain at southwest and northwest corners. Proper drainage measures should be provided. Verify if ditch armoring is needed at both locations so erosion is not being caused on the County right-of-way ditch area.
- 2. 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 32.11c. A separate map should show estimated seasonal water table depths down to planned excavation depths with references to the proposed site plan.
 - a. Chapter 32.10(d)(6)(E) as referenced by 32.09(c)(17): 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.

- 3. Chapter 32.09(c)(4): Locations of soil stockpiles should be shown, if applicable. Any soil stockpile that remains on the site for more than 30 days should be stabilized.
- 4. A construction sequence should be shown on the Erosion Control Plan.
- 5. Dewatering notes should be added to the Plan.
- 6. Chapter 32.09(d)(2)(xiv): Inspection requirements should be added to verify that critical elements of the plan are successfully accomplished such as verifying 3 foot thick clay liner is installed, etc.

Utility Plan, Sheet C300

1. Additional design specifications should be added for areas of work within the City right-of-way or City easements including connecting to the sanitary sewer lateral, etc.

Plat of Survey

- 1. No comments.
- **F. PC14 0089** Expanded Shoppes of Fox River, Chapman & Spring City Drive Final Site Plan & Architectural PUD Review
 - 1. The following items should be submitted:
 - a. Erosion Control Plan per Chapter 32.09(c).
 - b. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
 - c. Storm Sewer Easement Document. A storm sewer easement agreement will need to be prepared, submitted, reviewed and approved for the public storm sewer. The existing easements will need to be released.
 - d. Permits needed for the project will include:
 - i. Storm Water/Erosion Control permit.
 - e. 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.
 - 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.

Storm Water Management Plan

- A Storm water facility maintenance agreement per Section Chapter 32.12 should be submitted for review and approval for all ponds within the development. At our previous meeting, the Developer was unsure if the storm water maintenance agreements from previously constructed facilities in previous phases had been recorded.
- 2. The addendums, including Exhibits D to G, for all the storm water facility maintenance agreements should also be prepared, submitted for approval and recorded.

- 3. Since the East and West sites both drain to the same northerly pond and then to the Fox River, the model for the development should include both the East and West sides of the site as a combined model. The combined model will allow the site to be analyzed as a whole and the effects of the connected storm water facilities can reviewed. The correct tailwater elevations should be utilized in the model and listed in the storm water plan.
- 4. Verify the 100-year flood plain elevation of the Fox River at all of the discharge locations to the river and list in the storm water plan.
- 5. The design includes an overland relief route that breaks off from the storm sewer route in the center of the site. The overland flow path should be included in the drainage easement. If the storm sewer would become plugged at some point or the storm exceeds the 100-year event, the runoff will flow along this overland route.
- 6. An illustration showing the combination of the hydrographs and reservoirs should be added to the Plan.

Demolition Plan C0.1

1. No comments.

Site Plan C1.0

- 1. Proposed public sidewalk is shown along Chapman Drive. The sidewalk should be extended along the entire east lot line to the north lot line.
- 2. Verify the fire trucks and delivery trucks can safely pass through the site using turning templates.

Site Detail West C1.1

1. No comments.

Site Detail East C1.2

1. No comments.

Site Detail North C1.3

1. No comments.

Grading Plan Overall C2.0

- 1. A high berm is shown along the north lot line. Please confirm the intent of the berm to block the view to the north.
- 2. 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 32.11c. A separate map should show estimated seasonal water table depths down to planned excavation depths with references to the proposed site plan.

- 3. Chapter 32.10(d)(6)(E) as referenced by 32.09(c)(17): 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. Chapter 32.09(c)(4): Locations of soil stockpiles should be shown, if applicable. Any soil stockpile that remains on the site for more than 30 days should be stabilized.
- 5. A construction sequence should be shown on the Erosion Control Plan.
- 6. Dewatering notes should be added to the Plan.
- 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 verifying 2 foot thick clay liner is installed, etc.
- 8. Chapter 32.10(e)(12)(I): Cost estimates for the installation of the proposed BMP's.
- 9. Chapter 32.10(e)(4)(c): A cross section of the pond, and outlet structure detail should be shown.
- 10. Specifications for the proposed work should be added to the Drawing submittal.

Grading and Erosion Control Plan West C2.1

1. No comments.

Grading and Erosion Control Plan West C2.2

1. No comments.

Grading and Erosion Control Plan North C2.3

- 1. The pond should include an emergency overflow weir.
- 2. Specifications for the clay should be added.
- 3. The pond design should comply with DNR Technical Standard 1002 for wet ponds.
- 4. Chapter 32.10(e)(7): Locations, dimensions and surfacing material of proposed access lanes and delineation of easements should be shown to allow future maintenance of all storm water BMPs. The minimum width for an access easement is 15 feet. An adequate designed structural ramp at 6:1 slope is listed in the Wisconsin DNR Technical Standards as the recommended design. The access location should be labeled.

Utility Plan C3.0 (Overall)

- 1. Chapter 32.10(c)(21): Locations of existing and proposed easements or other known site restrictions should be shown.
 - a. If existing easements are located on the property, then the easements should be shown on the Drawings. Please verify if a title report or ALTA Survey was obtained for the property or if the presence of existing easements has been reviewed.
 - b. A portion of the existing drainage easement is proposed to be released. The document to release the easement and create the new easement should be prepared.
- 2. Chapter 32.10(d)(6)(B) 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. Private drainage easements will need to be added around the storm water pond areas. The City has a storm water maintenance agreement template that will be sent to the design Engineer.
- b. A public storm sewer easement should be prepared around the two offsite by-pass pipes leading up to the pond.+
- 3. CSM 10509 shows a 12' and 15' private utility easements that are not shown on this Plan. The proposed building is in the location of the existing easement. Please verify the existence of the easements.
- 4. Turning templates should be run through the proposed site layout driving lanes to verify that the City's fire trucks and delivery trucks can safely pass through the proposed site.
- 5. The existing distribution easements are shown under the proposed building. The easements should be released and utilities relocated.
- 6. Several public sanitary sewer easements were conveyed from Opus Corporation to the City of Waukesha on CSM No. 10509. The easements are shown on the CSM. Ramco Fox River LLC now owns the property. The City has changed its policy and no longer desires to own or maintain sanitary sewer in easements outside of the public right-of-ways to the maximum extent practicable. The sanitary sewer easements should be released. A permit application and approval from the State of Wisconsin Department of Safety and Professional Services prior to the easements being released.
- 7. Specifications for the proposed work should be added to the Drawings. The City can send their latest specifications for storm sewer projects to the Engineer.

Utility Detail C3.1

1 No comments.

Utility Detail C3.2

- 1. The off-site drainage by-pass connection points only list pipes to the north of the manholes. The west manhole should list the south pipe connection. The east manhole should show and list the east connection pipe, if applicable. Verify pipe connections to manholes at initial bypass connection.
- 2. The storm sewer manhole diameter sizes should be listed.

Utility Detail C3.3

1. The storm sewer manhole diameter sizes should be listed.

Water main Plans C3.4 & C3.5

1. A City Construction Permit is needed to open cut in Chapman Drive.

Construction Notes and Details C4.0 & C4.1

1. No comments.

Shoppes at Fox River-CSM 0.29814 Acre

- 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).
- 2. Chapter 23.06(7)(c): Every lot shall have a minimum frontage of at least 40' on a public street. Proposed Lot 1 does not abut a public street.
- 3. Confirm if the 30' public utility easement is existing or proposed.
 - a. If existing, the document number or source of the easement should be listed. If proposed, a separate document will be needed to convey the rights and conditions of the easement.
- 4. Confirm if the 15' public distribution easement is existing or proposed.
 - a. If existing, the document number or source of the easement should be listed. If proposed, a separate document will be needed to convey the rights and conditions of the easement.
- 5. Wisconsin State Statute Chapter 236.20(2)(f) as referenced by 236.34(1)(c): The exact width of all easements should be shown on the CSM. Existing easements on the property should be shown and labeled on the CSM.
 - a. CSM 10509 shows a 12' and 15' private utility easements that are not shown on this CSM. Please verify the existence of the easements.
- 6. Several public sanitary sewer easements were conveyed from Opus Corporation to the City of Waukesha on CSM No. 10509. The easements are shown on the CSM. Ramco Fox River LLC now owns the property. The City has changed its policy and no longer desires to own or maintain sanitary sewer in easements outside of the public right-of-ways unless the sewer is an interceptor sewer.
 - a. A permit application and approval from the State of Wisconsin Department of Safety and Buildings should be obtained prior to the easements being released. The permit application should be prepared by the Applicant and submitted to the City for review and approval prior to the Applicant sending the application to the State.
 - b. The sanitary sewer easements should be released. A sanitary sewer easement release document should be prepared and submitted to the City for review and approval.
- 7. Provide recorded copy of CSM to City Engineering Division after the CSM is recorded.

Shoppes at Fox River-CSM 9.86 Acre lot

- 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).
- 2. Chapter 23.06(7)(f): Side lot lines should be approximately at right angles or radial to the right-of-way line of the street on which the lot faces.
- 3. Confirm if the 30' public utility easement is existing or proposed.
 - a. If existing, the document number or source of the easement should be listed. If proposed, a separate document will be needed to convey the rights and conditions of the easement.
- 4. Existing railroad tracks are shown on the CSM just south of the north line. Confirm if the tracks are location in an existing right-of-way or easement. If no easement exists, label who owns the tracks and if an easement should be conveyed to the railroad.

- 5. A public storm water drainage easement is shown on the CSM. We understand that the easement is intended to be released and relocated by conveying a new drainage and storm sewer easement. The documents for the release and new easement should be prepared, and submitted for review to the City prior to approval of this CSM.
- 6. Confirm if the 15' public distribution easement is existing or proposed.
 - a. If existing, the document number or source of the easement should be listed. If proposed, a separate document will be needed to convey the rights and conditions of the easement.
- 7. A 50 foot wide private road is shown along the south lot line. The document creating the private road should be labeled on the CSM.
- 8. CSM 10925 lists a public utility easement granted to the City of Waukesha that is not shown on this CSM along the south lot line. The easement should be shown. The width is not listed on CSM 10925 and should be determined.
- 9. Several public sanitary sewer easements were conveyed from Opus Corporation to the City of Waukesha on CSM No. 10509. The easements are shown on the CSM. Ramco Fox River LLC now owns the property. The City has changed its policy and no longer desires to own or maintain sanitary sewer in easements outside of the public right-of-ways unless the sewer is an interceptor sewer. The sanitary sewer easements should be released. A permit application and approval from the State of Wisconsin Department of Safety and Buildings prior to the easements being released.
- 10. A new storm water maintenance facility easement agreement will be need to be prepared for the pond on the City's latest template.
- 11. The addendums to the agreement will also need to be prepared, and submitted for review.
- 12. We understand that Outlot 1 of the 0.29814 Outlot CSM will be attached to the Lot 1 created by this CSM. Please confirm the timing for this process or if this CSM should be revised.
- 13. Provide recorded copy of CSM to City Engineering Division after the CSM is recorded.

Traffic Study Comments

The City of Waukesha has reviewed and generally agrees with the conclusions of the Traffic Impact Study done by RA Smith for the Shoppes at Fox River – Lot D development relative to the existing transportation improvements on Sunset Drive. We concur that no additional improvements are needed along Sunset Drive from Fox River Parkway to Chapman Drive or on Chapman Drive adjacent to the development.

However, there are some safety concerns that the City has identified related to some locations on Sunset Drive, adjacent to the site, and will require Ramco-Gershenson to address these concerns.

U-Turn Median Opening on Sunset near CVS

The first median opening on Sunset Drive, west of Chapman Drive, is a U-turn opening to allow local drivers to U-Turn in the median to go westbound. However, the City observed many drivers using the U-Turn make an immediate right turn to what we refer to as the CVS Driveway.

With the Lot D development addition, the City is concerned that more drivers will be U-Turning and then turning right into the CVS driveway when the new stores are open in Lot D. As the development is completed, this traffic movement at the U-Turn may become a safety issue.

At this time, it is uncertain if the U-Turn to the CVS driveway will become a larger safety issue and, therefore, the City will not require the developer to make any changes to this location. As development progresses and nears completion, the City will monitor the U-Turn movements at this location periodically and assess if it is becoming an issue.

Westbound Sunset Lane Line and Joint Line Issue

The City has identified a safety issue related to the traffic lane line and concrete pavement joint line on westbound Sunset between Sentry Drive & Chapman Drive. Westbound drivers often veer off the lane line because they are following the concrete joint line. In this section of westbound Sunset, the lane lines are not coincident with the joint lines.

The City had asked the traffic study to investigate this issue. Although the traffic study did acknowledge this issue and proposed a solution by having a different wet-reflective tape installed, the City feels the problem with vehicle close brushes and sideswipes will not properly be addressed by new tape. The problem is more prevalent during the day when drivers follow the roadway cues and "follow" the joint lines inadvertently into the adjacent lanes.

It is estimated that 30% of new (increased) traffic generated to the Shoppes at Fox River Lot D expansion will come from the east and will travel down these lanes and the lane veering problem will increase. It is estimated that approximately 1000 more vehicles per day will travel westbound on Sunset Drive to access the development

The City will require Ramco-Gershenson to reconstruct approximately a 400 foot section of westbound Sunset Drive to correct the joint line / lane line issue. The work will consist of installing new concrete pavement that will have joint lines that are coincident and follow the lanes lines.

Other Improvements Recommended in the TIA

The TIA recommends some changes to traffic control at the intersection of Oakdale & Spring City and at Spring City & CVS Driveway. Both of these intersections are privately owned by the Shoppes at Fox River development.

The recommended improvements are to remove the southbound stop sign at Oakwood Drive with Spring City. This will create a more traditional 2 way stop condition and reduce driver confusion. It should be noted that this work will require the developer to remove the southbound stop sign, revise the east / westbound supplemental signs to say "Cross Traffic Does Not Stop" and to remove the white painted stop bar for the southbound direction. The City agrees with this change.

Even though it was not specifically recommended in the traffic study, it was mentioned to consider revising the traffic control at the CVS driveway with Spring City drive to be an All-Way stop control. The City endorses this change and will require the developer to convert the intersection to an All-Way stop. This change will also require the installation of white painted stop bars.

End of comments.