

#### DEPARTMENT OF PUBLIC WORKS



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

# ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday September 24, 2014

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#14-1086** Minutes for the Meeting of September 10, 2014.

- V. Business Items
  - **ID#14-1096** Presentation of the Traffic Study Guideline by the City of Waukesha Public Works Department.
  - PC14 -0115 Boscos Social Club, 260 W. Main Street New Brick Fascia

#### 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.
  - b. 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.

### 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 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.

#### PC14 -0116 Oberlin Filter - 827 Silvernail Road - Certified Survey Map

#### **CSM**

- 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.
- 2. The storm water management plan, construction drawings, storm water facility maintenance agreement, easements, Developer's Agreement, and Bonds should be reviewed and approved prior to approval of the Certified Survey Map (CSM). If the location of any lot lines or easement lines need to be changed as a result of the approved construction drawings, the CSM should be updated to reflect the needed changes.
- 3. City Ordinance 23.06(3)(a): <u>Highways</u>, <u>Primary Thoroughfares</u>, and <u>Parkways</u>. Specified in the official Thoroughfare Plan should not be less than 80 feet wide in any case.
  - a. The CSM boundary should extend to the center line of Silvernail Road to formally dedicate the southerly 40 feet of Silvernail Road.
  - b. The right-of-way line on the north side of Silvernail Road should be shown to confirm that the minimum right-of-way width exists.
- 4. 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.
- 5. Wisconsin State Statute 236.34(1): A mortgagee's certificate should be included if the property is mortgaged.
- 6. 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 CSM should be stamped by a Professional Land Surveyor.

- 7. Proposed drainage easements are shown on Page 2 of the CSM.
  - a. The easements should be included in the storm water maintenance agreement document.
  - b. The location and size of the easements may need to be revised upon final review of the grading plan and storm water management plan.
- 8. A proposed storm sewer easement is shown on Page 3.
  - a. The existing pipe conveying runoff from the Waukesha County Airport site is being relocated on this property. The document creating the relocated easement for the storm sewer should be submitted to Waukesha County for review and approval prior to City approval of the CSM.
  - b. Easement notes are shown conveying the easement to the City of Waukesha. The storm sewer easement should instead be conveyed to Waukesha County.
- 9. CSM 6482 should be shown along the west lot line.

## PC14 -0118 Moreland Plaza, 811-831 W. Moreland Blvd. and 1120-1122 Delafield Street - Final Site Plan & Architectural Review (Canopy)

#### 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.
  - b. 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.

#### **PC14 -0055** Timber View Estates Preliminary Plat: 37 single family lots.

#### 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).
    - i. The City will prepare a fee, and letter of credit summary.
  - b. 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.
- c. Developer's Agreement.
  - i. This Agreement will need to be updated by City Staff and signed prior to the City signing the Plat.
- d. 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.

#### Erosion Control Plan Sheet E1

- 1. Show the INRA limits on the Drawing.
- 2. In accordance with Chapter 32.09(d)(2)(iv), the tree survey has been received that was prepared by RA Smith. The survey includes the woodland areas to be cleared as part of the initial mass grading areas along the proposed retaining wall. The remaining tree surveys will be completed on a lot by lot basis. All woodland areas, those proposed to be lost or transplanted during construction and acres or numbers of each are to be shown. For woodlands proposed to be lost, individual trees larger than eight (8) inches in diameter that are located within twenty (20) feet of proposed grading boundaries are also to be shown. Trees within the INRA should be shown if greater than 6 inches.
  - a. The response letter from the Developer states that all trees in front of the retaining wall are in or within 20' of the building envelope will not survive home construction.
  - b. The INRA replanting plan should include the lots to be graded within the INRA on the grading plan and follow the required notes to be shown on the Final Plat for building within the INRA on the Final Plat. The number, type, and diameter size of trees to be replanted should be shown on the INRA Replanting Plan.
- 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.
  - a. Lot 1 has a proposed basement elevation of greater than or equal to 92.8 on the ground water table report. Lot 1 has a proposed basement exposure of 89.5. The proposed basement floor elevation on the exhibit report does not match the proposed exposure elevation shown on the plan. The grading plan should be updated for lots where this discrepancy occurs.
- 4. City Staff previously supplied a basement restriction groundwater note as listed as follows, "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." This note should be replaced with the following note:

- a. "Basement Restriction-Groundwater. Basement floor surface elevations shall not be lower than the proposed basement floor elevations shown in the table shown either on the Plat or on the Master Grading Plan and Erosion Control Plan due to the potential for the seasonal high water table. Minimum basement floor elevation changes may only be authorized upon further analysis compliant with the City of Waukesha Storm Water Management Ordinance and such analysis must be approved by the City of Waukesha Engineering Department.
- b. After further discussion with Community Development Department, a chart listing the Lot #, Elevation of Seasonal High Water Table, and Proposed Basement Floor Elevation should be shown on the Final Plat.
- 5. Construction Phasing note #5 states, "Wall specifications provided by Owner's supplier." The wall cross-section, design material specifications, base design, drain pipes, and installation specifications should be included on the Master Grading Plan or additional detail sheet.

#### Master Grading Plan Sheet C1 and C2

- 1. Show the INRA limits on the Drawing.
- 2. Chapter 23.06(4)(d): The pavement of a turning circle at the end of a deadend 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.
- The wall cross-section, design material specifications, base design, drain pipes, and installation specifications should be included on the Master Grading Plan or additional detail sheet.

#### 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 1<sup>st</sup> submittal dated March 18, 2014 and then was revised to 2,733 square feet on the 2<sup>nd</sup> submittal dated April 14, 2014. The reduced impervious area has now been revised to 550 square feet on the 3<sup>rd</sup> submittal letter dated May 12, 2014 and Exhibit A dated March 20, 2014.
- 3. Based on the above information, the current development plan addendum documents that the amount of impervious area on site was reduced as compared to the original development plan.

## As-built Drawings for modified infrastructure including storm sewer and sanitary sewer

- 1. The requirements for the as-builts were previously sent to the Land Surveyor and Engineer.
- 2. Confirm is new sanitary sewer main was installed and the limits.
- 3. If new sanitary sewer main was installed, the manhole information and pipe information connecting the manholes should be listed, etc.

#### Final Plat

- 1. Show the Isolated Natural Resource Areas (INRA) on the Plat and the source of the information.
- 2. The following notes were included on the previous submittal of the Plat and were removed as part of the latest submittal. These notes should be put on the Plat in the INRA notes:
  - a. 1. AS USED HEREIN, (A) THE ISOLATED NATURAL RESOURCE AREA OR INRA SHALL CONSIST OF LOTS 1 THROUGH 11; LOTS 14 THROUGH 18, AND LOTS 30 AND 31; AND (B) THE NON-DISTURBANCE AREA SHALL CONSIST OF THE AREAS LABELED ON THE PLAT AS THE NON-DISTURBANCE AREAS.
  - b. 2. THE REMOVAL OF TREES GREATER THAN 6 "DIAMETER IN THE INRA IS PROHIBITED, EXCEPT IN CONNECTION WITH THE CONSTRUCTION OF A RESIDENCE IN A DESIGNATED BUILDING ENVELOPE (SETBACK AREA AS SHOWN HEREON) AND AS PRE-APPROVED BY THE CITY OF WAUKESHA. PRIOR TO CONSTRUCTION OF A RESIDENCE IN THE INRA, AN INDIVIDUAL LOT GRADING PLAN SHALL BE SUBMITTED TO

THE CITY OF WAUKESHA ENGINEERING DEPARTMENT, WHICH PLAN SHALL BE PREPARED BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL ENGINEER, AND WHICH SHALL INDICATE THE FIELD LOCATION OF ALL TREES GREATER THAN 6" DIAMETER EXISTING IN THE BUILDABLE AREA OF THE RESPECTIVE LOT. THE INDIVIDUAL LOT GRADING PLAN SHALL INDICATE THE PROPOSED LOCATION OF THE HOME AND A PROPOSED GRADING PLAN THAT MINIMIZES THE REMOVAL OF TREES GREATER THAN 6 IN DIAMETER TO THE GREATEST EXTENT POSSIBLE USING BUILDING LANDSCAPE WALLS LESS THAN 5 FEET IN HEIGHT AND BUILDING EXPOSURES AS REVIEWED AND APPROVED BY THE CITY OF WAUKESHA ENGINEERING DEPARTMENT.

- 3. The following INRA additional note should be added:
  - a. The replanting plan should be approved by the Plan Commission.
- 4. Note #4 should be revised to:
  - a. "The City of Waukesha or their designee are authorized access to the Isolated Natural Resource areas for purposes of inspecting and enforcing the restrictions in the Isolated Natural Resource Areas and the the Non-Disturbance Area Easements."
- 5. 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."

#### 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 Punchlist

 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.

#### PC14 -0114 Solo Salon, 1947 E. Main Street - 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.
  - 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. Confirm if grease trap should be removed from sanitary sewer lateral.

## PC14 -0117 President's Plaza Shopping Center - Developers Agreement Modification and Dissolution

#### 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.
  - b. 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.
  - 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.

## ID#14-1170 "Zoning Code Modification – Amend section 22.70(4)(a) of the Floodplain Zoning ordinance so that it incorporates revised Federal Emergency Management Agency floodplain maps for the City that take effect November 5, 2014; and repeal Chapter 24, "Floodland Zoning," because it was superseded by section 22.70."

1. No comments.