# CITY OF FRANKLIN PLAN COMMISSION MEETING\* FRANKLIN CITY HALL COUNCIL CHAMBERS 9229 W. LOOMIS ROAD, FRANKLIN, WISCONSIN AGENDA THURSDAY, MARCH 3, 2022, 7:00 P.M.

The YouTube channel "City of Franklin WI" will be live streaming the Plan Commission meeting so that the public will be able to watch and listen to the meeting. https://www.youtube.com/c/CityofFranklinWIGov.

- A. Call to Order and Roll Call
- **B.** Approval of Minutes
  - 1. Approval of regular meeting of February 17, 2022.
- C. **Public Hearing Business Matters** (action may be taken on all matters following the respective Public Hearing thereon)
  - 1. FIDUCIARY REAL ESTATE DEVELOPMENT, INC. MULTI-FAMILY **APARTMENT COMPLEX DEVELOPMENT.** Special Use and Site Plan applications by Fiduciary Real Estate Development, Inc. (CCM-9801 27th Franklin, LLC, property owner), to allow for the development of the former Nature's Nook, gas station and single-family house properties into a multi-family residential apartment complex (The Seasons at Franklin) use, containing up to 252 apartment units consisting of 2-story units with 20 and 24 unit configurations (total unit counts are 12 buildings with a mix of 30 studio units, 96 one bedroom units, 102 two bedroom units, and 24 three bedroom units) with a single primary access off of South 27th Street, and site plan approval for the full 252 unit apartment complex in a single phase, the property development including stormwater management, parking (both covered and open) and a dog park amenity for on-site residents only, properties located at 9801 South 27th Street and 9605 South 29th Street, zoned B-4 South 27th Street Mixed-Use Commercial District; Tax Key Nos. 902-9965-006 and 902-9966-001. A PUBLIC HEARING IS SCHEDULED FOR THIS MEETING UPON THE SPECIAL USE APPLICATION OF THIS MATTER.
- D. **Business Matters** (no Public Hearing is required upon the following matters; action may be taken on all matters)
  - 1. CAPE CROSSING SINGLE-FAMILY RESIDENTIAL SUBDIVISION PLANNED DEVELOPMENT DISTRICT DEVELOPMENT. Preliminary Plat application by Neumann Developments, Inc., Franklin DC Land, LLC, current property owner, to create The Villas at Cape Crossing/The Estates at Cape Crossing, a new single-family

residential subdivision Planned Development District which includes a total of 130 single-family lots, 6 outlots and 6,579 linear feet of right-of-way, with private neighborhood amenities such as a pool, playground and firepit and access to a proposed interurban trail, on approximately 84.0074 acres of land located at 12200 West Ryan Road, zoned Planned Development District No. 40 (Cape Crossing); Tax Key Nos. 890-9991-001 and 890-9991-002.

- 2. **KARLEY J. BLAKE AND JACOB W. MUTTER OUTLOT DESIGNATION REMOVAL.** Certified Survey Map and Land Division Variance applications by Karley J. Blake and Jacob W. Mutter (Crescent Construction Inc., property owner), to remove the outlot designation assigned to the 3.45 acre parcel of Certified Survey Map No. 6416, to connect a driveway to the stub of West Lake Pointe Drive for future development (this Certified Survey Map requires a Land Division Variance to allow for waiver of the required 60 feet street frontage on a public street, as required by Section 15-5.0101B.1. of the Unified Development Ordinance), property zoned R-8 Multiple-Family Residence District, specifically located at the abrupt, west dead end of West Lake Pointe Drive (on the east property line of the parcel, abutting the northwest portion of Lake Pointe Estates subdivision); Tax Key No. 839-9996-007.
- 3. HSA COMMERCIAL REAL ESTATE INDUSTRIAL BUILDING DEVELOPMENT IN THE PROPOSED BUSINESS PARK IN PLANNED DEVELOPMENT DISTRICT NO. 39 (MIXED USE BUSINESS PARK). Site Plan application by HSA Commercial, Inc., d/b/a HSA Commercial Real Estate (SFT Franklin Oakwood, LLC, property owner), to allow for the development of an approximately 271,753 square foot speculative industrial building at the northwest 1/4 of the parcel adjacent to the future Hickory Street (Lot 1 of Certified Survey Map No. 9362), stormwater facilities, parking for cars in front of the buildings on Oakwood Road and loading areas for trucks at the rear, property generally located at West Oakwood Road, the northwest 1/4 of the parcel adjacent to the future Hickory Street (Lot 1 of Certified Survey Map No. 9362), zoned Planned Development District No. 39 (Mixed Use Business Park), Tax Key No. 951-9994-001; Requested Waivers of Planned Development District No. 39 (Mixed Use Business Park) Design Standards, Section 15-3.0444B.D. Business Park Area Design Standards:
  - a. 15-3.0444B.D.1.a.iv. Parking required and location regulated-waiver of restriction on parking in front yard
  - b. 15-3.0444B.D.1.a.vi. Parking required and location regulated-waiver of screening requirement adjacent to a conservancy outlot
  - c. 15-3.0444B.D.2.c.iii. Bicycle and pedestrian amenities required-modification in favor of the proposed site plan
  - d. 15-3.0444B.D.4.a.iii. Building Character and Design regulated-modification in favor of articulated, painted precast concrete wall panels

- e. 15-3.0444B.D.4.a.iv. Building Character and Design regulated-modification to permit precast concrete as a primary material
- f. 15-3.0444B.D.5. Signage Standards-waiver of Plan Commission review of proposed signs, defer review and approval to Department of City Development under Sign Permit Application

Requested Waivers of South 27th Street Design Overlay District Standards:

- a. 15-3.0352.A. Parking required and Location Regulated-waiver of restriction on parking in front yard
- b. 15-3.0352.B. Number of Parking Spaces Limited-modification on number of parking spaces permitted to 201 motor vehicle parking spaces, vs. 136 minimum
- c. 15-3.0353.C.4. Pedestrian Considerations-modification in favor of the proposed site plan
- d. 15-3.0353.G. Central Areas/Features-waiver of requirement and replacement with the existing covered walk areas, benches, and bicycle parking accommodations
- e. 15-3.0355.A.3. Building Character and Design-modification to permit use of articulated, painted precast concrete wall panels
- f. 15-3.0355.A.4. Building Character and Design-modification to permit precast concrete
- g. 15-3.0355.A.6. Building Character and Design-modification to permit use of painted precast concrete
- h. 15-3.0355.A.10. Building Character and Design-modification to permit a single-story structure construction, with option for second-story office or second-story spaces
- i. 15-3.0355.C.4. Building Materials-modification to permit use of articulated, painted precast concrete wall panels
- j. 15-3.0355.C.5. Building Design-modification to permit the existing architectural requirement in lieu of the specific requirements
- k. 15-3.0355.C.8. Building Location-waiver of setback limit due to parking and truck loading area separation.

#### 4. VICTORY OF THE LAMB LUTHERAN CHURCH PARKING LOT

**EXPANSION.** Site Plan Amendment application by Victory of the Lamb, Inc., to allow for expansion of the existing parking lot (62 additional spaces) and to build a related stormwater management pond (facilities will be connected to the existing parking area along the west property line), property zoned I-1 Institutional District, located at 11120 West Loomis Road; Tax Key No. 889-9989-000.

#### E. Adjournment

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\*Supporting documentation and details of these agenda items are available at City hall during normal business hours.

[Note: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information, contact the City Clerk's office at (414) 425-7500.]

#### **REMINDERS:**

Next Regular Plan Commission Meeting: March 17, 2022

<sup>\*\*</sup>Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which they have decision-making responsibility. This may constitute a meeting of the Common Council per *State ex rel. Badke v. Greendale Village Board*, even though the Common Council will not take formal action at this meeting.

#### City of Franklin Plan Commission Meeting February 17, 2022 Minutes

unapproved

#### A. Call to Order and Roll Call

Mayor Steve Olson called the February 17, 2022, regular Plan Commission meeting to order at 7:00 p.m. in the Council Chambers at Franklin City Hall, 9229 West Loomis Road, Franklin, Wisconsin.

Present were Mayor Steve Olson, Alderwoman Shari Hanneman. Commissioners Patricia Hogan, Adam Burckhardt, Patrick Leon and Kevin Haley and City Engineer Glen Morrow. Also present were City Attorney Jesse Wesolowski, Planning Manager Heath Eddy, Principal Planner Régulo Martínez-Montilva. Director Administration Peggy Steeno, Alderwoman Kristen Wilhelm and Alderman Ed Holpfer.

#### **B.** Approval of Minutes

1. Regular Meeting of January 20, 2022 and February 3, 2022

Commissioner Hogan moved and Alderwoman Hanneman seconded a motion to approve the January 20, 2022, regular meeting minutes. On voice vote, all voted 'aye'; motion carried (6-0-0).

Alderwoman Hanneman moved and Commissioner Hogan seconded a motion to approve the February 3, 2022, regular meeting minutes. On voice vote, all voted 'aye'; motion carried (6-0-0).

#### C. Public Hearing Business Matters

#### 1. TESS CREEK ESTATES SINGLE-FAMILY RESIDENTIAL SUBDIVISION DEVELOPMENT.

Comprehensive Master Plan Amendment, Rezoning, Special Use and Preliminary Plat applications by P. Kenneth Servi, Servi Investments, LLC (Forest Home Investors, LLC, property owner), for construction of a residential subdivision with 17 single-family lots:

#### **Comprehensive Master Plan**

Amendment: to amend the Future Land Use Map designation for property bearing Tax Key Number 751-9001-000 located at 11595 West Forest Home Avenue, containing 3.151 acres, from Residential use to Residential – Multi-Family use;

Principal Planner Régulo Martínez-Montilva presented the request by P. Kenneth Servi, Servi Investments, LLC (Forest Home Investors, LLC, property owner), for construction of a residential subdivision with 17 single-family lots:

Comprehensive Master Plan Amendment: to amend the Future Land Use Map designation for property bearing Tax Key Number 751-9001-000 located at 11595 West Forest Home Avenue, containing 3.151 acres, from Residential use to Residential – Multi-Family use;

**Rezoning**: the project site is approximately 10.10 acres (two properties total, with different zoning designations; southern, previously developed property (11600 West Forest Home Avenue) is entirely zoned R-8 Multiple-Family Residence District, with an area of 5.03 acres; northern, undeveloped property (11595 West Forest Home Avenue) has several zoning designations: R-3 Suburban/Estate Single-Family Residence District, FC Floodplain Conservancy District and FW Floodway District, with an area of approximately 5 acres

**Rezoning**: the project site is approximately 10.10 acres (two properties total, with different zoning designations; southern, previously developed property (11600 West Forest Home Avenue) is entirely zoned R-8 Multiple-Family Residence District, with an area of 5.03 acres; northern, undeveloped property (11595 West Forest Home Avenue) has several zoning designations: R-3 Suburban/Estate Single-Family Residence District, FC Floodplain Conservancy District and FW Floodway District, with an area of approximately 5 acres [Section 15-3.0103 "District Boundaries" of the Unified Development Ordinance does not allow newly created lots with multiple zoning designations, also known as split zoning, with the exception of floodplain districts such as FC and FW]; the applicant is requesting to rezone 3.15 acres of the northern property from R-3 Suburban/Estate Single-Family Residence District to R-8 Multiple-Family Residence District in order to avoid split zoning; A PUBLIC HEARING IS SCHEDULED FOR

## THIS MEETING UPON THIS **REZONING APPLICATION;**

**Special Use:** The Unified Development Ordinance requires a Special Use permit for all residential developments in an R-8 Multiple-Family Residence District regardless of the housing type (singlefamily, two-family or multiple-family) and therefore, the applicant is requesting a Special Use permit to allow for a single-family residential development use; A PUBLIC HEARING IS

#### SCHEDULED FOR THIS MEETING **UPON THIS SPECIAL USE** APPLICATION;

**Preliminary Plat:** the proposed subdivision consists of a single minor street to be named "Tess Creek", with a length of 790 feet, 60 foot right-of-way, designed to the typical minor street standards of Unified Development Ordinance Table 15-5.0103 and with a temporary turnaround cul-de-sac (this street may be connected to Mission Hills

[Section 15-3.0103 "District Boundaries" of the Unified Development Ordinance does not allow newly created lots with multiple zoning designations, also known as split zoning, with the exception of floodplain districts such as FC and FW]; the applicant is requesting to rezone 3.15 acres of the northern property from R-3 Suburban/Estate Single-Family Residence District to R-8 Multiple-Family Residence District in order to avoid split zoning;

Special Use: The Unified Development Ordinance requires a Special Use permit for all residential developments in an R-8 Multiple-Family Residence District

regardless of the housing type (single-family, two-family or multiple-family) and therefore, the applicant is requesting a Special Use permit to allow for a single-family residential development use;

Preliminary Plat: the proposed subdivision consists of a single minor street to be named "Tess Creek", with a length of 790 feet, 60 foot right-of-way, designed to the typical minor street standards of Unified Development Ordinance Table 15-5.0103 and with a temporary turnaround cul-de-sac (this street may be connected to Mission Hills Court providing access to future development) and in addition to the 17 residential lots, the subdivision would include an outlot for floodplain, natural resource areas, stormwater basin and existing fuel substation [a fuel line easement will cross the entire subdivision]; properties located at 11595 and 11600 West Forest Home Avenue, zoned R-8 Multiple-Family Residence District, R-3 Suburban/Estate Single-Family Residence District, FC Floodplain Conservancy District and FW Floodway District; Tax Key Nos. 751-9001-000 and 796-9987-001.

The Official Notice of Public hearing for the Rezoning was read in to the record by Planning Manager Heath Eddy and the Public Hearing was opened at 7:13 p.m. and closed at 7:17 p.m.

The Official Notice of Public hearing for the Special Use was read in to the record by Planning Manager Heath Eddy and the Public Hearing was opened at 7:19 p.m. and closed at 7:19 p.m.

#### **Comprehensive Master Plan Amendment**

Alderwoman Hanneman moved and Commissioner Leon seconded a motion to adopt a Resolution recommending the adoption of an Ordinance to amend the City of Franklin 2025 Comprehensive Master Plan to change the City of Franklin 2025 Future Land Use map for a portion of the property located at 11595 W. Forest Home Avenue from residential use to residential-multi-family use, pursuant to Wis. Stat. §66.1001(4)(b). On voice vote, all voted 'aye'; motion carried (6-0-0).

#### Rezoning

Alderwoman Hanneman moved and Commissioner Hogan

Court providing access to future development) and in addition to the 17 residential lots, the subdivision would include an outlot for floodplain, natural resource areas, stormwater basin and existing fuel substation [a fuel line easement will cross the entire subdivision]; properties located at 11595 and 11600 West Forest Home Avenue, zoned R-8 Multiple-Family Residence District, R-3 Suburban/Estate Single-Family Residence District, FC Floodplain Conservancy District and FW Floodway District; Tax Key Nos. 751-9001-000 and 796-9987-001. PUBLIC HEARINGS ARE SCHEDULED FOR THIS MEETING UPON THE REZONING AND SPECIAL USE APPLICATIONS AS AFOREMENTIONED.

seconded a motion to recommend approval of an Ordinance to amend the Unified Development Ordinance (zoning map) to rezone a certain parcel of land from R-3 Suburban/Estate Single-Family Residence District to R-8 Multiple-Family Residence District (a portion of the property located at 11595 West Forest Home Avenue) (approximately 3.15 acres). On voice vote, all voted 'aye'; motion carried (6-0-0).

#### **Special Use**

Commissioner Hogan moved and Commissioner Burckhardt seconded a motion to recommend approval of a Resolution imposing conditions and restrictions for the approval of a Special Use to allow for a single-family residential development use in an R-8 Multiple-Family Residence District upon property located at 11595 and 11600 West Forest Home Avenue. On voice vote, all voted 'aye'; motion carried (6-0-0).

#### **Preliminary Plat**

Commissioner Burckhardt moved and Commissioner Haley seconded a motion to recommend approval of a Resolution conditionally approving a Preliminary Plat for Tess Creek Estates subdivision (at 11595 and 11600 West Forest Home Avenue). On voice vote, all voted 'aye'; motion carried. (6-0-0).

Commissioner Burckhardt left the meeting at 7:30 pm.

# 2. STRAUSS BRANDS LLC MEAT PROCESSING FACILITY CONSTRUCTION (pursuant to Court

Order signed January 24, 2022 and filed January 25, 2022, in Franklin Community Advocates, et al. v. City of Franklin, and Strauss Brands, LLC, Milwaukee County Circuit Court, Case No. 20-CV-7031). Special Use and Site Plan applications by Strauss Brands LLC, for the development of a 152,035 square foot (total building footprint of the single-story building) meat processing facility (Phases I and II (staffed by approximately 261 employees in the production area and 11 employees in the office area)) designed to process 250 to 500 head of cattle per day, including cattle pens, a harvest floor, carcass coolers, fabrication areas, packaging areas, warehouse areas, shipping docks, operations offices, employee welfare spaces and associated mechanical support facilities and spaces Planning manager Heath Eddy presented the request by Strauss Brands LLC, for the development of a 152,035 square foot (total building footprint of the single-story building) meat processing facility (Phases I and II (staffed by approximately 261 employees in the production area and 11 employees in the office area)) designed to process 250 to 500 head of cattle per day, including cattle pens, a harvest floor, carcass coolers, fabrication areas, packaging areas, warehouse areas, shipping docks, operations offices, employee welfare spaces and associated mechanical support facilities and spaces (this use is classified under Standard Industrial Classification No. 2011, Meat Packing Plants, which is a Special Use in the M-1 Zoning District), on approximately 30.2 acres; the proposed Site Plan includes a building positioned north/south on the site (roughly centered on the site) with employee/visitor parking on the east side of the building (280 spaces) and an access drive located along the south, west, and north sides of the building for truck traffic, with all access to the site via Monarch Drive (two access drives will be provided, one for employee auto parking and one for truck receiving and shipping) (the western portion of the site is identified as future building expansion area) [the site is designed to detain all stormwater on-site in three (3) detention ponds; the ponds are designed with a capacity to accommodate the future phases of work as indicated on the site

(this use is classified under Standard Industrial Classification No. 2011, Meat Packing Plants, which is a Special Use in the M-1 Zoning District), on approximately 30.2 acres; the proposed Site Plan includes a building positioned north/south on the site (roughly centered on the site) with employee/visitor parking on the east side of the building (280 spaces) and an access drive located along the south, west, and north sides of the building for truck traffic, with all access to the site via Monarch Drive (two access drives will be provided, one for employee auto parking and one for truck receiving and shipping) (the western portion of the site is identified as future building expansion area) [the site is designed to detain all stormwater onsite in three (3) detention ponds; the ponds are designed with a capacity to accommodate the future phases of work as indicated on the site drawings], property located at the southwest corner of the intersection of West Loomis Road and the new Monarch Drive (Lot 83 of Ryan Meadows Subdivision), zoned M-1 Limited Industrial District; Tax Key No. 891-1083-000. The City Administrative Record of the records and documents of the proceedings upon this subject matter and as filed and ordered by the Court in Franklin Community Advocates, et al. v. City of Franklin, and Strauss Brands, LLC, Milwaukee County Circuit Court, Case No. 20-CV-7031, are available for public inspection and review and may be accessed by entering upon:

https://franklinwi.box.com/s/3dt5qubmyi m4caofk7hyine4iup4onv0

drawings], property located at the southwest corner of the intersection of West Loomis Road and the new Monarch Drive (Lot 83 of Ryan Meadows Subdivision), zoned M-1 Limited Industrial District; Tax Key No. 891-1083-000. The City Administrative Record of the records and documents of the proceedings upon this subject matter and as filed and ordered by the Court in *Franklin Community Advocates, et al. v. City of Franklin, and Strauss Brands, LLC*, Milwaukee County Circuit Court, Case No. 20-CV-7031, are available for public inspection and review and may be accessed by entering upon: https://franklinwi.box.com/s/3dt5qubmyim4caofk7hyine4iup 4onv0

The Official Notice of Public hearing was read in to the record by Planning Manager Heath Eddy and the Public Hearing was opened at 7:41 p.m. and closed at 8:44 p.m.

#### **Special Use**

Commissioner Leon moved and Alderwoman Hanneman seconded a motion to recommend approval of a Resolution imposing conditions and restrictions for the approval of a Special Use for a meat processing facility use upon property located at the southwest corner of the intersection of West Loomis Road and the new Monarch Drive (lot 83 of Ryan Meadows subdivision).

Commissioner Leon moved and City Engineer Morrow seconded to amend the motion on the floor to amend condition No. 4, "unless unforeseen conditions occur" shall be defined with further specificity by planning and engineering staff and be included in the resolution. On voice vote, all voted 'aye'; motion carried. (5-0-1).

Commissioner Leon moved and Alderwoman Hanneman seconded to amend the motion on the floor to amend condition No. 8, to add "cleaned to applicable federal and/or state standards". On voice vote, all voted 'aye'; motion carried. (5-0-1).

Alderwoman Hanneman moved and Commissioner Haley seconded to amend the motion on the floor to amend condition No. 12, to replace "site plan" with "special use". On voice vote, all voted 'aye'; motion carried. (5-0-1).

Commissioner Leon moved and Alderwoman Hanneman seconded a motion to recommend approval of a Resolution imposing conditions and restrictions for the approval of a Special Use for a meat processing facility use upon property located at the southwest corner of the intersection of West Loomis Road and the new Monarch Drive (lot 83 of Ryan

Meadows subdivision), with amendments to conditions 4, 8 and 12. On roll call vote, 4 voted 'aye', 1 voted 'nay' and 1 abstained; motion carried (4-1-1).

#### Site Plan

Commissioner Leon moved and Alderwoman Hanneman seconded a motion to adopt a Resolution approving a Site Plan for construction of a meat processing facility with associated cattle pen, a harvest floor, carcass coolers, fabrication areas, packaging areas, warehouse areas, shipping docks, operations offices, employee welfare spaces, associated mechanical support facilities and spaces, a future development area, stormwater ponds, parking lot and truck and employee vehicle entrance drives (the southwest corner of the intersection of West Loomis Road and the new Monarch Drive (lot 83 of Ryan Meadows subdivision). On roll call vote, 4 voted 'aye', 1 voted 'nay' and 1 abstained; motion carried (4-1-1).

#### **D.** Business Matters

# 1. SANIA INVESTMENTS LLC PARKING LOT EXPANSION. Site

Plan Amendment application by Dr. Vikramjit Singh Dhillon, owner of Sania Investments LLC, to expand the existing parking lot into the property immediately to the east of the existing building located at 2735 West Rawson Avenue (10 additional spaces, with the required 10 foot parking setback along the north and south property line, addition of curb and gutter and snow storage area to the proposed parking area) and to install new landscaping for the new lot and along West Rawson Avenue, properties zoned B-4 South 27th Street Mixed-Use Commercial District, located at 2735 West Rawson Avenue and 7103 South 27th Street; Tax Key Nos. 761-9950-003 and 761-9950-001 [applicant previously submitted an application to combine the corner parcel on the southwest corner of South 27th Street and West Rawson Avenue (7103 South 27th Street), recently purchased from the Wisconsin Department of Transportation, with the lot immediately to the west (2735 West Rawson Avenue), said land combination having been approved by the Common Council on November 16, 2021, by Resolution No. 2021-7797].

Commissioner Burckhardt returned to the meeting at 10:21 pm.

Principal Planner Régulo Martínez-Montilva presented the request by Dr. Vikramjit Singh Dhillon, owner of Sania Investments LLC, to expand the existing parking lot into the property immediately to the east of the existing building located at 2735 West Rawson Avenue (10 additional spaces, with the required 10 foot parking setback along the north and south property line, addition of curb and gutter and snow storage area to the proposed parking area) and to install new landscaping for the new lot and along West Rawson Avenue, properties zoned B-4 South 27th Street Mixed-Use Commercial District, located at 2735 West Rawson Avenue and 7103 South 27th Street; Tax Key Nos. 761-9950-003 and 761-9950-001 [applicant previously submitted an application to combine the corner parcel on the southwest corner of South 27th Street and West Rawson Avenue (7103 South 27th Street), recently purchased from the Wisconsin Department of Transportation, with the lot immediately to the west (2735 West Rawson Avenue), said land combination having been approved by the Common Council on November 16, 2021, by Resolution No. 2021-7797].

Commissioner Hogan moved and Commissioner Haley seconded a motion to adopt a Resolution to amend the Site Plan for properties located at 2735 West Rawson Avenue and 7103 South 27th Street for expansion of the existing parking lot, addition of curb and gutter and snow storage area and installation of new landscaping (tax key nos. 761-9950-003 and 761-9950-001). On voice vote, all voted 'aye'; motion carried (6-0-0).

#### Adjournment

Commissioner Hogan moved and Commissioner Haley seconded to adjourn the Plan Commission meeting of February 17, 2022 at 10:23 p.m. On voice vote, all voted 'aye'; motion carried. (6-0-0).





#### REPORT TO THE PLAN COMMISSION

#### Meeting of March 3, 2022

#### SPECIAL USE/SITE PLAN

**RECOMMENDATION:** City Development Staff recommends the following: (1) Recommend approval of the special use application, and (2) Approve the site plan, subject to conditions contained in the draft Resolution.

**Property Owner:** CCM-9801 27<sup>th</sup> Franklin LLC

**Applicant:** Fiduciary Real Estate Development, Inc.

Property Address/Tax Key Number: 9801 S. 27th Street/902-9965-006

9605 S. 29th Street/902-9966-001

**Aldermanic District:** District 4

**Agent:** Anthony DeRosa, Fiduciary Real Estate Development, Inc.

**Zoning District:** B-4 South 27<sup>th</sup> Street Mixed Use-Commercial

R-3 Suburban/Estate Single-Family Residence

South 27<sup>th</sup> Street Design Overlay

**Use of Surrounding Properties:** West: Residential zoned R-3

South: Medical office and hospital zoned B-7, Small scale

business/service uses zoned B-4

North: Floodplain and hotel zoned PDD-33

East: Business/industrial uses zoned M-1 (City of Oak Creek)

**Special Use Request:** To permit a 252-unit apartment complex on 24.12 acres in the

B-4 South 27<sup>th</sup> Street Mixed Use-Commercial District.

Site Plan Proposal: To permit construction of 252 apartment units in 12 buildings

and a clubhouse and pool, with attached and detached garage facilities, a grill station, a dog park, a maintenance garage, and necessary utility and stormwater facilities (in concept

form).

**Staff Planner:** Heath Eddy, AICP, Planning Manager

#### APPLICANT'S REQUEST

The applicant is requesting approval of (1) a Special Use to permit development of 252 apartment units on a property located in the B-4 South 27<sup>th</sup> Street Mixed Use-Commercial District, and (2) a Site Plan to permit construction of 252 apartment units in 12 buildings, along with associated parking, detached parking garages, a clubhouse and pool, grill station area, and dog park for residents only. The mix of residential units is 30 studio units, 96 one-bedroom units, 102 two-bedroom units, and 24 three-bedroom units.

The applicant is further requesting approval for a Natural Resource Features Special Exception (NRSE) under a separate review by Department staff. That application was filed subsequent to the requests under review here, and was delayed in part because the applicant was working to secure the General Permit for disturbance of wetland on-site, which was approved by WDNR staff under docket GP-SE-2021-41-04248 on December 23, 2021 (see attached). The NRSE application was filed with the Department of City Development originally on January 10, 2022, and staff has finished completeness review and routed the application materials for departmental reviews.

While it is unusual for an applicant to request separate and prior action on a Site Plan application, in particular, before the particulars of the NRSE are factored into the Site Plan, the applicant believes the design revisions made to secure WDNR approval materially reduce the impact that NRSE approval requires, and therefore the Site Plan would not be significantly altered subsequently. Staff expressed concern with this approach, and informed the applicant of such particularly with respect to the Site Plan; nevertheless the applicant requested moving forward. Staff believes the Plan Commission can proceed with the public hearing and discussion of the special use request and a review of the Site Plan application as it is currently designed.

#### CHARACTER OF THE SITE AND SURROUNDING AREA

The subject property is a former landscaping business known as Nature's Nook, and currently contains the former commercial building along with available parking on-site, and the remainder disturbance areas of outdoor storage of landscaping materials. The property has been variably commercial in orientation, though the extent of use of the property included the wetland complex on the east half of the property. The disturbance authorized by the Wetland General Permit, as mentioned above, is limited to approximately 653 square feet of total wetland disturbance that was already previously disturbed with small culvert-like overpasses due west of the existing commercial building. The applicant's current Site Plan design reflects these two cross-over areas.

The attached Natural Resource Protection Plan shows that there is a 2.22-acre wetland complex located primarily on the east-northeast side of the site adjacent to a County-owned former gas station and near South 27<sup>th</sup> Street (STH 241). Combined with the required wetland buffer and setback, a total of 5.64 acres of the property is listed for natural resource protection, prior to official approval of the NRSE. This wetland and wetland protection area bisects the site from northeast to southwest, and is linked to a conservancy area located southwest of the site (west of South 31<sup>st</sup> Street). The subject property further contains 5.14 acres of woodland, most of which does not co-exist with the wetland areas. Therefore, the applicant is constrained in terms of designing the site in order to comply with the City's natural resource protection standards. Furthermore, Wetland General Permit approval does give the applicant reason to believe the proposed design of their development is worthy of support and approval.

The surrounding area includes a set of variable uses and protection areas. Immediately north of the site is a conserved floodplain area for Oak Creek, north of which is a hotel and commercial uses located along Ryan Road (STH 100). The area east of South 27<sup>th</sup> Street is the Southbranch Industrial Park in the City of Oak Creek. The area immediately southeast includes a former residence and a software development company, while due south is the Ascension Hospital and medical park area. The major influence on the site from a buffering perspective are the row of single-family residences fronting South 31<sup>st</sup> Street, which are west of the subject property.

#### **DESCRIPTION OF THE APPLICATION**

On September 14, 2021, the applicant submitted applications for a Site Plan and a Special Use, and contemporaneous to these applications the applicant requested an exemption to the wetland requirements from WDNR. Following denial of the exemption request, the applicant filed the General

Permit application with WDNR, and following some revisions to comply with the WDNR justification requirement and the alternatives analysis, the WDNR issued the General Permit with the limited wetland disturbance as shown on the attached NRPP.

The application site is approximately 24 acres in size, and the application request for 252 apartment units reflects a total density of 10.5 units/acre. While this is generally larger than the baseline "permitted" density of 8 units/acre, staff notes the City has previously approved multi-family development with higher densities than were listed in base zoning districts such as R-8 or B-4 (most recently the Statesman Apartments north of the subject property). Staff notes that the usual impetus for approving densities is due to a redevelopment condition or removing a perceived "eyesore." In this case, the applicant is proposing a redevelopment of a defunct landscaping business site, along with proposed acquisition of the small gas station site along South 27<sup>th</sup> Street for redevelopment purposes. While the commercial portion of the Conceptual Site Plan is not specifically included in this request, it demonstrates that the applicant is aware of the property's surroundings and is seeking to improve these conditions.

The applicant proposes developing the site with 12 apartment buildings, in 20-unit and 24-unit combinations, which would include a series of studio, one-bedroom, two-bedroom, and three-bedroom units. The applicant's Detailed Proposed Description for "The Seasons at Franklin" is attached for further information.

#### **PROJECT ANALYSIS:**

There are a few existing constraints to the property that impact the design and development of this project.

- 1. Wetland Impacts and NRSE Application. The applicant submitted the NRSE application initially on January 10, 2022. The applicant supplemented this application with additional information on January 28, 2022. The proposed Site Plan relies on approval of the NRSE requests in order to develop the site. As noted above, the Wetland General Permit has been issued by WDNR and permits disturbance of 653 square feet of wetland in two areas, which are at interior drive-lane crossings. Additional impact to the wetland buffer and setback are requested, in the vicinity of the wetland crossings. Staff anticipates no major issues with this request, though the timing will be delayed relative to the Special Use/Site Plan applications.
- 2. Landscaping Requirements. Staff believes the proposed design is in general compliance with the intent of the landscaping requirements in UDO Division 15-5.0300. However, it should be noted that the requirements are very difficult to meet: a total of 3.5 trees (shade, evergreen, and decorative/ornamental) plus 3 shrubs per dwelling unit. If this were a high-rise development it would require the planting of a forest to accommodate this requirement. If the proposed development were at the standard maximum density of 8 units/acre, it would require 28 trees and 24 shrubs per acre. Conversely, the Division does permit credit for existing trees on-site, with full credit in the non-Bufferyard areas and half credit in the western Bufferyard. The credit is applied to each healthy tree 6 feet or taller. NO ONE evaluates non-evergreen trees based on height. This is a subject for further review and amendment under the UDO Rewrite Project. Suffice to say, staff believes the applicant is generally compliant pending final submission and sign-off of detailed inventory of the trees located on the subject property.
- 3. **Access Design.** The proposed design identifies a single driveway from South 27<sup>th</sup> Street (STH 241) to enter the site. This design has been evaluated by WisDOT and the preliminary conclusion is that it complies with engineering requirements for access, and further that the anticipated traffic to and from the site does not warrant a traffic signal at this location. Staff notes a secondary "emergency" access was requested by the City Engineer, which is currently

located at the northern lot line adjacent the defunct gas station site, and is the driveway entrance to the former residence located on the adjacent lot at 9605 S. 31<sup>st</sup> Street. The applicant indicated that this driveway could be retained as an emergency access, though the Site Plan and Landscape Plan do not specifically call for maintaining this driveway west of the commercial site along South 27<sup>th</sup> Street.

#### UNIFIED DEVELOPMENT ORDINANCE REQUIREMENTS

Special Use and Site Plan Applications are subject to the following provisions of the UDO. Subject to the development conditions of approval, the Special Use and Site Plan shall meet these standards:

- §15-3.0701 General Standards for Special Uses
- §15-7.0102 Principles and Standards of Review, Site Plans

#### **GENERAL STANDARDS FOR SPECIAL USES** (§15-3.0701)

| Summary of Standard     |                               | Staff's Finding  |
|-------------------------|-------------------------------|--|
| 1. Harmony with UDO and |                               | The applicant's proposal would significantly redevelop a site that is a            |
|                         | Comprehensive Plan            | perceived "eyesore" and could spur additional development or                       |
|                         | purposes and intent.          | redevelopment in the vicinity adjacent to South 27th Street. This is in            |
|                         |                               | keeping with the intent of the South 27 <sup>th</sup> Street Design Overlay, and   |
|                         |                               | consistent with the purpose and intent of the City of Franklin 2025                |
|                         |                               | Comprehensive Master Plan.   |
| 2.                      | No Undue Adverse Impact.      | The evaluation of "undue adverse impact" can be subjective. In the context         |
|                         |                               | of this use, the applicant's proposal does maintain an existing bufferyard of      |
|                         |                               | young and mature woodlands, which should mitigate the shift in density             |
|                         |                               | from the single-family neighborhood west of the site. Other uses in the area       |
|                         |                               | are commercial, hospitality, service-oriented, or industrial in character, and     |
|                         |                               | the proposed use is designed to fit into this location.                            |
| <i>3</i> .              | No Interference with          | The proposed design is limited to 2-story facades and buildings are a              |
|                         | Surrounding Development.      | maximum of 24 apartment units. The arrangement of units is designed to             |
|                         |                               | fit the vast majority of units into the "long" side of the site. Therefore the     |
|                         |                               | proposed use should not interfere or dominate adjacent properties.                 |
| 4.                      | Adequate Public Facilities.   | The proposed development will be served by City water and regional sewer           |
|                         |                               | services, and should have ready availability for emergency services, fire,         |
|                         |                               | and police protection.   |
| <i>5</i> .              | No Traffic Congestion.        | The proposed development is designed for single-access from South 27 <sup>th</sup> |
|                         |                               | Street (STH 241), a 4-land arterial. It is noted that WisDOT did not believe       |
|                         |                               | the development was large enough to require additional signalization along         |
|                         |                               | this arterial roadway, even coupled with the linked access to Southbranch          |
|                         |                               | Boulevard to the east.   |
| 6.                      | No Destruction of Significant | The proposed design is intended to limit the amount of disturbance of              |
|                         | Features.                     | wetland in keeping with the approved Wetland General Permit. Further               |
|                         |                               | disturbance includes approximately 50% of young woodland and 28% of                |
|                         |                               | mature woodland, which are within the limits of the UDO Natural                    |
|                         |                               | Resource Protection.   |
| <i>7</i> .              | Compliance with Standards.    | The proposed use complies with the requirements of the R-8 Multiple-               |
|                         |                               | Family Residence District, except with respect to project density. The             |
|                         |                               | Common Council can approve an increase in density under the provisions             |
|                         |                               | of Special Use approvals, if found that the project density would result in a      |
|                         |                               | better design or would mitigate and existing issue or circumstance.                |
|                         |                               | Redevelopment of a vacant, overgrown commercial site with attractive               |
|                         |                               | residential uses and open space protections could be such a situation.             |

### PRINCIPLES AND STANDARDS OF REVIEW OF SITE PLANS (§15-7.0102)

| Summary of Standard   | Staff's Finding  |
|---|--|
| A. Conformity of Use to Zoning L  | District. The proposed use is a Special Use in the B-4 District.   |
| B. Dimensional Requirements.  | The proposed development complies with all dimensional requirements for the proposed use.  |
| C. Site Intensity and Site Capacity Calculations to be Reviewed.              | The proposed development complies with the limitations of the B-4 District.  |
| D. Use and Design Provisions.   | The proposed development complies with all use and design provisions for multi-family development with the exception of project density, which may be increased by the Common Council under the Special Use review process.  |
| E. Relation to Existing and Propo<br>Streets and Highways.                    | The applicant has contacted WisDOT for permitting of access for this development. A Condition of Approval requiring submission of the WisDOT access permit prior to building permit issuance is included in the Resolution.  |
| F. Impacts on Surrounding Uses.   | The proposed development is designed to focus traffic ingress/egress, along with locating facilities such that impacts on surrounding uses should be minimal.  |
| G. Natural Resource Features Protection.                                      | The required NRPP has been submitted and reviewed. Staff notes that the applicant makes use of existing woodland along the west property line as an effective bufferyard against adjacent single-family uses. The applicant has filed for NRSE review and approval for disturbance of wetland, wetland buffer and wetland setback. This review is forthcoming, and a Condition of Approval stipulating that Site Plan approval is conditioned on approval of an NRSE for these impacts is included in the attached draft Resolution. |
| H. Required Landscaping and<br>Landscape Bufferyards.                         | The proposed development generally meets the requirements with respect to landscaping and required bufferyards. A Condition of Approval requiring follow-up submission of documentation specifying tree species locations, types and preservation methods, along with full compliance with UDO Division 15-5.0300 is included in the attached draft Resolution.  |
| I. Provision of Emergency Vehic Accessibility.                                | The proposed development design incorporates accessibility for emergency purposes and provides accessible spaces in compliance with the ADA.   |
| J. Building Location.   | The proposed development design is modeled to locate buildings in places that minimize existing natural resources as much as possible, and maintains existing woodland areas in locations that buffer existing residential uses from development of the subject property.  |
| K. Location and Design of On-Sit<br>Waste Disposal and Loading<br>Facilities. | On-site waste disposal facilities are located central to the development utility and not located in the peripheral areas where adjoining properties would be impacted.   |

| L. | Consistency with Intent of UDO.                   | The proposed development is consistent with the intent and purposes of the UDO, in particular UDO §15-1.0104 subparts A, B, C, D, E, F, G, H, I, J, K, N, O, and T.                           |
|----|---|---|
| М. | Consistency with Intent of<br>Comprehensive Plan. | The proposed development is consistent with the intent of the City of Franklin 2025 Comprehensive Master Plan, particularly in terms of scale, density, and location of proposed development. |
| N. | Determination of "Suitability" of Site.           | There is no evidence that the subject property is "unsuitable" for development at the orientation and scale of the proposed development.  |

#### **Natural Resource Protection Plan**

The applicant is aware of the limits of approval under the Wetland General Permit. Additional approval of the NRSE is necessary for temporary or permanent disturbance or filling of the wetland and wetland buffer, and for permanent changes to the wetland setback. Should the Plan Commission choose to render a decision on the Site Plan Application, a condition of approval is included stating that an approval of the Site Plan is conditional on approval of the NRSE Application by the Common Council.

#### OTHER DEPARTMENT REVIEW COMMENTS

#### **Engineering Department**

- 1. Use South Zone NAD 83 datum as specified on the proposed plans.
- 2. The stormwater management facilities must meet the requirements of the City of Franklin stormwater management plan (UDO Division 15-8.0600).
- 3. If the water main is dedicated (approved by the WDNR) to the City by an easement, the proposed water main must be looped, having two connections at the water main on South 27th Street. The said City water main must comply with City Design Standards & Construction Specifications.
- 4. Engineering highly suggests having two access points at South 27th street.
- 5. The access to South 27<sup>th</sup> Street (STH 241) must be reviewed and approved by the WisDOT. A copy of said approval must be provided to the City Engineering Department (and a copy with the Department of City Development).
- 6. Engineering recommends a pedestrian sidewalk along South 27th Street.
- 7. The driveway entrance must be designed to accommodate the turning of trucks and busses. A turning exhibit shall be provided by the applicant demonstrating that the driveway access is sufficient to accommodate larger vehicles.
- 8. The applicant must have a permit from the WisDOT to work in the South 27<sup>th</sup> Street right-ofway.
- 9. The applicant shall submit detailed construction plans for follow-up Engineering review.

**Staff Comment:** The above will be reflected in the Conditions of Approval in the Site Plan Resolution.

#### **Health Department**

- 1. **Dog Park.** Some concerns/questions from the Health Department perspective as we handle dog bites.
  - a) Will there be a master list of those in the building(s) that own dogs that utilize the dog

- park? Will the Health Department have the ability to review this list should there be a bite that occurs at this park? Will it be open to anyone that doesn't reside on the property?
- b) Will there be a requirement that all animals that use the dog park be up to date on rabies vaccine and have valid municipal license?
- c) Will animals within the enclosure be allowed off leash?
- d) Will there by information supplied to those that frequent the park that animal bites are reportable to both the Health Department and Police Department and any animal involved in a bite will be subject to a 10-day quarantine including up to 3 veterinarian visits? Unprovoked bites and/or serious bites may lead to declaration of dangerous or vicious animal per Municipal Code § 80-9.
- e) Will animals that bite (whether provoked or unprovoked) be allowed to continue using the park?
- f) How will animal waste inside the park be disposed of?
- 2. If this property includes any pools as defined in ATCP 76, proper plan review by DSPS and licensing must occur.

**Staff Comment:** The Health Department comments are normally reflected in the Condition of Approval that relates to "compliance with City Code," but staff has incorporated two conditions to the Site Plan Resolution reflecting these requirements.

#### **Fire Department**

The Fire Department has no comments regarding this project.

#### **Police Department**

The police department has no comment regarding this project.

#### **Inspection Services Department**

Inspection Services has no comments on the subject proposal at this time.

#### STAFF RECOMMENDATION

The Department of City Development staff recommends as follows:

- (1) That the Plan Commission recommend approval of the Special Use based on the conditions included in the draft Common Council Resolution, including the total number and density of multi-family residential units on the subject property, which recommendation will be considered by the Common Council at a future date; and
- (2) Approve the Site Plan, subject to the conditions in the draft Site Plan Resolution.

MILWAUKEE COUNTY [Draft 2-14-22]

| RESOLUTION NO. 20 | 22- |
|-------------------|-----|
|-------------------|-----|

A RESOLUTION IMPOSING CONDITIONS AND RESTRICTIONS
FOR THE APPROVAL OF A SPECIAL USE FOR A MULTI-FAMILY RESIDENTIAL
APARTMENT COMPLEX DEVELOPMENT USE UPON PROPERTY LOCATED AT
9801 SOUTH 27TH STREET AND 9605 SOUTH 29TH STREET
(FIDUCIARY REAL ESTATE DEVELOPMENT, INC., APPLICANT)

WHEREAS, Fiduciary Real Estate Development, Inc. having petitioned the City of Franklin for the approval of a Special Use in a B-4 South 27th Street Mixed-Use Commercial District, to allow for The Seasons at Franklin multi-family residential apartment complex development on the former Nature's Nook, gas station and single-family house site, containing up to 252 apartment units consisting of 2-story units with 20 and 24 unit configurations (total unit counts are 12 buildings with a mix of 30 studio units, 96 one bedroom units, 102 two bedroom units, and 24 three bedroom units) with a single primary access off of South 27th Street, properties located at 9801 South 27th Street and 9605 South 29th Street, bearing Tax Key Nos. 902-9965-006 and 902-9966-001, more particularly described as follows:

9801 South 27th Street, City of Franklin, Milwaukee County, Wisconsin: Parcel 1 of Certified Survey Map No. 6044, recorded November 17, 1994 on Reel 3419, Image 833, as Document No. 7026244, said map being a redivision of Parcel 2 of Certified Survey Map No. 5782, located in the Northeast 1/4 and Southeast 1/4 of the Northeast 1/4 of Section 25, Township 5 North, Range 21 East, in the City of Franklin, County of Milwaukee, State of Wisconsin. EXCEPTING THEREFROM that part of Parcel 1 of Certified Survey Map No. 6044, Document No. 7026224, located in the Northeast 1/4 and Southeast 1/4 of the Northeast 1/4 of Section 25, Township 5 North, Range 21 East, in the City of Franklin, County of Milwaukee, State of Wisconsin, more fully described as follows: Beginning at the Southeast corner of said Parcel 1; thence South 88 deg. 29'34" West along the South line of said Parcel 1, 131.00 feet to a point; thence North 00 deg. 22'41" West, 95.11 feet to a point; thence North 04 deg. 31'38" East, 116.30 feet to a point; thence North 88 deg. 29'34" East, 121.00 feet to a point on the Westerly right-of-way line of South 27th Street (U.S.H. "41"); thence South 00 deg. 23'33" East, along said Westerly right-of-way line, 210.79 feet to the place of beginning. ALSO EXCEPTING those lands as conveyed by a Warranty Deed recorded March 4, 1999 as Document No. 7701197.

9605 South 29th Street, City of Franklin, Milwaukee County, Wisconsin: Parcel 1:

Part of the East 56 acres of the Northeast 1/4 of Section 25, in Township 5

# FIDUCIARY REAL ESTATE DEVELOPMENT, INC. – SPECIAL USE RESOLUTION NO. 2022-\_\_\_\_\_Page 2

North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at a point in the East line of the said 1/4 Section and 1014.56 feet South of the Northeast corner thereof; thence South 89° 19′ West 764 feet to a point, said point being the beginning of the herein described parcel of land; running thence South 89° 19′ West 158.80 feet (recorded as 160.00 feet) to a point in the West line of the said East 56 acres; thence Northerly along said West line of the East 56 acres, 80.02 feet to a point; thence North 89° 19′ East 159.18 feet (recorded as 161.11 feet) to a point; thence South and parallel to the East line of said 1/4 Section, 80 feet to the place of beginning. Parcel 2:

That part of Parcel 1 of Certified Survey Map No. 6044, recorded on November 11, 1994, on Reel 3419, Images 833-835 inclusive, as Document No. 7026224, being a redivision of all of Parcel 2 of Certified Survey Map No. 5782, as Document No. 6698838, located in the Northeast 1/4 and Southeast 1/4 of the Northeast 1/4, all in Section 25, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, bounded and described as follows:

Beginning at the Northwest corner of said Parcel 1, said point also being the Southwest corner of lands described in Document No. 4338532 of Deeds, on Reel 375, Image 1500, recorded August 21, 1967; thence North 88° 55′ 27″ East along the North line of Parcel 1 aforesaid, 133.80 feet to a point; thence South 00°23′ 33″ East 92.75 feet to a point; thence North 88° 53′ 59″ West 133.36 feet to a point; thence North 00°39′ 59″ West along the West line of Parcel 1 aforesaid, 92.80 feet to the point of beginning. Parcel 3:

Together with a non-exclusive perpetual easement for ingress and egress over the following described property: Over and across that part of Parcel 1 of Certified Survey Map No. 6044, in the Northeast 1/4 of Section 25, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, which is bounded and described as follows:

Beginning at the Northwest corner of said Parcel 1; thence North 88° 55′ 27″ East along the Northerly line of Parcel 1 aforesaid, 133.80 feet to the beginning of the lands to be described; thence continue North 88°55′ 27″ East along said Northerly line 28.00 feet to a point; thence South 05° 55′ 23″ East 93.14 feet to a point; thence North 88° 53′ 59″ East along the Northerly line of Parcel 1 aforesaid and its extension, 672.02 feet to the Northeast corner of said Parcel 1; thence South 00° 23′ 33″ East along the West line of South 27th Street, 25.00 feet to a point; thence South 88° 53′ 59″ West 709.00 feet to a point; thence North 00°23′ 33″ West 117.83 feet to the point of beginning; and

FIDUCIARY REAL ESTATE DEVELOPMENT, INC. – SPECIAL USE RESOLUTION NO. 2022-\_\_\_\_\_Page 3

WHEREAS, such petition having been duly referred to the Plan Commission of the City of Franklin for a public hearing, pursuant to the requirements of §15-9.0103D. of the Unified Development Ordinance, and a public hearing having been held before the Plan Commission on the 3rd day of March, 2022, and the Plan Commission thereafter having determined to recommend that the proposed Special Use be approved, subject to certain conditions, and the Plan Commission further finding that the proposed Special Use upon such conditions, pursuant to §15-3.0701 of the Unified Development Ordinance, will be in harmony with the purposes of the Unified Development Ordinance and the Comprehensive Master Plan; that it will not have an undue adverse impact upon adjoining property; that it will not interfere with the development of neighboring property; that it will be served adequately by essential public facilities and services; that it will not cause undue traffic congestion; and that it will not result in damage to property of significant importance to nature, history or the like; and

WHEREAS, the Common Council having received such Plan Commission recommendation and also having found that the proposed Special Use, subject to conditions, meets the standards set forth under §15-3.0701 of the Unified Development Ordinance.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the petition of Fiduciary Real Estate Development, Inc., for the approval of a Special Use for the properties particularly described in the preamble to this Resolution, be and the same is hereby approved, subject to the following conditions and restrictions:

- 1. That this Special Use is approved only for the use of the subject properties by Fiduciary Real Estate Development, Inc., successors and assigns, as a multi-family residential apartment complex development use, which shall be developed in substantial compliance with, and operated and maintained by Fiduciary Real Estate Development, Inc., pursuant to those plans City file-stamped January 27, 2022 and annexed hereto and incorporated herein as Exhibit A.
- 2. Fiduciary Real Estate Development, Inc., successors and assigns, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the Fiduciary Real Estate Development, Inc. multi-family residential apartment complex development, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
- 3. The approval granted hereunder is conditional upon Fiduciary Real Estate

# FIDUCIARY REAL ESTATE DEVELOPMENT, INC. – SPECIAL USE RESOLUTION NO. 2022-\_\_\_\_\_Page 4

Development, Inc., and the multi-family residential apartment complex development use, for the properties located at 9801 South 27th Street and 9605 South 29th Street: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.

4. This approval is for the maximum number of 252 apartment units and an overall project density of 10.5 dwelling units per acre, and does not reflect any proposed disturbance or improvements to wetlands, wetland buffers, or wetland setbacks as shown on the attached plans, except as already permitted by the City of Franklin Unified Development Ordinance.

BE IT FURTHER RESOLVED, that in the event Fiduciary Real Estate Development, Inc., successors or assigns, or any owner of the subject properties, does not comply with one or any of the conditions and restrictions of this Special Use Resolution, following a ten (10) day notice to cure, and failure to comply within such time period, the Common Council, upon notice and hearing, may revoke the Special Use permission granted under this Resolution.

BE IT FURTHER RESOLVED, that any violation of any term, condition or restriction of this Resolution is hereby deemed to be, and therefore shall be, a violation of the Unified Development Ordinance, and pursuant to §15-9.0502 thereof and §1-19 of the Municipal Code, the penalty for such violation shall be a forfeiture of no more than \$2,500.00, or such other maximum amount and together with such other costs and terms as may be specified therein from time to time. Each day that such violation continues shall be a separate violation. Failure of the City to enforce any such violation shall not be a waiver of that or any other violation.

BE IT FURTHER RESOLVED, that this Resolution shall be construed to be such Special Use Permit as is contemplated by §15-9.0103 of the Unified Development Ordinance.

BE IT FURTHER RESOLVED, pursuant to §15-9.0103G. of the Unified Development Ordinance, that the Special Use permission granted under this Resolution shall be null and void upon the expiration of one year from the date of adoption of this Resolution, unless the Special Use has been established by way of the issuance of an occupancy permit for such use.

| FIDUCIARY REAL ESTATE DEVELOPMENT, IN RESOLUTION NO. 2022<br>Page 5  | NC. – SPECIAL USE                        |
|--|--|
| BE IT FINALLY RESOLVED, that the City the recording of a certified copy of this Resolution in Milwaukee County, Wisconsin. |  |
| Introduced at a regular meeting of the Commday of, 2022.  FIDUCIARY REAL ESTATE DEVELOPMENT, IN RESOLUTION NO. 2022 Page 5 | non Council of the City of Franklin this |
| Passed and adopted at a regular meeting o Franklin this day of   |  |
| AI   | PPROVED:                                 |
| Sto  | ephen R. Olson, Mayor                    |
| ATTEST:  |  |
| Sandra L. Wesolowski, City Clerk   |  |
| AYES NOES ABSENT   |  |

STATE OF WISCONSIN

# CITY OF FRANKLIN PLAN COMMISSION

MILWAUKEE COUNTY [Draft 2-23-22]

RESOLUTION NO. 2022-\_\_\_

A RESOLUTION APPROVING A SITE PLAN FOR CONSTRUCTION OF A MULTI-FAMILY RESIDENTIAL APARTMENT DEVELOPMENT WITH ASSOCIATED PARKING, STORMWATER MANAGEMENT AND A DOG PARK (9801 SOUTH 27TH STREET AND 9605 SOUTH 29TH STREET) (FIDUCIARY REAL ESTATE DEVELOPMENT, INC., APPLICANT)

WHEREAS, Fiduciary Real Estate Development, Inc. having applied for approval of a proposed site plan for construction of a multi-family residential apartment development ("The Seasons at Franklin") at the site of the former Nature's Nook, a nearby former gas station and a single-family house, containing up to 252 apartment units consisting of 2-story units with 20 and 24 unit configurations (total unit counts are 12 buildings with a mix of 30 studio units, 96 one bedroom units, 102 two bedroom units, and 24 three bedroom units) with a single primary access off of South 27th Street, the property development including stormwater management, parking (both covered and open) and a dog park amenity for on-site residents only, properties located at 9801 South 27th Street and 9605 South 29th Street, zoned B-4 South 27th Street Mixed-Use Commercial District; and

WHEREAS, the Plan Commission having reviewed such proposal and having found same to be in compliance with the applicable terms and provisions of §15-3.0421 of the Unified Development Ordinance and in furtherance of those express standards and purposes of a site plan review pursuant to Division 15-7.0100 of the Unified Development Ordinance.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the Site Plan for the construction of a multi-family residential apartment development ("The Seasons at Franklin") at the site of the former Nature's Nook, a nearby former gas station and a single-family house, containing up to 252 apartment units consisting of 2-story units with 20 and 24 unit configurations (total unit counts are 12 buildings with a mix of 30 studio units, 96 one bedroom units, 102 two bedroom units, and 24 three bedroom units) with a single primary access off of South 27th Street, the property development including stormwater management, parking (both covered and open) and a dog park amenity for on-site residents only, properties located at 9801 South 27th Street and 9605 South 29th Street, zoned B-4 South 27th Street Mixed-Use Commercial District, as depicted upon the plans dated January 27, 2022, attached hereto and incorporated herein, is hereby approved, subject to approval of the application for a Special Use, and subject to the following terms and conditions:

1. The property subject to the Site Plan shall be developed in substantial compliance with and operated and maintained pursuant to the Site Plan for the Fiduciary Real Estate Development, Inc. multi-family residential apartment development ("The

# FIDUCIARY REAL ESTATE DEVELOPMENT, INC. – SITE PLAN RESOLUTION NO. 2022-\_\_\_\_Page 2

Seasons at Franklin") construction dated January 27, 2022.

- 2. Fiduciary Real Estate Development, Inc., successors and assigns, and any developer of the Fiduciary Real Estate Development, Inc., multi-family residential apartment development ("The Seasons at Franklin") construction project, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the Fiduciary Real Estate Development, Inc. multi-family residential apartment development ("The Seasons at Franklin") construction project, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to 15-9.0502 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
- 3. The approval granted hereunder is conditional upon the Fiduciary Real Estate Development, Inc. multi-family residential apartment development ("The Seasons at Franklin") construction project (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
- 4. That the Fiduciary Real Estate Development, Inc. multi-family residential apartment development ("The Seasons at Franklin") construction project shall be developed and constructed pursuant to such Site Plan within one year from the date of adoption of this Resolution, or this Resolution and all rights and approvals granted hereunder shall be null and void, without any further action by the City of Franklin.
- 5. That the approved Site Plan is conditioned on subsequent approval of a Special Exception to Wetland, Wetland Buffer, and Wetland Setback Provisions, and Improvements and Enhancements to a Natural Resource Feature (or NRSE Application), and that any changes or amendments to said Site Plan as a result of an NRSE Application approval shall be provided to the Department of City Development Department for administrative review and approval.
- 6. That the applicant shall provide a revised Site Plan that identifies all revisions required under the staff review memorandum dated February 7, 2022, for review and approval, prior to the issuance of the building permit.
- 7. That the applicant shall submit a revised Landscape Plan including revisions to the preserved tree canopy lists and inventory to reflect the minimum standards of UDO §15-5.0302D. for review and approval by the Department of City Development.

| FIDUCIARY REAL ESTATE DEVELOPMENT, INC. – S | SITE PLAN |
|---|-----------|
| RESOLUTION NO. 2022-                        |           |
| Page 3                                      |           |

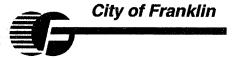
- 8. That the applicant shall obtain approval of the Stormwater Management Plan, Utilities Construction Plan, and Erosion Control Plan from the City Engineering Department prior to issuance of the building permit.
- 9. That the applicant shall provide a copy of the Driveway Access Permit from the Wisconsin Department of Transportation prior to the issuance of the building permit.
- 10. That the applicant shall comply with Health Department requirements regarding dog park usage, signage, vaccinations, and related standards for animal control.
- 11. That the applicant shall comply with all review and licensure requirements of the Wisconsin Department of Safety and Professional Services regarding the swimming pool facility at the clubhouse.

|             | _                           | gular meeting of the, 202 | e Plan Commission of the City of Franklin this 22. |
|-------------|-----------------------------|---------------------------|--|
|             | _                           | ed at a regular med<br>of | eting of the Plan Commission of the City of, 2022. |
|             |                             |                           | APPROVED:  |
|             |                             |                           | Stephen R. Olson, Chairman                         |
|             | Y REAL ESTA<br>ION NO. 2022 |                           | ENT, INC. – SITE PLAN                              |
| ATTEST:     |                             |                           |  |
| Sandra L. W | Vesolowski, Ci              | ty Clerk                  |  |
| AYES        | NOES                        | ABSENT                    |  |

**Planning Department** 9229 West Loomis Road Franklin, Wisconsin 53132 Email: generalplanning@franklinwi.gov

Name & Title (PRINT)

Date: \_\_\_\_



Phone: (414) 425-4024 Fax: (414) 427-7691

Web Site: www.franklinwi.gov

| Date of Application: |  |
|----------------------|--|
|----------------------|--|

### **SPECIAL USE / SPECIAL USE AMENDMENT APPLICATION**

| Complete, accurate and specific infor  | mation must be entered. <u>Please Print.</u>  |
|--|---|
| Applicant (Full Legal Name[s]): Name: Anthony DeRosa   | Applicant is Represented by: (contact person)(Full Legal Name[s])   |
| Company: Fiduciary Real Estate Development, Inc.   | Name:Company:   |
| Mailing Address: 789 North Water Street, Suite 200   | Mailing Address:  |
| City / State: Milwaukee, WI Zip: 53202   | City / State: Zip:  |
| Phone: 414-246-8402  |   |
| Email Address: tderosa@fred-inc.com  | Phone:  |
| Lineal Address.  | Email Address:  |
| Project Property Information: Property Address: 9801 S 27th Street & 9605 S 29th Street  | Tax Key Nos: 902-9965-006 & 902-9966-001  |
| Property Owner(s): CCM-9801 27th Franklin LLC  |   |
|  | Existing Zoning: B-4  |
| Mailing Address: 901 S 70th St. & 2 E Mifflin St#801   | Existing Use: Vacant Land   |
| City / State: West Allis, WI & Madison, WI Zip: 53214 & 53703  | Proposed Use: Multi-family Development  |
| Email Address:   | Future Land Use Identification: B-4 Special Use   |
| *The 2025 Comprehensive Master Plan <u>Future Land Use Map</u> is available  | e at: http://www.franklinwi.gov/Home/ResourcesDocuments/Maps.htm  |
| Special Use/Special Use Amendment submittals for review must include and   | be accompanied by the following:  |
| ■ This Application form accurately completed with original signature(s). Face  | similes and copies will not be accepted.  |
|  | 1000 Special Use Amendment  |
|  | '50, New Special Use under 4,000 square feet  |
| Legal Description for the subject property (WORD.doc or compatible formation)  | •   |
|  | pplicable), and Considerations found in Section 15-3.0701(A), (B), and (C) of   |
| the Unified Development Ordinance available at <a href="https://www.franklinwi.gov">www.franklinwi.gov</a> .   |   |
| Seven (7) complete <u>collated</u> sets of Application materials to include:   |   |
| One (1) original and six (6) copies of a written Project Summary, includ<br>interior/exterior building modifications or additions to be made to proj<br>information that is available.)  |   |
| Three (3) folded full size, drawn to scale copies (at least 24" x 36") of the only those plans/items as set forth in Section 17-7.0101, 15-7.0301 and development. (e.g., Site Plan, Building Elevations, Landscape Plan, Outcomes   | 15-5.0402 of the Unified Development Ordinance that are impacted by the   |
| Four (4) folded reduced size (11"x17") copies of the Site Plan/Site Plan   | Amendment package.  |
| One colored copy (11"x17") of the building elevations, if applicable.  |   |
| Three copies of the Natural Resource Protection Plan and report, if applical   |   |
| Email (or CD ROM) with all plans/submittal materials. Plans must be submit   | ted in both Adobe PDF and AutoCAD compatible format (where applicable).   |
| <ul> <li>Upon receipt of a complete submittal, staff review will be conduct</li> <li>Special Use/Special Use Amendment requests require Plan Committee</li> </ul>  |   |
| The applicant and property owner(s) hereby certify that: (1) all statements and other of applicant's and property owner(s)' knowledge; (2) the applicant and property owner(s) agree that any approvals based on represent issued building permits or other type of permits, may be revoked without notice execution of this application, the property owner(s) authorize the City of Franklin and a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under been posted against trespassing pursuant to Wis. Stat. §943.13. | wner(s) has/have read and understand all information in this application; and (3) ations made by them in this Application and its submittal, and any subsequently if there is a breach of such representation(s) or any condition(s) of approval. By ad/or its agents to enter upon the subject property(ies) between the hours of 7:00 |
| (The applicant's signature must be from a Managing Member if the business is a signed applicant's authorization letter may be provided in lieu of the applicant's provided in lieu of the property owner's signature[s] below. If more than one, all of  | s signature below, and a signed property owner's authorization letter may be  |
| Signature - Property Owner   | Signature - Applicant   |
| Name & Title (PRINT)  Date:  | Name & Title (PRINT)  Date: 9/14/2021   |
| Signature - Property Owner   | Signature - Applicant's Representative  |

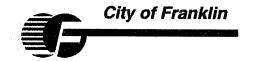
Name & Title (PRINT)

Date: \_\_\_\_\_

**Planning Department** 9229 West Loomis Road Franklin, Wisconsin 53132 Email: generalplanning@franklinwi.gov

Name & Title (PRINT)

Date: \_\_\_\_\_



Phone: (414) 425-4024 Fax: (414) 427-7691

Web Site: www.franklinwi.gov

| Date of Application: |  |
|----------------------|--|

#### **SITE PLAN / SITE PLAN AMENDMENT APPLICATION**

| Complete, accurate and specific info  | rmation must be entered. <u>Please Print.</u>   |  |
|---|---|--|
| Applicant (Full Legal Name[s]): Name: Anthony DeRosa  | Applicant is Represented by: (contact person)(Full Legal Name[s]) Name:   |  |
| Company: Fiduciary Real Estate Development, Inc.  | Company:  |  |
| Mailing Address: 789 North Water Street, Suite 200  | Mailing Address:  |  |
| City / State: Milwaukee, WI Zip: 53202  | City / State: Zip:  |  |
| Phone: 414-246-8402   | Phone:  |  |
| Email Address: tderosa@fred-inc.com   | Email Address:  |  |
|   |   |  |
| Project Property Information: Property Address: 9801 S 27th Street & 9605 S 29th Street   | Tax Key Nos: 902-9965-006 & 902-9966-001  |  |
| Property Owner(s): CCM-9801 27th Franklin LLC   | 1ax key Nos: 302-3300-000 d 302-3300-001  |  |
| roperty owner(s).   | F   |  |
| Mailing Address: 901 S 70th St. & 2 E Mifflin St#801  | Existing Zoning: B-4 Existing Use: Vacant Land  |  |
| City / State: West Allis, WI & Madison, WI Zip: 53214 & 53703   | Proposed Use: Multi-family Development  |  |
| Email Address:  |   |  |
| Little Address.   | Future Land Use Identification: B-4 Special Use   |  |
| *The 2025 Comprehensive Master Plan Future Land Use Map is available  | e at: http://www.franklinwi.gov/Home/ResourcesDocuments/Maps.htm  |  |
| Site Plan/Site Plan Amendment submittals for review must include and be ac  | companied by the following:   |  |
| This Application form accurately completed with original signature(s). Face   | similes and copies will not be accepted.  |  |
| Application Filing Fee, payable to City of Franklin: Tier 1: \$200  | 0   |  |
| ☐Tier 3: \$500 (≤ 10% increase or decrease in total floor area of all s   | structures with no change to parking; or change to parking only).   |  |
| Legal Description for the subject property (WORD.doc or compatible formation)   | at).  |  |
| Seven (7) complete <u>collated</u> sets of Application materials to include:  |   |  |
| One (1) original and six (6) copies of a written Project Summary, includ  | ing description of any new building construction and site work,   |  |
| interior/exterior building modifications or additions to be made to prop<br>information that is available.)   | perty, site improvement costs, estimate of project value and any other  |  |
| Seven (7) <b>folded</b> full size, drawn to scale copies (at least 24" x 36") of the  | he Site Plan/Site Plan Amendment nackage. /The submittel should include   |  |
| only those plans/items as set forth in Section 15-7.0103, 15-7.0301 and   | 1 15-5.0402 of the Unified Development Ordinance that are impacted by the   |  |
| development. (e.g., Site Plan, Building Elevations, Landscape Plan, Outo  | door Lighting Plan, Natural Resource Protection Plan, etc.)   |  |
| Reduced size (11"x17") copies of the Site Plan/Site Plan Amendment  | t package will be at Planning staff recommendation, if applicable.  |  |
| One colored copy (11"x17") of the building elevations, if applicable.   |   |  |
| One copy of the Site Intensity and Capacity Calculations, if applicable (see I  |   |  |
| Three copies of the Natural Resource Protection report, if applicable (see S  |   |  |
| Email (or CD ROM) with all plans/submittal materials. Plans must be submitted   | ed in both Adobe PDF and AutoCAD compatible format (where applicable).  |  |
| <ul> <li>Upon receipt of a complete submittal, staff review will be conduct</li> <li>Site Plan/Site Plan amendment requests require Plan Commission</li> </ul>  | ed within ten business days. Additional materials may be required.<br>or Community Development Authority review and approval. |  |
| The applicant and property owner(s) hereby certify that: (1) all statements and other information submitted as part of this application are true and correct to the best of applicant's and property owner(s)' knowledge; (2) the applicant and property owner(s) has/have read and understand all information in this application; and (3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval. By execution of this application, the property owner(s) authorize the City of Franklin and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13. |   |  |
| (The applicant's signature must be from a Managing Member if the business is an<br>signed applicant's authorization letter may be provided in lieu of the applicant's<br>provided in lieu of the property owner's signature[s] below. If more than one, all of  | s signature below, and a signed property owner's authorization letter may be  |  |
| •   | Ku Doll   |  |
| Signature - Property Owner  | Signature, Applicant  |  |
| Name & Title (PRINT)  Date:   | Name & Title (PRINT)  Date: 9/14/2021   |  |
| Signature - Property Owner  | Signature - Applicant's Representative  |  |

Name & Title (PRINT)

Date: \_\_\_\_



901 South 70th Street West Allis, WI 53214

September 14, 2021

Mr. Heath Eddy City of Franklin Planning Manager, Department of City Development 9229 W. Loomis Road Franklin, WI 53132

RE: Site Plan & Special Use Review - NWC of 27th Street and Southbranch Boulevard

Dear Mr. Heath Eddy:

I hereby give my authorization to Fiduciary Real estate Development, Inc. to apply for Site Plan and Special Use Amendment Applications for the following property located on the NWC of 27<sup>th</sup> Street and Southbranch Boulevard:

- Parcel # 90-29-965-006
- Parcel # 90-29-966-001

Should you have any comments or questions, I can be reached at (414) 395-4452.

Regards,

Cardinal Capital Management, Inc.

Nicklaus J. Jung General Counsel



# The Seasons at Franklin

### **Detailed Proposal Description**



**January 5, 2022** 



789 N. Water Street, Suite 200, Milwaukee, Wisconsin 53202 Phone 414.226.4535 • Fax 414.226.4523 • www.fred-inc.com

#### **Subject Property**

The subject property is located on the west side of South 27<sup>th</sup> Street at Southbranch Boulevard. The subject property is approximately 24.06 acres in size and contains the former Nature's Nook building and a single family home.



#### **Proposed Multi-Family Development**

The Seasons at Franklin is an institutional grade, market rate, amenity rich multifamily development designed with the end user in mind. The development has a true suburban feel with a significant amount of preserved open green space. The community will consist of two-story walkup buildings with 20 and 24 unit configurations. The buildings have been designed in a townhouse style which feature ground level, private direct entrances as well as attached garages for select apartments. The apartments, which include studio, one bedroom, two bedroom, and three bedroom floor plans, are strategically placed within the buildings.

Careful attention was taken to maximize floor plan efficiency, functionality, and flexibility to provide residents with a great value. Each of the 252 market rate apartment homes will feature modern finishes including open concept floor plans, designer cabinetry, expansive windows, quartz countertops, upgraded appliances, oversized balconies/patios, large walk-in closets and 9-foot ceilings. Flooring will consist of high-quality grade carpet in all bedrooms and designer plank flooring throughout the balance of the apartment. All apartments will include a split HVAC system (similar to what is in a new single family home), individual hot water heaters, energy efficient windows and a full-size washer and dryer to maximize efficiency and comfort. The building layouts and floor plan designs of this development provide a variety of housing options and price points that will cater to a broad demographic group. Monthly rents will range from \$1,200 to \$2,500.

In addition to the individual apartment features, the 5,000 square foot clubhouse has been designed to create an unparalleled resident experience with its resort style pool, 24-hour fitness center with high end cardio equipment and club room with an entertaining style kitchen. Walking paths will also be featured throughout the site, including connections to the onsite dog park as well as to Ascension at the south property line.

Over the years, the former Nature's Nook property has become a real eyesore. It has become common practice for people to dump random materials throughout the site. The proposed multifamily portion of the property has the following environmental challenges that Fiduciary intends to remediate:

- Nine 55-gallon drums, containers of gasoline, diesel fuel and kerosene, transmission fluid with potential environmental impacts.
- Diesel fuel stained gravel was observed beneath a 105 gallon street transfer fuel tank
- 300 gallon waste oil tank and containers of drain oil, gear oil, and trans-hydraulic fluid were observed on the property and have the potential to impact the soil and groundwater of the property.
- Solid waste storage areas throughout the site



#### Natural Resource Protection Plan

The City of Franklin UDO Division 15-4.0100 on Natural Resources requires 100% protection of wetlands and wetland buffers. A special exemption for the requirement to protect 100% of the wetlands and wetland buffers is being requested. The project will impact approximately 671 square feet of wetlands, and permanently impact approximately 4,990 square feet of wetland buffer. The existing wetland area to be impacted runs through the center of the site and cuts off the northwest portion of the site from the rest of the site. The location of the wetlands makes it very difficult to develop the northwest portion of the site. In order for the project to be economically feasible, development of the northwest portion of the site is necessary to achieve sufficient density and number of units. Without approval of the exemption request, the project is not viable. The

proposed development will mitigate the contamination and protect the wetlands to remain from potential environmental contamination. The existing flow of runoff through the site will be maintained. Only two small areas of low-quality wetlands which bisect the site, where existing crossings currently exist, are proposed to be filled in order provide connections to the northwest and southern portions of the site. Forty five percent of the site would be inaccessible without the wetland crossings. The crossings of the low-quality wetlands also provide a secondary emergency access point that is preferred by the Fire Department. The proposed wetland crossings have been moved from original plans to be centered on the gaps in the delineated wetlands to minimize wetland impacts. The use of smaller multifamily building footprints also helps avoid the higher quality wetlands on the site. Onsite wetland mitigation at a rate of 1.5 times the area of filled wetlands will be provided for on the site. We did receive approval from the Department of Natural Resources on December 23<sup>rd</sup>, 2021, to fill the 671 square feet of wetlands. Permit number GP-SE-2021-41-0428 along with all the corresponding plans are included in this submission.



#### South 27th Street Design Overlay District

Our development is subject to the 15-3.0351 South 27<sup>th</sup> Street Design Overlay District requirements. We meet or exceed the landscaping, parking and architectural requirements noted in this subsection of the Unified Development Ordinance. The majority of the requirements are related to commercial uses.

#### **Market Demand**

There are a multitude of characteristics that help support the long-term success of a multifamily development including location, community amenities, quality of construction, and overall cost of living. The demand for additional rental housing along with the current overall strength of the local rental market provides Fiduciary an opportunity to bring this "Class A" development to the market.

Fiduciary's market research indicates pent up demand for a unique type of new, luxury apartment rentals in the City of Franklin. This area of Franklin lacks a true Class A market rate rental housing

option. With the addition of the planned industrial developments along the South 27<sup>th</sup> Street corridor, this proposed development will aid in providing a modern housing option for these future employers and their employees. Specifically, there is a growing demand for alternatives to single family homes. Many of the multifamily housing options in the local submarket are older communities with dated finishes and amenities which cannot fulfill the current market demand.

In recent years, demand, especially from young professionals and empty nesters, has shifted away from home ownership towards multifamily housing. There is a demand for new, high-end market rate apartment homes in Franklin from those that are looking to downsize or no longer own a home, but want to stay within the community, as well as from those professionals that work for major employers in the area. This demand is from a demographic group that will spend their money in the communities in which they live and is looking for an upscale development to call home.



Fiduciary is targeting a different demographic that is not looking to live in the typical 3 or 4 story building with common corridors, but rather a smaller scale building type with private, direct entries creating more of a condo or townhome type feel. This group wants the community they live in to feel more suburban with an abundance of green space, walkability within the development, abundant amenity package and conveniently located.

Given the site characteristics and the pent up demand for high quality multifamily housing in this area, Fiduciary has identified that the highest and best use for the subject property is a multifamily development.

**Building and Unit Counts:** The multifamily development will include twelve (12) freestanding buildings with 20 or 24 apartments per building for a total of 252 apartments. The unit mix consists of 30 studios (12% of total), 96 one-bedrooms (38% of total), 102 two-bedrooms (40% of total), and 24 three-bedrooms (10% of total).

**Design/Materials:** The exterior finish of the buildings includes a significant amount of brick, oversized windows, and fiber cement siding. A mix of large balconies and private patios

complement the exterior elevations and the gabled roof details contribute to the suburban feel of the community.

**Parking:** Parking will be provided through a mix of building-attached garages containing twelve spaces throughout eight garages, detached garages with eight bays each, and surface parking. Total parking provided is 468 spaces for all 252 units, resulting in a parking ratio of 1.85 spaces per unit. The plan includes 124 enclosed garage spaces for an overall garage ratio of .49 garage spaces/unit.

**Access and Circulation:** Main access from South 27<sup>th</sup> Street will be provided via the intersection at Southbranch Boulevard. The existing South 29<sup>th</sup> Street that runs along the north side of the property will stay and be used as an emergency access point. This emergency access road is currently located within the floodplain limits and adjacent to higher quality wetlands.

**Landscape/Buffering and Pedestrian Ways:** The site plan reveals a greened-up site featuring courtyards and pedestrian walkways that flow throughout the development. The site has been planned so as to comply with tree preservation requirements for both mature and young woodlands found in the Natural Resource Protection Plan.

**Finishes:** Apartment finishes include: an upgraded stainless steel appliance package, upgraded cabinetry, large windows, open concept floor plans, inunit full size washer / dryer, walk in closets, and oversized balconies/patios.





#### **Development Details**

- Multifamily Property Size: 24.06 acres
- Current Zoning: B-4 South 27<sup>th</sup> Street Mixed Use Commercial District
- The Comprehensive Plan earmarks this site as Mixed Use.
- Residential Density: 10.5 units per acre.



- Parking Requirements
  - Code requires 1 space per efficiency and one bedroom dwelling units, 2 spaces for two bedroom dwelling units, and 1.96 spaces for three bedroom dwelling units.
    - Per code the multifamily project requires 403 parking spaces

- 468 parking spaces are being provided
- Minimum Parking Space Size. The size of each parking space shall be not less than 180 square feet nor less than nine feet in width, exclusive of the space required for ingress and egress
  - Parking stalls are currently shown as 9'x18' and 162 square feet
- Significant Increment in Property Taxes:
  - Current property tax: \$32,634.52
  - Estimated property tax upon completion: \$630,000 Making Fiduciary the third largest tax payer within the City of Franklin



- Impact of Additional Consumer Spending in Local Area:
  - o \$1,100,000 annually or in excess of \$11,000,000 over a ten year period.
- Architecture
  - Two story design that is in scale with adjacent properties:
    - Parcel to the North Staybridge Suites/Halquist Stone
    - Parcel to the East Transport National/Public Storage
    - Parcel to the South Single family home/Software Training & Development Center/Ascension
    - Parcel to the West Single family homes
- Storm Water Management
  - Utilizing the natural site characteristics to manage all storm water management on site
  - No additional runoff will be created from the development

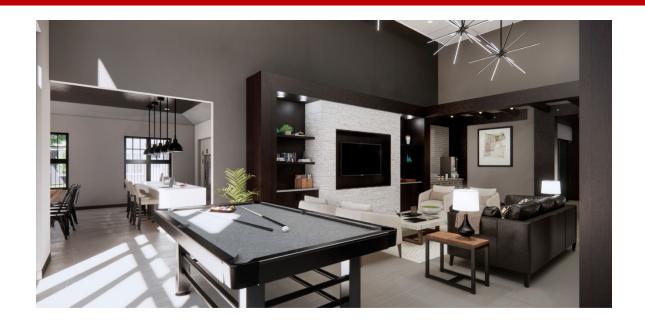


#### About Fiduciary Real Estate Development, Inc.

Fiduciary Real Estate Development, Inc. (FRED) is an experienced developer and investor in commercial real estate focusing on multifamily projects. Founded in 1984, FRED's proven track record of successful investment management has grown the business into one of Wisconsin's largest property management companies. The company owns and manages more than 8,000 market rate apartments, with an owned portfolio conservatively valued at over \$1.5 billion.

FRED's mission is to develop and manage exceptional residential communities that provide a distinctive living experience through enthusiastic service and dynamic teamwork. Visionary leadership, accountability with integrity and camaraderie and passion for people guide the vision of creating communities that are vibrant and enrich residents' lives.





## **DIVISION 15-3.0700** SPECIAL USE STANDARDS AND REGULATIONS SECTION 15-3.0701 GENERAL STANDARDS FOR SPECIAL USES

- **A.** <u>General Standards</u>. No special use permit shall be recommended or granted pursuant to this Ordinance unless the applicant shall establish the following:
- 1. **Ordinance and Comprehensive Master Plan Purposes and Intent.** The proposed use and development will be in harmony with the general and specific purposes for which this Ordinance was enacted and for which the regulations of the zoning district in question were established and with the general purpose and intent of the City of Franklin Comprehensive Master Plan or element thereof.
  - Response: The site is currently located in the B-4 South 27<sup>th</sup> Street Mixed Use Commercial District, which is intended to provide for the development of certain mixed uses including retail, commercial, office and residential development. The comprehensive plan notes the site as Mixed Use which is also consistent with the zoning designation. The proposed development will be focused on multi-family housing as well as one commercial outlot of .68 acres along South 27<sup>th</sup> Street.
- 2. **No Undue Adverse Impact.** The proposed use and development will not have a substantial or undue adverse or detrimental effect upon or endanger adjacent property, the character of the area, or the public health, safety, morals, comfort, and general welfare and not substantially diminish and impair property values within the community or neighborhood.
  - Response: The proposed development will have no adverse impact on the adjacent property's owners. The redevelopment of this blighted property will actually enhance the area as the subject site has become a dumping site over the years.
- 3. **No Interference with Surrounding Development.** The proposed use and development will be constructed, arranged, and operated so as not to dominate the immediate vicinity or to interfere with the use and development of neighboring property in accordance with the applicable zoning district regulations.
  - Response: A large buffer will be kept in place on the west side of the property to preserve a significant portion of the young woods and will provide for additional screening to the homes to the west.
- 4. **Adequate Public Facilities.** The proposed use and development will be served adequately by essential public facilities and services such as streets, public utilities including public water supply system and sanitary sewer, police and fire protection, refuse disposal, public parks, libraries, schools, and other public facilities and utilities or the applicant will provide adequately for such facilities.
  - Response: Yes, the proposed development will be served adequately by essential public facilities, public utilities, police, fire protection, refuse disposal, public parks and libraries. The subject property is not within the Franklin school district.

- 5. **No Traffic Congestion.** The proposed use and development will not cause undue traffic congestion nor draw significant amounts of traffic through residential streets. Adequate measures will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.
  - Response: The proposed project will have direct access to South 27th Street and therefor should not draw significant traffic through surrounding residential streets. We do not anticipate any congestion from the development onto South 27th Street.
- 6. **No Destruction of Significant Features.** The proposed use and development will not result in the destruction, loss, or damage of any natural, scenic, or historic feature of significant importance.
  - Response: The proposed multifamily development will not result in the destruction, loss, or damage of any historic feature of significant importance.
- 7. **Compliance with Standards.** The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified by the Common Council pursuant to the recommendations of the Plan Commission. The proposed use and development shall comply with all additional standards imposed on it by the particular provision of this Division and Ordinance authorizing such use.
  - Response: FRED exceeds the parking requirement of 403 parking spaces. The parking stalls are 9'x18' for 162 square feet instead of the required 180 square feet.
- **B.** <u>Special Standards for Specified Special Uses</u>. When the zoning district regulations authorize a special use in a particular zoning district and that special use is indicated as having special standards, as set forth in Section 15-3.0702 and 15-3.0703 of this Division, a Special Use Permit for such use in such zoning district shall not be recommended or granted unless the applicant shall establish compliance with all such special standards.
  - Response: FRED complies with all such special standards that apply to B-4 zoning noted in 15-3.0702 and 15-3.0703.
- C. <u>Considerations</u>. In determining whether the applicant's evidence establishes that the foregoing standards have been met, the Plan Commission and the Common Council shall consider the following:
- 1. **Public Benefit**. Whether and to what extent the proposed use and development at the particular location requested is necessary or desirable to provide a service or a facility that is in the interest of the public convenience or that will contribute to the general welfare of the neighborhood or community.

Response: A multifamily development in this area will support the existing commercial as well as encourage additional commercial growth in this part of Franklin. The potential increment in property taxes from this development would make FRED the third highest tax payor in the City of Franklin.

2. **Alternative Locations**. Whether and to what extent such public goals can be met by the location of the proposed use and development at some other site or in some other area that may be more appropriate than the proposed site.

Response: FRED has looked throughout Franklin for a multifamily site that meets our needs as well as the needs of the City of Franklin. This site has become blighted as it has sat vacant since Natures Nook closed along with the closed down former gas station property.

3. **Mitigation of Adverse Impacts**. Whether and to what extent all steps possible have been taken to minimize any adverse effects of the proposed use and development on the immediate vicinity through building design, site design, landscaping, and screening.

Response: FRED has designed the site so that it minimizes any potential adverse effects.

4. **Establishment of Precedent of Incompatible Uses in the Surrounding Area**. Whether the use will establish a precedent of, or encourage, more intensive or incompatible uses in the surrounding area.

Response: FRED believes a multifamily development in this area will encourage additional compatible growth in this part of Franklin.



#### **RESPONSE MEMO**

This memo serves as a response to the comments received on 2/7/2022 from Franklin Department of City Development. Sigma responses are indicated in red.

To: Heath Eddy, Planning Manager, Department of City Development

HEddy@franklinwi.gov

414-425-4024

Cc: Christopher Carr

From: Tony DeRosa, Vice President

tderosa@fred-inc.com

262-366-4376



Please be advised that City Staff has reviewed the above application received (as revised) on January 5, 2022, for a site plan for 252 apartment units consisting of 30 studio/efficiencies, 96 1-bedroom units, 102 2-bedroom units, and 24 3-bedroom units, on 24+ acres of property located at 9801 S. 27<sup>th</sup> Street/9605 S. 29<sup>th</sup> Street. A separate set of review comments for the Natural Resources Special Exception will be forthcoming from staff. Please note the following comments:

#### **DEPARTMENT OF CITY DEVELOPMENT**

1. **Minimum Area/Bulk Requirements.** The proposal for multi-family apartment units is reviewed based on the standards provided in the R-8 Multiple-Family Residence District, Option 2. Staff's review indicates that the locations of all buildings meet the minimum setback requirements, and the overall project complies with the "Open Space Ratio" for this type of development.

#### Response 1: Concur. Project Meets requirements.

2. **South 27**<sup>th</sup> **Street Design Overlay District Requirements.** Per UDO 15-3.0351A.4, Residential uses are exempt from compliance with the Overlay.

#### Response 2: Concur. Project Meets requirements.

- 3. Landscaping. Review and comments are as follows:
  - a. The proposed site plan relies primarily on retaining existing vegetation. Per the submitted Landscape Plan (L100-L103), 286 trees with a caliper greater than 8 inches are to be preserved. These are primarily located along the west lot line and the southeast portion of the site near South 27<sup>th</sup> Street. What the Landscape Plan lacks is the exact location, size and type of materials to be preserved, as required under UDO §1505.0302D.4. Staff will make this a condition of approval.

#### Response 3: Landscape plan will include detailed information on existing landscape to be preserved.

b. Given the subject property location, the only area where a 25-foot landscaped bufferyard is required is along the west lot line adjacent single-family residences which front South 31<sup>st</sup> Street. It is noted that this entire 25-foot buffer area is largely maintained in either "Young Woodland" along the southwest edge and "Mature Woodland" further north.

#### Response 4: Concur. Project Meets requirements.

c. Per UDO Table 15-5.0302, multi-family developments are required to provide a certain number of 4 types of plant materials. The applicant's provision is cited in the table below:

| Type              | Planting Size | Minimum<br>Quantity | Total Required | Total Provided |
|-------------------|---------------|---------------------|----------------|----------------|
| Canopy/Shade Tree | 2.5" caliper  | 1.5 per unit        | 378            | 100            |
| Evergreen Tree    | 4' tall       | 1 per unit          | 252            | 85             |
| Decorative Tree   | 1.5" caliper  | 1 per unit          | 252            | 33             |
| Shrubs            | 3' tall       | 3 per unit          | 756            | 3,383          |

The proposed site plan is significantly short on tree plantings, even accounting for the preservation of existing species on-site. Per UDO §15-5.0302D., one-for-one species replacement applies to non-bufferyards;



as noted above, staff does not know where the 286 preserved trees are located, how large they are, or whether or not they get full credit (for non-bufferyards) versus ½ credit in the bufferyard along the west lot line. Staff recommends that the applicant provide a location map and details for each preserved tree 8" in caliper (or over 6 feet in height, per UDO §15-5.0302D).

In lieu of the preservation locational analysis, the maximum that could be reduced would be 286 tree species, which still leaves the Landscape Plan a minimum of 378 canopy, evergreen, and decorative trees short. And while the applicant provides an over four-fold increase in shrubs over the minimum required, staff notes that the locations of the shrubs are surrounding the building foundations. While this is a nice design element, it doesn't quite count per the UDO standards. The UDO also does not provide for modifications of landscaping requirements and these requirements are ineligible for a variance application.

Response 5: We will work with staff to ensure the final landscape plan is in conformance with the applicable landscape codes.

- 4. Parking: ADA, Standard Ratio, and Lot Design.
  - a. ADA Requirements. Per UDO Table 15-5.0202(I)(1), the minimum required number of accessible off-street parking spaces for a parking facility of over 400 spaces is 9 ADA compliance spaces. Per UDO §15-5.0202J.1., the minimum dimensions for each such space shall be 13 feet by 20 feet for automobiles and 16 feet by 20 feet for vans. The current "Detailed Site Plan" (Sheets C100-C103) only shows 4 such spaces, and the dimensions are 9 feet by 18 feet.

Response 6: Site plan will be updated to include the required ADA spaces.

- b. Parking Numbers. Staff notes that the minimum amount of parking on the property shall be as follows:
  - i. Efficiency/1-bedroom units 1 space/unit x 126 = 126 spaces
  - ii. 2-bedroom units 2 spaces/unit x 102 units = 204 spaces
  - iii. 3-bedroom units 2.5 spaces/unit x 24 units = 60 spaces
  - iv. TOTAL = 126 + 204 + 60 = 390 spaces (SHOWN: 413 spaces + 20 spaces at clubhouse)
  - v. To permit more than 10% above the Standard Parking Ratio as provided in UDO Table 15-5.0203, the applicant needs to provide written support for this based on the standards provided in UDO §15-5.0203B.ii.
- c. Minimum size and aisle width. Parking area design does not comply with the minimum parking stall size of 180 square feet (UDO §15-5.0202B.) and the minimum aisle width of 25 feet (See UDO Table 15-5.0204).

Response 7: Site plan will be updated to not go above the 10% Parking Ratio. Site plan will also be updated to hold a 25' drive aisle (measured from face of curb) and a minimum 180 square foot parking spot.

#### LIGHTING.

5. Staff received no Lighting Plan, photometric analysis, or description of any proposed lighting to be provided on the subject property. Is the applicant proposing no lighting on the site? Please note that any lighting on-site is subject to the requirements in UDO §15-5.0401, depending on the type of luminaires to be provided. A lighting



plan would be required for review prior to issuance of any building or electrical permit for construction of such lighting, in compliance with UDO §15-5.0402.

#### Response 8: The development will include site lighting. Site lighting will be provided to meet City Codes.

6. **Natural Resources Protection.** Obviously lacking in compliance with respect to the UDO is that the proposed development would disturb 679.89 sq.ft. of wetland, 8,018 sq.ft. of wetland buffer, and 27,935 sq.ft. of wetland setback. The UDO does not permit any disturbance of these features without approval of a Natural Resource Features Special Exception (NRSE). The applicant has filed the NRSE application but it is further behind in the review cycle than the Site Plan/Special Use applications, so the applicant has request that these two applications proceed through the public review process in advance of the NRSE application. Staff is not entirely comfortable with this process, as it would require that both the Site Plan and Special Use Resolutions include a significant condition that the applicant is required to comply with the NRSE decision, which could include a denial of said application. The applicant is aware of this possibility but has requested to proceed. Staff notes that the applicant depicts the wetland mitigation areas on the submitted Natural Resource Protection Plan (dated January 6, 2022), though the area of coverage of this mitigation area is 12,171 sq.ft., the standard as required under UDO §15-4.0103B.4. and B.5. is 1.5 times the area permanently disturbed which should be 13,033.34 sq.ft.

Response 9: The revised NRPP submitted to the City on January 28<sup>th</sup> now exceeds the wetland mitigation standards noted in the UDO. Project team has gone through considerable changes to the site plan to drastically minimize wetland impacts and have received WDNR and Corps approvals. We feel that the NRSE decision will follow approvals from the WDNR and Corps and therefore would like to continue with approvals.

#### **ENGINEERING DEPARTMENT COMMENTS**

7. Use South Zone NAD 83 datum as specified on the proposed plans.

#### Response 10: Datum will be used.

8. The stormwater management facilities must meet the requirements of the City of Franklin stormwater management plan (UDO Division 15-8.0600).

#### Response 11: Understood.

9. If the water main is dedicated (approved by the WDNR) to the City by an easement, the proposed water main must be looped, having two connections at the water main on South 27th Street. The said City water main must comply with City Design Standards & Construction Specifications.

#### Response 12: Understood.

10. Engineering highly suggests having two access points at South 27th street.

Response 13: The Developer has worked with the City Engineer and the DOT on this issue. The site will have one primary access on the south side along South 27<sup>th</sup> Street. The existing driveway on the north side will be used as an "Emergency Access Only" and will be gated will a lock provided to Fire Department. If the driveway were to be upgraded it would have significant impact to the existing floodplain, wetlands and environmental corridor in the area.



11. The access to South 27<sup>th</sup> Street (STH 241) must be reviewed and approved by the WisDOT. A copy of said approval must be provided to the City Engineering Department (and a copy with the Department of City Development).

#### Response 14: Understood.

12. Engineering recommends a pedestrian sidewalk along South 27th Street.

Response 15: Currently there is no sidewalk along this stretch of 27<sup>th</sup> Street. Any sidewalk, either in the proposed or the existing right of way, would have additional impacts to wetlands.

13. The driveway entrance must be designed to accommodate the turning of trucks and busses. A turning exhibit shall be provided by the applicant demonstrating that the driveway access is sufficient to accommodate larger vehicles.

#### Response 16: Turning exhibit to be submitted.

14. The applicant must have a permit from the WisDOT to work in the South 27<sup>th</sup> Street right-of-way.

#### Response 17: Understood.

15. The applicant shall submit detailed construction plans for follow-up Engineering review.

#### Response 18: Understood.

#### **HEALTH DEPARTMENT COMMENTS**

- 16. **Dog Park. [these comments came from the earlier Site Plan submission]** Some concerns/questions from the Health Department perspective as we handle dog bites.
  - a. Will there be a master list of those in the building(s) that own dogs that utilize the dog park? Will the Health Department have the ability to review this list should there be a bite that occurs at this park? Will it be open to anyone that doesn't reside on the property?

Response 19: Residents are required to note all pets on their lease agreements. Information can be shared with the Health Department as needed. The dog park is not open to the public and only for residents' pets.

b. Will there be a requirement that all animals that use the dog park be up to date on rabies vaccine and have valid municipal license?

Response 20: Yes, all dogs need to have vaccines or shots per the local Health Department and our lease agreement.

c. Will animals within the enclosure be allowed off leash?

#### Response 21: Yes, dogs within the enclosure will be allowed off leash.

d. Will there by information supplied to those that frequent the park that animal bites are reportable to both the Health Department and Police Department and any animal involved in a bite will be subject to a 10-day quarantine including up to 3 veterinarian visits? Unprovoked bites and/or serious bites may lead to declaration of dangerous or vicious animal per Municipal Code § 80-9.



Response 22: If required, we can supply signage for the dog park that indicates any Health Department or Municipal codes for the dog park.

e. Will animals that bite (whether provoked or unprovoked) be allowed to continue using the park?

Response 23: This would be a lease violation and subject to a 5 day notice.

f. How will animal waste inside the park be disposed of?

Response 24: Animal waste inside of the dog park will be disposed of in pet waste stations by the pet's owner. Onsite maintenance will empty the stations on a regular basis.

17. If this property includes any pools as defined in ATCP 76, proper plan review by DSPS and licensing must occur.

Response 25: A pool will be included at the clubhouse, we will follow proper review with DSPS.

#### FIRE DEPARTMENT COMMENTS

18. The Fire Department has no comments regarding this project.

Response 26: Understood.

#### POLICE DEPARTMENT COMMENTS

19. The police department has no comment regarding this project.

Response 27: Understood.

#### **INSPECTION SERVICES DEPARTMENT COMMENTS**

20. Inspection Services has no comments on the subject proposal at this time.

Response 28: Understood.

# SEASONS AT FRANKLIN

Franklin, Wisconsin

FIDUCIARY REAL ESTATE DEVELOPMENT INC.



DATE: 17 FEBRUARY 2022

CONCEPTUAL DEVELOPMENT SUBMISSION





DEVELOPER

## FIDUCIARY REAL ESTATE DEVELOPMENT

789 North Water Street, Suite 200 Milwaukee, WI 53202

## THE SIGMA GROUP

Milwaukee, WI 53233 (414)643-4200

## SITE STATISTICS

## MULTIFAMILY

TWO STORY WALKUP BUILDINGS WITH 20 AND 24 UNIT CONFIGURATIONS ALONG WITH A CLUBHOUSE AND POOL

CLUBHOUSE - 4,942 SF

20 UNIT BUILDING - 25,797 SF (1,072 SF/UNIT\*) \* SF/UNIT DOES NOT INCLUDE GARAGE

24 UNIT BUILDING - 25,450 SF

ONE BEDROOM 24 TWO BEDROOM 30

**OVERALL UNIT COUNT 252** 

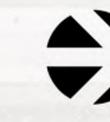
SITE AREA: 24.0 ACRES (10.5 UNITS/ACRE)

## SITE PARKING

416 STALLS (1.66 STALLS/UNIT) 124 STALLS ( .49 STALLS/UNIT)

540 STALLS (2.14 STALLS/UNIT)

SCALE 1"=60' 17 FEBRUARY 2022



Seasons At Franklin MULTIFAMILY Franklin, Wisconsin



















































































































1/8" EXTERIOR ELEVATIONS - 24 UNIT A510

DIMENSIONS AT EXTERIOR WALLS ARE TO FACE OF BRICK OR SHEATHING. ALIGN WITH FOUNDATION WALL BELOW.

UPPER FLOOR EXTERIOR DIMENSIONS ARE TO THE FACE OF MASONRY BELOW. ALIGN FRAMING WITH FRAMING BELOW.

UPPER FLOOR EXTERIOR DIMENSIONS ARE TO THE FACE OF MASONRY BELOW. ALIGN FRAMING WITH FRAMING BELOW.

ALL OTHER DIMENSIONS ARE TO FACE OF STUD.

VERIFY ALL ROUGH AND MASONRY OPENINGS (M.O.) WITH APPROVED SHOP DRAWINGS.

DIMENSIONS SHOWN AS ROUGH OPENINGS
FOR SPECIFIC PRODUCTS BASED ON
CURRENT INFORMATION AVAILABLE AT TIME
OF DRAWING PREPARATION. CONTRACTOR
TO VERIFY AS APPROPRIATE.

DOOR SCHEDULE

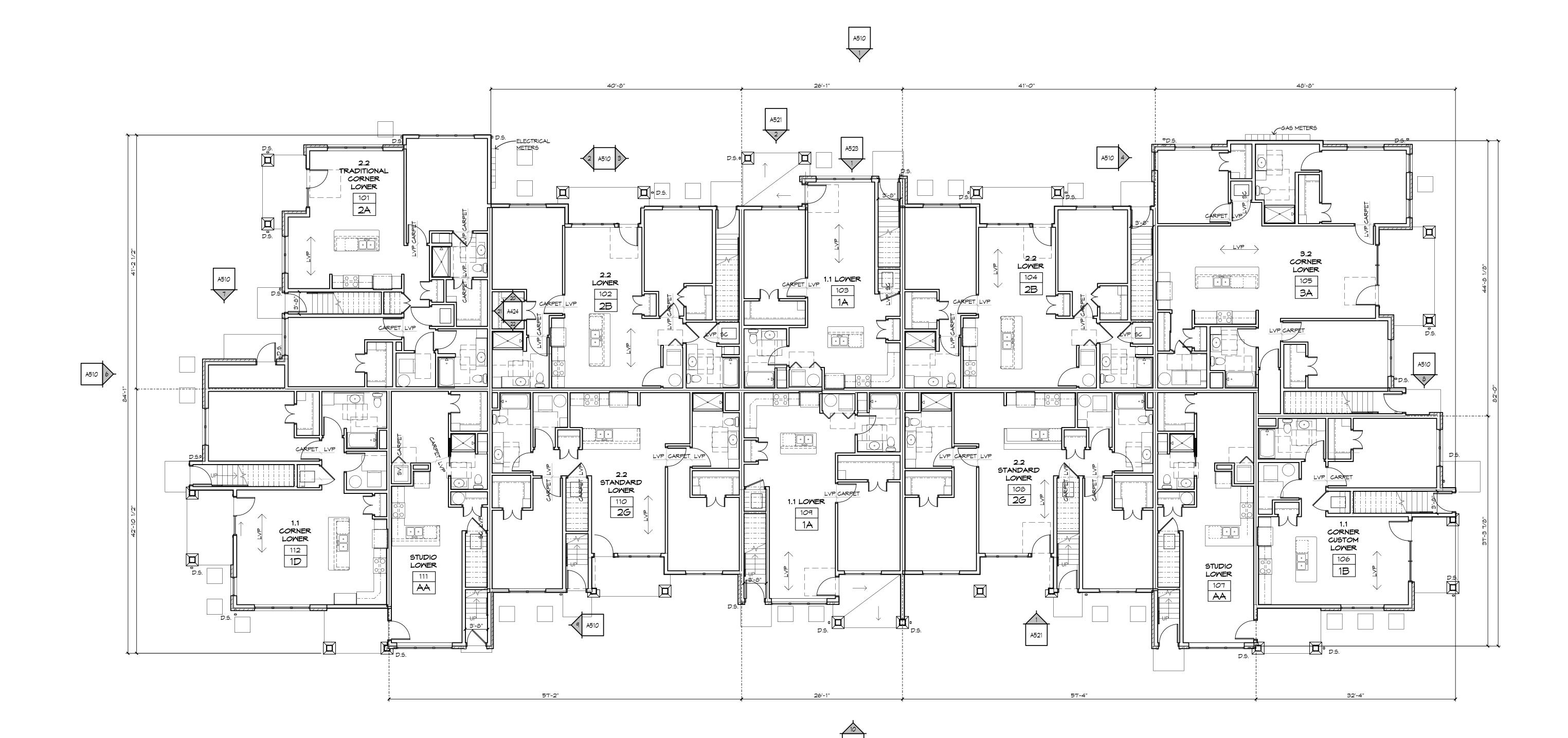
| 6'-6" \*\*
| PLUS OR MINUS - FOR REFERENCE ONLY.
| 1/4" UNIT PLANS SHEET A320 - A324

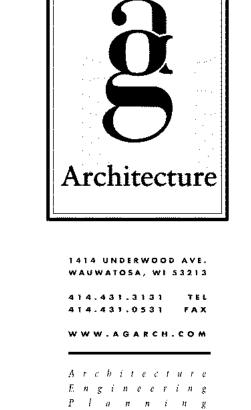
| SHEET AT320
| SHEET AT120
| SHEET A523

FIRE RATED WALL CONSTRUCTION MUST RUN CONTINUOUS BEHIND TUBS, SHOWERS, ETC.

VERIFY WALL CONSTRUCTION WITH WALL TYPES.

ROOM FINISH SCHEDULE SEE SPEC





REVISIONS

NO. DATE DESCRIPTION

PROMO 2025

FLOOR PLAN

APPROVED SHOP DRAWINGS.

1/4" UNIT PLANS

DOOR SCHEDULE

CORNER

CORNER CUSTOM

STANDARD UPPER 208 2E

20" x 30" CLEAR ATTIC ACCESS PANEL 1 HOUR FIRE RATED

SEE SHEET A323 FOR ENLARGED PARTIAL PLAN

2.2 UPPER

—20" x 30" CLEAR ATTIC ACCESS PANEL

STANDARD UPPER

SEE SHEET A322 FOR ENLARGED PARTIAL PLAN

TRADITIONAL CORNER

A623

A510 6

ROOM FINISH SCHEDULE

BEHIND TUBS, SHOWERS, ETC.

VERIFY MALL CONSTRUCTION WITH MALL TYPES.

GENERAL NOTES

DIMENSIONS AT EXTERIOR WALLS ARE TO FACE OF BRICK OR SHEATHING. ALIGN WITH FOUNDATION WALL BELOW.

UPPER FLOOR EXTERIOR DIMENSIONS ARE TO THE FACE OF MASONRY BELOW. ALIGN FRAMING WITH FRAMING BELOW.

VERIFY ALL ROUGH AND MASONRY OPENINGS (M.O.) WITH

PROVIDE PORTABLE FIRE EXTINGUISHER AT ALL UNITS WITH A MIN. RATING OF IA:10-B:C AS REQUIRED PER IFC906.1(1)

TO VERIFY AS APPROPRIATE.

SHEET AT320

SHEET A320 - A324

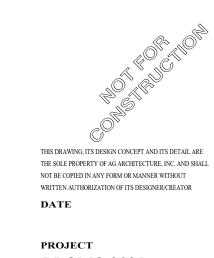
ALL OTHER DIMENSIONS ARE TO FACE OF STUD.

----- INDICATES 1 HOUR WALL ----- INDICATES 2 HOUR MALL





REVISIONS NO. DATE DESCRIPTION





## FLOOR PLAN GENERAL NOTES

DIMENSIONS AT EXTERIOR WALLS ARE TO FACE OF BRICK OR SHEATHING. ALIGN WITH FOUNDATION WALL BELOW.

UPPER FLOOR EXTERIOR DIMENSIONS ARE TO THE FACE OF MASONRY BELOW, ALIGN FRAMING WITH FRAMING BELOW,

ALL OTHER DIMENSIONS ARE TO PACE OF STUD. VERIFY ALL ROUGH AND MASONRY OPENINGS (M.O.) WITH

APPROVED SHOP DRAWINGS. LVP INDICATES VINYL PLANK FLOORING INSTALLATION DIRECTION ----- INDICATES 1 HOUR WALL

----- INDICATES 2 HOUR MALL DIMENSIONS SHOWN AS ROUGH OPENINGS TOR SPECIFIC PRODUCTS BASED ON 1 CURRENT INFORMATION AVAILABLE AT TIME OF DRAWING PREPARATION, CONTRACTOR TO VERIFY AS APPROPRIATE. 6'-6" \*\*

PLUS OR MINUS - FOR REFERENCE ONLY.

SHEET A320 - A324 DOOR SCHEDULE ROOM FINISH SCHEDULE

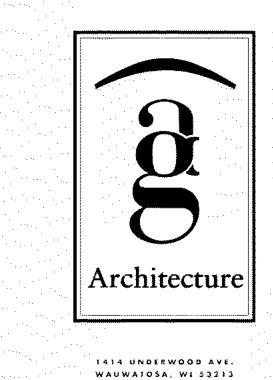
FIRE RATED WALL CONSTRUCTION MUST RUN CONTINUOUS BEHIND TUBS, SHOWERS, ETC.

VERIFY WALL CONSTRUCTION WITH WALL TYPES.

A TYPICAL DEMISING WALL SEE SHEET AT320
SIDE A INSTALL EXTRA LAYER OF DRYWALL PER WALL TYPE B - CONTRACTOR OPTION INSTALL OPPOSIDE SIDE AS NEEDED

FLOORING TRANSITION LOCATIONS LOCATE CENTER OF DOOR TYPICAL

LVP = LUXURY VINYL PLANK SC = SEALED CONCRETE & LOWER LEVEL HVAC ONLY SY = SHEET VINYL @ UPPER LEVEL HVAC ONLY



ASI #002 REVISIONS: REVISIONS PER RFI-002 RESPONSE REVISIONS PER RFI-033 RESPONSE REVISIONS PER RFI-054 RESPONSE ADDED FLOORING TRANSITIONS NOTES ADDED FLOORING INSTALLATION DIRECTIONS

> REVISIONS NO. DATE DESCRIPTION

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## FLOOR PLAN GENERAL NOTES

DIMENSIONS AT EXTERIOR WALLS ARE TO PACE OF BRICK OR SHEATHING. ALIGN WITH FOUNDATION WALL BELOW.

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ALL OTHER DIMENSIONS ARE TO PACE OF STUD.

YERIFY ALL ROUGH AND MASONRY OPENINGS (M.O.) WITH APPROVED SHOP DRAWINGS.

LVP INDICATES VINYL PLANK FLOORING INSTALLATION DIRECTION ----- INDICATES 1 HOUR WALL

----- INDICATES 2 HOUR MALL ──\* FOR SPECIFIC PRODUCTS BASED ON CURRENT INFORMATION AVAILABLE AT TIME OF DRAWING PREPARATION, CONTRACTOR TO VERIFY AS APPROPRIATE. FLUS OR MINUS - FOR REFERENCE ONLY.

SHEET A320 - A324

FIRE RATED WALL CONSTRUCTION MUST RUN CONTINUOUS BEHIND TUBS, SHOWERS, ETC.

A TYPICAL DEMISING WALL SEE SHEET AT320 SIDE A INSTALL EXTRA LAYER OF DRYWALL PER WALL TYPE [B - CONTRACTOR OPTION INSTALL OPPOSIDE SIDE AS NEEDED

FLOORING TRANSITION LOCATIONS LOCATE CENTER OF DOOR TYPICAL

LVP = LUXURY VINYL PLANK SC = SEALED CONCRETE @ LOWER LEVEL HVAC ONLY SV = SHEET VINYL @ UPPER LEVEL HVAC ONLY

ASI #002 REVISIONS:
REVISIONS PER RFI-002 RESPONSE
REVISIONS PER RFI-033 RESPONSE
ADDED FLOORING TRANSITIONS NOTES

ADDED FLOORING INSTALLATION DIRECTIONS

Architecture

1414 UNDERWOOD AVE. WAUWATOSA, WE 53213 .414.431.3131 TEL 414.431.0531 FAX WWW.AGARCH.COM  $\forall A \in \mathcal{E} \setminus \mathcal{E} \setminus h \cup \mathcal{E} \cup \mathcal{E}$ 

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FIELD VERIFY ALL CUSTOM WINDOWS,

ALL GLASS LOCATIONS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED POSITION WILL BE SAFETY GLASS WHER THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.

ALL GLASS IN ANY DOOR SHALL BE SAPETY GLASS.

## EXTERIOR ELEVATION GENERAL NOTES

1, ALL CONDUIT, METERS, VENTS, ETC, TO BE PAINTED TO MATCH ADJACENT SURFACE,

2, GUTTERS AND DOWNSPOUTS ARE PREFINISHED ALUMINUM,

3. SEE SHEET A530 FOR STOREFRONT SCHEDULE.

4. FIBER CEMENT TRIM TO BE ARTIC WHITE.

### EXTERIOR ELEVATION KEY NOTES:

A THREE DIMENSIONAL ASPHALT SHINGLES

B BRICK - GLACIER GREY

CS MANUPACTURED STONE - CINDER LIMESTONE

F1 FIBER CEMENT SIDING WITH 6" LAP - NIGHT GRAY

FP1 VERTICAL FIBER CEMENT PANEL BATTENS & 16" O.C. - NIGHT GREY - BATTENS TO MATCH

PP2 SMOOTH PIBER CEMENT PANEL - ARCTIC MHITE

FP3 SMOOTH FIBER CEMENT PANEL - PEARL GREY



## MINDOW NOTES

PROVIDE 1/2" WIDE PREFINISHED MUNTING IN INSULATING GLASS AIR SPACE PER ELEVATIONS.

FIELD VERIFY ALL CUSTOM WINDOWS.

ALL GLASS LOCATIONS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED POSITION WILL BE SAFETY GLASS WHER THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.

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2. GUTTERS AND DOWNSPOUTS ARE PREFINISHED ALUMNUM.

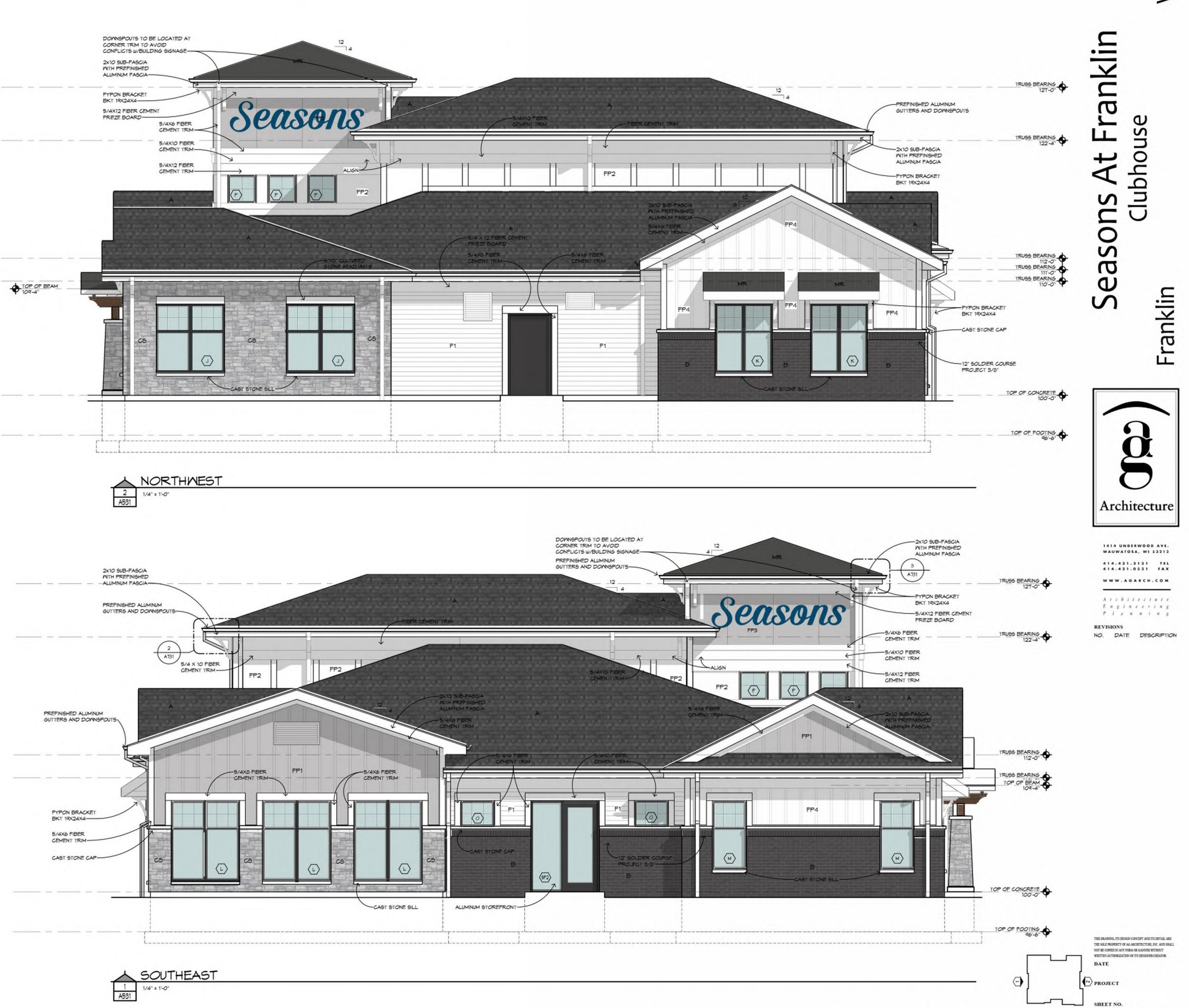
3, SEE SHEET A530 FOR STOREFRONT SCHEDULE, 4. FIBER CEMENT TRIM TO BE ARTIC WHITE.

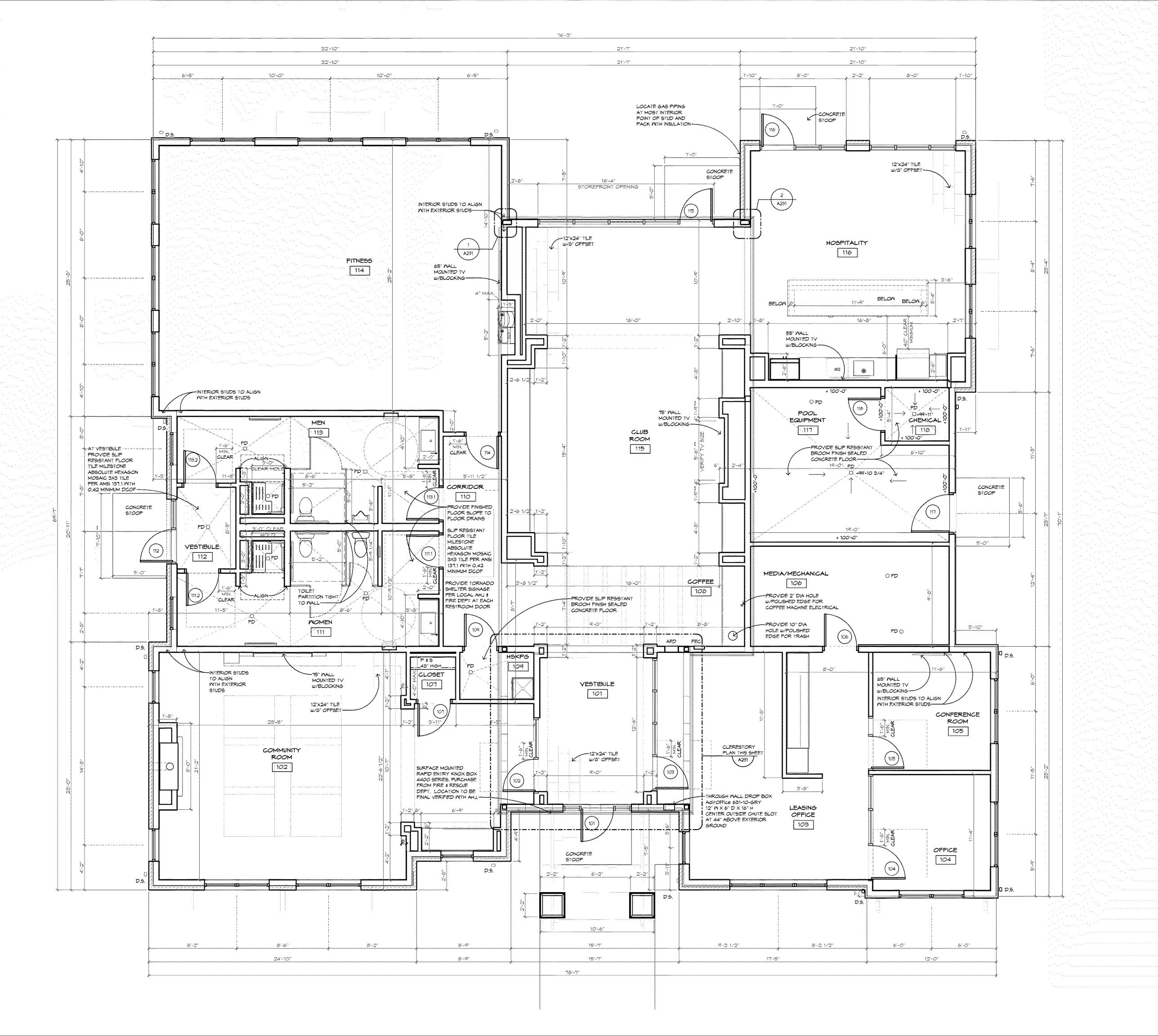
### EXTERIOR ELEVATION KEY NOTES:

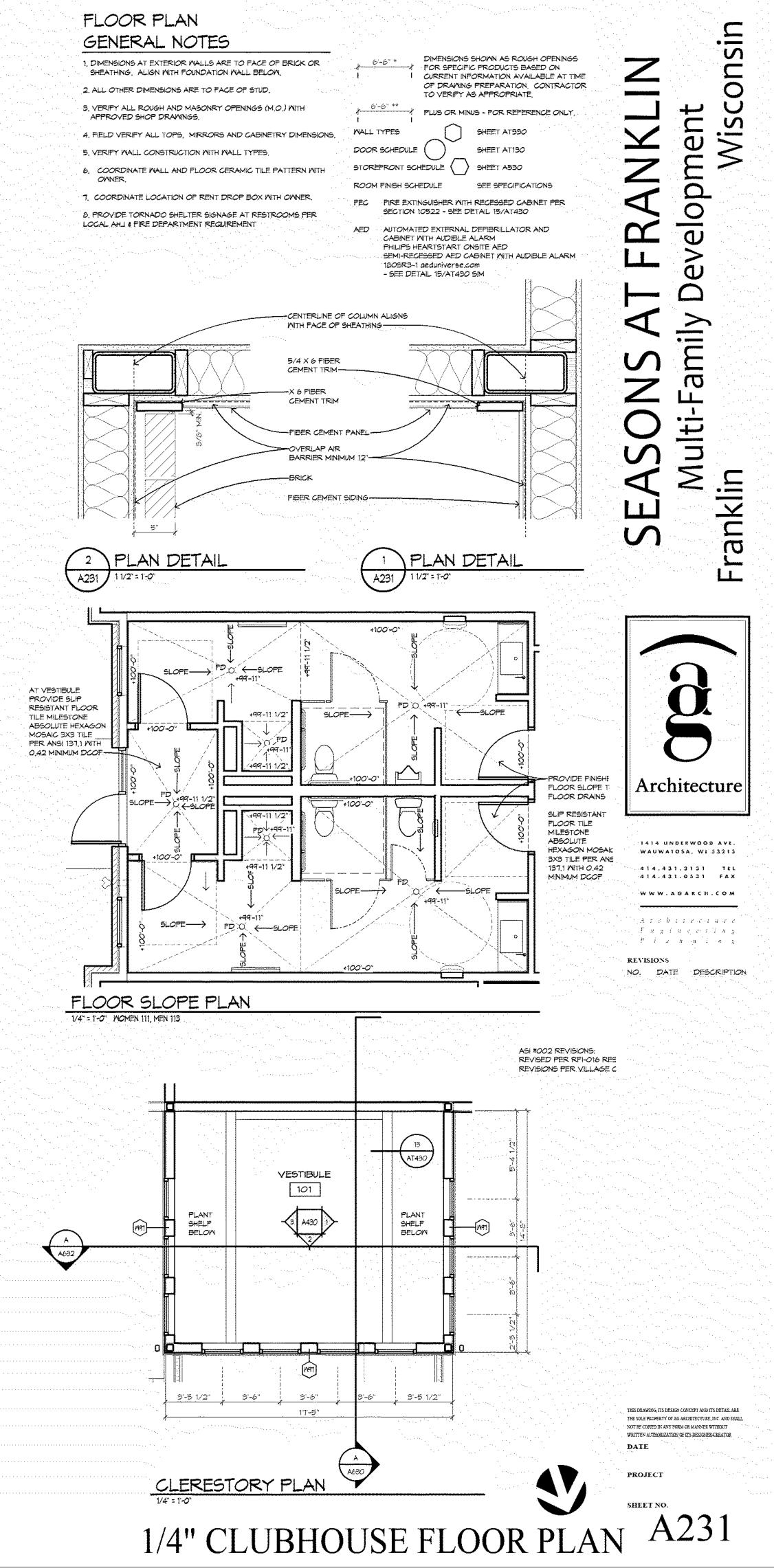
- A THREE DIMENSIONAL ASPHALT SHINGLES
- B BRICK GLACIER GREY CS MANUFACTURED STONE - CINDER LIMESTONE
- F1 FIBER CEMENT SIDING WITH 6" LAP NIGHT GRAY
- PP1 VERTICAL PIBER CEMENT PANEL BATTENS @ 16" O.C. NIGHT GREY BATTENS TO MATCH
- PP2 SMOOTH PIBER CEMENT PANEL ARCTIC WHITE

FP3 SMOOTH FIBER CEMENT PANEL - PEARL GREY

ASI #002 REVISIONS: REVISED PER RFI-019 RESPONSE







GATE STRUCTUAL DESIGN, CONNECTIONS AND SUPPORTS BY GATE MANUFACTURER/FABRICATOR

FIBER CEMENT TRIM BOARDS

Architecture

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Architecture Engineering Ріаннінд

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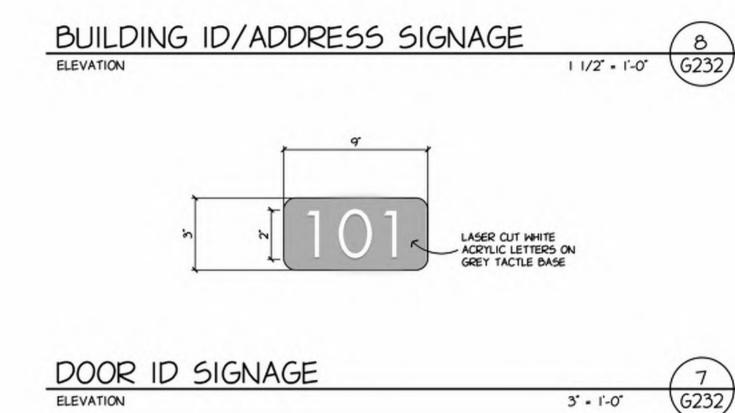
1414 UNDERWOOD AVE.

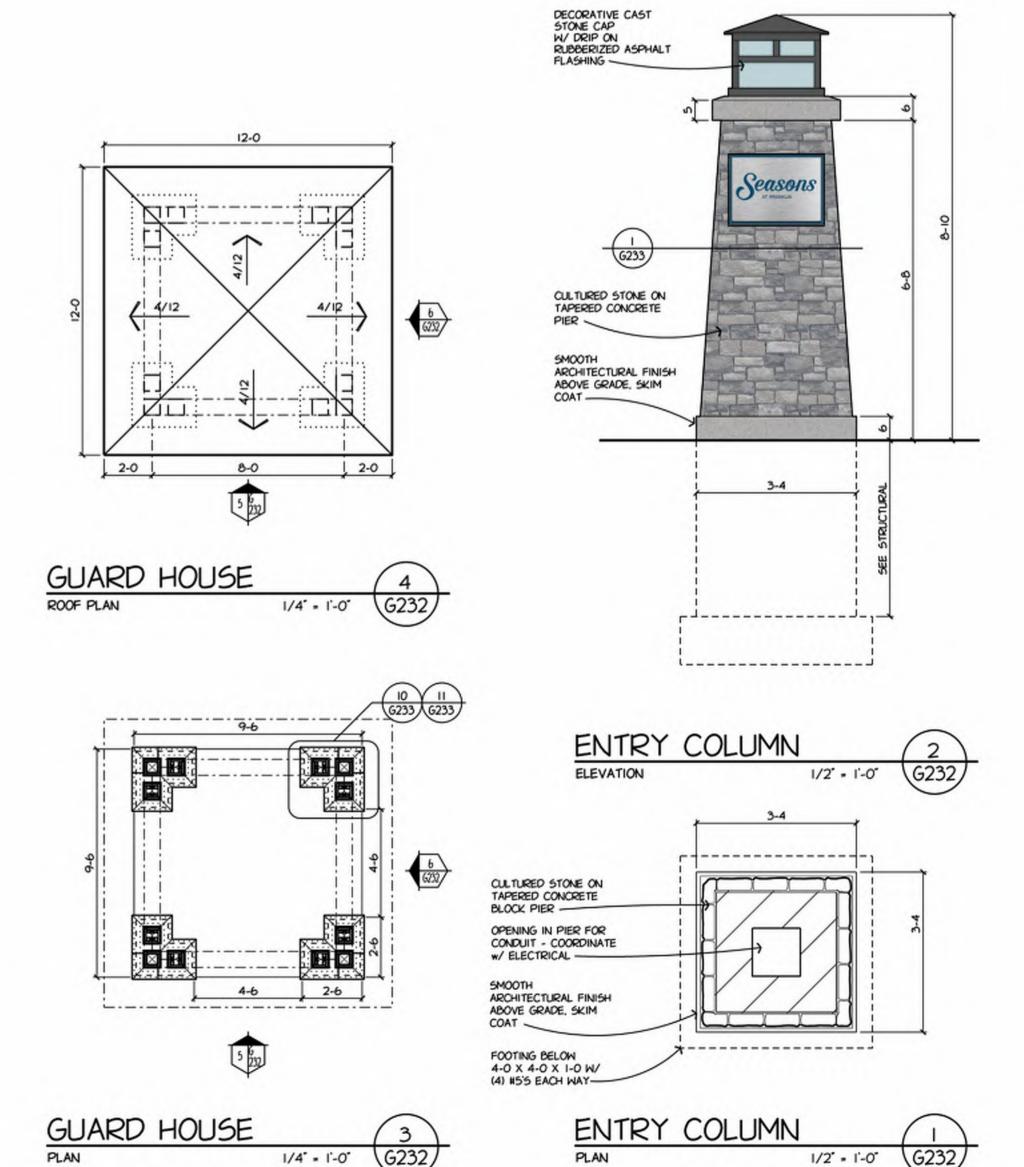
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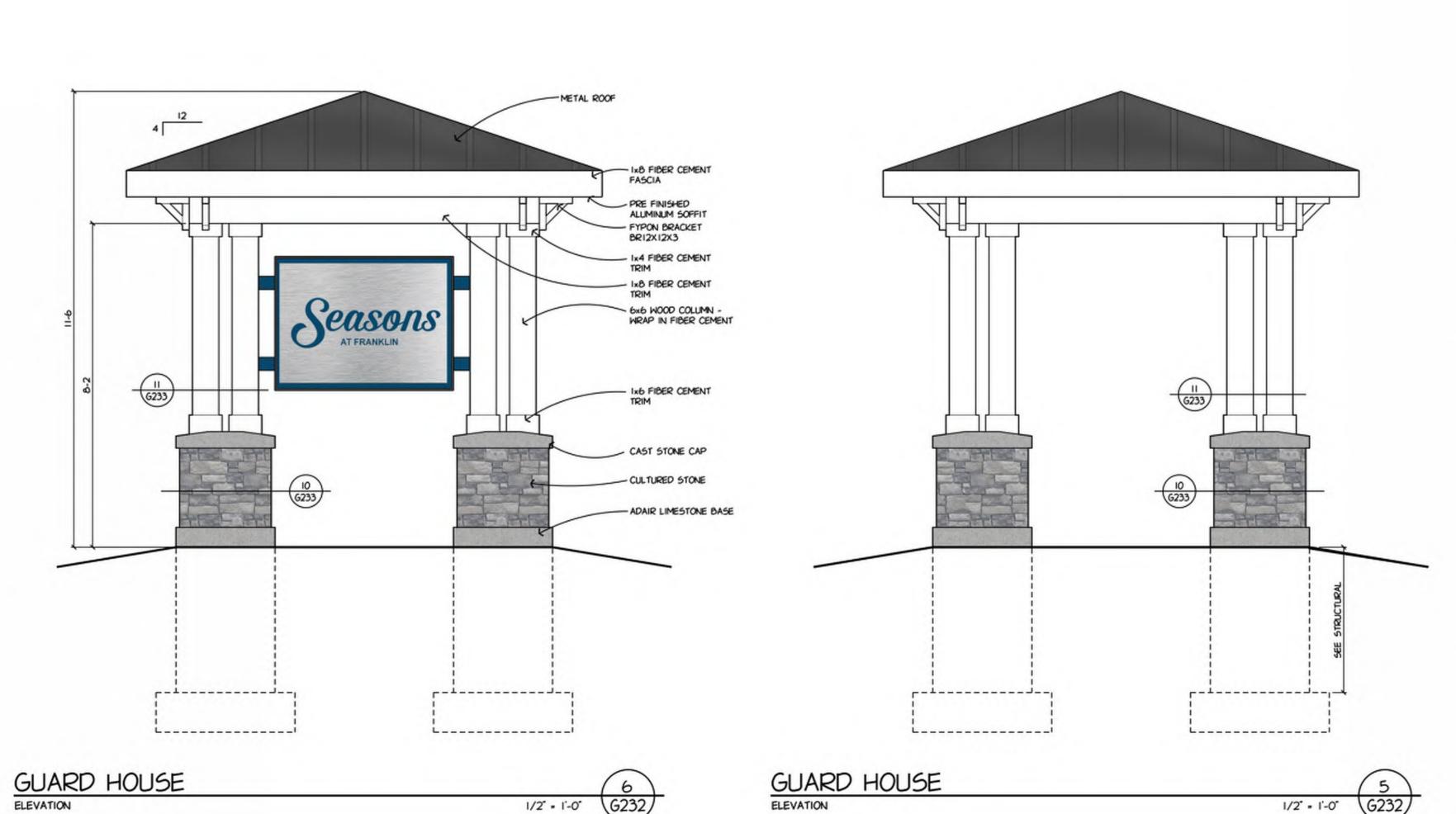
Architecture Engineering Planning

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1/2" = 1'-0"

1/2 - 1-0

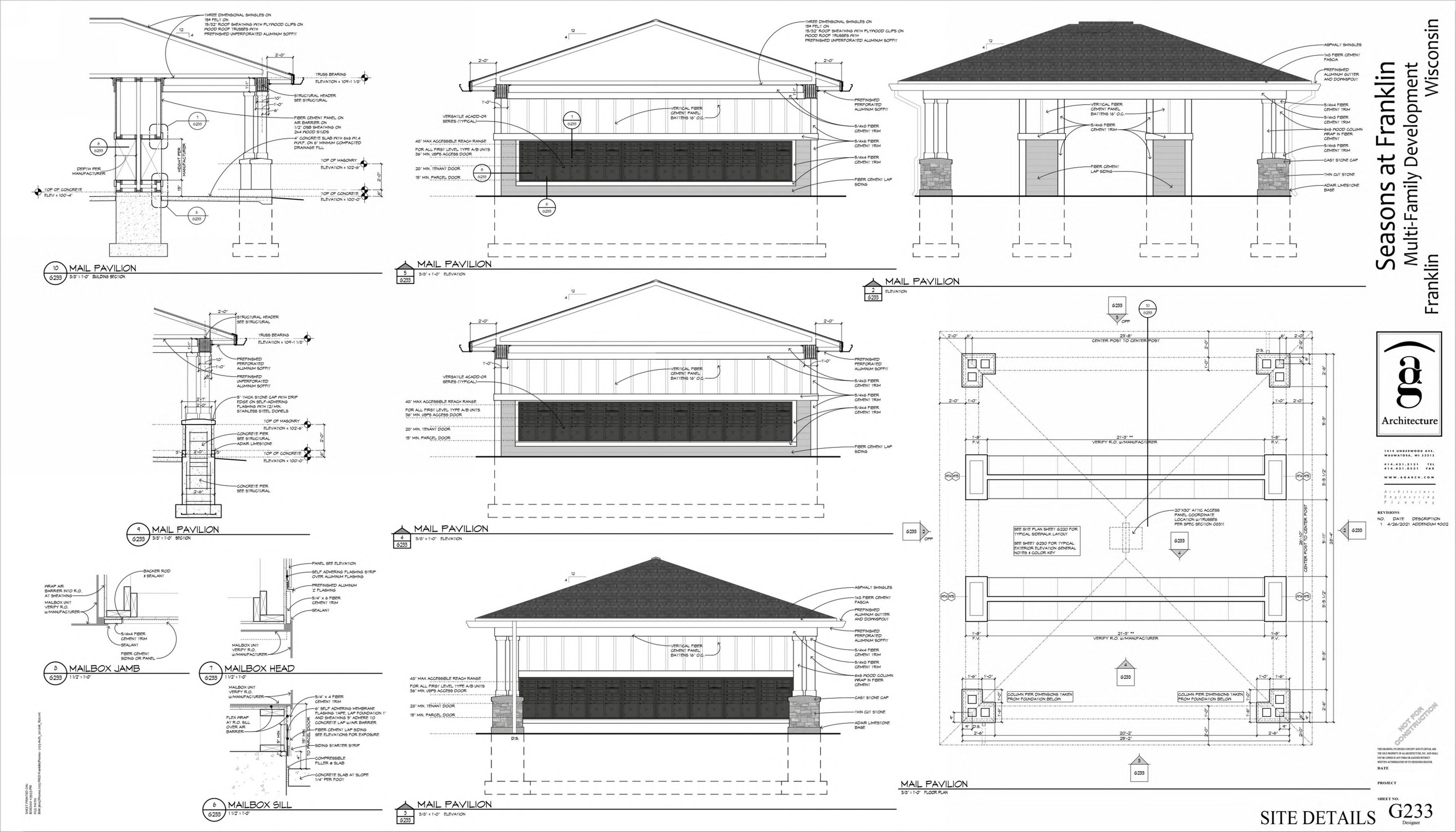
Multi-Family | Franklin G232 3 - 1-0 Architecture 1414 UNDERWOOD AVE. WAUWATOSA, WI 53213 414.431.3131 TEL 414.431.0531 FAX WWW.AGARCH.COM Architecture Engincering Planning NO. DATE DESCRIPTION 1 4/26/2021 ADDENDUM #002 Engincering Planning

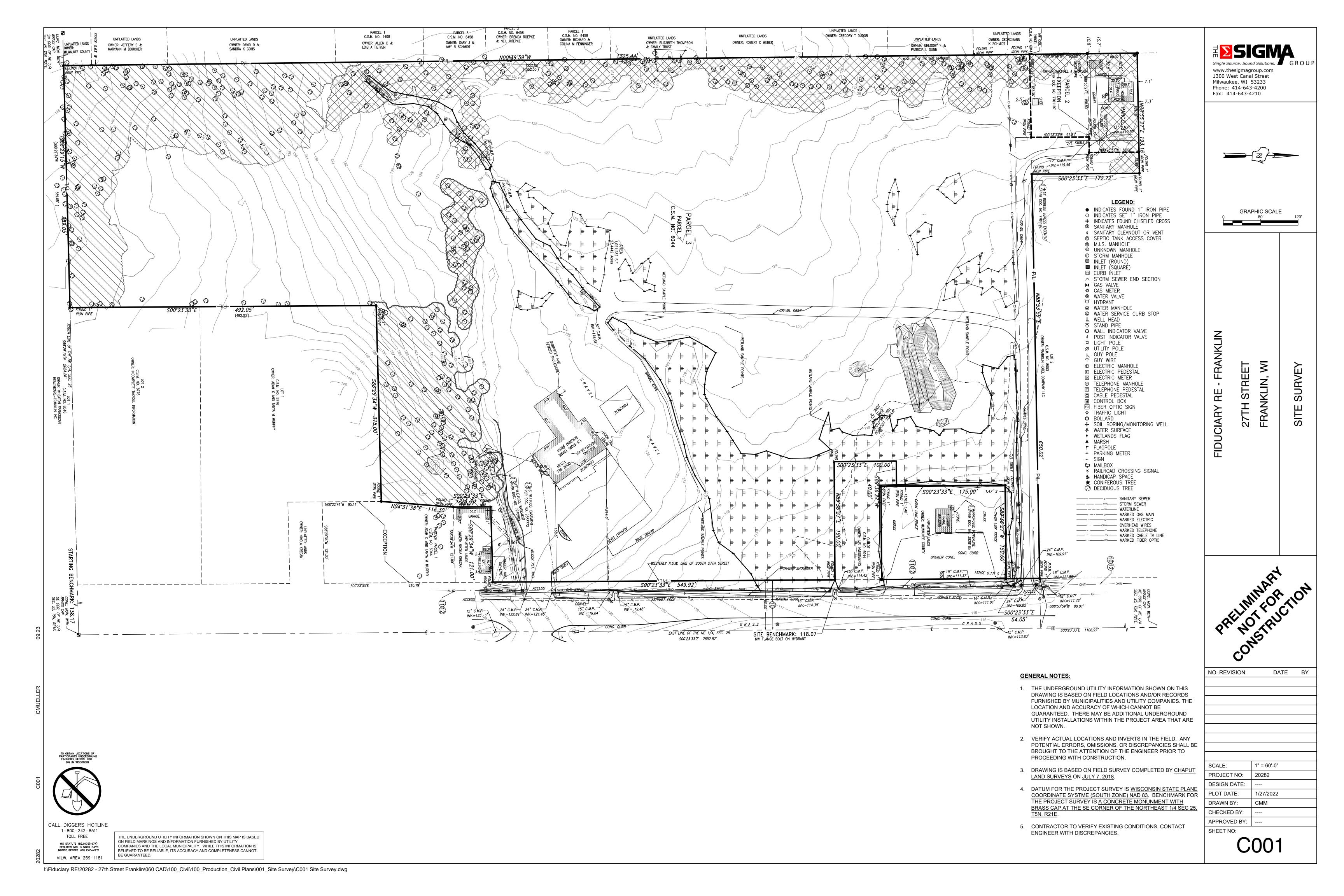
Sevelopment Wisconsin

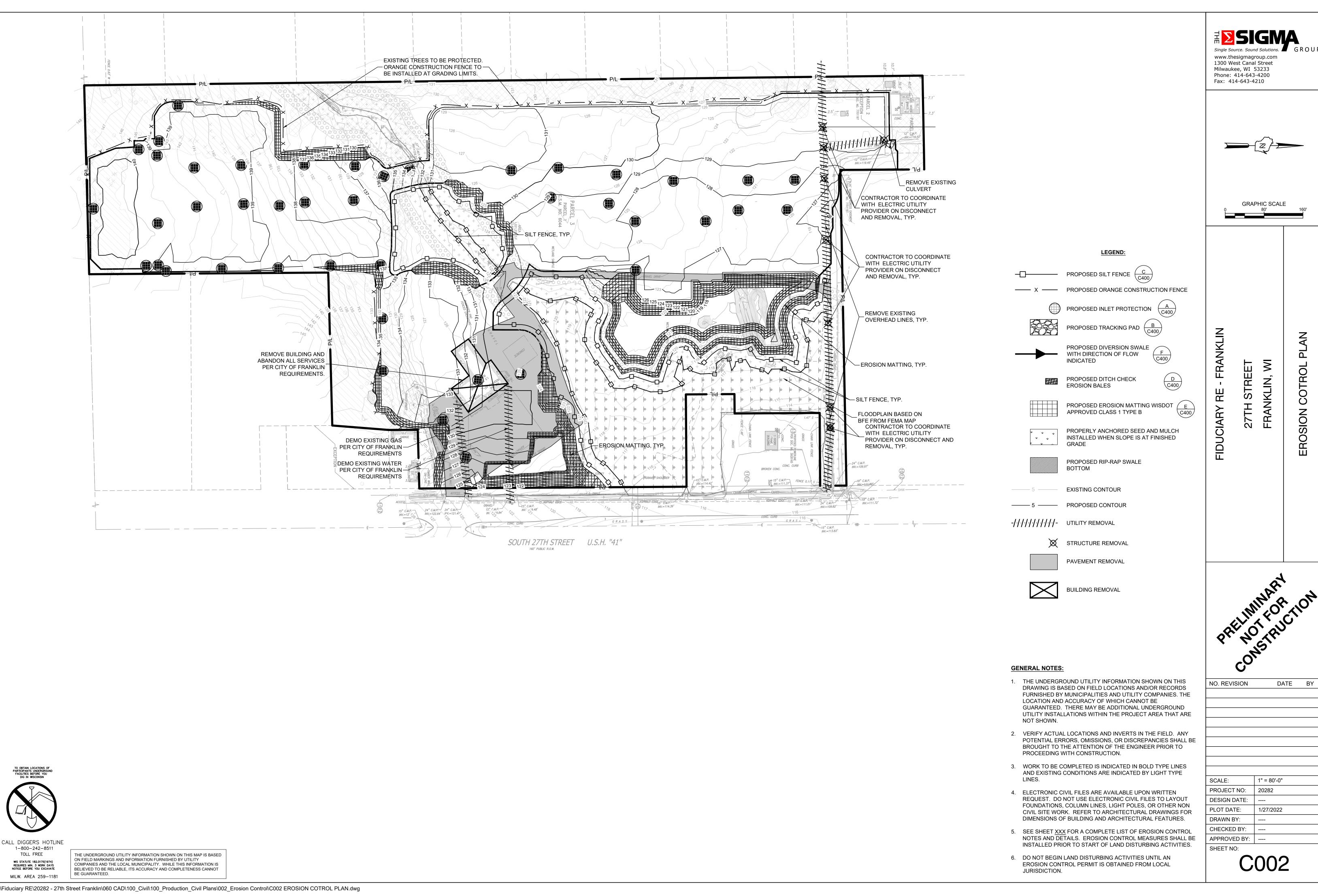
1/2" - 1'-0"

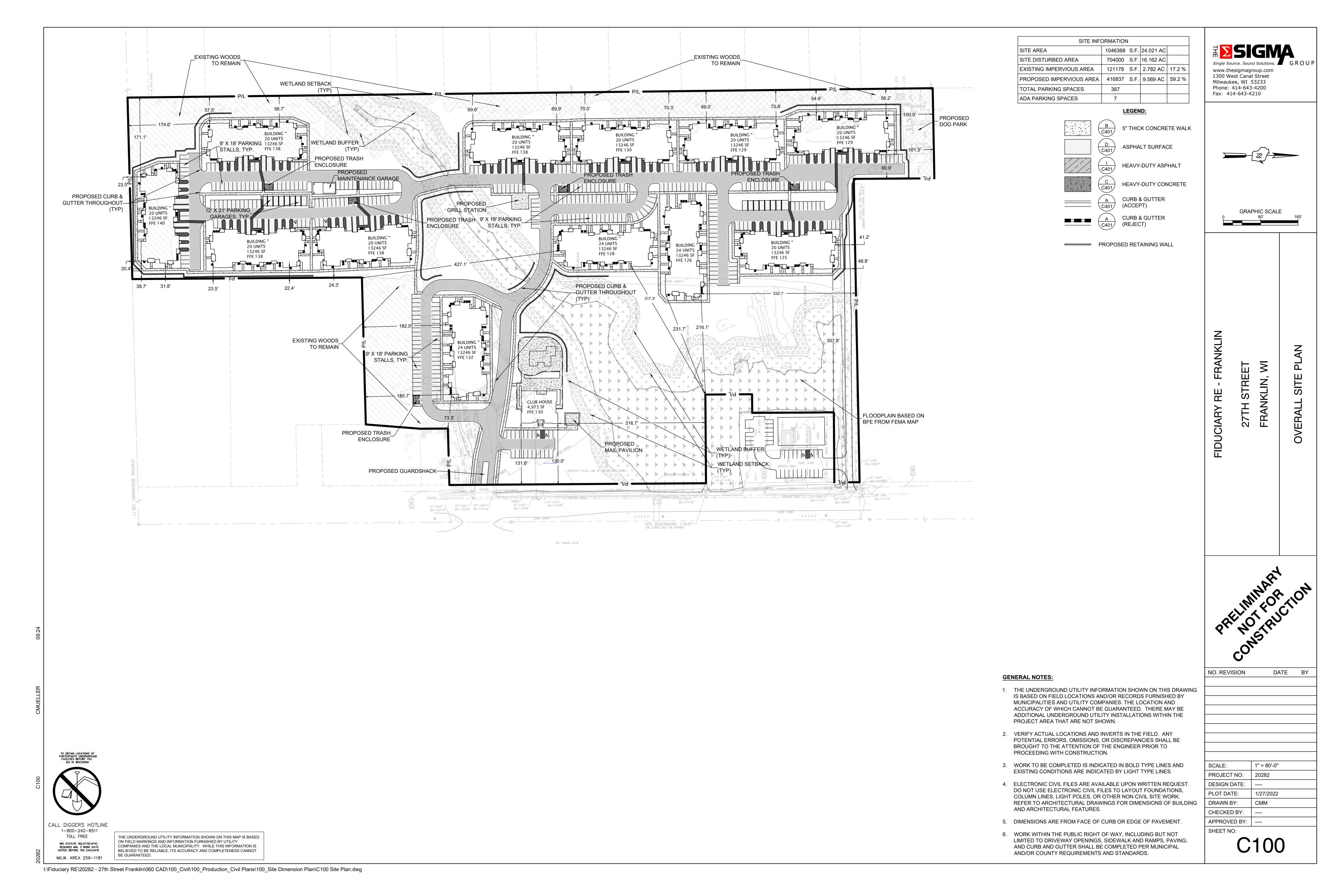
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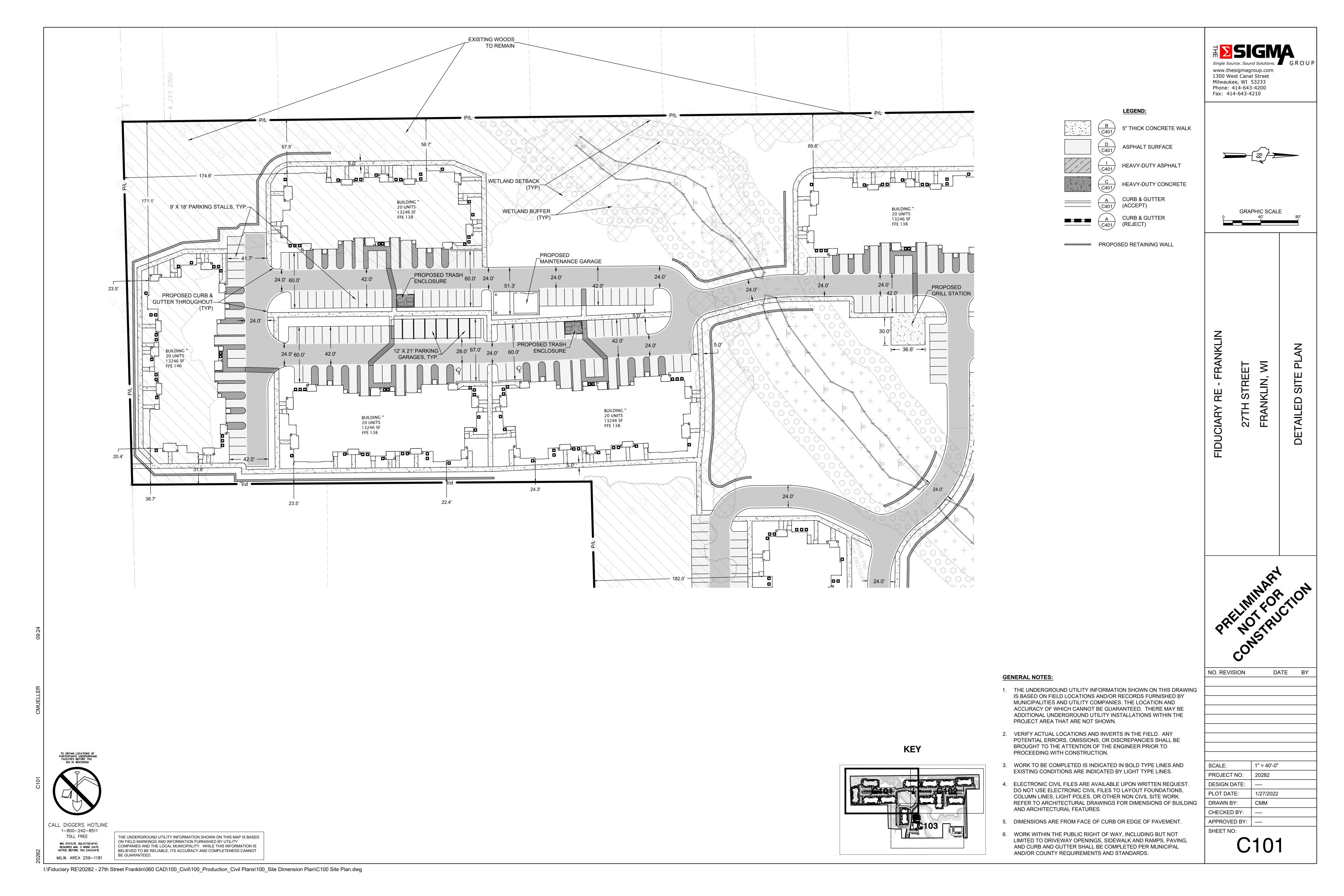
WRITTEN AUTHORIZATION OF ITS DESIGNER/CREATOR

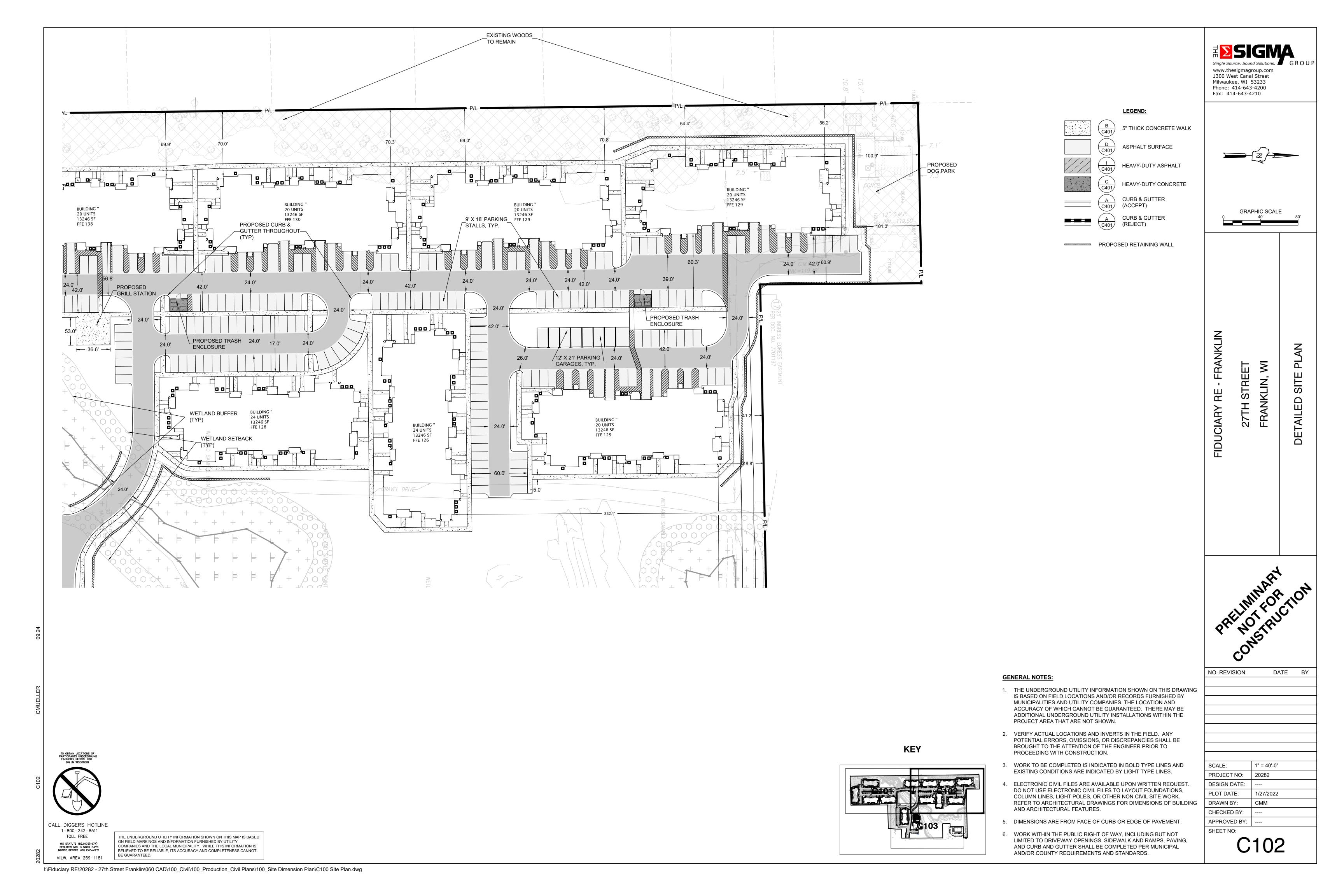


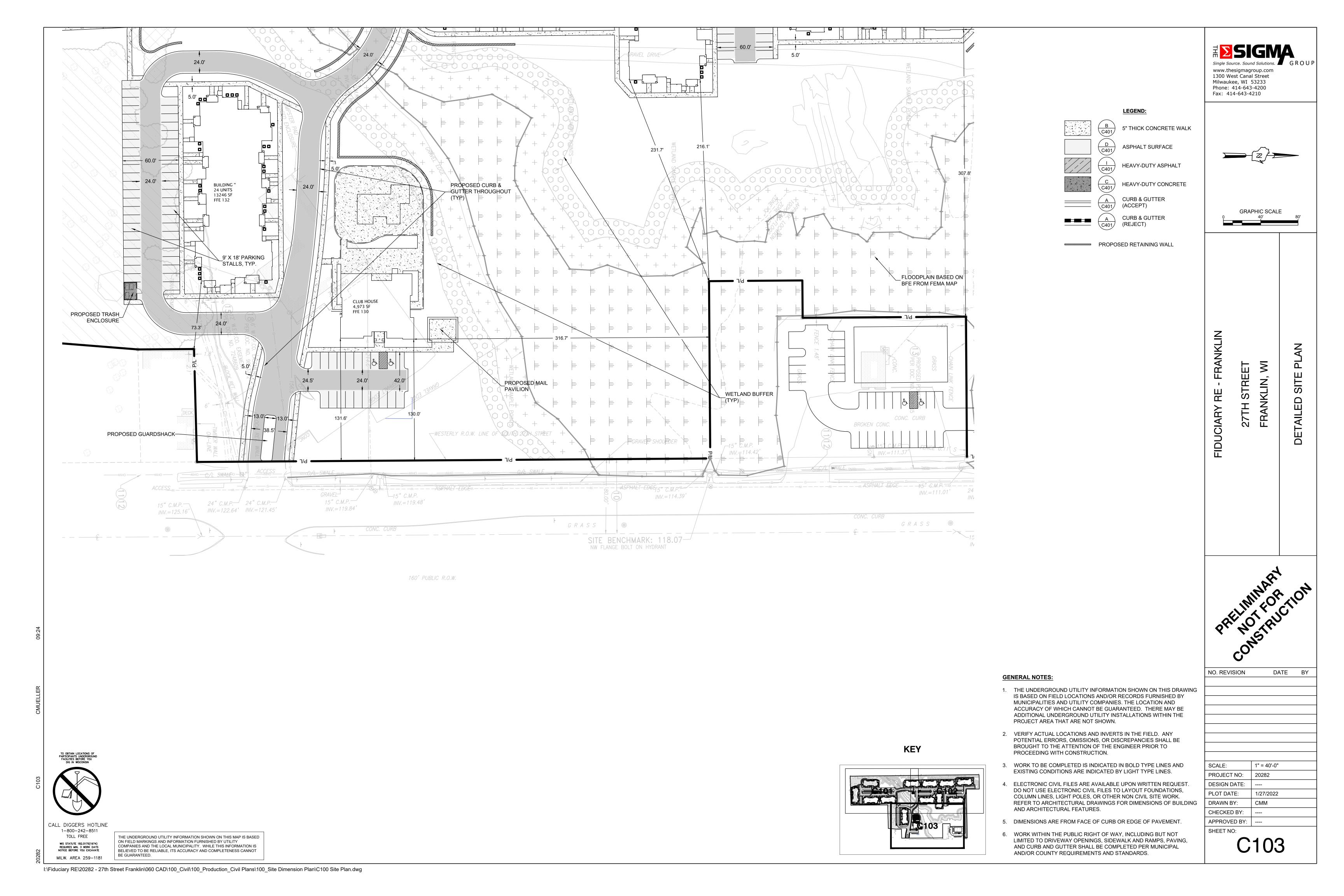


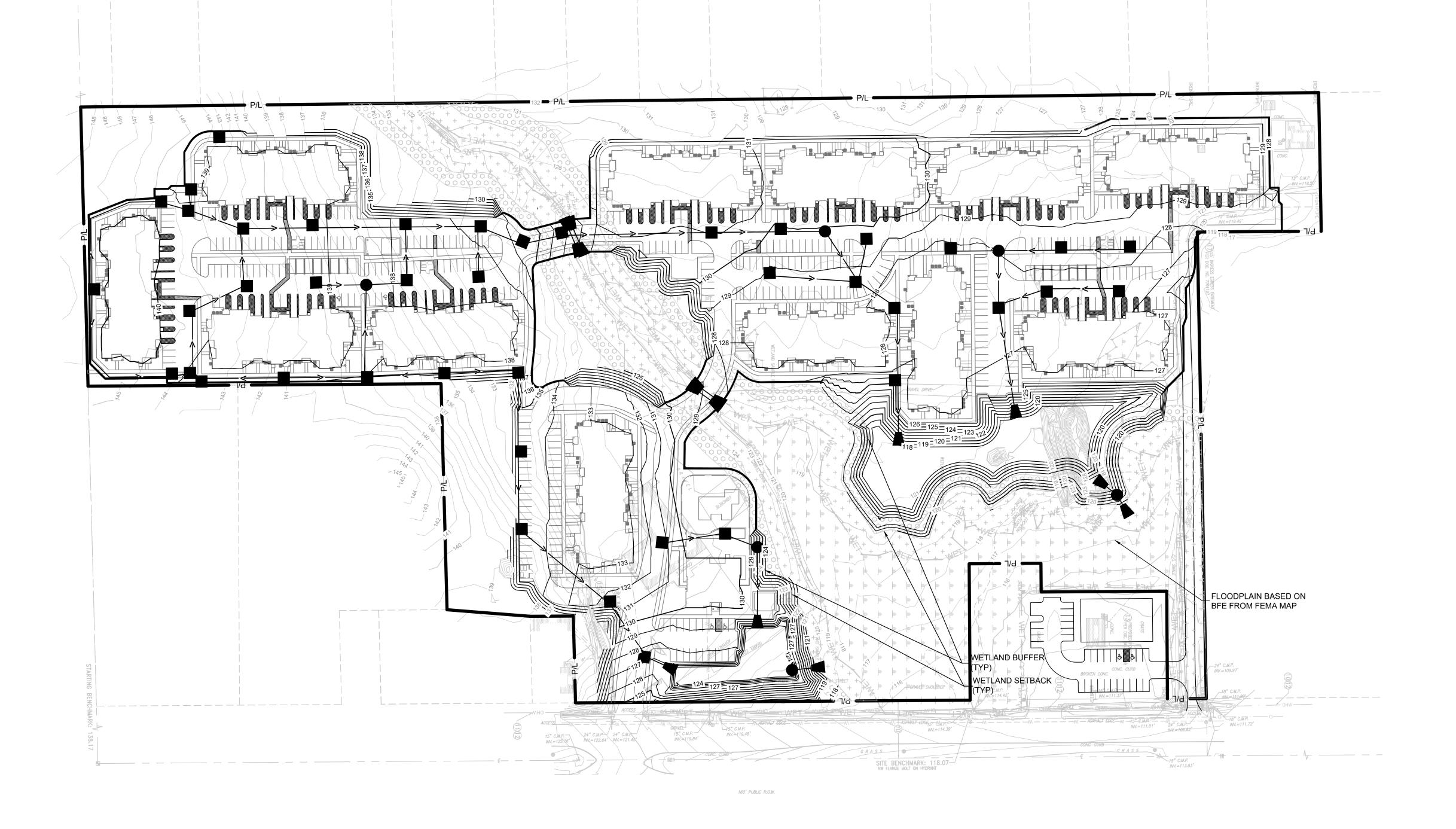












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LEGEND:

5" THICK CONCRETE WALK C401 ASPHALT SURFACE

HEAVY-DUTY ASPHALT

HEAVY-DUTY CONCRETE CURB & GUTTER (ACCEPT) (A) (C401)

CURB & GUTTER

PROPOSED RETAINING WALL

**EXISTING CONTOUR** 

100.50 T/C 100.00 FL

PROPOSED CURB & GUTTER SPOT GRADE T/C: TOP OF CURB GRADE FL: FLOW LINE CURB GRADE

PROPOSED CONTOUR

EXISTING SURFACE

PROPOSED SWALE

SPOT GRADE (MATCH)

PROPOSED ASPHALT SPOT GRADE

GRADING

DATE BY

3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE 4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.

5. DIMENSIONS ARE FROM FACE OF CURB OR EDGE OF PAVEMENT.

**GENERAL NOTES:** 

NOT SHOWN.

6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE

GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE

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LOCATION AND ACCURACY OF WHICH CANNOT BE

PROCEEDING WITH CONSTRUCTION.

7. EARTHWORK SHALL BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

NO. REVISION

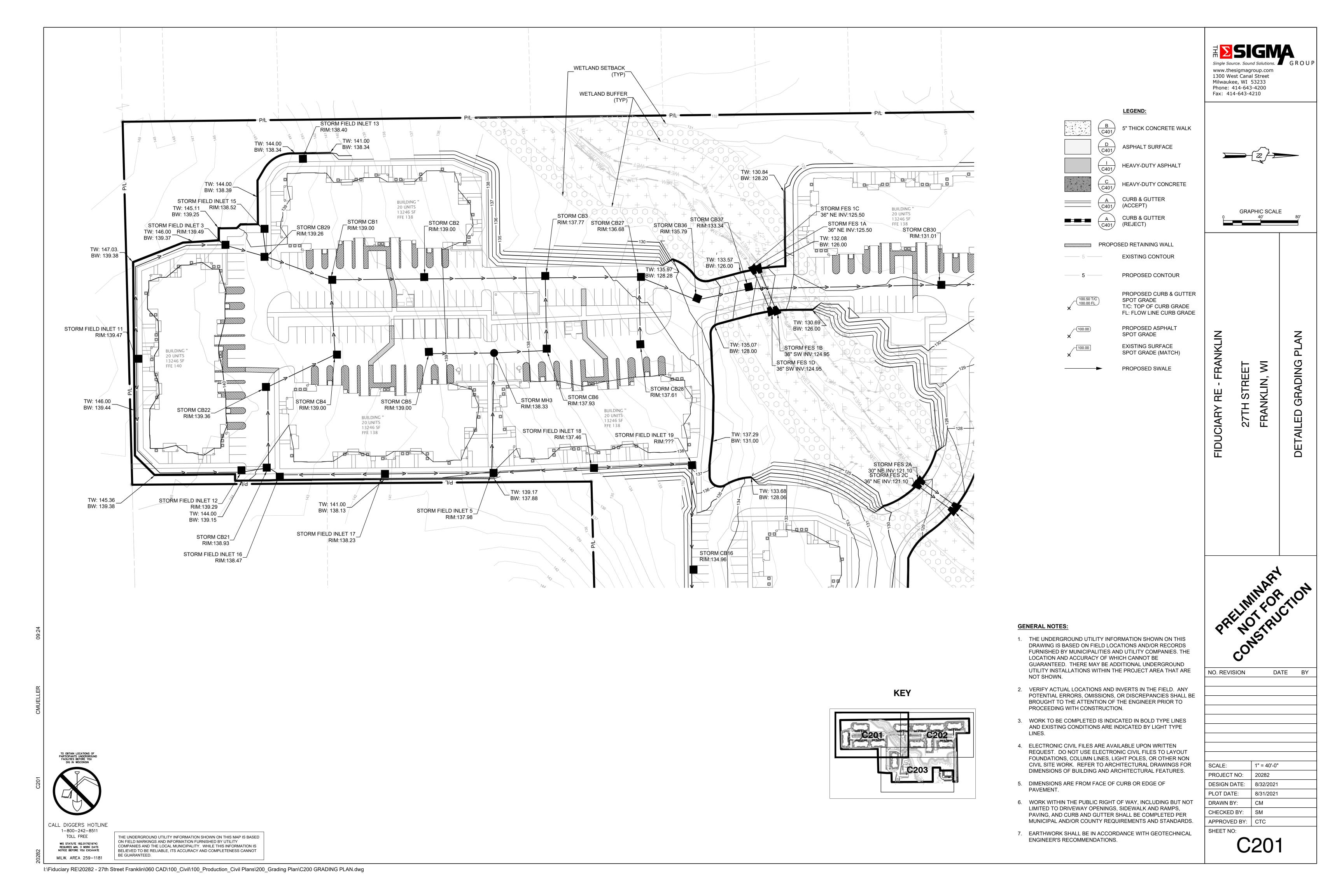
| CALE:       | 1" = 80'-0" |
|-------------|-------------|
| ROJECT NO:  | 20282       |
| ESIGN DATE: | 8/32/2021   |
| LOT DATE:   | 8/31/2021   |
| RAWN BY:    | СМ          |
| HECKED BY:  | SM          |
| PPROVED BY: | CTC         |
| HEET NO:    |             |
|             |             |

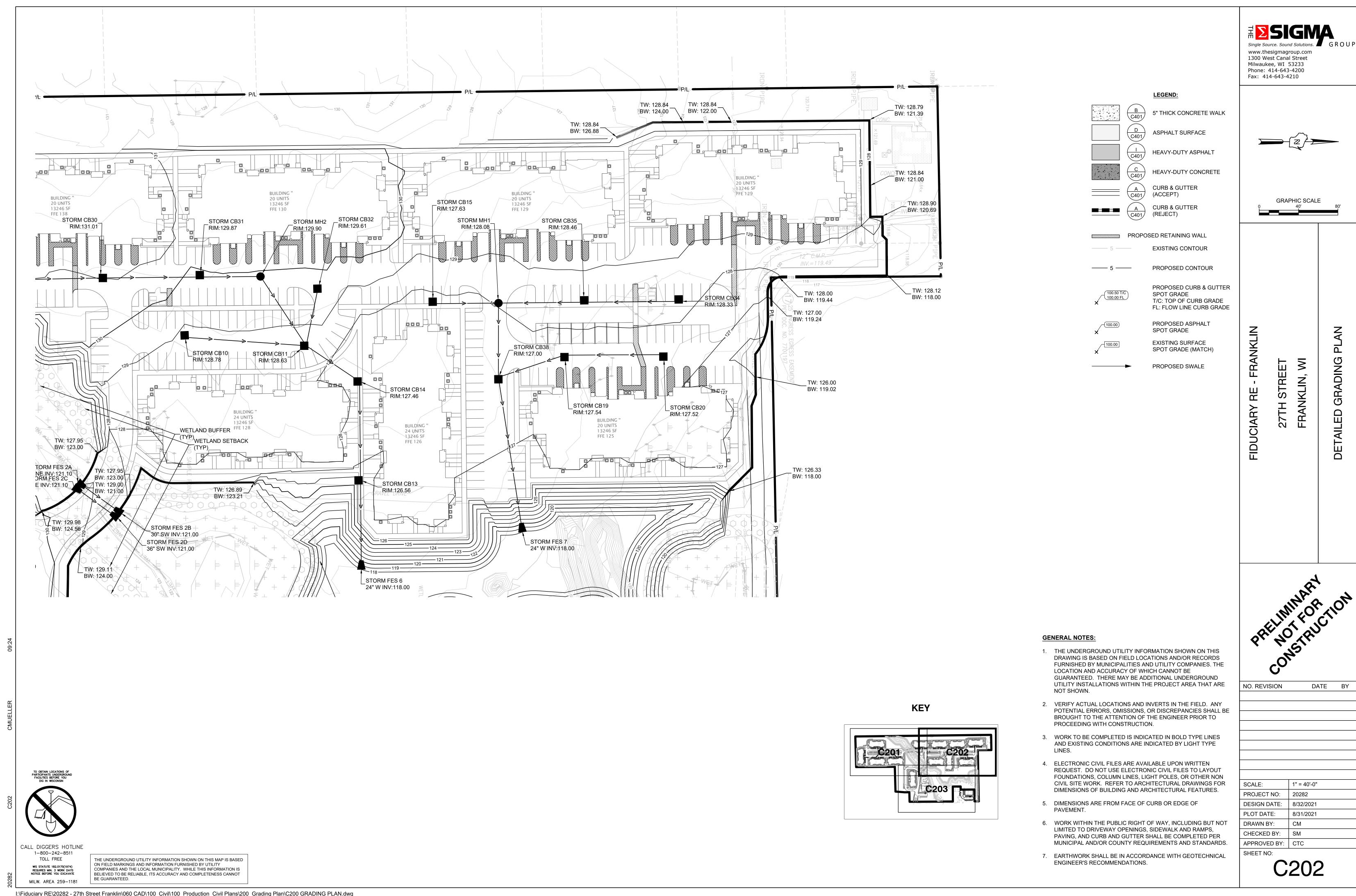
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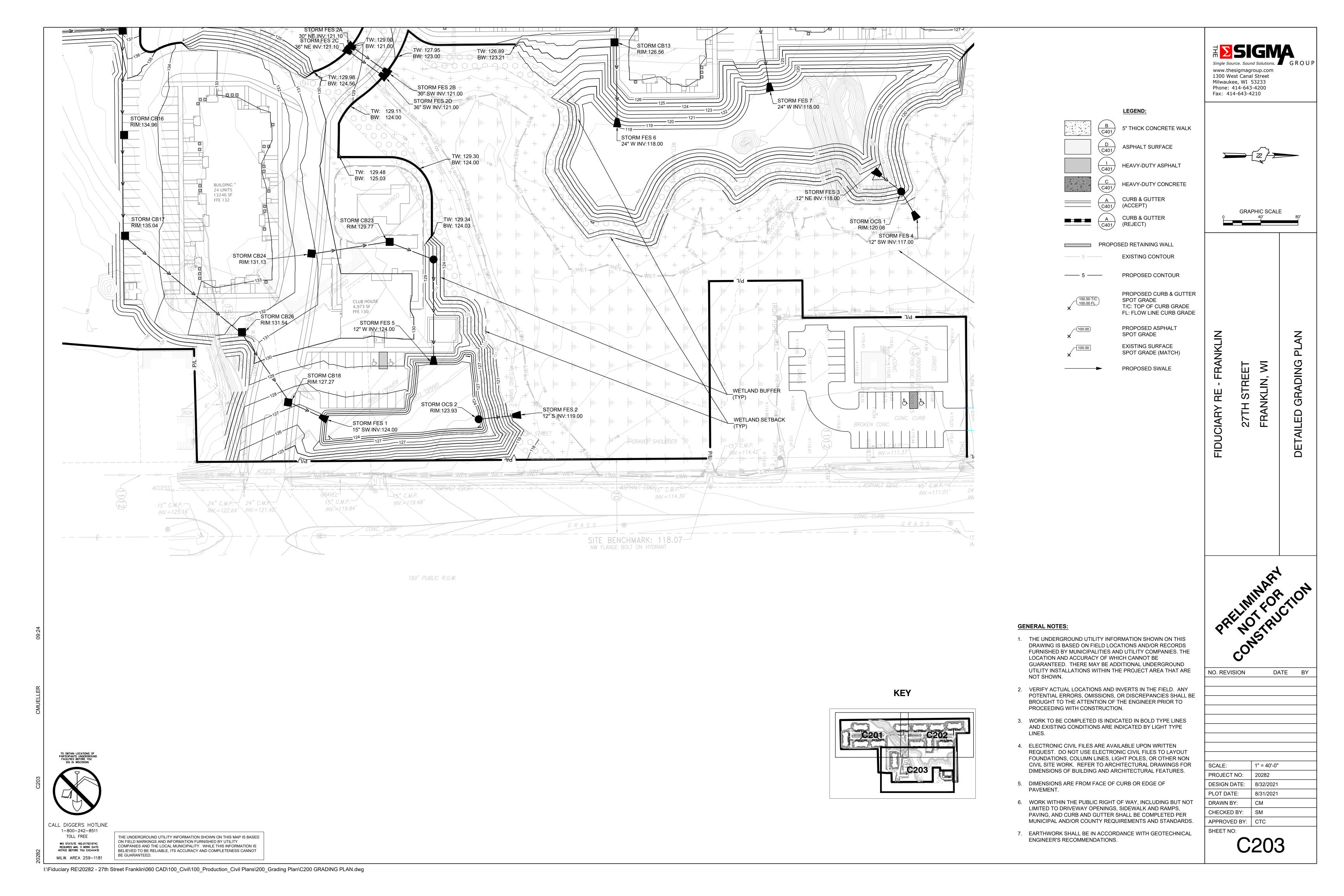
CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

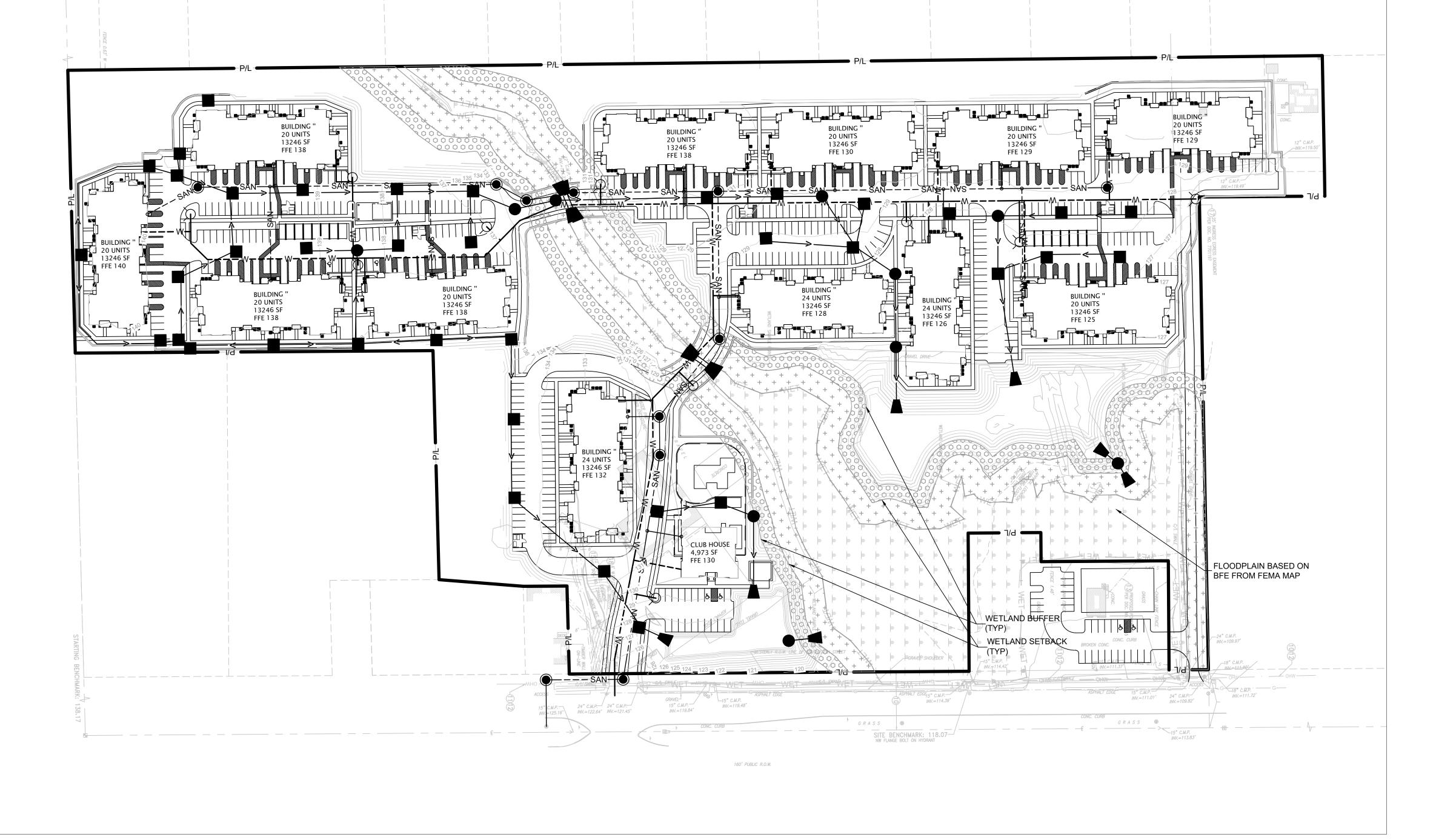
MILW. AREA 259-1181

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LEGEND:

———— W— PROPOSED WATER SERVICE --- SAN- PROPOSED SANITARY SERVICE PROPOSED STORM SEWER

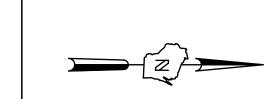
PROPOSED STORM INLET

PROPOSED STORM MANHOLE PROPOSED FLARED END SECTION (\_\_\_\_C\_\_

PROPOSED HYDRANT ASSEMBLY (\_\_D\_

PROPOSED SANITARY MANHOLE

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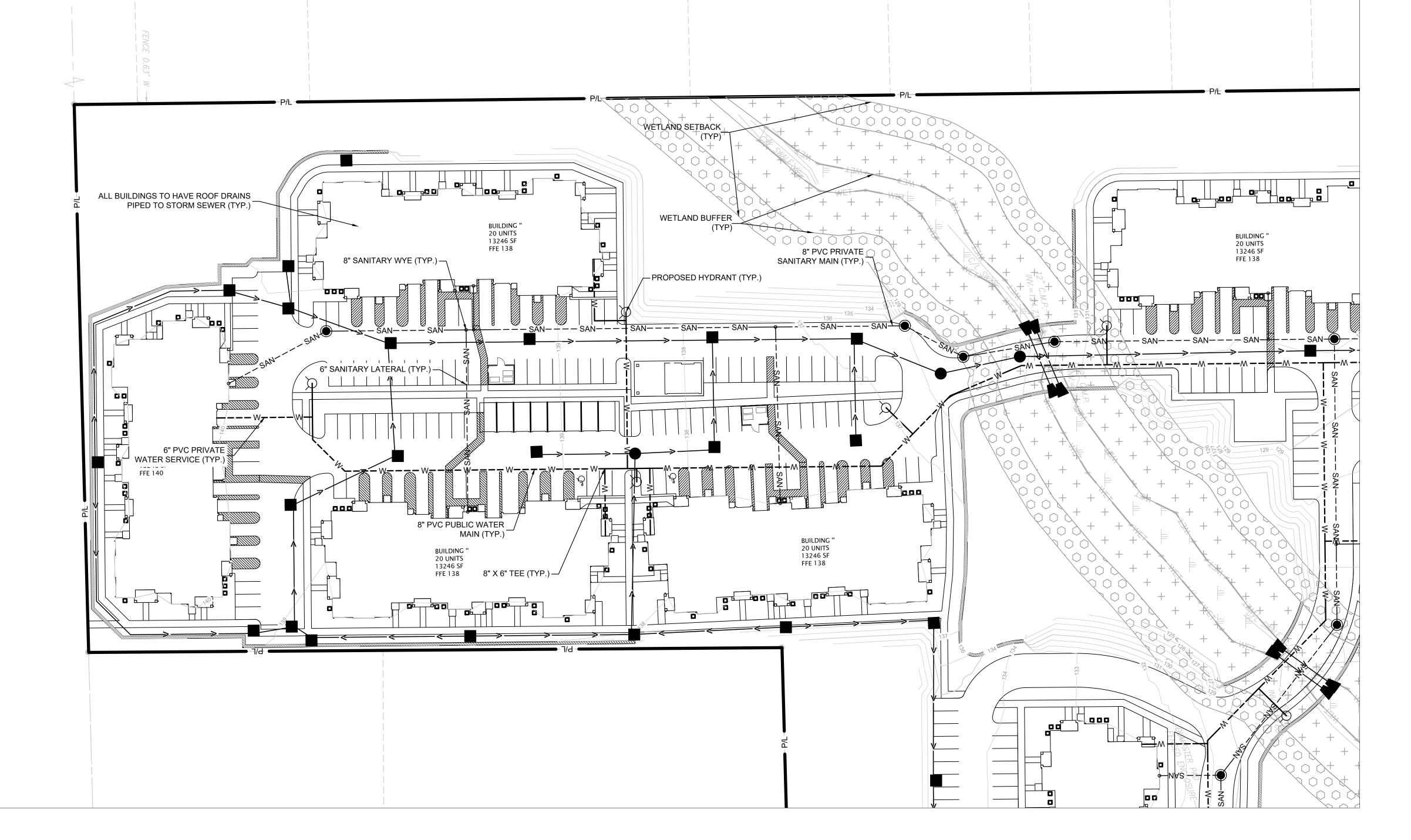
NO. REVISION DATE BY

SCALE: 1" = 80'-0" PROJECT NO: 20282 **DESIGN DATE:** 8/31/2021 PLOT DATE: 1/27/2022 DRAWN BY: CM CHECKED BY: APPROVED BY: CTC SHEET NO:

CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

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LEGEND:

PROPOSED WATER SERVICE

PROPOSED SANITARY SERVICE

PROPOSED STORM SEWER

PROPOSED STORM INLET

A
C401

PROPOSED STORM MANHOLE

B
C401

PROPOSED FLARED END SECTION

C
C401

PROPOSED HYDRANT ASSEMBLY

PROPOSED SANITARY MANHOLE

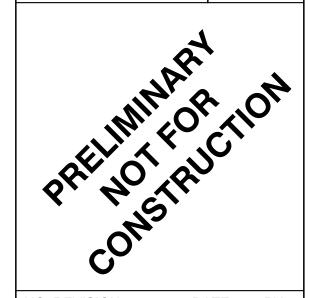
E

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Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 40' 80'

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NO. REVISION DATE BY

SCALE: 1" = 40'-0"

PROJECT NO: 20282

DESIGN DATE: 8/31/2021

PLOT DATE: 1/27/2022

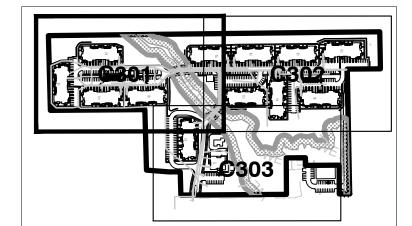
DRAWN BY: CM

CHECKED BY: SM

APPROVED BY: CTC
SHEET NO:

C301

**KEY** 



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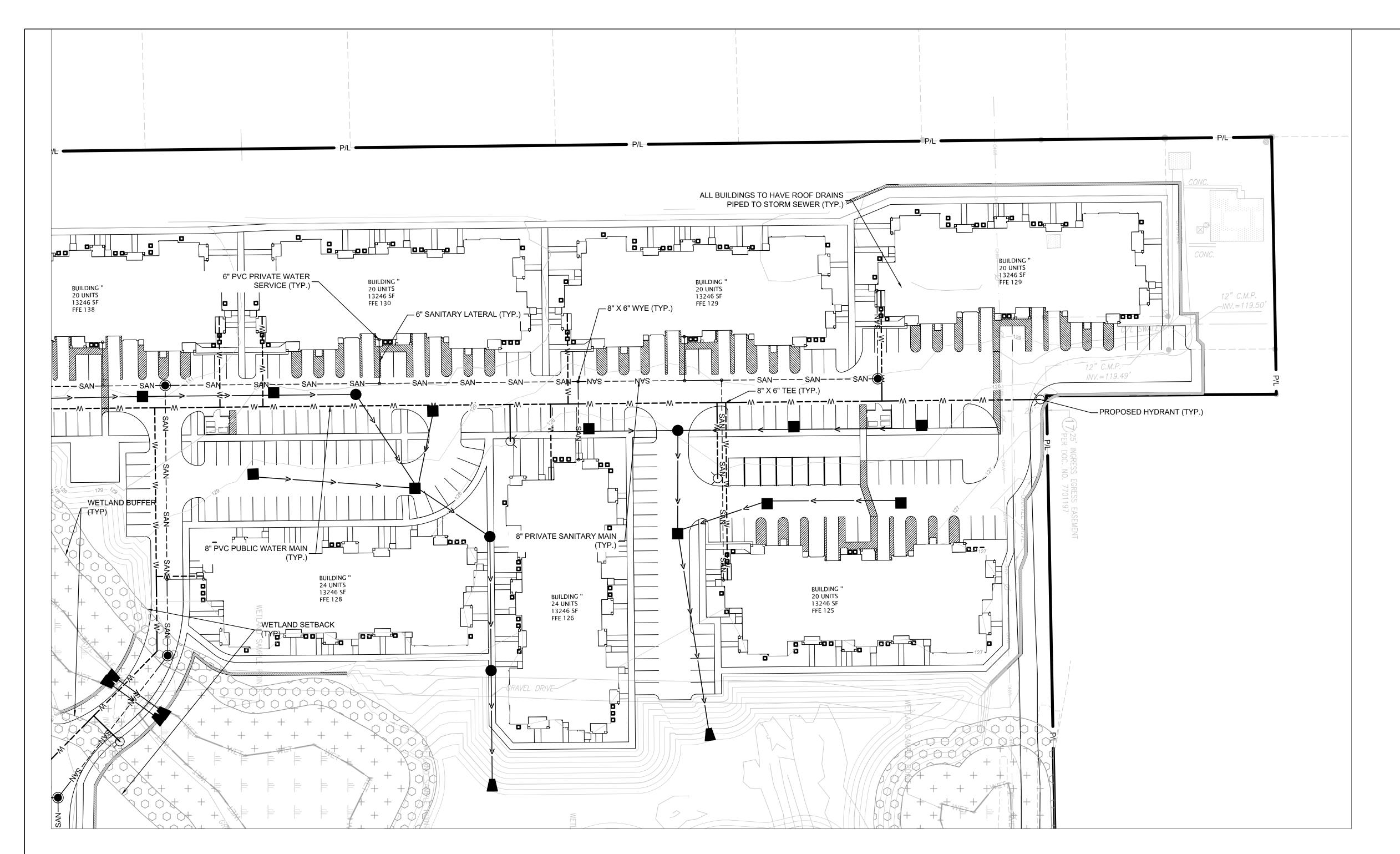
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1-800-242-8511 TOLL FREE

WIS STATUTE 182.0175(1974)

REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181



LEGEND:

PROPOSED WATER SERVICE

PROPOSED SANITARY SERVICE

PROPOSED STORM SEWER

PROPOSED STORM INLET

A
C401

PROPOSED STORM MANHOLE

PROPOSED FLARED END SECTION

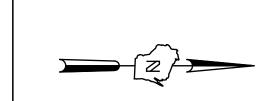
CCC401

PROPOSED HYDRANT ASSEMBLY

PROPOSED SANITARY MANHOLE

E
DAME

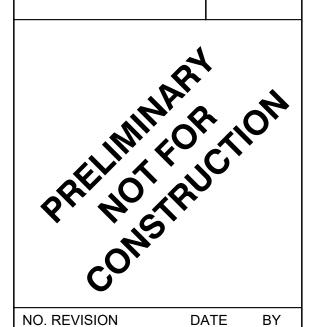
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Milwaukee, WI 53233
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GRAPHIC SCALE
0 40' 80

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DESIGN DATE: 8/31/2021

PLOT DATE: 1/27/2022

DRAWN BY: CM

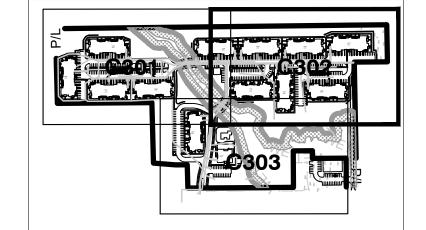
CHECKED BY: SM

APPROVED BY: CTC

SHEET NO:

C302

KEY



TOLL FREE

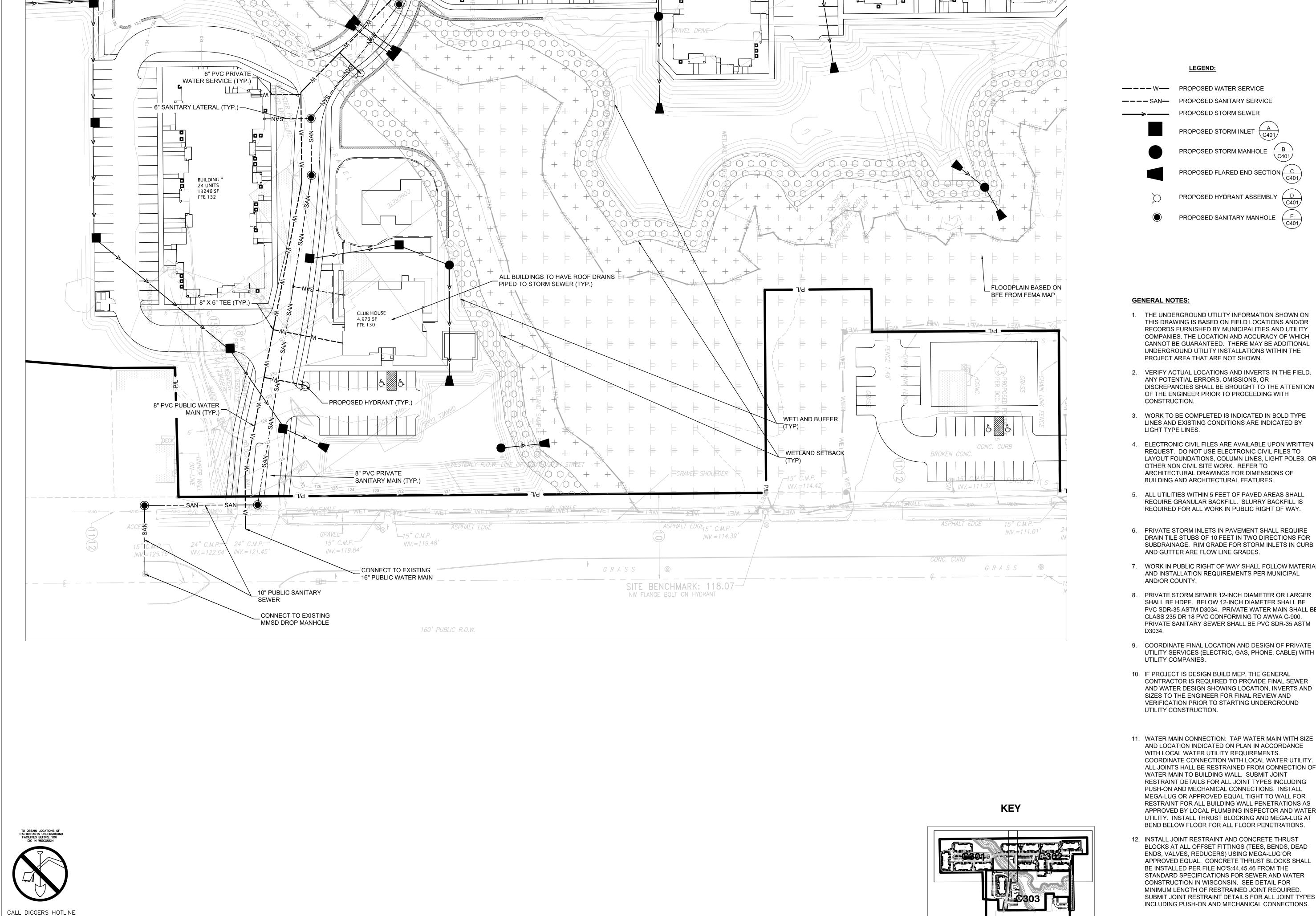
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NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259—1181

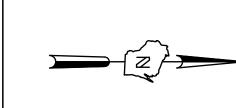
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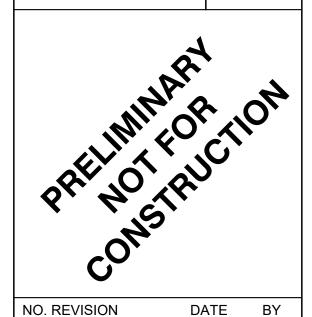


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|--------------|-------------|
| PROJECT NO:  | 20282       |
| DESIGN DATE: | 8/31/2021   |
| PLOT DATE:   | 1/27/2022   |
| DRAWN BY:    | СМ          |
| CHECKED BY:  | SM          |
| APPROVED BY: | СТС         |
| SHEET NO:    |             |

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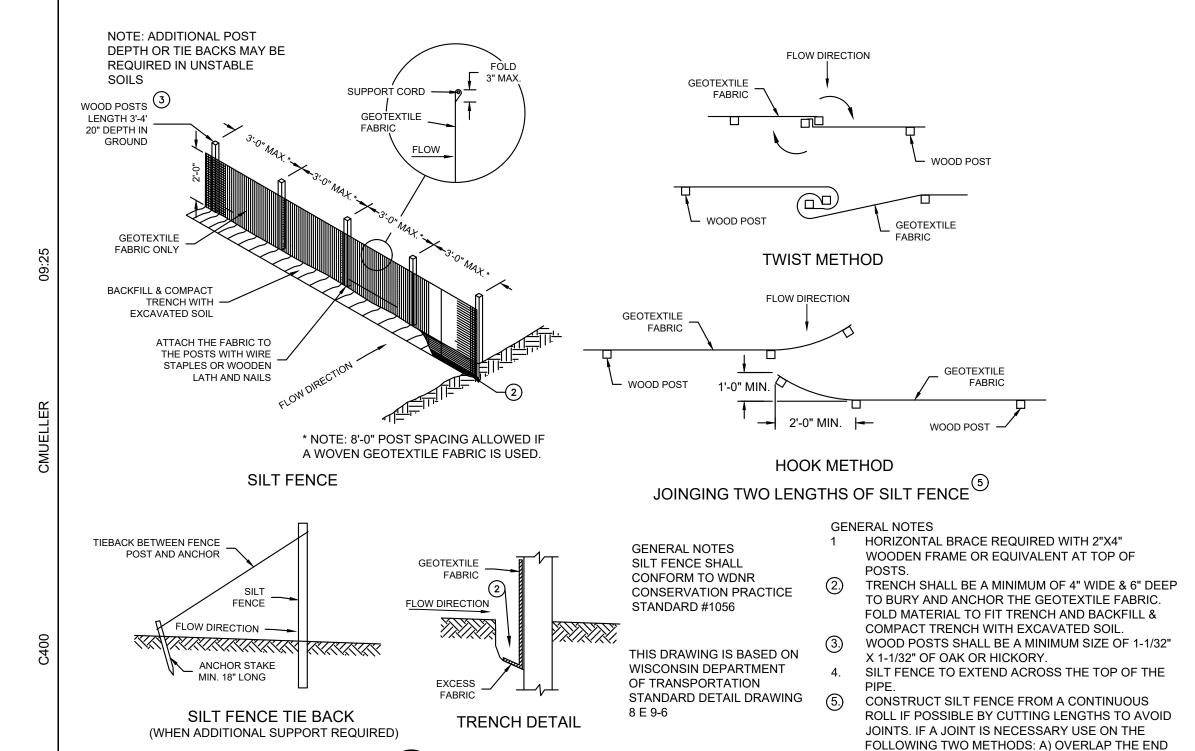
MILW. AREA 259-1181

# EROSION CONTROL NOTES:

- CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL MUNICIPALITY AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL
- 2. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE
- . EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY. DOCUMENT AND MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH WDNR NR216 REQUIREMENTS.
- 4. SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN DEPOSITS REACH A DEPTH OF 6 INCHES. THE SILT FENCE SHALL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
- 5. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
- 6. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
- 7. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN ADJACENT STREETS FREE OF DUST AND DIRT
- 8. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ANY TOPSOIL AND FILL STOCKPILES.
- 9. SITE DEWATERING. WATER PUMPED FROM THE SITE SHALL BE TREATED BY SEDIMENT BASINS OR OTHER APPROPRIATE MEASURES SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
- 10. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY
- 11. TRACKING. EACH SITE SHALL HAVE GRAVELED ROADS, ACCESS DRIVES AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE MUNICIPALITY, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY A SEDIMENT BASIN OR PRACTICE SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. NOTIFY MUNICIPALITY OF ANY CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
- 12. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORKDAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE
- 13. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, MULCHING, SODDING, COVERING WITH TARPS, OR EQUIVALENT PRACTICE FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES. TECHNICAL STANDARD. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION
- 14. SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILES. IF REMAINING FOR MORE THAN THIRTY DAYS. PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS OR OTHER MEANS.
- 15. WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY PRACTICES, SUCH AS FILTER FABRIC FENCES, STRAW BALES, SEDIMENT AND SEDIMENT TRAPS, FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS SHALL BE REMOVED.
- 16. NOTIFY THE LOCAL MUNICIPALITY HAVING JURISDICTION WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
- 17. OBTAIN PERMISSION FROM THE LOCAL MUNICIPALITY HAVING JURISDICTION PRIOR TO MODIFYING THE EROSION CONTROL PLAN.
- 18. REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
- 19. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
- 20. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE DISTURBANCE OF EXISTING VEGETATION DURING CONSTRUCTION.
- 21. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE COMPACTION OF TOPSOIL AND PRESERVE TOPSOIL IN GREENSPACE AREAS
- 22. WASH WATER FROM VEHICLES AND WHEEL WASHING SHALL BE CONTAINED AND TREATED PRIOR TO DISCHARGE.
- 23. CONTRACTOR SHALL MAINTAIN SPILL KITS ON-SITE.
- 24. PERMAMENT TURF SEEDING OF DISTURBED AREA MUST OCCUR PRIOR TO SEPTEMBER 15TH. IF ADEQUATE TIME IS NOT AVAILABLE TO APPLY PERMANENT SEEDING PRIOR TO SEPTEMBER 15TH, THEN DISTURBED AREAS SHALL BE TEMPORARILY SEEDED WITH AN ANNUAL RYE GRASS PER WDNR TECHNICAL STANDARD 1059, WHERE THE TEMPORARY SEEDING MUST OCCUR PRIOR TO OCTOBER 15TH.
- 25. IF TEMPORARY SEEDING IS NOT COMPLETED BY OCTOBER 15TH, APPLY SOIL STABILIZERS AND DORMANT SEED TO DISTURBED AREA PER WDNR TECHNICAL STANDARD 1050. INSPECT ANIONIC PAM APPLICATION AT A MINIMUM FREQUENCY OF EVERY TWO MONTHS AND REAPPLY AS NECESSARY

#### **CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:**

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 2. INSTALL SILT FENCING AND INLET PROTECTION.
- 3. INITIATE STOCKPILING OF IMPORTED MATERIAL. PLACE SILT FENCE AROUND STOCKPILE(S).
- 4. STRIP TOPSOIL FROM STORM WATER BASIN LOCATION AND STOCKPILE.
- 5. CONSTRUCT STORM WATER BASIN AND INSTALL TEMPORARY OUTLET AND EMERGENCY OVERFLOW. BASIN IS TO BE USED AS A SEDIMENTATION BASIN DURING THE COURSE OF CONSTRUCTION.
- 6. CONSTRUCT DIVERSION SWALES, DIRECT RUNOFF TO STORM BASIN. INSTALL ASSOCIATED DITCH CHECKS
- 7. INSTALL RIP-RAP AT STORM WATER BASIN AS SHOWN ON THE PLANS
- 8. STRIP TOPSOIL FROM REMAINDER OF SITE IN A PROGRESSIVE MANNER, AND STOCKPILE.
- 9. PERFORM ROUGH SITE GRADING. STABILIZE FINISHED AREAS AS THE WORK PROGRESSES. USE EROSION MATTING WHERE CALLED FOR ON THE PLANS. PER WDNR TECHNICAL STANDARD 1059: AREAS THAT RECEIVE TEMPORARY SEEDING SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 2 INCHES. AREAS THAT RECEIVE PERMANENT SEEDING SHALL HAVE A MINIMAL TOPSOIL DEPTH OF 4 INCHES.
- 10. PREPARE BUILDING PAD AND BEGIN FOUNDATIONS WORK FOR BUILDING
- 11. INSTALL UTILITIES. INSTALL ANY ADDITIONAL INLET PROTECTION ON NEW STORM SEWER AND INSTALL RIP-RAP AT NEW STORM SEWER OUTFALLS.
- 12. REMOVE TEMPORARY OUTLET CONTROL STRUCTURE ON BASIN AND INSTALL PAVEMENTS.
- 13. STABILIZE AREAS REMAINING AREAS WITHIN 7 DAYS OF COMPLETION OF FINAL GRADING AND TOPSOILING.
- 14. REMOVE EXCESS SEDIMENT FROM STORMWATER BASINS AND RETURN BASINS TO THEIR DESIGN DIMENSIONS AND VOLUMES.
- 15. REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.



SILT FENCE: WDNR TS-1056

POSTS AND TWIST OR ROTATE, AT LEAST 180 DEGREES. B) HOOK THE END OF EACH SILT FENCE

LENGTHS.

**EXISTING ASPHALT, CONCRETE** 

STONE TRACKING PAD SHALL CONFORM TO WDNR CONSERVATION PRACTICE

**CONSTRUCTION ENTRANCE/** 

**EXIT DETAIL: WDNR TS-1057** 

EXISTING ASPHALT, CONCRETE

OR GRASS SURFACE

GENERAL NOTE:

STANDARD #1057

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL 4. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN
- ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX
- FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

3" TO 6" CLEAR

OR WASHED STONE

2" X 4" STAKE AND INLET SPECIFICATIONS AS PER GEOTEXTILE FABRI THE PLAN DIMENSION LENGTH AND WIDTH TO MATCH GEOTEXTILE FABRIC RUNOFF WATER 2" X 4" STAKE AND CROSS BRACING USE REBAR OR STEEL ROD INLET SPECIFICATIONS AS PER FOR REMOVAL THE PLAN DIMENSION LENGTH -FOR INLETS WITH CAST AND WIDTH TO MATCH CURB BOX USE WOOD 2"X4", GEOTEXTILE FABRI INLET PROTECTION, TYPE B XTEND 10" BEYOND GRATE WIDTH ON BOTH SIDES, LENGTH VARIES. SECURE TO (WITHOUT CURB BOX) GRATE WITH WIRE OR FRONT, BACK, AND (CAN BE INSTALLED IN ANY INLET PLASTIC TIES. BOTTOM TO BE MADE WITHOUT A CURB BOX) FROM SINGLE PIECE OF FABRIC. 4"X6" OVAL HOLE SHALL BE HEAT CUT INTO ALL FOUR SIDE PANELS. MINIMUM DOUBLE STITCHED EAMS ALL AROUND SIDE PIECES -AND ON FLAP POCKETS FABRIC, TYPE FF TO THE STAKES AND CROSSING BRACING INLET WITH OR VITHOUT GRATE INLET PROTECTION, TYPE A GEOTEXTILE FABRIC, WOOD 2" X 4" EXTENDS 7" **GENERAL NOTES** BEYOND GRATE WIDTH ON BOTH SIDES, LENGTH INLET PROTECTION, TYPE VARIES. SECURE TO INLET PROTECTION, TYPE D (WITH CURB BOX) GRATE WITH WIRE OR PLASTIC TIES (CAN BE INSTALLED IN ANY INLET WITH OR WITHOUT A CURB BOX AS PER NOTE) CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED **INSTALLATION NOTES** TYPE B & C

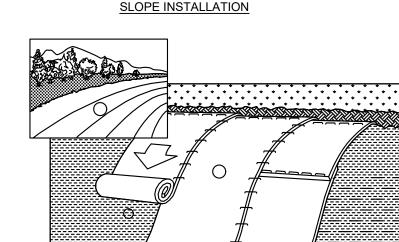
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. TRIM EXCESS FABRIC IN THE FLOW LINE

TO WITHIN 3" OF THE GRATE. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACES AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

GENERAL NOTE INLET PROTECTION SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1060 THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING

INLET PROTECTION TYPE A, B, C, AND D: WDNR TS-1060



ECRMs (EROSION CONTROL REVEGATIVE MATS) SHALL BE INSTALLED AFTER ALL TOPSOILING, FERTILIZING, LIMING, AND SEEDING IS COMPLETE.

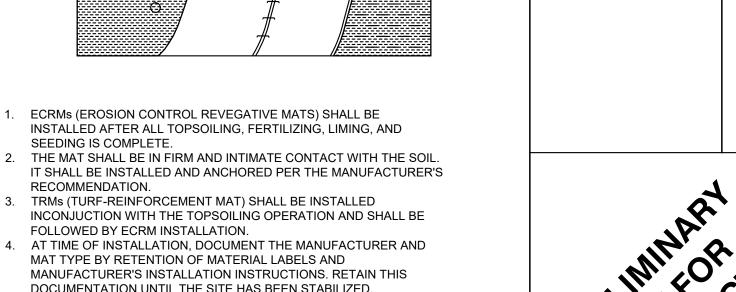
IT SHALL BE INSTALLED AND ANCHORED PER THE MANUFACTURER'S RECOMMENDATION. 3. TRMs (TURF-REINFORCEMENT MAT) SHALL BE INSTALLED

INCONJUCTION WITH THE TOPSOILING OPERATION AND SHALL BE FOLLOWED BY ECRM INSTALLATION. AT TIME OF INSTALLATION, DOCUMENT THE MANUFACTURER AND

MAT TYPE BY RETENTION OF MATERIAL LABELS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. RETAIN THIS DOCUMENTATION UNTIL THE SITE HAS BEEN STABILIZED.

- 1. EROSION MATTING SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1052.
- 2. INSTALL PER MANUFACTURERS SPECIFICATIONS.

ENOSION MATTING: WDNR TS-1052



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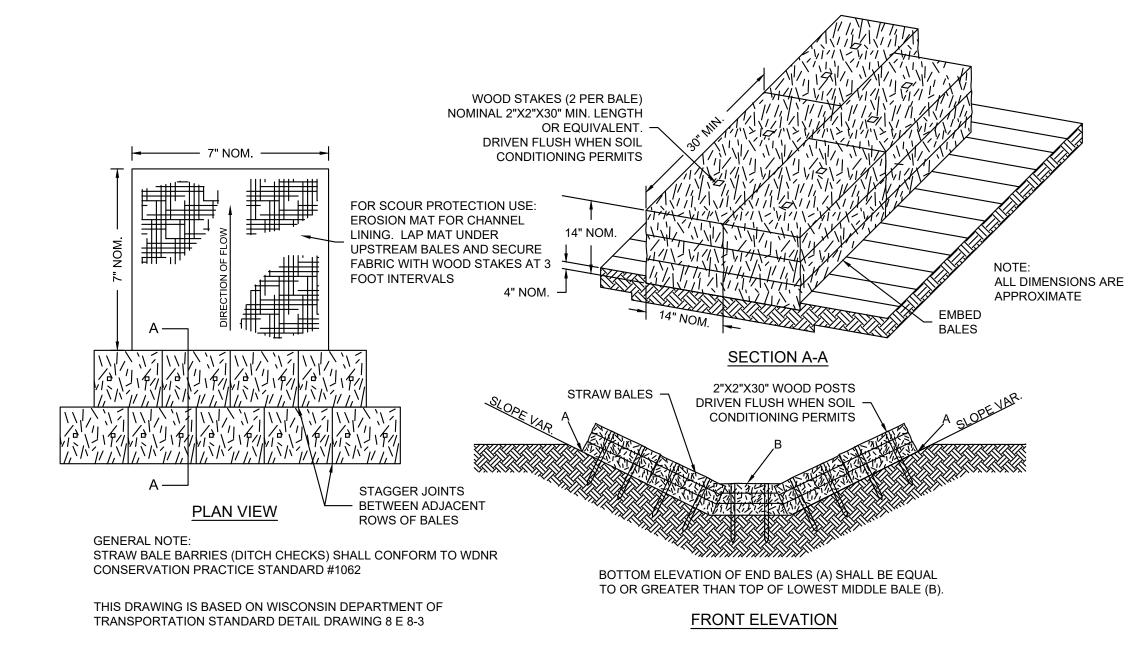
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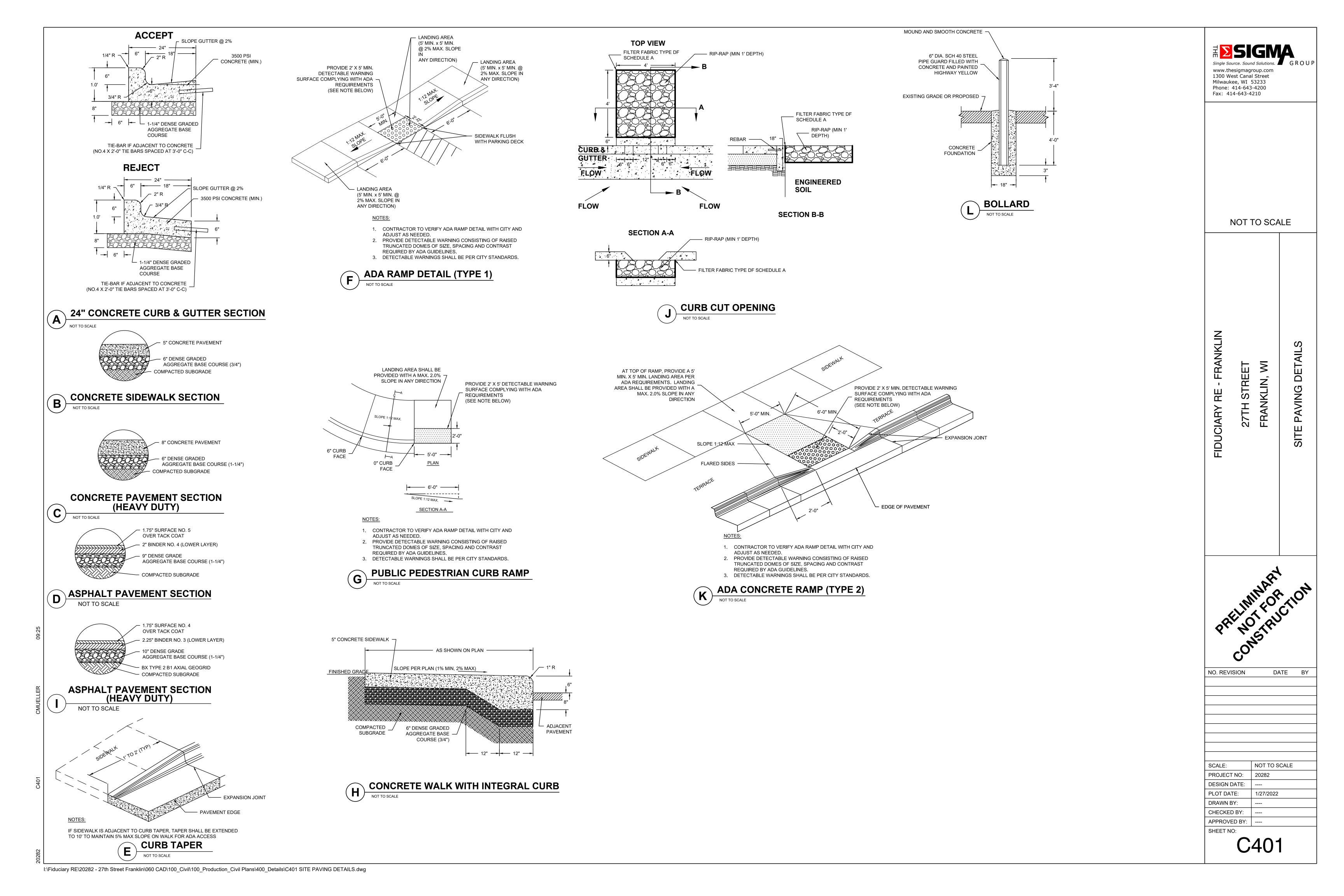
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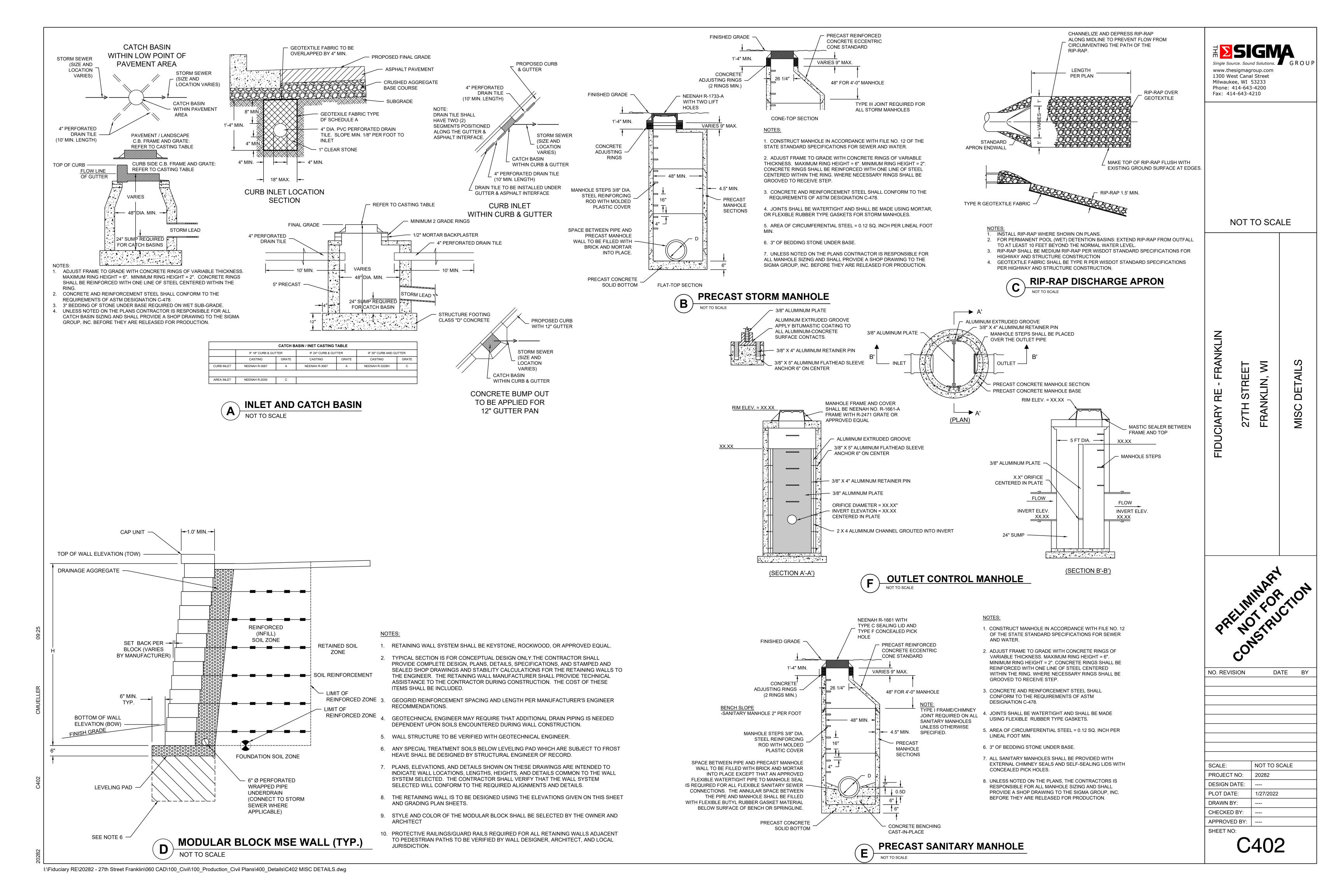
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**DITCH CHECKS: WDNR TS-1062** 





#### **GENERAL**:

- EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR THEIR ACCURACY OR COMPLETENESS
- CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL HAVE SITE MARKED BY DIGGER'S HOTLINE AND SHALL HAVE PRIVATE UTILITIES MARKED BY A PRIVATE UTILITY LOCATOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL UTILITY CROSSINGS AND PROPOSED CONNECTIONS FOR CONFLICTS/DISCREPANCIES PRIOR TO INITIATING CONSTRUCTION. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED.
- LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLANS. LENGTHS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

#### SITE CLEARING:

- 1. EXCEPT FOR STRIPPED TOPSOIL OR OTHER MATERIALS INDICATED TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
- 2. MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
- 3. SALVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE
- INDICATED.
- 4. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
- 5. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN
- PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
- 7. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED
- 8. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION; RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.
- 9. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED; ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
- 10. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY THE OWNER AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES.
- 11. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED; PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 7 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
- 12. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL
- 13. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
- 14. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
- 15. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.
- 16. SAWCUT ALL PAVEMENTS FULL DEPTH PRIOR TO REMOVAL; SAWCUTS SHALL BE IN STRAIGHT LINES PERPENDICULAR AND/OR
- PARALLEL TO EXISTING PAVEMENT JOINTS AND PAVEMENT EDGES.
- INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- 18. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

#### SITE WATER SERVICE:

- 1. COMPLY WITH STANDARDS OF STATE PLUMBING CODE (SPS CH. 382, 384), LOCAL WATER UTILITY REQUIREMENTS AND STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR FIRE-SUPPRESSION AND WATER SERVICE PIPING INCLUDING MATERIALS, FITTINGS APPURTENANCES, INSTALLATION, TESTING, SERVICE TAPS, ETC. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND STATE PLUMBING CODE OR LOCAL JURISDICTIONAL AUTHORITY, STATE PLUMBING CODE AND LOCAL JURISDICTIONAL AUTHORITY REQUIREMENTS GOVERN.
- AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY WATER-DISTRIBUTION SERVICE.
- 3. WATER SERVICE PIPING MAY BE EITHER DUCTILE IRON WATER PIPE OR PVC WATER PIPE AS ALLOWED BY THE LOCAL WATER UTILITY.
- 4. DUCTILE IRON WATER PIPE CONFORMING TO THE REQUIREMENTS OF THE AMERICAN NATIONAL STANDARD FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST. AWWA C151/A21.51 - LATEST REVISION AND REQUIREMENTS OF CHAPTER 8.18.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. a. CLASS 52
- b. CEMENT MORTAR LINING AND INTERNAL AND EXTERNAL BITUMINOUS COATS IN ACCORDANCE WITH SECTION 51.8 OF AWWA C151.
- c. PUSH-ON GASKET PIPE d. PLAIN RUBBER GASKETS
- e. BONDING STRAPS TO PROVIDE ELECTRICAL CONDUCTIVITY WITHOUT FIELD TESTING
- 5. JOINTS FOR DUCTILE IRON PIPE: JOINTS SHALL BE RUBBER GASKET JOINTS; CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR RUBBER GASKET JOINTS FOR DUCTILE IRON PRESSURE PIPE AND FITTINGS (ANSI/AWWA C111/A21.11,
- 6. FITTINGS FOR DUCTILE IRON PIPE: CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR DUCTILE IRON AND GRAY IRON FITTINGS, 3" THROUGH 48" FOR WATER ANSI/AWWA C110/A21.10, LATEST EDITION); CLASS 250 MECHANICAL JOINT PIPE FITTINGS; CEMENT LINED; ALL BELLS; ENTIRE FITTING TARRED; CONDUCTIVE MECHANICAL JOINT (NO LEAD) RUBBER GASKETS, FLANGES, AND BOLTS.
- 7. PVC AWWA PIPE: AWWA C900, CLASS 235 WITH BELL END WITH GASKET AND WITH SPIGOT END AND MEETING REQUIREMENTS OF CHAPTER 8.20.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. FITTINGS SHALL BE IN ACCORDANCE WITH CHAPTER 8.22.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. MECHANICAL -JOINT, DUCTILE IRON FITTINGS: AWWA C153, DUCTILE-IRON COMPACT PATTERN. GLANDS, GASKETS AND BOLTS: AWWA C111, DUCTILE IRON GLANDS, RUBBER GASKETS AND STEEL BOLTS.
- 8. GATE VALVES: CONFORM TO AWWA C-500 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN SUITABLE FOR DIRECT BURY.
- 9. VALVE BOXES: CAST IRON CONFORMING TO ASTM DESIGNATION A-48, CLASS 20 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN
- 10. FIRE HYDRANTS: TO MEET LOCAL STANDARDS.
- 11. WATER MAIN CONNECTION: TAP WATER MAIN WITH SIZE AND LOCATION INDICATED ON PLAN IN ACCORDANCE WITH LOCAL WATER UTILITY REQUIREMENTS. COORDINATE CONNECTION WITH LOCAL WATER UTILITY. ALL JOINTS HALL BE RESTRAINED FROM CONNECTION OF WATER MAIN TO BUILDING WALL. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS. INSTALL MEGA-LUG OR APPROVED EQUAL TIGHT TO WALL FOR RESTRAINT FOR ALL BUILDING WALL PENETRATIONS AS APPROVED BY LOCAL PLUMBING INSPECTOR AND WATER UTILITY. INSTALL THRUST BLOCKING AND MEGA-LUG AT BEND BELOW FLOOR FOR ALL FLOOR PENETRATIONS
- 12. GENERAL WATER PIPE INSTALLATION: IN ACCORDANCE WITH CHAPTER 4.3.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN
- 13. INSTALL DUCTILE-IRON, WATER-SERVICE PIPING ACCORDING TO AWWA C600 AND CHAPTER 4.4.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- 14. ALL DUCTILE IRON PIPE SHALL BE ENCASED IN POLYETHYLENE PER AWWA C105, LATEST EDITION AND IN ACCORDANCE WITH CHAPTER 4.4.4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. ALL JOINTS AND FITTINGS SHALL HAVE POLYETHYLENE ENCASEMENT INSTALLED PER MANUFACTURER'S REQUIREMENTS AND PROCEDURES.
- 15. INSTALL PVC AWWA PIPE ACCORDING TO ASTM F645 AND AWWA M23 AND CHAPTER 4.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- 16. INSTALL JOINT RESTRAINT AND CONCRETE THRUST BLOCKS AT ALL OFFSET FITTINGS (TEES, BENDS, DEAD ENDS, VALVES, REDUCERS) USING MEGA-LUG OR APPROVED EQUAL. CONCRETE THRUST BLOCKS SHALL BE INSTALLED PER FILE NO'S:44,45,46 FROM THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SEE DETAIL FOR MINIMUM LENGTH OF RESTRAINED JOINT REQUIRED. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS.INSTALL WATER SERVICE PIPING SUCH THAT THERE IS A MINIMUM OF 6' OF COVER OVER THE TOP OF THE WATER SERVICE PIPING.

#### SITE WATER SERVICE CONT.:

- 17. BEDDING AND COVER FOR WATER SERVICE PIPING SHALL BE IN ACCORDANCE WITH SECTION 4.3.3 AND FILE NO. 36 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. TRENCH BACKFILL SHALL BE GRANULAR B BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION ON-SITE.
- 18. INSTALL TRACER WIRE FOR NON-METALLIC WATER SERVICES IN ACCORDANCE WITH SPS SECTION 382.40(8)(K). TRACER WIRE INSULATION COLOR SHALL BE BLUE FOR POTABLE WATER SERVICE PIPING.
- 19. DUCTILE-IRON PIPING, RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 4.4.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- 20. PVC PIPING GASKETED JOINTS: USING JOINING MATERIALS ACCORDING TO AWWA C900. CONSTRUCT JOINTS WITH ELASTOMERIC SEALS AND LUBRICANTS ACCORDING TO ASTM D2774 OR ASTM D3139 AND PIPE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 21. CONDUCT HYDROSTATIC TESTS IN ACCORDANCE WITH CHAPTER 4.15.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.

#### SANITARY SEWERAGE:

- ALL PRIVATE SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS.
- 2. ALL PUBLIC SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS.

22. CLEAN AND DISINFECT WATER SERVICE PIPING IN ACCORDANCE WITH SPS CHAPTER 82.40(8)(I) AND AWWA C651

- PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.
- 4. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
- MANHOLES DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
- SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D).
- PIPE JOINT CONSTRUCTION: FOLLOW PIPING MANUFACTURER'S RECOMMENDATIONS; JOIN PVC SEWER PIPE ACCORDING TO ASTM D2321 AND ASTM D 3212 FOR ELASTOMERIC GASKET JOINTS. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE, FLEXIBLE COUPLINGS
- 7. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FORM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
- CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS.
- TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
- 17. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS 10. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
  - 11. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS. TEST NEW BUILDING SEWER IN ACCORDANCE WITH SECTION 5.4.0 OF THE STANDARD SPECIFICATIONS. REPLACE LEAKING PIPE USING NEW PIPE MATERIALS AAND REPEAT TESTING UNTIL LEAKAGE IS WITHIN ALLOWANCES SPECIFIED.

- 1. ALL PRIVATE STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS
- 2. DO NOT INTERRUPT SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY OWNERS OF SUCH FACILITIES 2. ALL PUBLIC STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS.
  - 3. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.
  - 4. REINFORCED CONCRETE PIPE: ASTM C76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C443 RUBBER GASKETS IN ACCORDANCE WITH CHAPTER 8.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
  - 5. HDPE PIPE: ADS N12 PIPE AS APPROVED ON THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCT REGISTER.
  - 6. CATCH BASINS: STANDARD PRECAST CONCRETE CATCH BASINS CONFORMING TO CHAPTER 3.6.0 OF THE STANDARD SPECIFICATIONS AND IN GENERAL CONFORMANCE WITH FILE NO. 26 OF THE STANDARD SPECIFICATIONS. DEPTH AND DIAMETER AS INDICATED ON PLANS. CATCH BASIN SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
  - 7. FRAMES AND GRATES: AS INDICATED ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SPECIFIED FRAME/GRATE IS COMPATIBLE WITH STRUCTURE: IF NOT, NOTIFY ENGINEER.
  - 8. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
  - 9. MANHOLES AND CATCH BASINS DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
  - 10. SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORDANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D).
  - 11. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FORM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
  - 12. CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS.
  - 13. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
  - 14. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
  - 15. CATCH BASIN INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.6 OF THE STANDARD SPECIFICATIONS. CATCH BASIN EXCAVATION AND PREPARATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.4(A) AND (B) OF THE STANDARD SPECIFICATIONS. FRAMES AND GRATES SHALL BE SET TO THE ELEVATIONS SHOWN ON THE PLANS.
  - 16. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS.

#### **EARTH MOVING:**

PROCTOR (ASTM D1557)

OBTAINED.

- 1. ALL EARTH WORK SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER PRESENTED IN THE SITE GEOTECHNICAL REPORT, GEOTECHNICAL ENGINEER RECOMMENDATIONS MADE IN THE FIELD AND THESE SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
- 2. CONTRACTOR SHALL PROVIDE MATERIAL TEST REPORTS FROM A QUALIFIED TESTING AGENCY INDICATING TEST RESULTS FOR CLASSIFICATION ACCORDING TO ASTM D2487 AND LABORATORY COMPACTION CURVES ACCORDING TO ASTM D 1557 FOR EACH ON-SITE AND OFF-SITE SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
- 3. CONTRACTOR SHALL PROVIDE PREEXCAVATION PHOTOS OR VIDEOS SHOWING EXISTING CONDITIONS OF ADJOINING STRUCTURES AND SITE IMPROVEMENTS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY EARTHWORK OPERATIONS.
- 4. OLD BUILDING FOUNDATIONS, BUILDING REMNANTS OR UNSUITABLE BACKFILL MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND THE NEW BUILDING PAD AREAS. THE RESULTING EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL.
- 5. FOUNDATIONS, FOUNDATION WALLS OR CONCRETE FLOOR SLABS SHALL BE REMOVED TO A MINIMUM OF TWO FEET BELOW PROPOSED SUBGRADE WITHIN PROPOSED PARKING AND GREENSPACE AREAS. BASEMENT SLABS LOCATED BELOW 2 FEET FROM PLANNED SUBGRADE ELEVATION MAY BE LEFT IN PLACE BUT SHALL BE BROKEN INTO MAXIMUM 6 INCH PIECES TO FACILITATE DRAINAGE
- 6. SATISFACTORY SOILS FOR FILL: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER OR ANY SOIL GROUP OR COMBINATION OF GROUPS APPROVED OF BY THE PROJECT GEOTECHNICAL ENGINEER.
- 7. UNSATISFACTORY SOILS FOR FILL: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487 OR A COMBINATION OF THESE GROUPS UNLESS DEEMED SATISFACTORY BY THE PROJECT GEOTECHNICAL ENGINEER. UNSATISFACTORY SOILS ALSO INCLUDE SOILS NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM SOIL MOISTURE CONTENT AT THE TIME OF COMPACTION.
- 8. AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
- 9. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE OR ANY SOIL DEEMED ACCEPTABLE FOR ENGINEERED FILL BY THE PROJECT GEOTECHNICAL ENGINEER. ENGINEERED FILL SHALL BE FREE OF ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIAL AND HAVE A MAXIMUM PARTICLE SIZE LESS THAN 3 INCHES. CLAY FILLS SHALL HAVE A LIQUID LIMIT OF LESS THAN 49 AND PLASTICITY INDEX BETWEEN 11 AND 25.
- 10. BEDDING COURSE FOR SEWERS AND WATER SERVICE: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND CONFORMING TO THE REQUIREMENTS OF SECTION 8.43.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- 11. DRAINAGE COURSE BENEATH BUILDING SLABS: NARROWLY GRADED MIXTURE OF WASHED, CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D 448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND 0 TO 5 PERCENT PASSING A NO. 8 SIEVE.
- 12. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
- 13. PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- 14. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
- 15. SHORING, SHEETING AND BRACING: SHORE, BRACE OR SLOPE BANKS OF EXCAVATION TO PROTECT WORKMEN, BANKS, ADJACENT PAVING, STRUCTURES, AND UTILITIES TO MEET OSHA REQUIREMENTS. DESIGN OF TEMPORARY SUPPORT OF EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 16. EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF OBSTRUCTIONS.
- 17. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH FULLY LOADED TANDEM AXLE DUMP TRUCK OR RUBBER TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT, TYPICALLY 9 TONS/AXLE, WHERE COHESIVE SOILS ARE ENCOUNTERED OR WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PRESENT. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES AND PROOFROLL IN DRY WEATHER. PROOF ROLL IN PRESENCE OF PROJECT GEOTECHNICAL ENGINEER OR TECHNICIAN. SOILS THAT ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOAD (TYPICALLY >1") SHALL BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL. IN PAVEMENT AREAS WHERE UNDERCUTS ARE PERFORMED, THE EDGES OF THE OVEREXCAVATIONS SHALL BE FEATHERED INOT THE SURROUNDING SUITABLE SOIL SO THAT EDGE FAILURE OF THE OVEREXCAVATED AREA DOES NOT OCCUR.
- 18. DUE TO CLAYEY SOILS, IF UNDERCUTS OCCUR WITHIN PAVEMENT AREAS AND THEY ARE BACKFILLED WITH GRANULAR SOILS, THE BOTTOM OF THE OVEREXCAVATION SHALL BE SLOPED TO A DRAINTILE THAT IS IN KIND SLOPED TOWARD THE NEAREST STORM SEWER. MINIMUM SLOPES OF SUCH DRAINTILES SHALL BE 0.5%.
- 19. CONVENTIONAL DISKING AND AERATION TECHNIQUES SHALL BE USED TO DRY SOILS BEFORE PROOF ROLLING. ALLOT FOR PROPER DRYING TIME
- 20. ENGINEERED FILL SHALL BE PLACED IN MAXIMUM LIFTS OF EIGHT INCHES OF LOOSE MATERIAL AND COMPACTED WITHIN 3% OF OPTIMUM SOIL MOISTURE CONTENT VALUE AND A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST ASTM D1557. EACH LIFT OF COMPACTED ENGINEERED FILL SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
- 21. EXISTING OLD FILL MATERIAL SHALL BE REMOVED BELOW FOOTINGS OR FOUNDATION SUPPORTING FILL. ENGINEERED FILL BELOW FOOTINGS SHOULD HAVE AN IN-PLACE DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. ENGINEERED FILL BELOW FOOTINGS SHALL BE EVALUATED BY IN-FIELD DENSITY TESTS DURING CONSTRUCTION.
- 22. WHERE UNSUITABLE BEARING SOILS ARE ENCOUNTERED IN A FOOTING EXCAVATION, THE EXCAVATION SHALL BE DEEPENED TO COMPETENT BEARING SOIL AND THE FOOTING LOWERED OR AN OVEREXCAVATION AND BACKFILL PROCEDURE PERFORMED. OVEREXCAVATION AND BACKFILL TREATMENT REQUIRES WIDENING THE DEEPENED EXCAVATION IN ALL DIRECTIONS AT LEAST 6 INCHES BEYOND THE EDGE OF THE FOOTING FOR EACH 12 INCHES OF OVEREXCAVATION DEPTH. THE OVEREXCAVATION SHALL BE BACKFILLED UP TO FOOTING BASE ELEVATION IN MAXIMUM 8 INCH LOOSE LIFTS WITH SUITABLE GRANULAR FILL MATERIAL AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. SOILS AT FOUNDATION BEARING ELEVATION IN THE FOOTING EXCAVATIONS SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
- 23. A MINIMUM OF FOUR INCHES OF DRAINAGE COURSE MAT SHALL BE PLACED BELOW BUILDING FLOOR SLABS. DRAINAGE COURSE SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557)
- 24. UTILITY TRENCHES FOR SEWER AND WATER SHALL CONFORM TO CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- 25. BACKFILL UTILITY TRENCHES IN 4 TO 6 INCH LOOSE LIFTS COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
- BACKFILL SHALL BE MOISTURE CONDITIONED TO BE WITH 3% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557. 26. UTILITY BEDDING PLACEMENT: CONFORM TO SECTION 3.2.6 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. BEDDING MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% COMPACTION WITH RESPECT TO THE MODIFIED
- 27. COMPACTION TESTING OF UTILITY TRENCHES SHALL BE PERFORMED ONE FOR EVERY 200 CUBIC YARDS OF BACKFILL PLACED OR ONE FOR TEST PER 200 LINEAR FEET OF TRENCH FOR EACH LIFT, WHICHEVER IS LESS.
- 28. AGGREGATE BASE COURSE BENEATH PAVEMENTS SHALL BE PLACED AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. AGGREGATE BASE SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN. 29. GRADING GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION
- REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. 30. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM
- FIELD QUALITY-CONTROL TESTING. 31. FOOTING SUBGRADE TESTING: EACH ISOLATED FOOTING SHALL INCLUDE AT LEAST ONE TEST PROBE. TEST PROBES SHALL BE PERFORMED
- EVERY 20 LINEAR FEET IN CONTINUOUS FOOTINGS. 32. BUILDING SLAB AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EVERY 2500 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
- 33. PAVEMENT AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST ONE TEST FOR EVERY LIFT FOR EVERY 2,500 SQUARE FEET OF PAVEMENT AREA, BUT IN NO CASES FEWER THAN 3 TESTS.
- 34. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EACH 50 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS. 35. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY
- 36. DISPOSAL: REMOVE SURPLUS SOIL AND WASTE MATERIAL, INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF IT OFF OWNER'S PROPERTY.

AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS



NOT TO SCALE

PRELIMINARY

NO. REVISION DATE BY

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SHEET NO:

DRAWN BY:

CHECKED BY:

APPROVED BY:

#### **CONCRETE PAVING:**

- THE COMPOSITION, PLACING AND CONSTRUCTION OF CONCRETE PAVEMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTIONS 415, 416, 501, 601, AND 602 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
- MANUFACTURER QUALIFICATIONS: MANUFACTURER OF READY-MIXED CONCRETE PRODUCTS WHO COMPLIES WITH ASTM C 94/C 94M
- REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT AND APPROVED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION. CONCRETE GRADE: GRADE A, GRADE A-2, OR A-FA CONFORMING TO SECTION 501.3.1.3 OF THE WISDOT STANDARD SPECIFICATIONS
- 5. AGGREGATES: CONFORM TO SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. PROVIDE AGGREGATES FROM A SINGLE SOURCE.
- 9. CURING MATERIALS IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS
- 10. EXPANSION JOINT MATERIAL: CONFORM TO SECTION 415.2.3 OF THE WISDOT STANDARD SPECIFICATIONS.
- 11. MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE IN ACCORDANCE WITH SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
- 12. GENERAL EXECUTION: CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS.
- 13. PROOFROLL SUBGRADE AND AGGREGATE BASE AS OUTLINED IN EARTH MOVING SPECIFICATION PRIOR TO PLACEMENT OF PAVEMENTS.
- 14. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES FOR PAVEMENT TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
- 15. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.
- 16. JOINTS GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED. CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS
- 17. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVEMENT AND AT LOCATIONS WHERE PAVEMENT OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVEMENT TERMINATES AT ISOLATION JOINTS.
- 18. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND WHERE INDICATED.
- 19. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS TO MATCH JOINTING OF EXISTING ADJACENT CONCRETE PAVEMENT.
- 20. EDGING: TOOL EDGES OF PAVEMENT, GUTTERS, CURBS, AND JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE TOOL MARKS ON CONCRETE SURFACES.
- 21. CURBING: COMPLY WITH SECTION 601 OF THE WISDOT STANDARD SPECIFICATIONS.
- 22. SIDEWALKS: COMPLY WITH SECTION 602 OF THE WISDOT STANDARD SPECIFICATIONS.
- 23. MOISTEN AGGREGATE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
- 24. FINISH CURBING IN ACCORDANCE WITH SECTION 601.3.5 OF THE WISDOT STANDARD SPECIFICATIONS.
- 25. FINISH SIDEWALK AND PATIO IN ACCORDANCE WITH SECTION 602.3.2.3 OF THE WISDOT STANDARD SPECIFICATIONS (LIGHT BROOM FINISH)
- 26. FINISH CONCRETE VEHICULAR PAVEMENTS AND PADS IN ACCORDANCE WITH SECTION 415.3.8 OF THE WISDOT STANDARD SPECIFICATIONS (ARTIFICIAL TURF DRAG FINISH).
- 27. PROTECT AND CURE SIDEWALK IN ACCORDANCE WITH SECTION 602.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
- 28. PROTECT AND CURE CURBING IN ACCORDANCE WITH SECTION 601.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
- 29. PROTECT AND CURE VEHICULAR CONCRETE PAVING IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS
- 30. REMOVE AND REPLACE CONCRETE PAVEMENT THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION.
- 31. PROTECT CONCRETE FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVEMENT FOR AT LEAST 7 DAYS AFTER PLACEMENT.
- 32. MAINTAIN CONCRETE PAVEMENT FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PAVEMENT NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

# **ASPHALTIC PAVING:**

- THE COMPOSITION, PLACING AND CONSTRUCTION OF ASPHALTIC PAVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460, 465, AND 475 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS).
- CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
- MANUFACTURER QUALIFICATIONS: MANUFACTURER SHALL BE REGISTERED WITH AND APPROVED BY THE DOT OF THE STATE IN WHICH PROJECT
- . ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF BASE COURSE IS WET OR EXCESSIVELY DAMP OR IF THE FOLLOWING CONDITIONS ARE NOT MET: APPLY TACK COAT WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES FAHRENHEIT FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION; PLACE ASPHALTIC CONCRETE SURFACE COURSE WHEN TEMPERATURE IS ABOVE 40 DEGREES FAHRENHEIT: BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEGREES FAHRENHEIT AND RISING. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. DO NOT APPLY BELOW THE MINIMUM PAVEMENT TEMPERATURE AS RECOMMENDED BY THE MANUFACTURER.
- AGGREGATES SHALL BE IN ACCORDANCE WITH SECTION 460.2.2 OF THE WISDOT STANDARD SPECIFICATIONS.
- ASPHALT MATERIALS SHALL BE IN ACCORDANCE WITH CHAPTER 455 OF THE WISDOT STANDARD SPECIFICATIONS.
- 7. PAVEMENT MARKING PAINT: PROVIDE PAINT FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON PLANS.
- 3. HOT-MIX ASPHALT: ASPHALTIC BINDER COURSE AND SURFACE COURSE SHALL BE MIXTURE LT FOR REGULAR DUTY PAVEMENT AND LT FOR HEAVY DUTY PAVEMENT COMPLYING WITH THE WISDOT STANDARD SPECIFICATIONS. ASPHALTIC BINDER SHALL BE 58-28 S UNLESS NOTED.
- AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE WISDOT STANDARD SPECIFICATIONS.
- 10. PAVEMENT PLACEMENT GENERAL: ASPHALT CONCRETE PAVING EQUIPMENT, WEATHER LIMITATIONS, JOB-MIX FORMULA, MIXING, CONSTRUCTION METHODS, COMPACTION, FINISHING, TOLERANCE AND PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS.
- 11. PREPARE AND PROOFROLL SUBGRADES AND AGGREGATE BASE COURSE AS OUTLINED IN EARTH MOVING SPECIFICATIONS PRIOR TO PLACEMENT OF ASPHALT PAVEMENTS.
- 12. SWEEP LOOSE GRANULAR PARTICLES FROM SURFACE OF AGGREGATE BASE COURSE PRIOR TO PAVEMENT PLACEMENT. DO NOT DISLODGE OR DISTURB AGGREGATE EMBEDDED IN COMPACTED SURFACE OF BASE COURSE.
- 13. SPREAD AND FINISH ASPHALTIC MIXTURE IN ACCORDANCE WITH SECTION 450.3.2.5 OF THE WISDOT STANDARD SPECIFICATIONS. PAVEMENT THICKNESSES SHALL BE AS INDICATED ON THE PLANS.
- 14. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH
- 15. COMPACT ASPHALTIC PAVEMENT IN ACCORDANCE WITH SECTION 450.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
- 16. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.
- 17. THICKNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS 1/4 INCH FOR BINDER COURSE AND PLUS 1/4 INCH FOR SURFACE COURSE, NO MINUS.
- 18. SURFACE SMOOTHNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS: BINDER COURSE: 1/4 INCH;
- SURFACE COURSE: 1/8 INCH. REMOVE AND REPLACE ALL HUMPS OR DEPRESSIONS EXCEEDING THE SPECIFIED TOLERANCES. 19. DO NOT APPLY PAVEMENT-MARKING PAINT UNTIL LAYOUT, COLORS, AND PLACEMENT HAVE BEEN VERIFIED WITH ENGINEER.
- 20. APPLY MARKINGS TO A DRY SURFACE FREE FROM FROST. REMOVE DUST, DIRT, OIL, GREASE, GRAVEL, DEBRIS OR OTHER MATERIAL THAT MAY PREVENT BONDING TO THE PAVEMENT.
- 21. APPLY PAINT AS THE MANUFACTURER SPECIFIES WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS INDICATED, WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES AT A MINIMUM RATE OF 17.6 GALLONS/MILE FOR A CONTINUOUS 4" LINE.
- 22. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND TO PREPARE TEST REPORTS.

- 6. WATER: ASTM C 94/C 94M AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. 7. AIR-ENTRAINING ADMIXTURE: ASTM C 260 AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. 8. CHEMICAL ADMIXTURES: PER SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
- 5. COLOR AND STYLE OF SRW UNITS SHALL BE AS SELECTED BY ARCHITECT AND OWNER FROM MANUFACTURER'S FULL RANGE

RETAINING WALL UNITS, ROCKWOOD RETAINING WALL UNITS OR APPROVED EQUAL.

6. SRW UNITS SHALL BE CAPABLE OF BEING ERECTED WITH THE HORIZONTAL GAP BETWEEN ADJACENT UNITS NOT EXCEEDING 1/8 INCH.

4. SEGMENTAL RETAINING WALL (SRW) UNITS SHALL BE MACHINE FORMED, PORTLAND CEMENT CONCRETE BLOCKS SPECIFICALLY

DESIGNED FOR RETAINING WALL APPLICATIONS. SRW UNITS SHALL BE VERSA-LOK STANDARD RETAINING WALL UNITS, KEYSTONE

3. DESIGN SUBMITTAL: THE CONTRACTOR SHALL SUBMIT TWO SETS OF DETAILED DESIGN CALCULATIONS AND FINAL RETAINING WALL

STATING THAT THE SRW UNITS AND GEOSYNTHETIC REINFORCEMENT MEET THE REQUIREMENTS OF THE DESIGN.

WORK SHALL CONSIST OF FURNISHING DETAILED DESIGN, MATERIALS, LABOR, EQUIPMENT AND SUPERVISION TO INSTALL A SEGMENTAL

RETAINING WALL SYSTEM IN ACCORDANCE WITH PLANS AND SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES,

MATERIALS SUBMITTALS: THE CONTRACTOR SHALL SUBMIT MANUFACTURERS' CERTIFICATIONS TWO WEEKS PRIOR TO START OF WORK

PLANS FOR APPROVAL AT LEAST TWO WEEKS PRIOR TO THE BEGINNING OF WALL CONSTRUCTION. ALL CALCULATIONS AND DRAWINGS

SHALL BE PREPARED AND SEALED BY A PROFESSIONAL CIVIL ENGINEER (P.E.) - (WALL DESIGN ENGINEER) EXPERIENCED IN SRW DESIGN

- 7. SRW UNITS SHALL BE SOUND AND FREE OF CRACKS OR OTHER DEFECTS THAT WOULD INTERFERE WITH THE PROPER PLACING OF THE UNIT OR SIGNIFICANTLY IMPAIR THE STRENGTH OR PERMANENCE OF THE STRUCTURE. ANY CRACKS OR CHIPS OBSERVED DURING CONSTRUCTION SHALL FALL WITHIN THE GUIDELINES OUTLINED IN ASTM C 1372.
- 8. CONCRETE SRW UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM 1372 AND HAVE A MINIMUM NET AVERAGE 28 DAYS COMPRESSIVE STRENGTH OF 3000 PSI. COMPRESSIVE STRENGTH TEST SPECIMENS SHALL CONFORM TO THE SAW-CUT COUPON PROVISIONS OF ASTM C140.
- 9. SRW UNITS' MOLDED DIMENSIONS SHALL NOT DIFFER MORE THAN + 1/8 INCH FROM THAT SPECIFIED, AS MEASURED IN ACCORDANCE WITH ASTM C 140. THIS TOLERANCE DOES NOT APPLY TO ARCHITECTURAL SURFACES, SUCH AS SPLIT FACES.
- 10. SRW UNITS SHALL BE INTERLOCKED WITH CONNECTION PINS. THE PINS SHALL CONSIST OF GLASS-REINFORCED NYLON MADE FOR THE EXPRESSED USE WITH THE SRW UNITS SUPPLIED.
- 11. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF HIGH-TENACITY PET GEOGRIDS, HDPE GEOGRIDS, OR GEOTEXTILES MANUFACTURED FOR SOIL REINFORCEMENT APPLICATIONS. THE TYPE, STRENGTH AND PLACEMENT OF THE GEOSYNTHETIC REINFORCEMENT SHALL BE DETERMINED BY PROCEDURES OUTLINED IN THIS SPECIFICATION AND THE NCMA DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS (3RD EDITION 2009) AND MATERIALS SHALL BE SPECIFIED BY WALL DESIGN ENGINEER IN THEIR FINAL WALL PLANS AND SPECIFICATIONS. THE MANUFACTURERS/SUPPLIERS OF THE GEOSYNTHETIC REINFORCEMENT SHALL HAVE DEMONSTRATED CONSTRUCTION OF SIMILAR SIZE AND TYPES OF SEGMENTAL RETAINING WALLS ON PREVIOUS PROJECTS.
- 12. THE TYPE. STRENGTH AND PLACEMENT OF THE REINFORCING GEOSYNTHETIC SHALL BE AS DETERMINED BY THE WALL DESIGN ENGINEER, AS SHOWN ON THE FINAL, P.E.-STAMPED RETAINING WALL PLANS.
- 13. MATERIAL FOR LEVELING PAD SHALL CONSIST OF COMPACTED SAND, GRAVEL, OR COMBINATION THEREOF (USCS SOIL TYPES GP,GW, SP. & SW) AND SHALL BE A MINIMUM OF 6 INCHES IN DEPTH. LEAN CONCRETE WITH A STRENGTH OF 200-300 PSI AND 3 INCHES THICK MAXIMUM MAY ALSO BE USED AS A LEVELING PAD MATERIAL. THE LEVELING PAD SHOULD EXTEND LATERALLY AT LEAST A DISTANCE OF 6 INCHES FROM THE TOE AND HEEL OF THE LOWERMOST SRW UNIT.
- 14. DRAINAGE AGGREGATE SHALL BE ANGULAR, CLEAN STONE OR GRANULAR FILL MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422:

| PERCENT PASSING |
|-----------------|
| 100             |
| 75-100          |
| 0-60            |
| 0-50            |
| 0-5             |
|                 |

**SEGMENTAL RETAINING WALL** 

GRADES, DESIGN AND DIMENSIONS SHOWN ON PLANS.

AND LICENSED IN THE STATE WHERE THE WALL IS TO BE BUILT.

- 15. THE DRAINAGE COLLECTION PIPE SHALL BE A PERFORATED OR SLOTTED PVC, OR CORRUGATED HDPE PIPE. THE DRAINAGE PIPE MAY BE WRAPPED WITH A GEOTEXTILE TO FUNCTION AS A FILTER. DRAINAGE PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM F 405 OR ASTM F 758.
- 16. THE REINFORCED SOIL MATERIAL SHALL BE FREE OF DEBRIS. UNLESS OTHERWISE NOTED ON THE FINAL, P.E.-SEALED, RETAINING WALL PLANS PREPARED BY THE WALL DESIGN ENGINEER, THE REINFORCED MATERIAL SHALL CONSIST OF THE INORGANIC USCS SOIL TYPES GP, GW, SW, SP, SM, MEETING THE FOLLOWING GRADATION, AS DETERMINED IN ACCORDANCE WITH ASTM D422:

| SIEVE SIZE | PERCENT PASSING |
|------------|-----------------|
| 1 INCH     | 100             |
| NO. 4      | 20-100          |
| NO. 40     | 0-60            |
| NO. 200    | 0-35            |

- 17. THE MAXIMUM PARTICLE SIZE OF POORLY-GRADED GRAVELS (GP) (NO FINES) SHOULD NOT EXCEED 3/4 INCH UNLESS EXPRESSLY APPROVED BY THE WALL DESIGN ENGINEER AND THE LONG-TERM DESIGN STRENGTH (LTDS) OF THE GEOSYNTHETIC IS REDUCED TO ACCOUNT FOR ADDITIONAL INSTALLATION DAMAGE FROM PARTICLES LARGER THAN THIS MAXIMUM.
- 18. THE PLASTICITY OF THE FINE FRACTION SHALL BE LESS THAN 20.
- 19. THE PH OF THE BACKFILL MATERIAL SHALL BE BETWEEN 3 AND 9 WHEN TESTED IN ACCORDANCE WITH ASTM G 51.
- 20. DRAINAGE GEOTEXTILE SHALL CONSIST OF GEOSYNTHETIC SPECIFICALLY MANUFACTURED FOR USE AS A PERMEABLE SOIL FILTER THAT RETAINS SOIL WHILE STILL ALLOWING WATER TO PASS THROUGHOUT THE LIFE OF THE STRUCTURE. THE TYPE AND PLACEMENT OF THE GEOTEXTILE FILTER MATERIAL SHALL BE AS REQUIRED BY THE WALL DESIGN ENGINEER IN THEIR FINAL WALL PLANS AND SPECIFICATIONS.
- 21. THE DESIGN ANALYSIS FOR THE FINAL, P.E.-STAMPED RETAINING WALL PLANS PREPARED BY THE WALL DESIGN ENGINEER SHALL CONSIDER THE EXTERNAL STABILITY AGAINST SLIDING AND OVERTURNING, INTERNAL STABILITY AND FACIAL STABILITY OF THE REINFORCED SOIL MASS, AND SHALL BE IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICE AND THESE SPECIFICATIONS. THE INTERNAL AND EXTERNAL STABILITY ANALYSIS SHALL BE PERFORMED IN ACCORDANCE WITH THE "NCMA DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS, 3RD EDITION" USING THE RECOMMENDED MINIMUM FACTORS OF SAFETY IN THIS MANUAL.
- 22. EXTERNAL STABILITY ANALYSIS FOR BEARING CAPACITY, GLOBAL STABILITY, AND TOTAL AND DIFFERENTIAL SETTLEMENT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE OWNER'S GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL PERFORM BEARING CAPACITY, SETTLEMENT ESTIMATES, AND GLOBAL STABILITY ANALYSIS BASED ON THE FINAL WALL DESIGN PROVIDED BY THE WALL DESIGN ENGINEER AND COORDINATE ANY REQUIRED CHANGES WITH THE WALL DESIGN ENGINEER.
- 23. THE GEOSYNTHETIC PLACEMENT IN THE WALL DESIGN SHALL HAVE 100% CONTINUOUS COVERAGE PARALLEL TO THE WALL FACE. GAPPING BETWEEN HORIZONTALLY ADJACENT LAYERS OF GEOSYNTHETIC (PARTIAL COVERAGE) WILL NOT BE ALLOWED.
- 24. CONTRACTOR'S FIELD CONSTRUCTION SUPERVISOR SHALL HAVE DEMONSTRATED EXPERIENCE AND BE QUALIFIED TO DIRECT ALL WORK AT THE SITE.
- 25. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE PROJECT GRADING PLANS. CONTRACTOR SHALL TAKE PRECAUTIONS TO MINIMIZE OVER-EXCAVATION. OVER-EXCAVATION SHALL BE FILLED WITH COMPACTED INFILL MATERIAL, OR AS DIRECTED BY THE WALL DESIGN ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- 26. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING STRUCTURES AND UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL ENSURE ALL SURROUNDING STRUCTURES ARE PROTECTED FROM THE EFFECTS OF WALL EXCAVATION. EXCAVATION SUPPORT, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 27. FOLLOWING THE EXCAVATION, THE FOUNDATION SOIL SHALL BE EXAMINED BY THE OWNER'S ENGINEER TO ASSURE ACTUAL FOUNDATION SOIL STRENGTH MEETS OR EXCEEDS THE ASSUMED DESIGN BEARING STRENGTH. SOILS NOT MEETING THE REQUIRED
- STRENGTH SHALL BE REMOVED AND REPLACED WITH INFILL SOILS, AS DIRECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER. 28. FOUNDATION SOIL SHALL BE PROOF-ROLLED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY AND INSPECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF LEVELING PAD MATERIALS.
- 29. LEVELING PAD SHALL BE PLACED AS SHOWN ON THE FINAL, P.E.-SEALED RETAINING WALL PLANS WITH A MINIMUM THICKNESS OF 6 INCHES. THE LEVELING PAD SHOULD EXTEND LATERALLY AT LEAST A DISTANCE OF 6 INCHES FROM THE TOE AND HEEL OF THE LOWERMOST SRW UNIT.
- 30. GRANULAR LEVELING PAD MATERIAL SHALL BE COMPACTED TO PROVIDE A FIRM, LEVEL BEARING SURFACE ON WHICH TO PLACE THE FIRST COURSE OF UNITS. WELL-GRADED SAND CAN BE USED TO SMOOTH THE TOP 1/4 INCH TO 1/2 INCH OF THE LEVELING PAD. COMPACTION WILL BE WITH MECHANICAL PLATE COMPACTORS TO ACHIEVE 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D
- 31. ALL SRW UNITS SHALL BE INSTALLED AT THE PROPER ELEVATION AND ORIENTATION AS SHOWN ON THE FINAL, P.E.-SEALED WALL PLANS AND DETAILS OR AS DIRECTED BY THE WALL DESIGN ENGINEER. THE SRW UNITS SHALL BE INSTALLED IN GENERAL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE SPECIFICATIONS AND DRAWINGS SHALL GOVERN IN ANY CONFLICT BETWEEN THE TWO REQUIREMENTS.
- 32. FIRST COURSE OF SRW UNITS SHALL BE PLACED ON THE LEVELING PAD. THE UNITS SHALL BE LEVELED SIDE-TO-SIDE, FRONT-TO-REAR AND WITH ADJACENT UNITS, AND ALIGNED TO ENSURE INTIMATE CONTACT WITH THE LEVELING PAD. THE FIRST COURSE IS THE MOST IMPORTANT TO ENSURE ACCURATE AND ACCEPTABLE RESULTS. NO GAPS SHALL BE LEFT BETWEEN THE FRONT OF ADJACENT UNITS. ALIGNMENT MAY BE DONE BY MEANS OF A STRING LINE OR OFFSET FROM BASE LINE TO THE BACK OF THE UNITS.
- 33. ALL EXCESS DEBRIS SHALL BE CLEANED FROM TOP OF UNITS AND THE NEXT COURSE OF UNITS INSTALLED ON TOP OF THE UNITS BELOW.

#### **SEGMENTAL RETAINING WALL CONT.:**

- 34. CONNECTION PINS SHALL BE INSERTED THROUGH THE PIN HOLES OF EACH UPPER-COURSE UNIT INTO RECEIVING SLOTS IN LOWER-COURSE UNITS. PINS SHALL BE FULLY SEATED IN THE PIN SLOT BELOW. UNITS SHALL BE PUSHED FORWARD TO REMOVE ANY LOOSENESS IN THE UNIT-TO-UNIT CONNECTION.
- 35. PRIOR TO PLACEMENT OF NEXT COURSE, THE LEVEL AND ALIGNMENT OF THE UNITS SHALL BE CHECKED AND CORRECTED WHERE
- 36. LAYOUT OF CURVES AND CORNERS SHALL BE INSTALLED IN ACCORDANCE WITH THE WALL PLAN DETAILS OR IN GENERAL ACCORDANCE WITH SRW MANUFACTURER'S INSTALLATION GUIDELINES. WALLS MEETING AT CORNERS SHALL BE INTERLOCKED BY OVERLAPPING SUCCESSIVE COURSES.
- 37. PROCEDURES ABOVE SHALL BE REPEATED UNTIL REACHING TOP OF WALL UNITS, JUST BELOW THE HEIGHT OF THE CAP UNITS. GEOSYNTHETIC REINFORCEMENT, DRAINAGE MATERIALS, AND REINFORCED BACKFILL SHALL BE PLACED IN SEQUENCE WITH UNIT
- 38. ALL GEOSYNTHETIC REINFORCEMENT SHALL BE INSTALLED AT THE PROPER ELEVATION AND ORIENTATION AS SHOWN ON THE FINAL P.E.-SEALED RETAINING WALL PLAN PROFILES AND DETAILS, OR AS DIRECTED BY THE WALL DESIGN ENGINEER.
- 39. AT THE ELEVATIONS SHOWN ON THE FINAL PLANS, (AFTER THE UNITS, DRAINAGE MATERIAL AND BACKFILL HAVE BEEN PLACED TO THIS ELEVATION) THE GEOSYNTHETIC REINFORCEMENT SHALL BE LAID HORIZONTALLY ON COMPACTED INFILL AND ON TOP OF THE CONCRETE SRW UNITS, TO WITHIN 1 INCH OF THE FRONT FACE OF THE UNIT BELOW. EMBEDMENT OF THE GEOSYNTHETIC IN THE SRW UNITS SHALL BE CONSISTENT WITH SRW MANUFACTURER'S RECOMMENDATIONS. CORRECT ORIENTATION OF THE GEOSYNTHETIC REINFORCEMENT SHALL BE VERIFIED BY THE CONTRACTOR TO BE IN ACCORDANCE WITH THE GEOSYNTHETIC MANUFACTURER'S RECOMMENDATIONS. THE HIGHEST-STRENGTH DIRECTION OF THE GEOSYNTHETIC MUST BE PERPENDICULAR TO THE WALL FACE.
- 40. GEOSYNTHETIC REINFORCEMENT LAYERS SHALL BE ONE CONTINUOUS PIECE FOR THEIR ENTIRE EMBEDMENT LENGTH. SPLICING OF THE GEOSYNTHETIC IN THE DESIGN-STRENGTH DIRECTION (PERPENDICULAR TO THE WALL FACE) SHALL NOT BE PERMITTED. ALONG THE LENGTH OF THE WALL, HORIZONTALLY ADJACENT SECTIONS OF GEOSYNTHETIC REINFORCEMENT SHALL BE BUTTED IN A MANNER TO ASSURE 100% COVERAGE PARALLEL TO THE WALL FACE.
- 41. TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY ON THE GEOSYNTHETIC REINFORCEMENT. A MINIMUM OF 6 INCHES OF BACKFILL IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOSYNTHETIC. TURNING SHOULD BE KEPT TO A MINIMUM. RUBBER-TIRED EQUIPMENT MAY PASS OVER THE GEOSYNTHETIC REINFORCEMENT AT SLOW SPEEDS (LESS THAN 5 MPH).
- 42. THE GEOSYNTHETIC REINFORCEMENT SHALL BE FREE OF WRINKLES PRIOR TO PLACEMENT OF SOIL FILL. THE NOMINAL TENSION SHALL BE APPLIED TO THE REINFORCEMENT AND SECURED IN PLACE WITH STAPLES. STAKES OR BY HAND TENSIONING UNTIL REINFORCEMENT IS COVERED BY 6 INCHES OF FILL.
- 43. DRAINAGE AGGREGATE SHALL BE INSTALLED TO THE LINE, GRADES AND SECTIONS SHOWN ON THE FINAL P.E.-SEALED RETAINING WALL PLANS. DRAINAGE AGGREGATE SHALL BE PLACED TO THE MINIMUM THICKNESS SHOWN ON THE CONSTRUCTION PLANS BETWEEN AND BEHIND UNITS (A MINIMUM OF 1 CUBIC FOOT FOR EACH EXPOSED SQUARE FOOT OF WALL FACE UNLESS OTHERWISE NOTED ON THE FINAL WALL PLANS).
- 44. DRAINAGE COLLECTION PIPES SHALL BE INSTALLED TO MAINTAIN GRAVITY FLOW OF WATER OUTSIDE THE REINFORCED-SOIL ZONE. THE DRAINAGE COLLECTION PIPE SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE FINAL CONSTRUCTION DRAWINGS. THE DRAINAGE COLLECTION PIPE SHALL DAYLIGHT INTO A STORM SEWER OR ALONG A SLOPE, AT AN ELEVATION BELOW THE LOWEST POINT OF THE PIPE WITHIN THE AGGREGATE DRAIN. DRAINAGE LATERALS SHALL BE SPACED AT A MAXIMUM 50-FOOT SPACING ALONG THE WALL FACE.
- 45. THE REINFORCED BACKFILL SHALL BE PLACED AS SHOWN IN THE FINAL WALL PLANS IN THE MAXIMUM COMPACTED LIFT THICKNESS OF 8 INCHES AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D 698) AT A MOISTURE CONTENT WITHIN -1% POINT TO +3% POINTS OF OPTIMUM. THE BACKFILL SHALL BE PLACED AND SPREAD IN SUCH A MANNER AS TO ELIMINATE WRINKLES OR MOVEMENT OF THE GEOSYNTHETIC REINFORCEMENT AND THE SRW UNITS.
- 46. ONLY HAND-OPERATED COMPACTION EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET OF THE BACK OF THE WALL UNITS. COMPACTION WITHIN THE 3 FEET BEHIND THE WALL UNITS SHALL BE ACHIEVED BY AT LEAST THREE PASSES OF A LIGHTWEIGHT MECHANICAL TAMPER, PLATE, OR ROLLER.
- 47. AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR SHALL SLOPE THE LAST LEVEL OF BACKFILL AWAY FROM THE WALL FACING AND REINFORCED BACKFILL TO DIRECT WATER RUNOFF AWAY FROM THE WALL FACE. 48. AT COMPLETION OF WALL CONSTRUCTION, BACKFILL SHALL BE PLACED LEVEL WITH FINAL TOP OF WALL ELEVATION. IF FINAL GRADING, PAVING, LANDSCAPING AND/OR STORM DRAINAGE INSTALLATION ADJACENT TO THE WALL IS NOT PLACED IMMEDIATELY AFTER WALL COMPLETION, TEMPORARY GRADING AND DRAINAGE SHALL BE PROVIDED TO ENSURE WATER RUNOFF IS NOT

DIRECTED AT THE WALL NOR ALLOWED TO COLLECT OR POND BEHIND THE WALL UNTIL FINAL CONSTRUCTION ADJACENT TO THE

- WALL IS COMPLETED. 49. SRW CAPS SHALL BE PROPERLY ALIGNED AND GLUED TO UNDERLYING UNITS WITH VERSA-LOK ADHESIVE, A FLEXIBLE, HIGH-STRENGTH CONCRETE ADHESIVE. RIGID ADHESIVE OR MORTAR ARE NOT ACCEPTABLE.
- 50. CAPS SHALL OVERHANG THE TOP COURSE OF UNITS BY 3/4 INCH TO 1 INCH. SLIGHT VARIATION IN OVERHANG IS ALLOWED TO CORRECT ALIGNMENT AT THE TOP OF THE WALL.
- 51. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION BY OTHERS ADJACENT TO THE WALL DOES NOT DISTURB THE WALL OR PLACE TEMPORARY CONSTRUCTION LOADS ON THE WALL THAT EXCEED DESIGN LOADS, INCLUDING LOADS SUCH AS WATER PRESSURE, TEMPORARY GRADES, OR EQUIPMENT LOADING. HEAVY PAVING OR GRADING EQUIPMENT SHALL BE KEPT A MINIMUM OF 3 FEET BEHIND THE BACK OF THE WALL FACE. EQUIPMENT WITH WHEEL LOADS IN EXCESS OF 150 PSF LIVE LOAD SHALL NOT BE OPERATED WITHIN 10 FEET OF THE FACE OF THE RETAINING WALL DURING CONSTRUCTION ADJACENT TO THE WALL. CARE SHOULD BE TAKEN BY THE GENERAL CONTRACTOR TO ENSURE WATER RUNOFF IS DIRECTED AWAY FROM THE WALL STRUCTURE UNTIL FINAL GRADING AND SURFACE DRAINAGE COLLECTION SYSTEMS ARE COMPLETED.

# **BIOFILTRATION BASIN**

- BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH WDNR TECHNICAL STANDARD 1004: BIORETENTION FOR INFILTRATION AND THESE SPECIFICATIONS.
- 2. ENGINEERED SOIL MIX SHALL CONSIST OF A MIX OF 70 TO 85% SAND AND 15 TO 30% COMPOST BASED ON VOLUME. SAND SHALL MEET THE REQUIREMENTS FOR FINE AGGREGATE SAND SPECIFIED SECTION 501.2.5.3.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION OR MEET ASTM C33 (FINE AGGREGATE CONCRETE SAND).
- PRIOR TO PLACEMENT IN THE BIOFILTRATION BASIN, THE ENGINEERED SOIL SHALL BE PREMIXED AND THE MOISTURE CONTENT SHALL BE LOW ENOUGH TO PREVENT CLUMPING AND COMPACTION DURING PLACEMENT.
- 4. THE ENGINEERED SOIL SHALL BE PLACED IN MULTIPLE LIFTS, EACH APPROXIMATELY 12 INCHES IN DEPTH.
- ENGINEERED SOIL MIX SHALL BE FREE OF ROCKS, STUMPS, ROOTS, BRUSH OR OTHER MATERIAL OVER ONE INCH IN DIAMETER. NO OTHER MATERIALS SHALL BE MIXED WITH THEE PLANTING SOIL THAT MAY BE HARMFUL TO PLANT GROWTH OR BE A HINDRANCE TO PLANTING OR MAINTENANCE.
- 6. ENGINEERED SOIL AND GRAVEL SHALL BE IN ACCORDANCE WITH THE LATEST WDNR TECHNICAL STANDARD 1004.
- PEA GRAVEL SHALL BE GRADED SUCH THAT MINIMUM PARTICLE SIZE IS LARGE ENOUGH TO PREVENT FALLING THROUGH PERFORATIONS OF THE UNDERDRAIN PIPE.
- 8. BIOFILTRATION BASIN DRAIN PIPE: 6-INCH SCHEDULE 40 PVC PIPE MEETING PERFORATION REQUIREMENTS OF AASHTO M278 HIGHWAY UNDERDRAIN SPECIFICATIONS WITH 3/8" PERFORATIONS ON 6" CENTERS WITH 4 HOLES PER ROW.
- 9. BEEHIVE INLET: NEENAH R-256I, OR EQUAL
- 10. RISER STRUCTURE: 36" DIAMETER PRECAST CATCH BASIN STRUCTURE WITH 24" TOP OPENING TO ACCOMMODATE BEEHIVE INLET IN GENERAL ACCORDANCE WITH FILE NO. 26 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- 11. GRAVEL STORAGE LAYER (IF INDICATED ON PLANS): COURSE AGGREGATE #2 IN ACCORDANCE WITH SECTION 501.2.5.4.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- 12. FILTER FABRIC: GEOTEXTILE FABRIC IN ACCORDANCE WITH SECTION 645.2.2.4 OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
- 13. EXCAVATE TO GRADES AS INDICATED ON PLANS.

SHALL BE DEEP TILLED PRIOR TO PLANTING.

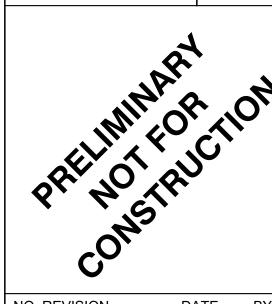
- 14. CONSTRUCT TEMPORARY DIVERSION SWALES OR PROVIDE OTHER MEANS AS NECESSARY TO PREVENT CONSTRUCTION SITE RUNOFF FROM DISTURBED AREAS, AND RUNOFF FROM PERVIOUS AREAS WHICH HAVE NOT YET BEEN STABILIZED, FROM ENTERING THE BIORETENTION AREA.
- 15. CONSTRUCTION SHALL BE SUSPENDED DURING PERIODS OF RAINFALL OR SNOWMELT. CONSTRUCTION SHALL REMAIN SUSPENDED IF PONDED WATER IS PRESENT OR IF RESIDUAL SOIL MOISTURE CONTRIBUTES SIGNIFICANTLY TO THE POTENTIAL FOR SOIL SMEARING, CLUMPING OR OTHER FORMS OF COMPACTION.
- 16. COMPACTION AND SMEARING OF THE ENGINEERED SOIL AND TOP SOIL BENEATH THE FLOORS, IN THE SOIL PLANTING BED, AND THE SIDE SLOPES OF THE BASIN, AND COMPACTION OF THE ENGINEERED SOILS IN THE BASIN SHALL BE MINIMIZED. DURING SITE DEVELOPMENT, THE AREA DEDICATED TO THE BIOFILTRATION BASIN SHALL BE CORDONED OFF TO PREVENT ACCESS BY HEAVY EQUIPMENT. ACCEPTABLE EQUIPMENT FOR CONSTRUCTING THE BIOFILTRATION BASIN INCLUDES EXCAVATION HOES, LIGHT EQUIPMENT WITH TURF TYPE TIRES, MARSH EQUIPMENT OR WIDE-TRACK LOADERS.
- 17. IF COMPACTION OCCURS AT THE BASE OF THE BIOFILTRATION BASIN, THE SOIL SHALL BE REFRACTURED TO A DEPTH OF AT LEAST 12 INCHES. IF SMEARING OCCURS, THE SMEARED AREAS OF THE INTERFACE SHALL BE CORRECTED BY RAKING OR ROTO-TILLING.
- MEDIUM AND TO STABILIZE THE PONDING DEPTH. VIBRATING PLATE-STYLE COMPACTORS SHALL NOT BE UTILIZED. 19. ANY SEDIMENT ACCUMULATED IN THE BASIN DUE TO CONSTRUCTION ACTIVITIES SHOULD BE REMOVED AND THE ENGINEERED SOIL

18. STEPS MAY BE TAKEN TO INDUCE MILD SETTLING OF THE ENGINEERED SOIL BED AS NEEDED TO PREPARE A STABLE PLANTING

20. IMPERVIOUS LINER SHALL BE 45 MIL FIRESTONE EPDM (GSI PRODUCTS), OR 30 MIL PVC (GSI PRODUCTS), OR EQUAL



NOT TO SCALE



NO. REVISION DATE BY

NOT TO SCALE PROJECT NO: 20282 DESIGN DATE PLOT DATE: 1/27/2022 DRAWN BY:

SHEET NO:

CHECKED BY:

APPROVED BY:



ADDITIONAL INFORMATION ON EXISTING WOODLANDS AND

WETLAND AREAS TO BE PRESERVED AND MITIGATED ON-SITE.

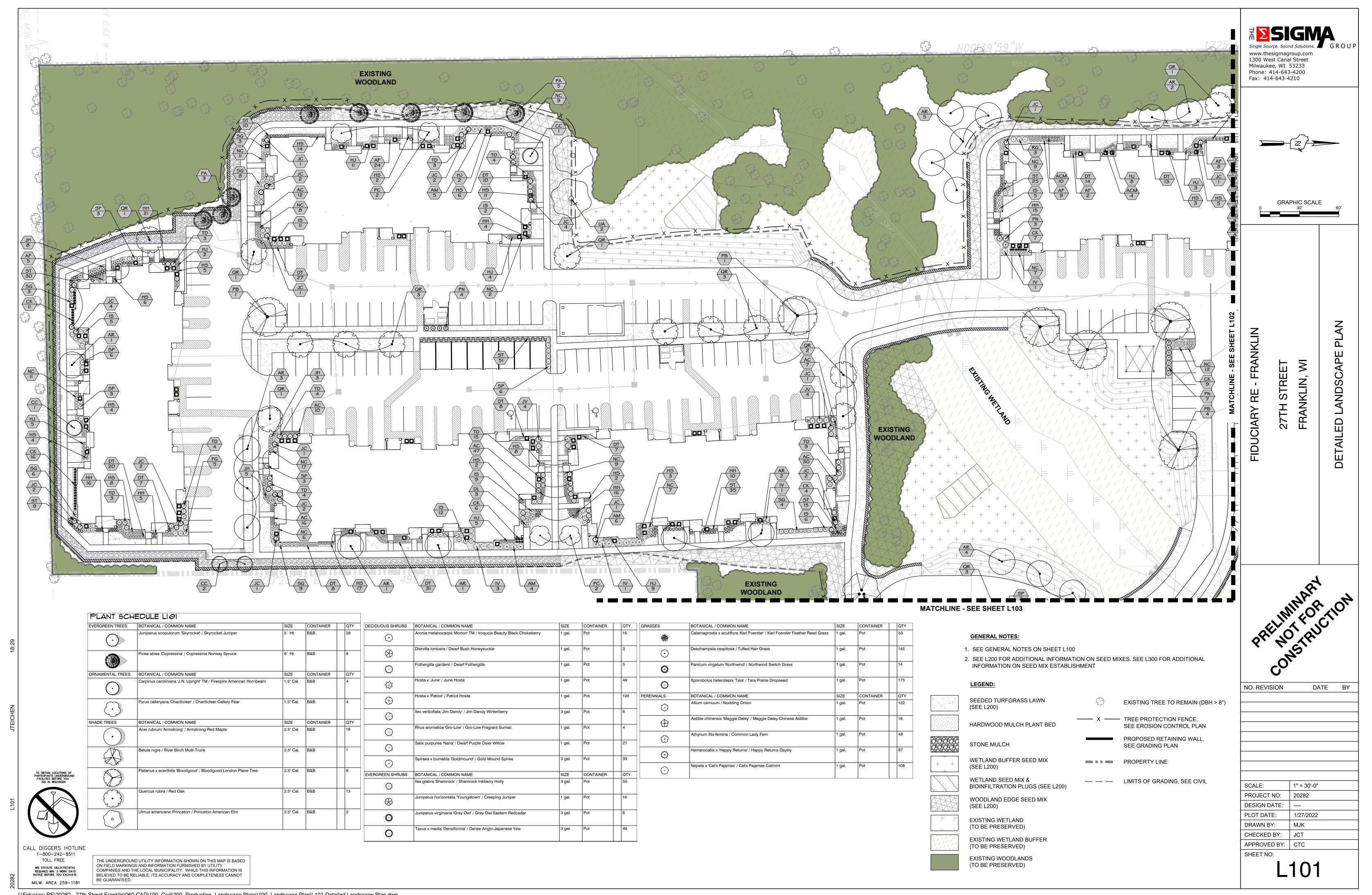
COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS

BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT

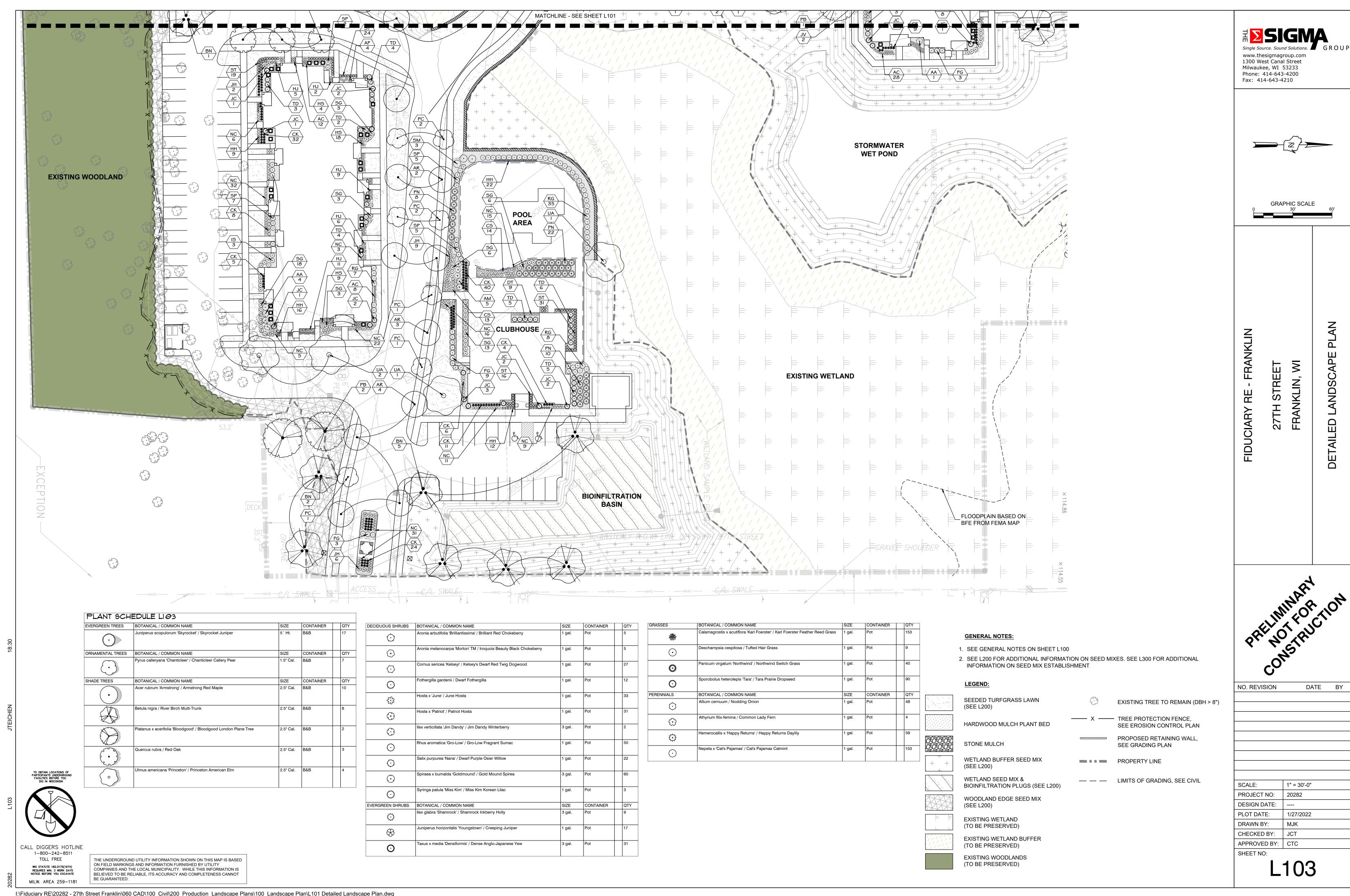
BE GUARANTEED.

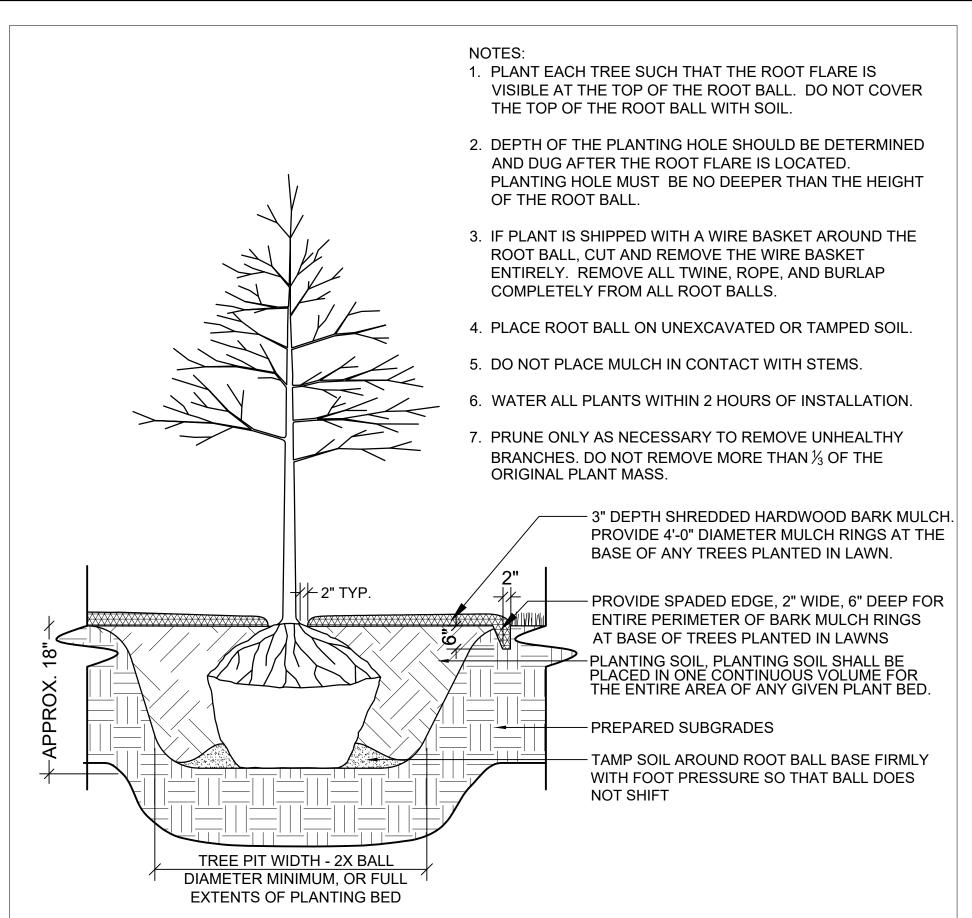
REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

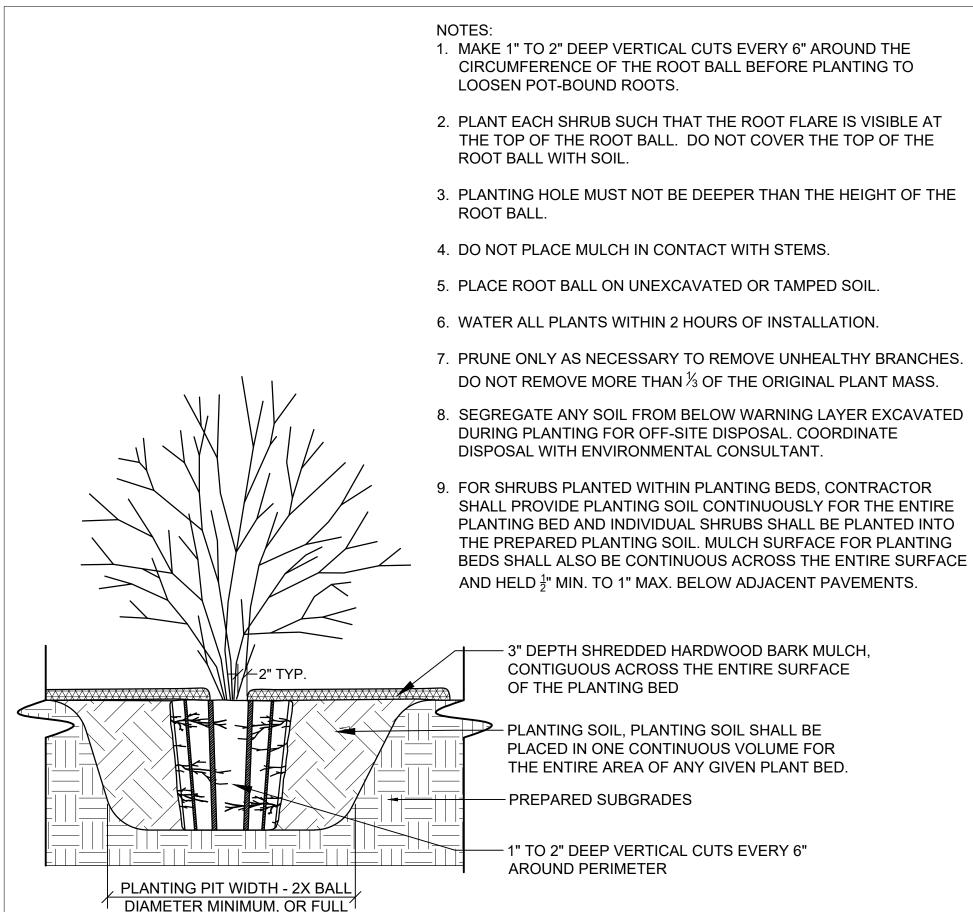
MILW. AREA 259-1181

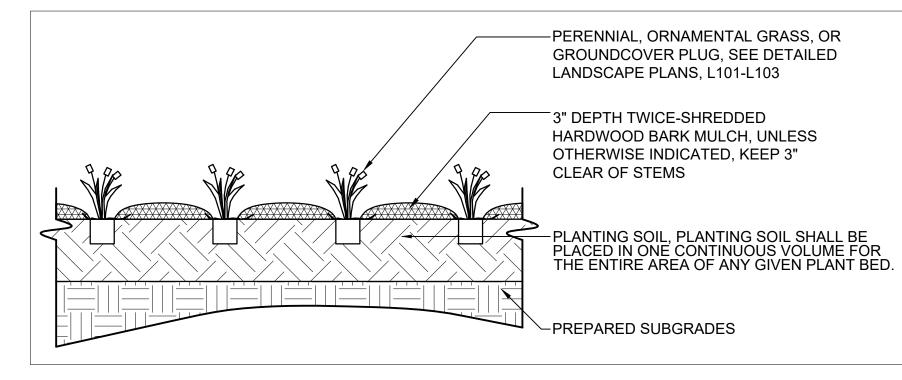














| <b>Bioinfiltration Plugs</b> |                      |          |                           |   |
|------------------------------|----------------------|----------|---------------------------|---|
| <b>Botanical Name</b>        | Common Name          | Quantity | <u>Size</u>               | Comments  |
| Asclepias incarnata          | Marsh Milkweed       |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Aster Novae-angliae          | New England Aster    |          | 91.00 Round Tapered Plug  | 18" O.C. in clusters of 5-12 plants per species |
| Carex stipdata               | Common Fox Sedge     |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Carex vulpinoidea            | Brown Fox Sedge      |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Eupatorium maculatum         | Spotted Joe Pye Weed |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Helenium autumnale           | Sneezeweed           |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Liatris spicata              | Marsh Blazingstar    |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Lobelia cardinalis           | Cardinal Flower      |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Monarda fistulosa            | Wild Bergamot        |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Panicum virgatum             | Switchgrass          |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Ratibida pinnata             | Yellow Coneflower    |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Rudbeckia hirta              | Black-Eyed Susan     |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Scirpus atrovirens           | Dark-Green Bulrush   |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Scirpus cyperinus            | Wool Grass           |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Spartina pactinata           | Prairie Cordgrass    |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Tradescantia ohiensis        | Ohio Spiderwort      |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Verbena hastata              | Blue Vervain         |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |
| Vernonia fasciculata         | Ironweed             |          | 112.00 Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species |

BIORETENTION PLUGS SCHEDULE

**(2**)

TYPICAL SHRUB PLANTING

NOT TO SCALE

| For 'WETLAND BUFFER SEED MIX' Areas | 87.00 Seeds/Sq. Ft.   |
|-------------------------------------|---|
|                                     | ·   |
| <u>Common Name</u>                  | PLS Ounces/Acre   |
|                                     |   |
| Native Yarrow                       | 0.75  |
| Lavender Hyssop                     | 0.50  |
| Leadplant                           | 2.00  |
|                                     | 2.00  |
|                                     | 8.00  |
| Prairie Coreopsis                   | 2.00  |
|                                     | 2.50  |
| Purple Prairie Clover               | 2.00  |
| Purple Coneflower                   | 8.00  |
| Early Sunflower                     | 4.00  |
| _                                   | 1.50  |
| _                                   | 0.50  |
|                                     | 1.00  |
| Yellow Coneflower                   | 6.00  |
| Prairie Wild Rose                   | 2.00  |
| Black-Eyed Susan                    | 2.00  |
| •                                   | 0.50  |
| •                                   | 4.00  |
| ·                                   | 1.50  |
|                                     | 1.00  |
|                                     | tals = 51.75  |
|                                     |   |
|                                     | 40.00   |
| Blue Grama                          | 4.00  |
| Canada Wild Rye                     | 16.00   |
|                                     | 0.25  |
|                                     | 4.00  |
| Little Bluestem                     | 16.00   |
| Indian Grass                        | 4.00  |
|                                     | Lavender Hyssop Leadplant Common Milkweed Partridge Pea Prairie Coreopsis White Prairie Clover Purple Prairie Clover Purple Coneflower Early Sunflower Prairie Blazing Star Wild Bergamont Dotted Mint Yellow Coneflower Prairie Wild Rose Black-Eyed Susan Showy Goldenrod Ohio Spiderwort Hoary Vervain Heart-Leaved Golden Alexanders  To: shes: Side Oats Grama Blue Grama Canada Wild Rye Path Rush June Grass |

Prairie Dropseed

**WETLAND BUFFER SEED MIX** 

**TYPICAL TREE PLANTING** 

NOT TO SCALE

Sporobolus heterolepis

| Savannah/Woodland Edge Mesic to Dry |                              | 80.00 Seeds/Sq. Ft. |             |
|-------------------------------------|------------------------------|---------------------|-------------|
| Botanical Name Common Name          |                              | PLS Ounces/A        | <u>\cre</u> |
| Wildflower Forbs:                   |                              |                     |             |
| Agastache scrophulariaefolia        | Purple Giant Hyssop          |                     | 1.00        |
| Allium cernuum                      | Nodding Onion                |                     | 8.00        |
| Anemone virginiana                  | Tall Anemone                 |                     | 0.50        |
| Aquilegia canadensis                | Wild Columbine               |                     | 1.50        |
| Aster sagittifolius                 | Arrow-Leaved Aster           |                     | 1.00        |
| Chamaecrista fasciculata            | Partridge Pea                |                     | 13.00       |
| Coreopsis lanceolata                | Lance Leaf Coreopsis         |                     | 2.00        |
| Coreopsis palmata                   | Prairie Coreopsis            |                     | 1.50        |
| Echinacea pallida                   | Pale Purple Coneflower       |                     | 4.00        |
| Eupatorium purpureum                | Purple Joe Pye Weed          |                     | 0.75        |
| Helianthus strumosus                | Pale-Leaved Sunflower        |                     | 2.00        |
| Heliopsis helianthoides             | Early Sunflower              |                     | 10.00       |
| Hypericum pyramidatum               | Great St. John's Wort        |                     | 0.25        |
| Kuhnia eupatorioides                | False Boneset                |                     | 2.00        |
| Liatris pycnostachya                | Prairie Blazing Star         |                     | 1.50        |
| Monarda fistulosa                   | Wild Bergamot                |                     | 1.50        |
| Penstemon digitalis                 | Foxglove Beard Tongue        |                     | 1.00        |
| Ratibida pinnata                    | Yellow Coneflower            |                     | 2.00        |
| Rudbeckia hirta                     | Black-Eyed Susan             |                     | 4.00        |
| Rudbeckia subtomentosa              | Sweet Black-Eyed Susan       |                     | 2.00        |
| Scrophularia lanceolata             | Early Figwort                |                     | 0.25        |
| Solidago speciosa                   | Showy Goldenrod              |                     | 0.75        |
| Tradescantia ohiensis               | Ohio Spiderwort              |                     | 3.00        |
| Veronicastrum virginicum            | Culver's Root                |                     | 0.50        |
| Zizia aurea                         | Golden Alexanders            |                     | 8.00        |
|                                     |                              | Totals =            | 72.00       |
| Perennial Grasses, Sedges & Rus     |                              |                     |             |
| Andropogon gerardii                 | Big Bluestem                 |                     | 8.00        |
| Bouteloua curtipendula              | Side Oats Grama              |                     | 32.00       |
| Bromus ciliatus                     | Fringed Brome                |                     | 6.00        |
| Bromus kalmii                       | Prairie Brome                |                     | 10.00       |
| Carex bicknellii                    | Copper-Shouldered Oval Sedge |                     | 2.00        |
| Diarrhena americana                 | Beak Grass                   |                     | 4.00        |
| Elymus canadensis                   | Canada Wild Rye              |                     | 64.00       |
| Elymus villosus                     | Silky Wild Rye               |                     | 16.00       |
| Hystrix patula                      | Bottlebrush Grass            |                     | 16.00       |
| Schizachyrium scoparium             | Little Bluestem              |                     | 8.00        |
| C 1 1                               | . I: C                       |                     | 40.00       |

|                | Rainwater Renewal Mix                | For 'WETLAND SEED MIX' Areas | 94.00 Seeds/Sq. Ft. |
|----------------|--------------------------------------|------------------------------|---------------------|
|                | Botanical Name                       | Common Name                  | PLS Ounces/Acre     |
| 1.00           |                                      |                              |                     |
| 8.00           | Wildflowers:                         |                              |                     |
| 0.50           | Asclepias incarnata                  | Marsh Milkweed               | 3.00                |
| 1.50           | Aster ericoides                      | Heath Aster                  | 0.10                |
| 1.00           | Aster novae-angliae                  | New England Aster            | 1.50                |
| 13.00          | Baptisia leucantha                   | White wild Indigo            | 4.00                |
| 2.00           | Eupatorium maculatum                 | Spotted Joe Pye Weed         | 0.80                |
| 1.50           | Eupatorium perfoliatum               | Boneset                      | 0.50                |
| 4.00           | Liatris pycnostachya                 | Prairie Blazing Star         | 2.50                |
| 0.75           | Liatris spicata                      | Marsh Blazing Star           | 5.00                |
| 2.00           | Lobelia cardinalis                   | Cardinal Flower              | 0.25                |
| 10.00          | Lobelia siphilitica                  | Great Blue Lobelia           | 0.50                |
| 0.25           | Monarda fistulosa                    | Wild Bergamont               | 1.50                |
| 2.00           | Physostegia virginiana               | Obedient Plant               | 1.50                |
| 1.50           | Pycnanthemum virginianum             | Mountain Mint                | 0.30                |
| 1.50           | Ratibida pinnata                     | Yellow Coneflower            | 2.2                 |
| 1.00           | Rudbeckia hirta                      | Black-Eyed Susan             | 2.00                |
| 2.00           | Rudbeckia subtomentosa               | Sweet Black-Eyed Susan       | 2.00                |
| 4.00           | Solidago ohiensis                    | Ohio Goldenrod               | 0.50                |
| 2.00           | Tradescantia ohiensis                | Ohio Spiderwort              | 1.2                 |
| 0.25           | Verbena hastata                      | Blue Vervain                 | 1.00                |
| 0.75           | Vernonia fasciculata                 | Ironweed                     | 1.00                |
| 3.00           | ,                                    |                              |                     |
| 0.50           |                                      | Totals =                     | 31.4                |
| 8.00           | Perennial Grasses, Sedges & Rus      |                              |                     |
|                | Bromus ciliatus                      | Fringed Brome                | 20.00               |
|                | Calamagrostis canadensis             | Blue Joint Grass             | 1.00                |
| 72.00          | Carex bebbii                         | Bebb's Oval Sedge            |                     |
|                | Carex crawfordii                     | Crawford's Sedge             | 1.00                |
| 8.00           | Carex crinita                        | Fringed Sedge                | 0.7!                |
| 32.00          | Carex stipata                        | Common Fox Sedge             | 1.50                |
| 6.00           | Carex vulpinoidea                    | Brown Fox Sedge              | 1.00                |
| 10.00          | Elymus canadensis                    | Canada Wild Rye              | 24.00               |
| 2.00           | Elymus virginicus                    | Virginia Wild Rye            | 32.00               |
| 4.00           | Glyceria grandis                     | Reed Manna Grass             | 1.00                |
| 54.00          | Panicum Virgatum                     | Switchgrass                  | 3.50                |
| L6.00          | Scirpus atrovirens                   | Dark-Green Bulrush           | 0.50                |
| L6.00<br>L6.00 | Scirpus attovirens Scirpus cyperinus | Wool Grass                   | 0.30                |
| 8.00           | Sorghastrum nutans                   | Indian Grass                 | 5.00                |
| 8.00<br>10.00  | Spartina pectinata                   |                              | 3.0                 |
| 10.00          | эранта рестиса                       | Prairie Cordgrass            | 3.00                |
| 76.00          |                                      | Totals =                     | 96.5                |

Reinder's Deluxe 50 Seed Mix

Seed at rate of 150-200 lbs/acre

20% Kentucky Bluegrass
15% Newport Kentuckly Bluegrass
15% Ken Blue Kentucky Bluegrass
25% Creeping Red Fescue
15% Quebec Perennial Ryegrass
10% Fiesta III Perennial Ryegrass

NO. REVISION DATE BY

LANDSCAPE

**SIGMA** 

www.thesigmagroup.com 1300 West Canal Street

Milwaukee, WI 53233

Phone: 414-643-4200

Fax: 414-643-4210

SCALE:
PROJECT NO: 20282
DESIGN DATE: ---PLOT DATE: 10/11/21
DRAWN BY: MJK
CHECKED BY: JCT
APPROVED BY: CTC
SHEET NO:
L200

Totals =

8.00

92.25

**WOODLAND EDGE SEED MIX** 

Sorghastrum nutans

**Indian Grass** 

Totals =



SEEDED TURFGRASS LAWN MIX

# 1. Contractor shall provide high-quality topsoil for all new turfgrass lawn and planting bed areas in the following

- For seeded lawns: 4-inches minimum; 8-inches in areas where high bedrock is present
- For planting beds: 12-inches
- For tree pits and/or trees planted in planting beds: 24-inches or the depth of the rootball, whichever is greater
- No topsoil is required under any areas that are exclusively stone cobbles/stone materials.
   Topsoil shall be loam to sandy loam and free of rocks, gravel, wood, debris, litter, and of noxious weeds and their seeds. It shall be cleaned, salvaged or imported material capable of passing the 1" sieve.
- 2. Additional Properties of Imported Topsoil or Manufactured Topsoil: Screened and free of stones ½ inch or larger in any dimension; free of roots, plants, sod, clods, clay lumps, pockets of coarse sand, paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials harmful to plant growth; free of obnoxious weeds and invasive plants including quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and bromegrass; not infested with nematodes; grubs; or other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens; friable and with sufficient structure to give good tilth and aeration. Continuous, air-filled pore space content on a volume/volume basis shall be at least 15 percent when moisture is present at field capacity. Soil shall have a field capacity of at least 15 percent on a dry weight basis.
- 3. Sand: Provide sand for sand/topsoil blend meeting the gradation requirements of USDA Coarse Sand (0.02-0.04 inches) or ASTM C33 (Fine Aggregate Concrete Sand) or WisDOT SSHSC Section 501.2.5.3.4 (Fine Aggregate Sand). Pre-blend sand and topsoil uniformly off-site prior to delivery and installation on-site and only install where specifically indicated in the drawings.
- 4. All topsoil shall be verified by field review at the location of the topsoil stockpile prior to delivery or spreading on the site. Field review may consist of visual inspection, hand test for clay, etc. Each different soil source (stockpiled from existing site, imported, stockpiled off-site, etc) is subject to a separate inspection and approval.
- 5. Refer to Civil plans for subterranean bioretention island materials and constructions.
- 6. Till or disc the exposed subsoils/subgrades to a depth of 2"-4" to allow aeration before placing topsoil. An Owner's Project Representative shall examine all subgrades prior to the delivery or installation of topsoil for any and all detrimental conditions including compaction, contamination by deleterious materials, presence of large construction debris, and/or any other negative conditions. Soil materials shall not be placed until all subgrade deficiencies have been corrected. Contractor will be held responsible for negative results from improper subgrade preparation if soil materials are placed with disregard to inadequately prepared subgrades.
- 7. Place an initial lift of topsoil to a 4-inch depth and gently till into the top layer of decompacted subgrades. Place subsequent layers of topsoil also in 4-inch lifts and lightly tamp to account for settling. Topsoil depths listed in these sheet notes are final depths, **taking into account settling**; Contractor shall account for a slight overage of topsoil volumes ordered and delivered to the site to account for material settling.
- 8. Do not apply topsoil to saturated or frozen subgrades.
- 9. Finish grade topsoil surfaces to the following tolerances where topsoiled area(s) meets adjacent pavements:
- For seeded lawns: Hold topsoil  $\frac{1}{2}$ -inch below top surface of adjacent pavement.
- For planting beds: Hold topsoil 2-inches below top surface of adjacent pavement and taper bark mulch down so that top surface of bark mulch is held even or slightly below top surface of adjacent pavement.

# <u>PLANTS</u>

- 1. Protect all existing trees to remain on or near the construction boundaries. If any existing trees to remain are damaged or need to be removed to accommodate construction, the appraised value of the tree(s) will need to be paid to the Owner.
- 2. All plant material shall conform to the American Standards of Nursery Stock and be true to the species and variety/hybrid/cultivar specified, and nursery-grown in accordance with good horticultural practices, and under climatic conditions similar to those of the site location. All material shall be well-rooted into its specified container size. Nursery-dug material shall be freshly dug and properly prepared for planting.
- 3. If discrepancies occur between the written Plant Schedule and the actual plant count from the planting symbols placed on the plans, the quantities in the plans shall govern over the quantities indicated in the Plant Schedule. Plants shall conform to the measurements specified within the contract documents.
- 4. Trees and shrubs shall have superior form, compactness, and symmetry. Damaged trees and shrubs, by weather, insects, fungus, knots, abrasions, or cut limbs or leaders and trees with multiple leaders, unless specified otherwise, will be rejected.
- 5. Trees and shrubs shall have healthy, well-developed root systems, free from physical damage.
- 6. Planting Restrictions: Plant between April 15 and October 1 and after ground has completely thawed. Any planting proposed outside of this planting window shall receive written approval from an Owner's Project Representative.
- 7. Do not fertilize newly planted material in the first year of planting.
- 8. During transportation, no plant shall be bound with rope or wire in a manner that damages trunks or breaks branches. Plants are not to be dragged, lifted, or pulled by the trunk, branches or foliage. Plants are not to be thrown off of a truck or loader.
- 9. Prior to installation, plants must be protected from sun and drying winds, kept in shaded areas, and kept well-watered. Install all plants within one day of delivery to site.
- 10. An Owner's Project Representative and Landscape Architect must inspect all plant material delivered to the site to verify health, form and conformance to the size and species requirements prior to planting. Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undersized, diseased, damaged, or installed incorrectly.
- 11. All plants shall be guaranteed to be in healthy and flourishing condition during the growing season. The guarantee does not cover damage from vandalism, animals, freezing rain, or winds over 60 mph. During any time of the guarantee period, the Contractor shall remove or replace, without cost to the owner, all plants not in a healthy and flourishing condition as determined by the Landscape Architect. All plant material shall be guaranteed for one (1) year from time of installation. Only one replacement per plant shall need to be made.

#### PLANTS, CONTINUED...

12. Set plants plumb into the center of plant holes or excavated plant bed area, <u>making sure that the root flare</u> is 1-inch above adjacent finished grades; plants set too low will require re-planting at no additional cost to the Owner. <u>Remove wire basket, burlap, twine, pots, and/or any other material completely from the rootball.</u> Gently scarify rootballs of shrubs and/or perennials that have pot-bound roots. Trees with girdling roots will be rejected. Remove all twine and labels and prune any dead or broken branches.

13. Backfill around rootballs in 6-inch to 8-inch lifts, tamping gently to settle soil and eliminate voids and air pockets. Fine grade all planting bed surfaces after installation and prior to mulching to re-distribute topsoil from plant hole excavations in an even, smooth surface level with adjacent grades. Provide a granular pre-emergent herbicide [Basis of Design: Preen Garden Weed Preventor by Preen] across the surface of all planting beds and/or tree pit areas in accordance with manufacturer's written instructions. Thoroughly water plants and planting bed surfaces (exposed soil areas that will be covered with bark mulch) immediately after planting and before mulching.

14. Organic Mulch is to be shredded hardwood or cedar bark, free of material detrimental to healthy plant growth Recycled bark, shredded pallets or other non-virgin material will be rejected. Individual pieces of shredded bark mulch shall not exceed 2-1/2" in size. Color shall be natural. Basis of Design: "Single Cut Hardwood" by Kisser Stone, or approved equal.

- Provide a 3-inch depth, continuous layer of shredded hardwood bark mulch for all planting beds indicated.
- Provide a shredded hardwood bark mulch ring at the base of all trees planted in lawn areas. Size (diameter) of the ring varies based on tree species and locations. Refer to plans for diameter of tree rings.
- 15. Provide a 6" deep x 2" wide spaded edge, backfilled with shredded hardwood bark mulch around the perimeter of all mulch rings for trees planted in lawn areas.
- 16. Provide a 6" deep x 6" wide shovel cut edge (trenched edge), backfilled with shredded hardwood bark mulch, for all planting beds adjacent to lawn areas.
- 17. Maintenance for plant material shall be 90 days. Contractor will be responsible for beginning initial maintenance for all plants and landscape materials as soon as the material is installed. Actual maintenance period will start at the end of installation on the date considered substantial completion by an Owner's Representative. Any days of maintenance period after October 15 of any given year will roll into the spring of the next year, Starting May 1. For example, a project completed on September 15 would be responsible for maintenance from September 15 to October 15 (30 days) and then from May 1 to July 1 (60 days) the following season.
- 18. During the maintenance period, the Contractor will be responsible for (at a minimum), watering with Contractor-supplied supplemental water, staking leaning trees, re-settling plant material/topsoil areas/seeded areas that settle, pruning, dead-heading, weeding, and removing trash and debris from planting and landscape areas, re-setting stone materials and/or edging, repairing areas of washout, and ensuring all landscape construction is on the path to successful short and long-term establishment. Whenever possible, utilize integrated pest management practices; hand-weeding will be required. Apply pesticides and chemical products only as required to prevent widespread outbreaks of a particular weed species and only after receiving written approval from the Owner. Contractor shall plan to make weekly maintenance visits to the site during the maintenance period and shall provide documentation to the Owner of the maintenance activities performed and observations of any deleterious nature for each maintenance visit.
- 19. Stake any trees planted on slopes of 3:1 or greater, in areas of high winds, and/or as determined by the Contractor or Owner's Representative to be in the best interest of the tree's immediate and long-term health and survivability.

#### SEEDING

- 1. Provide the following seed types from
- Agrecol LLC 10101 N. Casey Road Evansville, Wisconsin 53536:
- Agrecol's 'Upland Meadow' Seed Mix for areas shown as 'WETLAND BUFFER SEED MIX'
- Agrecol's 'Savannah/Woodland Edge' Seed Mix' for areas shown as 'WOODLAND EDGE SEED MIX'

  A SEED MIX'

  A
- Agrecol's 'Rainwater Renewal Mix' for areas shown as 'WETLAND SEED MIX'
   Reinder's 'Deluxe 50 Seed Mix' for areas shown as 'SEEDED TURFGRASS LAWN'
- Refer to DETAIL 5/6/7/8, L200, for Seed Mix composition.
- 2. Refer to Civil plans for locations and extents of erosion control mat. In general, provide Curlex Net Free for seeded areas with slopes of 4:1 or less and Curlex II erosion control mat in all other seeded areas. Provide manufacturer's standard biodegradable anchoring stakes (or alternative source for biodegradable stakes, if approved in writing by Owner's Representative). Install per manufacturer's written installation instructions.
- 3. Anchored straw mulch may only be used for seeding small areas of repair unless approved by the Owner.
- 4. Seed shall be delivered to the site in its original, unopened container, labeled as to weight, analysis, and manufacturer. Store any seed delivered prior to use in a manner safe from damage from heat, moisture, rodents, or other causes.
- 5. The Contractor shall guarantee the germination of seed installed during the regular seeding season. Seeding windows for the project are April 1 June 15 and/or September 1 to October 15. Seeding outside of these windows requires written approval from Owner and may require additional material and/or maintenance costs.
- 7. Fertilizer + Preemergent: Provide 21-22-4 Fertilizer-Mesotrione Herbicide blend by The Andersons, or approved equal, for application over bare soils before seeding or sodding for all turfgrass seeded areas. Apply at 40 lbs. / 11,000 square feet.
- 8. Starter Fertilizer: In addition to fertilizer+preemergent blend, provide a granular, non-burning fertilizer of 18-12-6 composition by Spring Valley, or approved equal, for all turfgrass seeded areas. Apply at manufacturer's recommended rate(s).
- 9. Contractor will be responsible for beginning initial maintenance for all lawns and erosion control materials as soon as the material is seeded/installed. Actual maintenance period will start at the end of installation on the date considered substantial completion by an Owner's Representative. Any days of maintenance period after October 15 of any given year will roll into the spring of the next year, Starting May 1. For example, a project completed on September 15 would be responsible for maintenance from September 15 to October 15 (30 days) and then from May 1 to July 1 (60 days) the following season.
- 10. Maintain and establish lawn areas by watering, fertilizing, weeding, mowing, trimming, replanting, and any other operations to ensure all lawns are on a path to short-term establishment and vigorous, long-term health. Roll, regrade, and replant bare or eroded areas and repair displaced erosion control materials to produce a uniformly smooth lawn. Contractor shall plan to make weekly maintenance visits to the site during the maintenance period and shall provide documentation to the Owner of the maintenance activities performed and observations of any deleterious nature for each maintenance visit.

#### VEGETATION MONITORING AND MANAGMENT

#### NATIVE SEED INSTALLATION:

NATIVE SEED SHALL BE MIXED THOROUGHLY BY VENDOR OR SEED INSTALLATION CONTRACTOR. SEED SHALL BE INSTALLED BY MEANS OF MECHANICAL AND/OR BROADCAST METHODS TO ASSURE EVEN DISTRIBUTION OF SEEDS THROUGHOUT ALL DESIGNATED SEEDING AREAS. IMMEDIATELY AFTER SEED PLACEMENT, SEED SHALL BE SOWN INTO THE SOIL'S SURFACE BY MEANS OF LIGHT RAKING OR HARROWING AND THEN LIGHTLY MULCHED WITH CLEAN, WEED-FREE STRAW. A COVER CROP OF ANNUAL RYE GRASS SHALL BE USED TO COMPLIMENT NATIVE SEEDING AREAS AT THE RATE OF FIVE (5) POUNDS PER ACRE.

#### MANAGEMENT AND MONITORING:

THE MANAGEMENT AND MONITORING OF NATIVE PLANTINGS (INCLUDING SEED MIXES, FORBS AND PLUGS) SHOULD BE DIRECTED TOWARD THE GOAL OF CREATING A STABLE, NATIVE PLANT COMMUNITY. INVASIVE AND WEEDY PLANT SPECIES WILL NEED TO BE CONTROLLED UNTIL THE DESIRED NATIVE PLANT COMMUNITIES ARE ESTABLISHED. THIS TYPICALLY WILL TAKE THREE (3) TO FIVE (5) YEARS AFTER SOWING OR PLUG INSTALLATION.

#### **UNDESIRABLE PLANT CONTROL:**

OVERALL MANAGEMENT OF VEGETATED AREAS MAY INCLUDE, BUT ARE NOT LIMITED TO: RESEEDING OR REPLANTING DAMAGED OR NON-ACTIVE GROWTH AREAS, IRRIGATION, STRATEGIC MOWING TO REDUCE WEED COVER AND PREVENT WEED SEED SET, REMOVAL OF TREE SEEDLINGS, TARGETED HERBICIDE APPLICATION(S), AND MECHANICAL WEED CONTROL (HAND PULLING AND SEED HEAD REMOVAL). SELECTED HERBICIDE APPLICATIONS SHOULD BE DONE SPARINGLY AND ONLY WHEN NECESSARY. SELECTION OF HERBICIDE FOR USE MUST CONSIDER THE PROXIMITY TO THE WATERWAY, IN COMPLIANCE WITH STATE AND APPLICABLE FEDERAL I AW

#### **SHORT-TERM VEGETATION MANAGEMENT:**

SHORT-TERM VEGETATION MANAGEMENT (2 YEARS AFTER SEEDING/PLUG INSTALLATION) OCCURS WHILE THE LANDSCAPE CONTRACTOR OR SPECIALTY SEEDING/ RESTORATION CONTRACTOR IS RESPONSIBLE TO THE PROJECT OWNER FOR THE GUARANTEE OF ALL PLANTINGS TO BE ALIVE AND IN VIGOROUS GROWING CONDITIONS. SEEDING SHOULD ACHIEVE AN AVERAGE OF 80% VEGETATION COVERAGE FROM SPECIFIED SEED MIXES. IF UNSATISFACTORY PLANTS ARE FOUND ON SITE, THEY SHOULD BE REPLACED BY THE LANDSCAPE CONTRACTOR OF SPECIALTY SEEDING/RESTORATION CONTRACTOR DURING THE FIRST MONTH OF THE NEXT FAVORABLE PLANTING SEASON. SUPPLEMENTAL SEEDING WILL BE NEEDED TO FILL IN BARE SPOTS WHERE NATIVE SEED GERMINATION IS POOR. IT IS ALSO THE LANDSCAPE CONTRACTOR / SPECIALTY SEEDING/RESTORATION CONTRACTOR'S RESPONSIBILITY TO ELIMINATE ALL NOXIOUS WEED GROWTH FROM THE SITE DURING THIS GUARANTEE PERIOD.

INSPECTIONS SHOULD BE MADE FREQUENTLY DURING THE GROWING SEASON TO PROPERLY DOCUMENT ANY INVASIVE SPECIES, WEEDS, DEHYDRATION, DAMAGE, EROSION, DISEASES, BARE AREAS, AND PESTS. THE NECESSARY REPAIRS, TREATMENTS, SEEDING AND PLANTING SHOULD BE DONE AS SOON AS WEATHER CON- DITIONS ARE APPROPRIATE. THE INSPECTIONS AND SUBSEQUENT ACTIONS SHOULD BE PROPERLY DOCUMENTED AND GRAPHICALLY IDENTIFIED ON THE APPROVED LANDSCAPE PLAN FOR THE PROJECT.

AT THE END OF THE GUARANTEE PERIOD, OWNERSHIP AND MAINTENANCE ACTIVITIES WILL BE TRANSFERRED TO THE PROJECT OWNERSHIP/MANAGEMENT ASSOCIATION.

#### LONG TERM VEGETATION MANAGEMENT:

LONG-TERM MANAGEMENT (AFTER 2 YEARS) WILL BE THE RESPONSIBILITY OF THE PROJECT OWNER/MANAGEMENT ASSOCIATION. LONG-TERM VEGETATION MANAGEMENT TASKS WILL INCLUDE MOWING, RESEEDING OR REPLANTING DAMAGED AREAS, REMOVAL OF TREE SEEDLINGS, TARGETED HERBICIDE APPLICATION AND MECHANICAL WEED CONTROL (HAND-PULLING AND SEED HEAD REMOVAL) AND REPAIR OF EROSION AREAS. SELECTIVE HERBICIDE APPLICATIONS SHOULD BE DONE SPARINGLY. INSPECTIONS SHOULD BE MADE FREQUENTLY DURING THE GROWING SEASON TO IDENTIFY ANY INVASIVE SPECIES, WEEDS, DEHYDRATION DAMAGE, EROSION, DISEASES, BARE AREAS, AND PESTS. THE NECESSARY REPAIRS, TREATMENTS, SEEDING AND PLANTING SHOULD BE DONE AS SOON AS WEATHER AND GROWING CONDITIONS ARE APPROPRIATE.

#### MOWING FREQUENCIES:

MOWING FREQUENCIES WILL DEPEND ON FIELD CONDITIONS. THE NATIVE SEEDLING/GRASS AREAS SHOULD NEVER BE MOWED SHORTER THAN SIX (6) INCHES. GROWTH OF THE VEGETATION ALONG THE WATER'S EDGE (WHERE APPLICABLE) WILL PROVIDE BANK STABILIZATION. THE VEGETATION SHOULD PREVENT NUISANCE LEVELS OF GEESE IN WATERWAYS, WHICH WOULD ADD TO THE NUTRIENT LEVEL IN THE WATER AND FURTHER DEGRADE THE WATER QUALITY. IN ADDITION, THE GROUND SLOPE ABOVE NORMAL WATER ELEVATION SHOULD PROVIDE GOOD DRAINAGE OF THE SURFACE SOILS REDUCE PONDING, AND THUS MOSQUITO HABITAT. THE NATIVE VEGETATION WILL PROVIDE HABITAT CONDUCIVE TO THE BREEDING AND ESTABLISHMENT OF EFFECTIVE MOSQUITO PREDATORS SUCH AS DRAGONFLIES.

MOWING SHOULD BE DONE THREE (3) TIMES DURING THE ESTABLISHMENT PERIOD:

| ACTIVITY      | TIMING                  | SUGGESTED MOWING HEIGHTS | REASON                             |
|---------------|-------------------------|--------------------------|------------------------------------|
| FIRST MOWING  | LATE MAY- EARLY<br>JUNE | NO LESS THAN (6) INCHES  | TARGET EARLY WEEDS                 |
| SECOND MOWING | EARLY AUGUST            | NO LESS THAN (12) INCHES | CONTROL WARM SEASON<br>WEED GROWTH |
| THIRD MOWING  | LATE OCTOBER            |                          | VEGETATION SHOULD BE<br>DORMANT    |

MOWING TIMES ARE APPROXIMATE; ACTUAL MOWING TIMES SHOULD BE BASED ON THE GROWTH OF NATURAL GRASSES AND UNDESIRABLE WEEDS.

AFTER THE DESIRED VEGETATION HAS BECOME ESTABLISHED THE FIRST AND SECOND MOWINGS (MAY, AUGUST) MAY NOT BE NECESSARY. THE THIRD MOWING (OCTOBER), HOWEVER, SHOULD BE DONE ANNUALLY. BURNING:

THE NORTH AMERICAN PRAIRIE EVOLVED UNDER THE INFLUENCE OF FIRE. MANY TIMES, THESE FIRES WERE IGNITED BY LIGHTNING FROM STORMS SWEEPING ACROSS THE PLAINS STATES. BURNING IS AN EFFECTIVE WAY TO CONTROL INVASIVE WEED SPECIES (THEY OFTEN CANNOT SURVIVE THE HEAT AND FLAMES), AND ALSO CAN BE A MECHANISM FOR DISBURSAL OF SEEDS FROM DESIRED PLANT SPECIES WITHING THE PRAIRIE. PROPERLY CONDUCTED, A "OPNTROLLED BURN" IS SAFE AND EFFECTIVE.

PRIOR TO BURNING, CONTACT WITH THE LOCAL MUNICIPALITY / FIRE DEPARTMENT IS REQUIRED. SOME MUNICIPALITIES MAY HAVE RESTRICTIONS ON OPEN BURNING, OR ONLY ALLOW SUCH PRACTICES AT CERTAIN TIMES. ADDITIONALLY, A PERMIT TO BURN MAY BE REQUIRED IN SOME MUNICIPALITIES. THE SUPERVISING CREW SHOULD BE COMPRISED OF EXPERIENCED PROFESSIONALS WHO ARE TRAINED AND CERTIFIED IN THESE TYPES OF PRESCRIBED BURNS.

IF ALLOWED BY LOCAL CODE AND ORDINANCES, ONLY BURN WHEN THE DEAD VEGETATION MATTER CAN SUSTAIN FIRE. WET OR DAMP PLANT MATTER IS NOT EFFECTIVE IN A CONTROL BURN SETTING. IT MAY TAKE UP TO THREE (3) YEARS FOR A NEWLY PLANTED PRAIRIE TO HAVE ENOUGH "FUEL" TO STAGE AN EFFETIVE CONTROLLED BURN

Single Source. Sound Solutions. GROU www.thesigmagroup.com
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CIARY RE - FRANKLIN 27TH STREET FRANKLIN, WI

ATIONS

ANDSCAPE

PRELIMINARY CONSTRUCTION

SCALE:

PROJECT NO: 20282

DESIGN DATE: ---
PLOT DATE: 1/27/2022

DRAWN BY: ---
CHECKED BY: ---
APPROVED BY: ---
SHEET NO:

I:\Fiduciary RE\20282 - 27th Street Franklin\060 CAD\100 Civil\200 Production Landscape Plans\L300 Landscape Specifications.dwg

234 W. Florida Street Milwaukee, WI 53204 414-224-8068 www.chaputlandsurveys.com

Drawing No. 20190429-Tree Exhibit-2933-far



DATE: 4-15-19

PROJECT #: 1500.00

# TREE INVENTORY SPREADSHEET FOR TWENTY 7 OAKS

| Tree Number | Size - DBH | Species       | Condition |
|-------------|------------|---------------|-----------|
| 1           | 20         | Basswood      | Average   |
| 2           | 10         | Basswood      | Average   |
| 3           | 15         | Basswood      | Average   |
| 4           | 16         | Basswood      | Average   |
| 5           | 23         | Basswood      | Poor      |
| 6           | 12         | Basswood      | Poor      |
| 7           | 8          | Basswood      | Poor      |
| 8           | 9          | Basswood      | Poor      |
| 9           | 10         | Basswood      | Average   |
| 10          | 9          | Basswood      | Average   |
| 11          | 9          | Basswood      | Average   |
| 12          | 8          | Basswood      | Average   |
| 13          | 8          | Basswood      | Poor      |
| 14          | 10         | Basswood      | Average   |
| 15          | 13         | Basswood      | Average   |
| 16          | 8          | Hop Horn Beam | Good      |
| 17          | 16         | Basswood      | Average   |
| 18          | 13         | Basswood      | Average   |
| 19          | 11         | Basswood      | Average   |
| 20          | 17         | Basswood      | Average   |
| 21          | 18         | Basswood      | Average   |
| 22          | 34         | Basswood      | Good      |
| 23          | 15         | Cottonwood    | Average   |
| 24          | 10         | Cottonwood    | Average   |
| 25          | 14         | Hawthorn      | Average   |
| 26          | 12         | Cottonwood    | Average   |
| 27          | 20         | Hickory       | Average   |
| 28          | 11         | Black Cherry  | Good      |
| 29          | 14         | Ash           | EAB       |
| 30          | 9          | Elm           | Average   |
| 31          | 11         | Black Cherry  | Average   |
| 32          | 26         | Ash           | EAB       |
| 33          | 11         | Ash           | EAB       |
| 34          | 10         | Elm           | Average   |
| 35          | 16         | Hawthorn      | Poor      |
| 36          | 31         | Maple         | Good      |
| 37          | 16         | Hawthorn      | Poor      |
| 38          | 10         | Ash           | EAB       |
| 39          | 8          |               |           |

| ,  |    |                  |         |
|----|----|------------------|---------|
| 40 | 11 | Elm              | Average |
| 41 | 8  | Ash              | EAB     |
| 42 | 8  | Elm              | Average |
| 43 | 13 | Ash              | EAB     |
| 44 | 26 | Elm              | Average |
| 45 | 10 | Elm              | Average |
| 46 | 16 | Maple            | Poor    |
| 47 | 8  | Elm              | Average |
| 48 | 14 | Buckthorn        | Poor    |
| 49 | 8  | Pine             | Good    |
| 50 | 8  | Ash              | EAB     |
| 51 | 10 | Black Cherry     | Good    |
| 52 | 8  | Ash              | EAB     |
| 53 | 10 | Basswood         | Average |
| 54 | 9  | Elm              | Average |
| 55 | 8  | Ash              | EAB     |
| 56 | 8  | Ash              | EAB     |
| 57 | 11 | Ash              | EAB     |
| 58 | 18 | Black Cherry     | Good    |
| 59 | 8  | Elm              | Average |
| 60 | 15 | Ash              | EAB     |
| 61 | 11 | Black Cherry     | Average |
| 62 | 13 | Elm              | Average |
| 63 | 10 | Basswood         | Average |
| 64 | 18 | Ash              | EAB     |
| 65 | 27 | Cottonwood       | Average |
| 66 | 19 | Basswood         | Average |
| 67 | 15 | Basswood         | Average |
| 68 | 16 | Basswood         | Good    |
| 69 | 20 | Hickory          | Good    |
| 70 | 17 | Shagbark Hickory | Good    |
| 71 | 15 | Basswood         | Good    |
| 72 | 10 | Basswood         | Good    |
| 73 | 11 | Black Cherry     | Average |
| 74 | 36 | Basswood         | Average |
| 75 | 12 | Basswood         | Average |
| 76 | 17 | Cottonwood       | Average |
| 77 | 17 | Cottonwood       | Average |
| 78 | 16 | Black Cherry     | Poor    |
| 79 | 27 | Shagbark Hickory | Good    |
| 80 | 38 | Cottonwood       | Average |
| 81 | 14 | Basswood         | Average |
| 82 | 9  | Basswood         | Average |
| 83 | 9  | Elm              | Average |
| 84 | 8  | Elm              | Average |
| 85 | 12 | Basswood         | Poor    |
| 86 | 13 | Basswood         | Average |
| 87 | 13 | Basswood         | Good    |
| -  |    |                  | •       |

| 88  | 9  | Elm              | Average |
|-----|----|------------------|---------|
| 89  | 9  | Ash              | Average |
|     |    |                  | EAB     |
| 90  | 9  | Ash              | EAB     |
| 91  | 15 | Black Cherry     | Average |
| 92  | 8  | Ash              | EAB     |
| 93  | 8  | Ash              | EAB     |
| 94  | 27 | Basswood         | Good    |
| 95  | 8  | Basswood         | Average |
| 96  | 10 | Basswood         | Poor    |
| 97  | 9  | Basswood         | Average |
| 98  | 17 | Black Cherry     | Average |
| 99  | 15 | Basswood         | Average |
| 100 | 11 | Basswood         | Poor    |
| 101 | 11 | Basswood         | Average |
| 102 | 17 | Shagbark Hickory | Good    |
| 103 | 58 | Basswood         | Poor    |
| 104 | 11 | Ash              | EAB     |
| 105 | 9  | Basswood         | Average |
| 106 | 10 | Basswood         | Average |
| 107 | 8  | Basswood         | Average |
| 108 | 12 | Basswood         | Average |
| 109 | 12 | Basswood         | Average |
| 110 | 15 | Basswood         | Average |
| 111 | 9  | Elm              | Average |
| 112 | 8  | Dead             |         |
| 113 | 9  | Shagbark Hickory | Average |
| 114 | 10 | Basswood         | Average |
| 115 | 10 | Basswood         | Average |
| 116 | 8  | Elm              | Poor    |
| 117 | 31 | Elm              | Average |
| 118 | 15 | Basswood         | Good    |
| 119 | 13 | Basswood         | Average |
| 120 | 24 | Basswood         | Good    |
| 121 | 10 | Basswood         | Average |
| 122 | 9  | Basswood         | Average |
| 123 | 24 | Basswood         | Good    |
| 124 | 12 | Elm              | Average |
| 125 | 9  | Basswood         | Average |
| 126 | 9  | Basswood         | Average |
| 127 | 14 | Basswood         | Good    |
| 128 | 25 | Basswood         | Average |
| 129 | 17 | Basswood         | Average |
| 130 | 9  | Basswood         | Average |
| 131 | 15 | Basswood         | Average |
| 132 | 40 | Basswood         | Good    |
| 133 | 25 | Basswood         | Average |
| 134 | 11 | Basswood         | Average |
| 135 | 13 | Basswood         | Average |
|     |    |                  | •       |

| 136 | 15 | Ash              | EAB          |
|-----|----|------------------|--------------|
| 137 | 9  | Basswood         |              |
|     | 12 |                  | Average      |
| 138 |    | Cottonwood       | Average      |
| 139 | 10 | Basswood         | Average      |
| 140 | 16 | Ash              | EAB          |
| 141 | 8  | Box Elder        | Average      |
| 142 | 12 | Dead             | _            |
| 143 | 13 | Elm              | Average      |
| 144 | 10 | Box Elder        | Average      |
| 145 | 15 | Black Cherry     | Average      |
| 146 | 15 | Black Cherry     | Average      |
| 147 | 12 | Elm              | Good         |
| 148 | 12 | Black Cherry     | Average      |
| 149 | 35 | Basswood         | Poor (Dying) |
| 150 | 10 | Elm              | Average      |
| 151 | 8  | Dead             |              |
| 152 | 9  | Oak              | Average      |
| 153 | 20 | Elm              | Good         |
| 154 | 8  | Basswood         | Average      |
| 155 | 11 | Basswood         | Average      |
| 156 | 17 | Basswood         | р            |
| 157 | 20 | Shagbark Hickory | Average      |
| 158 | 14 | Basswood         | Average      |
| 159 | 30 | Oak              | Average      |
| 160 | 21 | Oak              | Average      |
| 161 | 8  | Ash              | EAB          |
| 162 | 8  | Ash              | EAB          |
| 163 | 21 | Oak              | Average      |
| 164 | 16 | Basswood         | Average      |
| 165 | 9  | Ash              | EAB          |
| 166 | 10 | Basswood         | Average      |
| 167 | 16 | Basswood         | Poor         |
| 168 | 12 | Basswood         | Average      |
| 169 | 8  | Ash              | EAB          |
| 170 | 9  | Black Cherry     | Average      |
| 171 | 15 | Oak              | Average      |
| 172 | 11 | Oak              | Average      |
| 173 | 32 | Oak              | Good         |
| 174 | 8  | Oak              | Average      |
| 175 | 9  | Oak              | Average      |
| 176 | 16 | Basswood         | Average      |
| 177 | 8  | Basswood         | Average      |
| 178 | 8  | Oak              | Average      |
| 179 | 8  | Oak              | Average      |
| 180 | 15 | Oak              | Average      |
| 181 | 14 | Ash              | EAB          |
| 182 | 8  | Basswood         | Average      |
| 183 | 16 | Oak              | Average      |
| 100 |    | l Gun            | ,            |

| 184        | 8        | Black Cherry      | Average                               |
|------------|----------|-------------------|---------------------------------------|
| 185        | 22       | Oak               | Average                               |
| 186        | 11       | Basswood          | Average                               |
| 187        | 21       | Oak               | Average                               |
| 188        | 17       | Basswood          | Average                               |
| 189        | 24       | Oak               | Average                               |
| 190        | 25       | Oak               | Average                               |
| 191        | 9        | Oak               | Average                               |
| 192        | 13       | Oak               | Average                               |
| 193        | 17       | Basswood          | Average                               |
| 194        | 8        | Oak               | Average                               |
| 195        | 8        | Oak               | Average                               |
| 196        | 8        | Oak               |                                       |
| 197        | 9        | Oak               | Average<br>Average                    |
| 198        | 17       | Shagbark Hickory  | Average                               |
| 199        | 26       | Oak               | Average                               |
| 200        | 8        | Box Elder         | Average                               |
| 200        | 8        | Oak               | Average                               |
| 202        | 34       | Oak               | Good                                  |
| 202        | 12       | Maple             | Average                               |
| 203        | 24       | Oak               | · · · · · · · · · · · · · · · · · · · |
| 205        | 18       | Oak               | Average                               |
| 206        | 24       | Oak               | Average                               |
| 207        | 15       | Oak               | Average                               |
| 207        | 8        | Oak               | Average                               |
| 208        | 8        |                   | Average                               |
| 210        | 8        | Maple             | Average                               |
|            |          | Maple<br>Oak      | Average                               |
| 211<br>212 | 20<br>21 | Oak               | Average                               |
| 212        |          |                   | Average                               |
|            | 21       | Oak<br>Basswood   | Average                               |
| 214<br>215 | 15<br>24 | Oak               | Average                               |
|            | 20       |                   | Average                               |
| 216        |          | Oak               | Average                               |
| 217        | 30<br>25 | Oak               | Average                               |
| 218<br>219 | 25<br>15 | Oak<br>Oak        | Average<br>Good                       |
|            |          |                   |                                       |
| 220        | 11<br>14 | Oak               | Average                               |
| 221<br>222 | 39       | Maple<br>Basswood | Average<br>Good                       |
| 222        | 39<br>15 |                   |                                       |
| 223        | 14       | Maple<br>Oak      | Average                               |
| 225        | 14       |                   | Average<br>Poor                       |
| 225        | 16       | Maple<br>Maple    |                                       |
|            | 10       | Maple             | Average                               |
| 227<br>228 |          | Oak               | Average                               |
|            | 14       | Maple             | Average                               |
| 229        | 10<br>86 | Basswood          | Average                               |
| 230<br>231 | 86       | Basswood<br>Oak   | Average                               |
| 231        | Ó        | UdK               | Average                               |

| 232 | 13 | Basswood         | Average |
|-----|----|------------------|---------|
|     | 11 |                  | Average |
| 233 |    | Basswood         | Average |
| 234 | 20 | Basswood         | Average |
| 235 | 15 | Shagbark Hickory | Average |
| 236 | 15 | Basswood         | Poor    |
| 237 | 8  | Oak              | Average |
| 238 | 10 | Maple            | Average |
| 239 | 32 | Basswood         | Poor    |
| 240 | 24 | Oak              | Average |
| 241 | 10 | Oak              | Average |
| 242 | 15 | Black Cherry     | Good    |
| 243 | 13 | Oak              | Average |
| 244 | 9  | Oak              | Average |
| 245 | 15 | Maple            | Average |
| 246 | 21 | Oak              | Average |
| 247 | 9  | Oak              | Average |
| 248 | 14 | Oak              | Average |
| 249 | 16 | Ash              | EAB     |
| 250 | 16 | Maple            | Average |
| 251 | 9  | Maple            | Average |
| 252 | 9  | Ash              | EAB     |
| 253 | 10 | Basswood         | Average |
| 254 | 19 | Basswood         | Average |
| 255 | 11 | Oak              | Average |
| 256 | 15 | Basswood         | Average |
| 257 | 11 | Maple            | Average |
| 258 | 8  | Basswood         | Average |
| 259 | 10 | Oak              | Average |
| 260 | 8  | Ash              | EAB     |
| 261 | 19 | Oak              | Average |
| 262 | 8  | Maple            | Average |
| 263 | 30 | Basswood         | Average |
| 264 | 10 | Basswood         | Average |
| 265 | 8  | Oak              | Average |
| 266 | 8  | Oak              | Average |
| 267 | 15 | Maple            | Average |
| 268 | 8  | Maple            | Average |
| 269 | 13 | Oak              | Average |
| 270 | 8  | Oak              | Average |
| 271 | 30 | Oak              | Good    |
| 272 | 8  | Oak              | Average |
| 273 | 8  | Maple            | Average |
| 274 | 8  | Black Cherry     | Average |
| 275 | 10 | Oak              | Average |
| 276 | 8  | Oak              | Average |
| 277 | 8  | Oak              | Average |
| 278 | 12 | Maple            | Average |
| 278 | 8  | Maple            | Average |
| 2/3 | 0  | iviapie          | Avelage |

| 281         9         Ash         EAB           282         9         Oak         Average           283         22         Basswood         Average           284         24         Maple         Average           285         8         Oak         Average           286         9         Oak         Average           287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           295         9         Oak         Average           295         9         Oak         Average           296         8         Oak         Average           299         10         Basswood         Average   | 280 | 27 | Basswood | Average |
|--|-----|----|----------|---------|
| 282         9         Oak         Average           283         22         Basswood         Average           284         24         Maple         Average           285         8         Oak         Average           286         9         Oak         Average           287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           291         27         Basswood         Average           291         27         Basswood         Average           293         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Maple         Average           297         8         Maple         Average   |     |    |          |         |
| 283         22         Basswood         Average           284         24         Maple         Average           285         8         Oak         Average           286         9         Oak         Average           287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           291         27         Basswood         Average           291         27         Basswood         Average           293         8         Oak         Average           294         11         Black Cherry         Average           294         11         Black Cherry         Average           295         9         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           301         21         Oak <t< td=""><td></td><td></td><td></td><td></td></t<>  |     |    |          |         |
| 284         24         Maple         Average           285         8         Oak         Average           286         9         Oak         Average           287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           290         10         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average<   |     |    |          |         |
| 285         8         Oak         Average           286         9         Oak         Average           287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           299         10         Basswood         Average           300         15         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average<   |     |    |          |         |
| 286         9         Oak         Average           287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           290         10         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood <td< td=""><td></td><td></td><td></td><td></td></td<> |     |    |          |         |
| 287         9         Oak         Average           288         20         Basswood         Average           289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           291         27         Basswood         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           299         10         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak   |     |    |          |         |
| 288         20         Basswood         Average           289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Average           305         8         Oak         Average           306         9         Oak         Average  |     |    |          |         |
| 289         13         Maple         Average           290         10         Maple         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           307         23         Oak         Good <td></td> <td></td> <td></td> <td></td>           |     |    |          |         |
| 290         10         Maple         Average           291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           309         14         Shagbark Hickory         Good </td <td></td> <td></td> <td></td> <td></td>    |     |    |          |         |
| 291         27         Basswood         Average           292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Average           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good<   |     |    |          |         |
| 292         8         Black Cherry         Average           293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good  |     |    | ·        |         |
| 293         8         Oak         Average           294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average <td></td> <td></td> <td></td> <td></td>                    |     |    |          |         |
| 294         11         Black Cherry         Average           295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average   |     |    |          |         |
| 295         9         Oak         Average           296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average  |     |    |          |         |
| 296         8         Oak         Average           297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Average           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average  |     |    | •        |         |
| 297         8         Maple         Average           298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average </td <td></td> <td></td> <td></td> <td></td>              |     |    |          |         |
| 298         17         Basswood         Average           299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB  |     |    |          |         |
| 299         10         Basswood         Average           300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average  |     |    | ·        |         |
| 300         15         Basswood         Average           301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good <tr< td=""><td></td><td></td><td></td><td></td></tr<>                |     |    |          |         |
| 301         21         Oak         Average           302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           320         12         Oak         Good  |     |    |          |         |
| 302         32         Basswood         Average           303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           320         12         Oak         Good           321         16         Hickory         Average  |     |    |          |         |
| 303         16         Oak         Average           304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average   |     |    |          |         |
| 304         17         Oak         Good           305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           322         17         Basswood         Average <t< td=""><td></td><td></td><td></td><td></td></t<>                 |     |    |          |         |
| 305         8         Oak         Average           306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average  |     |    |          |         |
| 306         9         Oak         Average           307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average </td <td></td> <td></td> <td></td> <td></td>              |     |    |          |         |
| 307         23         Oak         Good           308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good  |     |    |          | Average |
| 308         11         Basswood         Average           309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good  |     |    |          |         |
| 309         14         Shagbark Hickory         Good           310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   |     |    |          | Good    |
| 310         13         Oak         Good           311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good   |     | 11 | Basswood |         |
| 311         10         Maple         Average           312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good   |     |    |          | Good    |
| 312         15         Maple         Average           313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good  |     |    |          | Good    |
| 313         20         Oak         Average           314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good  | 311 | 10 | Maple    | Average |
| 314         34         Oak         Average           315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   | 312 | 15 |          | Average |
| 315         44         Basswood         Average           316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good  | 313 |    |          | Average |
| 316         16         Ash         EAB           317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good  | 314 |    |          | Average |
| 317         30         Basswood         Average           318         16         Maple         Good           319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   |     |    |          |         |
| 318       16       Maple       Good         319       25       Basswood       Good         320       12       Oak       Good         321       16       Hickory       Average         322       17       Basswood       Average         323       13       Basswood       Average         324       8       Hawthorn       Average         325       24       Hawthorn       Good         326       18       Hawthorn       Good   |     |    |          |         |
| 319         25         Basswood         Good           320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   |     |    | Basswood | Average |
| 320         12         Oak         Good           321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good  |     |    |          | Good    |
| 321         16         Hickory         Average           322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good  | 319 |    | Basswood |         |
| 322         17         Basswood         Average           323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   |     | 12 | Oak      | Good    |
| 323         13         Basswood         Average           324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   | 321 | 16 | Hickory  | Average |
| 324         8         Hawthorn         Average           325         24         Hawthorn         Good           326         18         Hawthorn         Good   | 322 | 17 | Basswood | Average |
| 325         24         Hawthorn         Good           326         18         Hawthorn         Good  | 323 | 13 | Basswood | Average |
| 326 18 Hawthorn Good   | 324 | 8  | Hawthorn | Average |
|  | 325 | 24 | Hawthorn | Good    |
|  | 326 | 18 | Hawthorn | Good    |
| 327 17 Hawthorn Good   | 327 | 17 | Hawthorn | Good    |

| 328 | 8  | Hickory          | Good   |
|-----|----|------------------|--|
| 329 | 22 | Maple            | Poor   |
| 330 | 16 | Basswood         | Poor   |
| 331 | 26 | Basswood         | Average  |
| 332 | 15 | Basswood         | Average  |
| 333 | 15 | Basswood         | Poor   |
| 334 | 18 | Elm              | Average  |
| 335 | 14 | Basswood         | Average  |
| 336 | 13 | Basswood         | Average  |
| 337 | 15 | Basswood         | Average  |
| 338 | 41 | Basswood         | Average  |
| 339 | 11 | Hickory          | Average  |
| 340 | 19 | Basswood         | Average  |
| 341 | 10 | Shagbark Hickory | Average  |
| 342 | 15 | Basswood         | Poor   |
| 343 | 13 | Basswood         | Average  |
| 344 | 35 | Basswood         | Average  |
| 345 | 21 | Maple            | poor   |
| 346 | 34 | Basswood         | Good   |
| 347 | 14 | Basswood         | Average  |
| 348 | 13 | Maple            | Average  |
| 349 | 18 | Maple            | Good   |
| 350 | 17 | Black Walnut     | Good   |
| 351 | 13 | Basswood         | Average  |
| 352 | 13 | Basswood         | Average  |
| 353 | 35 | Basswood         | Average  |
| 354 | 21 | Maple            | Average  |
| 355 | 48 | Basswood         | Average  |
| 356 | 14 | Basswood         | poor   |
| 357 | 20 | Ash              | EAB  |
| 358 | 25 | Basswood         | Average  |
| 359 | 25 | Black Walnut     | Average  |
| 360 | 16 | Basswood         | Average  |
| 361 | 25 | Shagbark Hickory | Average  |
| 362 | 8  | Basswood         | Average  |
| 363 | 8  | Basswood         | Average  |
| 364 | 11 | Hickory          | Good   |
| 365 | 18 | Box Elder        | Average  |
| 366 | 9  | Ash              | EAB  |
| 367 | 12 | Basswood         | Poor   |
| 368 | 21 | Oak              | Average  |
| 369 | 21 | Oak              | Average  |
| 370 | 22 | Basswood         | Average  |
| 371 | 20 | Maple            | Average  |
| 372 | 11 | Hickory          | Average  |
| 373 | 20 | Basswood         | Poor   |
| 374 | 11 | Basswood         | Average  |
| 375 | 11 | Basswood         | Average  |
|     |    |                  | <u>.                                      </u> |

| 276 | 40 | Desavored        | A       |
|-----|----|------------------|---------|
| 376 | 48 | Basswood         | Average |
| 377 | 30 | Oak              | Average |
| 378 | 12 | Shagbark Hickory | Average |
| 379 | 36 | Basswood         | Average |
| 380 | 12 | Maple            | Poor    |
| 381 | 15 | Maple            | Poor    |
| 382 | 10 | Hickory          | Average |
| 383 | 25 | Oak              | Average |
| 384 | 8  | Basswood         | Poor    |
| 385 | 16 | Basswood         | poor    |
| 386 | 17 | Black Walnut     | Average |
| 387 | 20 | Oak              | Average |
| 388 | 13 | Basswood         | Poor    |
| 389 | 17 | Shagbark Hickory | Good    |
| 390 | 12 | Basswood         | Poor    |
| 391 | 18 | Hickory          | Average |
| 392 | 8  | Basswood         | Average |
| 393 | 13 | Ash              | EAB     |
| 394 | 10 | Hickory          | Good    |
| 395 | 15 | Ash              | EAB     |
| 396 | 17 | Ash              | EAB     |
| 397 | 24 | Maple            | Good    |
| 398 | 21 | Basswood         | Average |
| 399 | 39 | Ash              | EAB     |
| 400 | 32 | Basswood         | Average |
| 401 | 16 | Dead             | Ţ.      |
| 402 | 9  | Maple            | Average |
| 403 | 13 | Basswood         | Average |
| 404 | 10 | Basswood         | Average |
| 405 | 31 | Oak              | Good    |
| 406 | 11 | Maple            | Average |
| 407 | 28 | Basswood         | Good    |
| 408 | 25 | Basswood         | Good    |
| 409 | 10 | Basswood         | Average |
| 410 | 11 | Oak              | Average |
| 411 | 37 | Basswood         | Good    |
| 412 | 16 | Basswood         | Average |
| 413 | 13 | Shagbark Hickory | Average |
| 414 | 11 | Basswood         | Poor    |
| 414 | 15 | Basswood         | Average |
| 416 | 32 | Basswood         | Average |
| 417 | 16 | Basswood         | -       |
| 417 | 22 | Basswood         | Average |
| 418 | 12 | Basswood         | Average |
| 419 | 16 |                  | Average |
|     |    | Maple            | Average |
| 421 | 12 | Hop Horn Beam    | Average |
| 422 | 13 | Birch?           | Average |
| 423 | 18 | Basswood         | Good    |

| 424 | 16 | Basswood         | Average |
|-----|----|------------------|---------|
| 425 | 15 | Basswood         | Average |
| 426 | 34 | Basswood         | Poor    |
| 427 | 10 | Basswood         | Average |
| 428 | 17 | Basswood         | Average |
| 429 | 11 | Black Walnut     | Average |
| 430 | 10 | Basswood         | Average |
| 431 | 15 | Maple            | Good    |
| 432 | 8  | Ash              | EAB     |
| 433 | 20 | Oak              | Average |
| 434 | 20 | Oak              | Good    |
| 435 | 25 | Oak              | Good    |
| 436 | 26 | Oak              | Good    |
| 437 | 12 | Oak              | Average |
| 438 | 20 | Oak              | Good    |
| 439 | 23 | Oak              | Good    |
| 440 | 25 | Oak              | Good    |
| 441 | 26 | Oak              | Good    |
| 442 | 26 | Oak              | Good    |
| 443 | 18 | Oak              | Average |
| 444 | 8  | Basswood         | Good    |
| 445 | 16 | Maple            | Average |
| 446 | 9  | Dead             |         |
| 447 | 10 | Basswood         | Poor    |
| 448 | 8  | Ash              | EAB     |
| 449 | 27 | Basswood         | Good    |
| 450 | 9  | Basswood         | Poor    |
| 451 | 20 | Basswood         | Good    |
| 454 | 18 | Basswood         | Poor    |
| 455 | 27 | Basswood         | Average |
| 456 | 20 | Basswood         | Good    |
| 457 | 22 | Shagbark Hickory | Good    |
| 458 | 31 | Basswood         | Average |
| 459 | 23 | Basswood         | Average |
| 462 | 22 | Oak              | Average |
| 463 | 9  | Basswood         | Average |
| 464 | 11 | Shagbark Hickory | Average |
| 465 | 9  | Oak              | Average |
| 466 | 19 | Shagbark Hickory | Good    |
| 467 | 34 | Oak              | poor    |
| 468 | 29 | Oak              | Average |
| 469 | 14 | Ash              | EAB     |
| 474 | 9  | Oak              | Average |
| 475 | 42 | Oak              | Average |
| 476 | 16 | Oak              | Average |
| 477 | 15 | Oak              | Average |
| 478 | 10 | Oak              | Average |
| 479 | 9  | Oak              | Average |
|     |    |                  |         |

| 480 | 12 | Oak              | Average |
|-----|----|------------------|---------|
| 481 | 9  | Oak              | Average |
| 482 | 9  | Oak              | Average |
| 483 | 10 | Oak              | Average |
| 484 | 10 | Oak              | Average |
| 485 | 9  | Oak              | Average |
| 486 | 13 | Oak              | Average |
| 487 | 26 | Oak              | Good    |
| 488 | 12 | Basswood         | Average |
| 489 | 9  | Oak              | Average |
| 490 | 16 | Oak              | Average |
| 491 | 18 | Oak              | Good    |
| 492 | 8  | Basswood         | Average |
| 493 | 11 | Oak              | Average |
| 494 | 8  | Basswood         | Average |
| 495 | 10 | Oak              | Average |
| 496 | 18 | Basswood         | Average |
| 497 | 10 | Shagbark Hickory | Good    |
| 498 | 25 | Black Walnut     | Average |
| 499 | 12 | Basswood         | Average |
| 500 | 12 | Basswood         | Average |
| 501 | 14 | Basswood         | Average |
| 502 | 12 | Basswood         | Average |
| 503 | 9  | Basswood         | Average |
| 504 | 14 | Basswood         | Average |
| 505 | 29 | Basswood         | Average |
| 506 | 9  | Basswood         | Average |
| 507 | 10 | Basswood         | Average |
| 508 | 9  | Shagbark Hickory | Good    |
| 509 | 8  | Ash              | EAB     |
| 510 | 14 | Ash              | EAB     |
| 511 | 12 | Basswood         | Average |
| 512 | 10 | Black Walnut     | Good    |
| 513 | 9  | Oak              | Average |
| 514 | 12 | Basswood         | poor    |
|     |    |                  |         |

# Table 15-3.0502 WORKSHEET FOR THE CALCULATION OF BASE SITE AREA FOR BOTH RESIDENTIAL AND NONRESIDENTIAL DEVELOPMENT

| STEP 1: | Indicate the total gross site area (in acres) as determined by an actual on-<br>site boundary survey of the property.  | 24.02<br>Acres   |       |
|---------|--|------------------|-------|
| STEP 2: | Subtract (-) land which constitutes any existing dedicated public street rights-of-way, land located within the ultimate road rights-of-way of existing roads, the rights-of-way of major utilities, and any dedicated public park and/or school site area.  | 0                | acres |
| STEP 3: | Subtract (-) land which, as a part of a previously approved development or land division, was reserved for open space.   | 0                | acres |
| STEP 4: | In the case of "Site Intensity and Capacity Calculations" for a proposed residential use, subtract ( - ) the land proposed for nonresidential uses; or In the case of "Site Intensity and Capacity Calculations" for a proposed nonresidential use, subtract ( - ) the land proposed for residential uses. | 0                | acres |
| STEP 5: | Equals "Base Site Area"  | = 24.02<br>acres |       |

Table 15-3.0503
WORKSHEET FOR THE CALCULATION OF RESOURCE PROTECTION LAND

| Natural Resource Feature                            | Protection Standard Based Upon Zoning District Type (circle applicable standard from Table 15-4.0100 for the type of zoning district in which the parcel is located) |                         |                                 | Acres of Land in Resource Feature |      |
|---|--|-------------------------|---------------------------------|-----------------------------------|------|
|   | Agricultural<br>District   | Residential<br>District | Non-<br>Residential<br>District |                                   |      |
| Steep Slopes:                                       |  |                         |                                 |                                   |      |
| 10-19%  | 0.00   | 0.60                    | 0.40                            | X=                                | 0    |
| 20-30%  | 0.65   | 0.75                    | 0.70                            | X=                                | 0    |
| + 30%   | 0.90   | 0.85                    | 0.80                            | X0=                               | 0    |
|   |  |                         |                                 |                                   | 0    |
| Woodlands & Forests:                                |  |                         |                                 |                                   |      |
| Mature  | 0.70   | 0.70                    | 0.70                            | x _2.03=                          | 1.42 |
| Young   | 0.50   | 0.50                    | 0.50                            | x _2.97=                          | 1.49 |
| Lakes & Ponds                                       | 1  | 1                       | 1                               | xe                                | 0    |
| Streams   | 1  | 1                       | 1                               | xe                                | 0    |
| Shore Buffer  | 1  | 1                       | 1                               | xe                                | 0    |
| Floodplains/Floodlands                              | 1  | 1                       | 1                               | x 0.75_=                          | 0.75 |
| Wetland Buffers                                     | 1  | 1                       | 1                               | x _2.17_=                         | 2.17 |
| Wetland Setback                                     |  |                         |                                 | x1.25=                            | 1.25 |
| Wetlands & Shoreland<br>Wetlands                    | 1  | 1                       | 1                               | X2.22=                            | 2.22 |
| TOTAL RESOURCE PROTE (Total of Acres of Land in Res |  | be Protected            | )                               |                                   | 9.30 |

**Note**: In conducting the calculations in Table 15-3.0503, if two or more natural resource features are present on the same area of land, only the most restrictive resource protection standard shall be used. For example, if floodplain and young woodlands occupy the same space on a parcel of land, the resource protection standard would be 1.0 which represents the higher of the two standards.

## WORKSHEET FOR THE CALCULATION OF SITE INTENSITY AND CAPACITY FOR RESIDENTIAL DEVELOPMENT

| h <del></del> - |   | I            |
|-----------------|---|--------------|
|                 | CALCULATE MINIMAL REQUIRED ON-SITE OPEN SPACE   |              |
|                 | Take <i>Base Site Area</i> (from Step 5 in Table 15-3.0502):24.02   |              |
| STEP 1:         | Multiple by Minimum <i>Open Space Ratio (OSR)</i>   |              |
|                 | (see specific residential zoning district OSR standard): X0.35  | 8.41 acres   |
|                 | Equals MINIMUM REQUIRED ON-SITE OPEN SPACE =  |              |
|                 | CALCULATE NET BUILDABLE SITE AREA:  |              |
|                 | Take <i>Base Site Area</i> (from Step 5 in Table 15-3.0502):24.02   |              |
| STEP 2:         | Subtract Total Resource Protection Land from Table 15-3.0503) or Minimum Required   |              |
|                 | On-Site Open Space (from Step 1 above), whichever is greater:  9.30   | 14.72 acres  |
|                 | 9.30  |              |
|                 | Equals NET BUILDABLE SITE AREA =  |              |
|                 | CALCULATE MAXIMUM NET DENSITY YIELD OF SITE:  |              |
|                 | Take <i>Net Buildable Site Area</i> (from Step 2 above): _14.72   |              |
| STEP 3:         | Multiply by Maximum Net Density (ND)  | 117.76       |
|                 | (see specific residential zoning district ND standard): X $\_8.00$  | 117.76 D.U.s |
|                 | Equals MAXIMUM NET DENSITY YIELD OF SITE =  |              |
|                 | CALCULATE MAXIMUM GROSS DENSITY YIELD OF SITE:  |              |
|                 | Take <i>Base Site Area</i> (from Step 5 of Table 15-3.0502): _24.02   |              |
| STEP 4:         | Multiple by Maximum Gross Density (GD)  |              |
|                 | (see specific residential zoning district GD standard): X6.10   | 146.52 D.U.s |
|                 | Equals MAXIMUM GROSS DENSITY YIELD OF SITE =  |              |
|                 | DETERMINE MAXIMUM PERMITTED D.U.s OF SITE:  |              |
| STEP 5:         | Take the <i>lowest</i> of Maximum Net Density Yield of Site (from Step 3 above) or Maximum Gross Density Yield of Site (from Step 4 above): | 117.76 D.U.s |
|                 |   |              |

State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 1155 Pilgrim Rd. Plymouth, WI, 53073

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



December 23, 2021

GP-SE-2021-41-04248

CCM-9801 27<sup>th</sup> Franklin LLC Nicklaus Jung 901 S. 70th Street West Allis, WI 53214

Sent electronically via email

RE: Coverage under the wetland statewide general permit for Wetland Fill or disturbance for Residential, Commercial, Industrial development, located in the City of Franklin, Milwaukee County, also described as being in the SE ¼ of the NE ¼ section 25 Township 05 North, Range 21 East; docket GP-SE-2021-41-04248.

Dear Mr. Jung,

Thank you for submitting an application for coverage under the wetland statewide general permit for wetland fill or disturbance for residential, commercial, or industrial development, s. 281.36, Wis. Stats.

You have certified that your project meets the eligibility criteria for this activity. **Based upon your signed certification you may proceed with your project to fill 0.015 acres (653 square feet) of wetlands.** Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at <a href="https://dnr.wisconsin.gov/topic/Wetlands/permits">https://dnr.wisconsin.gov/topic/Wetlands/permits</a> - keyword: general permits-GP1). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Ryan Pappas at (715) 492-0200 or email <a href="Ryan.Pappas@wisconsin.gov">Ryan.Pappas@wisconsin.gov</a> to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

If you have any questions, please call me at (715) 492-0200 or email Ryan.Pappas@wisconsin.gov.

Sincerely,

Ryan Pappas

Water Management Specialist

Copy to: USACE Project Manager

City of Franklin Zoning Administrator

Consultant

#### WDNR-GP1-2017 Permit Conditions – Residential/Commercial/Industrial

You agree to comply with the following conditions:

- 1. **Application.** You shall submit a complete application package to the Department as outlined in the application materials and section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the department needs to verify compliance with the terms and conditions of this permit.
- 2. **Certification.** Acceptance of general permit WDNR-GP1-2017 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.
- 3. **Reliance on Applicant's Data.** The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the DNR.
- 4. **Project Plans.** This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP1-2017
- 5. **Expiration.** This WDNR-GP1-2017 expires on October 31, 2022. The time limit for completing work authorized by the provisions of WDNR-GP1-2017 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP1-2017 or until the discharge is completed, whichever occurs first.
- 6. **Other Permit Requirements.** You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits and by the U.S. Army Corps of Engineers before starting your project.
- 7. **Authorization Distribution.** You must supply a copy of the permit coverage authorization to every contractor working on the project.
- 8. **Project Start.** You shall notify the Department before starting construction.
- 9. **Permit Posting.** You must post a copy of this permit coverage letter at a conspicuous location on the project site prior to the execution of the permitted activity, and remaining at least five days after stabilization of the area of permitted activity. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.
- 10. **Permit Compliance.** The department may modify or revoke coverage of this permit if the project is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.
- 11. **Construction Timing.** Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed and the site is stabilized.
- 12. **Construction.** No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.
- 13. **Project Completion.** Within one week of completion of the regulated activity, you shall submit to the Department a statement certifying the project is in compliance with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number, and be submitted to the Department staff member that authorized coverage.

- 14. **Proper Maintenance.** You must maintain the activity authorized by WDNR-GP1-2017 in good condition and in conformance with the terms and conditions of this permit utilizing best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.
- 15. **Site Access.** Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP1-2017 and applicable laws.
- 16. **Erosion and siltation controls.** The project site shall implement erosion and sediment control measures that adequately control or prevent erosion, and prevent damage to wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.
- 17. **Equipment use.** The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.
- 18. **Invasive Species.** All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html.
- 19. **Federal and State Threatened and Endangered Species.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats and applicable State Laws. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.
- 20. **Special Concern Species.** If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.
- 21. **Historic Properties and Cultural Resources.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately and the State Historic Preservation Officer must be contacted for further instruction.
- 22. **Preventive Measures.** Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.
- 23. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(11) and (33), Wis. Stats.
- 24. **Standard for Coverage.** Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.
- 25. **Transfers.** Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.
- 26. **Limits of State Liability.** In authorizing work, the State Government does not assume any liability, including for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - d. Design or construction deficiencies associated with the permitted work.
  - e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP1-2017.
- 27. **Reevaluation of Decision.** The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occur:
  - a. The applicant fails to comply with the terms and conditions of WDNR-GP1-2017.
- b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

From: James Leedom, P.E., LEED AP

To: Pappas, Ryan J - DNR; Tony DeRosa

Cc: Marion Ecks; Wirth-Murray, Morgan M MVP; Christopher Carr, P.E.; Ashley Poull; David Ferrell; Sean Miller

Subject: [External] RE: [EXT] Fiduciary Real Estate Seasons\_Wetland Permit-HOLD\_Request for additional

information\_Franklin\_Milwaukee County

 Date:
 Wednesday, December 22, 2021 4:56:30 PM

 Attachments:
 Alternatives Analysis Cost Comparison Table.pdf

Wetland Permit Exhibit Revised ALT 4-ALT 4.pdf Wetland Permit Exhibit 5 - Wetland Impact Cross Section.pdf

2021.12.22 20282 Civil Site Plan.pdf

2021.12.22 20282 Wetland FIll Offsite Catchment Area.pdf

2021.12.22 Wetland Bypass Flow Calculation.pdf 2021.12.22 20282 Civil Grading Plan.pdf

Ryan, see our responses to your comments in red below. Based on your comments, we revisited the proposed site plan and made some revisions to further minimize wetland impacts. A copy of the revised proposed site plan is attached. The revisions result in approximately 6,316 less square feet of wetland disturbance than the originally proposed layout. The revised wetland disturbance area based on the revised plan is 0.015-acres (653 square feet). We look forward to your review of this additional information. Please do not hesitate to contact us should additional information be required to finish your review. Regards, Chip Leedom

James (Chip) B. Leedom, P.E., LEED A.P.
Senior Project Engineer
414-643-4169 (office)/414-217-3333 (Mobile)
The Sigma Group, Inc.
1300 W. Canal Street, Milwaukee, WI 53233
www.thesigmagroup.com | jleedom@thesigmagroup.com



This electronic transmission is strictly confidential and intended solely for the addressee. If you are not the intended addressee, you must not disclose, copy or take any action in reliance of this transmission.

From: Pappas, Ryan J - DNR < Ryan. Pappas@wisconsin.gov>

Sent: Wednesday, November 24, 2021 2:46 PM

**To:** James Leedom, P.E., LEED AP <jleedom@thesigmagroup.com>; njung@cardinalcapital.us; Tony DeRosa <tderosa@fred-inc.com>

**Cc:** Marion Ecks <MEcks@franklinwi.gov>; Wirth-Murray, Morgan M MVP <Morgan.M.Wirth-Murray@usace.army.mil>

**Subject:** [EXT] Fiduciary Real Estate Seasons\_Wetland Permit-HOLD\_Request for additional information\_Franklin\_Milwaukee County

Good morning Nicklaus, Anthony, and James,

Thank you for submitting a wetland general permit application for the proposed

Fiduciary real estate seasons project proposing to impact 6,970 square feet of wetlands in the City of Franklin, Milwaukee County (GP-SE-2021-41-04248). We have reviewed your application materials, and are writing to notify you that **we need additional information to complete your application** and determine if your proposed project will meet applicable legal standards. It is important that we receive clear detailed information about your project requirements and constraints so the permit application file adequately explains your project and allows the DNR to issue a decision that is supported by the file information. **Specifically, we need the following information:** 

Wetland permits require that you demonstrate you have avoided wetland impact where possible, and that you minimized wetland impact to the greatest practicable extent for the purpose and need of your proposed project. This means that you must show that you have used and considered all practicable alternatives where possible that can completely avoid or minimize wetland fill for your proposed project.

#### **Wetland Permit additional information needed:**

- 1). Differentiate between waterway and wetland: The area of wetland impact proposed will need to be reviewed to determine if the feature would be considered a waterway or watercourse by the Wisconsin DNR. The wetland delineation report calls out the feature as an intermittent stream, flowing in a particular direction, that ranges from 2-6 feet wide, and 6 inches – 12 inches deep. These dimension seem to indicate a marginal waterway is present at the site. Waterway and wetland projects have very different permitting requirements, and the DNR will need to visit the site to determine if the waterway/wetland feature would be considered a navigable waterway or not. If the feature is not a navigable waterway, we would then proceed under wetland permitting. If the feature is a navigable waterway, there may be additional waterway permit requirements. The site visit will also serve as a review of wetland functions and values, if the feature is not a waterway. Please let me know if 2PM on Thursday December 2<sup>nd</sup> would work for a tentative site visit day. The "waterway" in question was previously determined to be non-navigable by the WDNR in late 2018. An email from Joshua Wied of the WDNR dated 1/4/19 indicating that it is non-navigable was provided to you as documentation. Per the email, no waterway permitting would be required.
- **2). Top View plan detail:** Please provide a detailed top view plan details of the entire facility, showing all of the following:
  - The entire proposed expansion project, including all proposed features, stormwater pond, bioretention pond, roadways, culverts, sewer, utilities, parking areas, filling/grading limits.
  - detail showing the limits of all wetland on the parcel, and indicating the proposed wetland impact area. On this figure, please indicate the

amount of wetland proposed to be disturbed in square feet.

The top view plan detail must clearly show exactly which area of wetland you are requesting to fill for your project in context to the proposed expansion project limits. This proposed wetland fill area should either be highlighted, shaded or color-coded for easy reference, and include labels that indicate the amount of wetland disturbance in each area (in square feet). The top view plan detail must also show specifically all limits of disturbance and portions of your proposed development/expansion project as mentioned in your narrative and alternative analysis. A current set of site civil plans showing the top view of the entire project site including all proposed features were included as attachments to the permit application. In addition, the alternatives analysis attachment included exhibits showing the area of proposed wetland disturbance. The proposed site plan has since been adjusted to address some of your comments below. A revised site plan and revised wetland disturbance plan are included as attachments to this email.

**3). Side View and Cross section plan detail:** Please provide cross section/side view plan details for the proposed project, where you are proposing to impact wetlands. This cross section detail should show, road width, side slopes, sidewalks, parking spaces, proposed building edges, culvert details (including diameter, and culvert placement details), proposed swale details on the southwestern side of the site, and all other applicable details.

#### Please clarify road width, side slope and parking lot details:

a. Road width details: it appears that there are 2 road crossings of the wetland area. Please explain the proposed road width in these areas, and explain how the road width has been minimized to the greatest practicable extent. Please explain if one crossing could work instead of using two road crossings. Please see the attached 'suggested alternative 2' figure that includes a potential road that runs parallel to the south side of the wetland/watercourse, which could reduce wetland impacts by eliminating the other road segment. Please explain the reason for this road width in detail, including the typical widths of equipment, turning radius of typical equipment, and any other applicable details. Most public roads and 2-lane highways (that accommodate 2 directions of travel) have a drivable surface that is 24-30 foot wide drivable surface for 2-way traffic (two -12 foot lanes, and 3 foot wide shoulders on each side). Please explain in detail why the suggested alternative is not a practicable alternative that minimizes wetland impacts to the greatest practicable extent for the purpose and need of the proposed project. The drives are 24' in width from face of curb to face of curb. The Franklin Unified Development Ordinance requires drives to be a minimum of 24 feet in width. We are meeting that requirement.

The suggested alternative of eliminating the east-west wetland crossing by running a drive running parallel to the south side of the wetlands was

considered. However, this alternative would run through a stand of mature woodlands as defined by the City of Franklin. This alternative would result in the loss of approximately 1200 square feet of mature woodlands and would require approximately 400 linear feet of additional retaining wall. The development is trying to balance and minimize impacts to both wetlands and mature woodlands and meet City of Franklin requirements for the protection of natural resources. The delineated areas of mature woodlands have been added to the updated wetland impact plan which is attached to this email.

We have revised the proposed site layout to further minimize the impacts to the wetlands by shifting the drives such that they cross the wetlands at the gaps in the wetlands. This revision results in approximately 6,316 less square feet of wetland impact compared to the original proposed plan.

- b. Side slope details: Please explain what the side slopes are proposed to be in the wetland-facing impact areas. Have these side slopes been steepened in order to minimize wetland disturbance to the greatest practicable extent? Can you steepen the side slopes in these areas to 2:1 in certain areas to minimize wetland disturbance to the greatest practicable extent? Or can you utilize retaining walls in these wetland-facing areas to further minimize wetland impacts? If not, please explain in detail. See attached cross section through the wetland impacts. Vertical retaining walls are being utilized at the wetland crossing and extensively throughout the site to minimize impacts to wetlands and mature woodlands. Retaining walls are placed several feet off of roadways and sidewalks for safety reasons.
- c. Parking lot area details: Part of the proposed wetland impact area is for the purpose of parking stalls. Please explain how the number of parking stalls required was determined. Can you remove parking stalls in this wetland -impact area in order to minimize wetland disturbance to the greatest practicable extent? Can you reaarnage the parking stalls in this area in order to minimize wetland disturbance to the greatest practicable extent? Upland areas exist around that area to the south, could you add a few parking spots at that location, and remove the ones associated with the wetland fill to minimize to the greatest practicable extent? The parking stalls impacting the wetlands have been removed and relocated to avoid the wetland impacts. A revised site plan and wetland impact plan reflecting this revision is attached to this email. The total number of parking stalls is based on City requirements and what the market demands for parking.
- d. Sidewalks: It appears that sidewalks would be included in areas where wetland

impact is proposed. Can you explain the widths of the sidewalk proposed in this area? Can the sidewalks be minimized to minimize overall wetland impacts to the greatest practicable extent? Can the sidewalk be moved over to the edge of the road in order to minimize wetland disturbance to the greatest practicable extent? Please explain in detail. Please explain how you minimized these features in the wetland impact areas. Sidewalks along the drives crossing the wetlands have been moved to the back of the curb and the terrace between the curb and the sidewalk has been eliminated in order to minimize wetland disturbance. Retaining walls are used outside of the sidewalks to transition back to wetland grades and minimize wetland disturbances. As shown on the attached site plan, we have designed the site with extensive retaining walls throughout the site to minimize wetland impacts and impacts to mature woodlands.

- e. **Culverts:** Please provide typical cross sections of the culverts in the wetland area. The wetland/watercourse flows in a particular direction, from the southwest corner of the site to the northeast corner of the site. The swale continues offsite on other private property to the south-west of the parcel in question. Please explain the size of the culverts you are placing to maintain this drainage/watercourse through the site. Please explain how these culverts were sized, and what, if any, engineering or analysis was completed to ensure that the changes to this watercourse would not result in flooding/stormwater concerns on neighboring properties. Please explain in detail. Please indicate the culverts in plans, and show how these features will be installed. Culverts should be embedded to ensure that wetland hydrology is maintained, and that that it would not result in impounding water. Cross sections of the proposed culverts in the wetland area are attached. Off-site runoff from the southwest was modeled using Hydro-Cad modeling and the culverts were sized to safely convey the 100year storm event. Storm water modeling output is included as an attachment to this email.
- f. Wetland swale-rerouted area: Please provide cross section details for the proposed wetland swale rerouted area around the building in the southwest corner of the site. The rerouted area should be designed appropriately, to ensure that wetland hydrology will be maintained, and would not result in impounding water on neighboring properties. Please explain any engineering or analysis that went into the design of this feature, and provide a typical cross section of the proposed swale. The building in the southwest corner has been eliminated and the existing swale conveying offsite runoff from the southwest will remain in that area. As discussed above, the culverts at the drive crossings of the wetlands were sized to safely convey the 100-year storm event.

**4). Building details:** Please describe how many floors are planned with each of the proposed buildings (1 story, 2 story, 3 story, etc.), the number of unit types (studio, 1 BR, 2 BR, 3 BR, etc.) proposed throughout the site. Can you add floors to the buildings (or some of the buildings) to obtain more units in an alternative 3-layout (alternative 3 of your practicable alternative analysis narrative). The buildings are all two-story buildings. A total of 252 units are being provided broken down as follows: 30 studio apartments; 96 1-bedroom apartments; 102 2-bedroom apartments and 24 3-bedroom apartments. Three and four-story buildings are not considered viable for the following reasons.

Market demand is for two-story townhomes with private direct entrances (as proposed) for each apartment unit. The market has been flooded in recent years with three and four-story buildings with common corridors. With the onset of COVID and the typical renter is now significantly more concerned about their health, there is less demand for 3 and 4-story buildings with elevators and common hallways as people desire a more private living experience/entrance. Many renters do not want to share an elevator or common hallway with others.

The developer also conducted a neighborhood meeting last month, and all of the residential neighbors that we spoke with will not support anything taller than a two-story building. They do not want and will not support a three or four-story building in their backyards.

Not only is there less demand for corridor buildings for the reasons noted above and lack of support for taller buildings from neighboring residents, but there are significant implications with the idea of adding a third floor to these buildings as noted below:

- A three-story building will require an elevator. Adding an elevator will require that all three floors now have corridor ADA access and this would actually grow the size of the buildings to accommodate elevators and ADA compliant corridors. This would add an estimated \$1,500,000 to the project budget and the project would no longer be financially feasible, nor desirable to the target customers for what they are looking for.
- **5).** Alternatives analysis details: Regarding the alternatives in your provided alternative analysis, and including a few suggested alternatives below, please consider all of the following components and provide all applicable details and information regarding the alternatives where its applicable to your project. You suggest that fewer units would not be economically feasible, but you didn't provide any supplemental information as to how this was determined. Where economic information is the reason why one alternative is chosen over another, you must provide an economic analysis, and other detailed information as described below how this was determined. Regarding all suggested alternatives below, and your application alternatives, please provide all applicable details and information where applicable to your project:

**<u>List of suggested alternatives to evaluate</u>**, including but not limited to the following:

• Suggested alternative 1: Please describe a suggested alternative that is similar to alternative 3 in your submitted alternative analysis, where you utilize alternative sized buildings (besides just the standard 20-unit building) and fully utilize available upland areas to increase the number of units, making it more economically feasible. Please see suggested alternative 1 attachment — utilizing larger buildings in some areas or smaller unit buildings in other areas to make up for lost units. (i.e. using three 30-unit buildings and a 10-unit building to get closer to that desired 252 unit threshold). Please describe if an alternative like

this could be a practicable alternative that minimizes wetland disturbance to the greatest practicable extent. Please justify with below engineering, safety, logistical, or economic reasons. The current revised plan already includes a combination of 20 unit buildings (with attached garages) along with a few 24 unit buildings (with no attached garages). This was done to minimize wetland impacts to the extent practicable and to utilize more dense buildings in strategic locations. Constructing buildings that are any smaller in not financially feasible on per unit basis due to sunk costs related to footings, foundations, garages, etc. In addition, at our neighborhood meeting the neighboring residents made it clear that they will not support larger buildings than what is currently planned. Larger buildings would also not be as marketable due to their large scale appearance that makes it feel less like a townhome.

- Suggested alternative 2: Please describe a suggested alternative using only 1 wetland road crossing, as described in question 3-a above. See attached suggested alternative 2 attachment, should a potential roadway south of the wetland complex, and removing a section of road through wetland areas. As discussed above, this alternative would result in the loss of a significant area of mature woodlands as defined by the City. The development is trying to maintain a fine balance between impacts to wetlands and mature woods while trying to minimize impacts to both. We have, however, revised the site plan to further minimize wetland impacts by shifting the drives such that they cross the wetlands at the gaps in the wetlands. A copy of the revised proposed site plan is attached.
- Other suggested alternative: Parking lots or other features with different shape/design (question 3-c as listed above)/reduced number of parking spaces. The parking in the area of wetland impacts has been eliminated. See revised site plan and wetland impact plan.
- Other suggested alternative: Using clear span bridges across the waterway/wetland instead of culverts. Use of clear span bridges to cross the wetlands was evaluated. The existing clearance over the wetlands is insufficient and road grades would need to be raised an estimated 2-4' at the crossings to accommodate a clear span bridge which would result in significant additional costs for fill placement and extension of retaining walls. The use of clear span bridges for the wetland crossings would add significant costs to the project estimated at \$400,000 for the bridges alone. Use of clear span bridges is not financially viable for the project.
- Other suggested alternative: Moving/minimizing sidewalk, and maximized side slopes steepness (2:1) in wetland facing areas or retaining walls to minimize wetland disturbance. Sidewalks at the wetland crossings have been moved to the back of the drive curbs and terraces between the sidewalks and the drive curbs have been eliminated to reduce wetland impacts. We have designed the site with extensive retaining walls throughout the site to minimize wetland impacts and impacts to mature woodlands.
- Other suggested alternative: increasing the height of the proposed buildings (or some of the proposed buildings) in order to accommodate desired number of units (2<sup>nd</sup>, 3<sup>rd</sup> or more stories in order to minimize wetland impacts to greatest practicable extent. See discussion above.

#### **Engineering or technical reasons that alternatives are not practicable**

- ☐ Identification of the source of methods or standards used (citations to literature or professional publications) City of Franklin Unified Development Code
- ☐ Calculations relevant to the application of the method or standard to the project

  Minimum drive width and parking space requirements
- ☐ References to the methods or technical standards used in federal, state or local

#### Safety data or reasons that alternatives are not practicable

- □ A copy of an official written determination by a municipal governing body or the state transportation agency that a discharge into a non-federal wetland is necessary for public safety, including the basis for the determination
- □ Description of safety hazard Fall hazards from retaining walls. Retaining walls have been located a minimum of three feet from sidewalks for pedestrian safety purposes.
- □ Number and characterization of affected individuals or groups (e.g, school children, employees) Children and residents
- □ Nature of effect (e.g., death, injury, property damage) and Frequency of effect Fall hazard serious injury
- ☐ Assessment of other methods of hazard reduction

#### □ Logistical reasons that alternatives are not practicable

- □ Description of the logistical difficulty(s) In order to provide best in class development with logistical efficiencies 250 to 300 units need to be maintained. As you drop below 250 units it becomes a challenge to manage operations and the high level of service demanded for a market rate apartment development. Operating inefficiencies make a smaller project unfeasible.
- □ Number and characterization of affected individuals or groups (e.g., occupant, employees)
- □ Frequency of effect
- ☐ Quantify how the degree of difficulty varies with each alternative analyzed
- ☐ Assessment of alternative methods of overcoming logistical difficulties

Economic reasons that alternatives are not practicable (supply all data listed in this section) Data must include all phases of a project or all adjacent land in common ownership. Copies of source documents or supporting reference information must be provided. See attached cost comparison table for comparison of project costs based on a per unit basis. Other alternatives evaluated would result in an increase of per unit project cost ranging from 132% to 265%. The increase per unit costs cannot be absorbed by the project for it to remain financially feasible.

- Description, dates and cost of infrastructure or improvements to the property –
- Total number of parking spaces how this was determined The total number of parking spaces being provided is based both on what is required per the City of Franklin Unified Development Code as well as what the developer has seen for demand for parking for similar types of development. The current plan reflects a less than typical number of spaces per unit compared to all other comparable residential projects by the developer. The total number of parking spaces is 468 or 1.86 spaces per unit; the developer's typical parking count ratio for this type of development is 2.25 which would result in 567 parking stalls (99 additional spaces).
- Description of alternative development scenarios Provided in alternatives analysis
- Market studies (current market conditions and trends)

Construction cost estimates

- Financing cost estimates
- Comparable sales, leasing rates (for ultimate uses)
- Calculation of projected amount or rate of return
- Please provide any local/state requirements if applicable that determined specific size/design, and whether you have sought variances from these requirements, and what the outcomes were if applicable.

Local zoning requirements. If any design preferences are related to state/local requirements, please explain in detail, referencing code/ordinances and/or providing correspondence (email/letter) from local zoning official/city officials explaining the zoning/city requirements. This should include parking requirements, fire department/emergency access requirements, documentation of City's denial of other alternatives, and any other local zoning requirements that have dictated plan elements that result in wetland impacts. Please provide any local/state requirements if applicable that determined specific size/design, and whether you have sought variances from these requirements, and what the outcomes were if applicable (parking reduction, building height limitations, road/sidewalk/side slope requirements, etc.).

**Please note,** if any changes to plans result from review of alternatives, and if wetland impacts can be minimized, we would need all updated plans and specs and wetland impact totals for the new proposed plans.

The review of your application will be placed on HOLD, until we receive all of the detailed information as requested above. Please let me know if you have any questions or concerns. Thank you and have a nice thanksgiving!

Ryan Pappas

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Ryan Pappas

Water Management Specialist-Waterways and Wetlands Wisconsin Department of Natural Resources
1155 Pilgrim Road
Plymouth, WI 53073

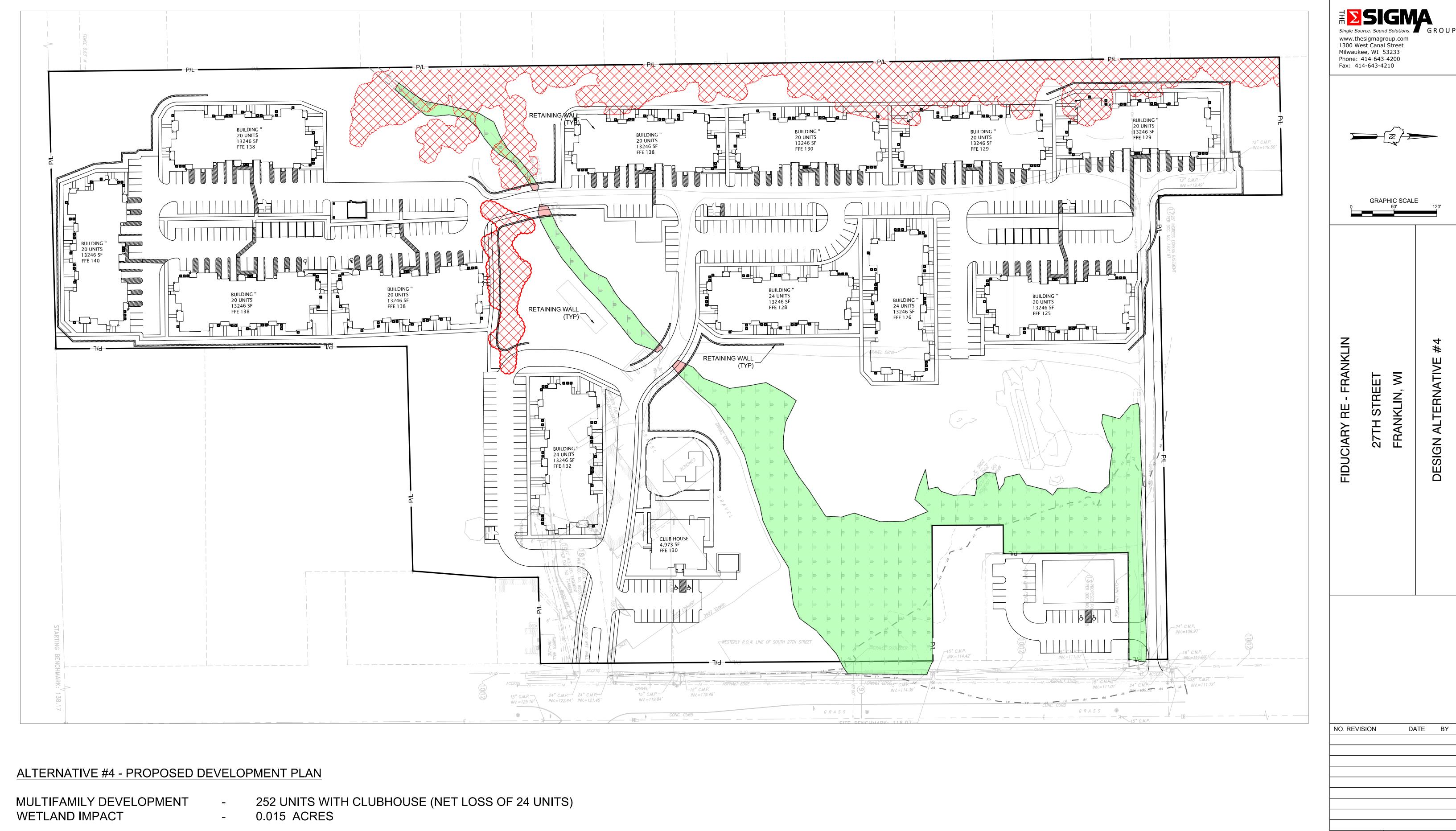
Phone: (715) 492-0200 Ryan.Pappas@wisconsin.gov



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## Alternatives Analysis Estimated Project Costs Per Unit Compared to Preferred Alternative

| Estimated Per<br>Unit Costs                       | Alternative 2 | Alternative 3 | Alternative 4<br>(Proposed |
|---|---------------|---------------|----------------------------|
| Land Cost Per<br>Units Developed<br>(\$1,500,000) | 265% Increase | 132% Increase | Plan)<br>109% Increase     |
| Environmental (\$300,000)                         | 265% Increase | 132% Increase | 109% Increase              |
| Clubhouse &<br>Amenities<br>(1,750,000)           | 265% Increase | 132% Increase | 109% Increase              |
| Design &<br>Engineering<br>(1,000,000)            | 265% Increase | 132% Increase | 109% Increase              |
| Site<br>Prep/Demolition<br>(250,000)              | 265% Increase | 132% Increase | 109% Increase              |



WETLAND FILL

WETLAND TO REMAIN

MATURE WOODLANDS

EXHIBIT 4

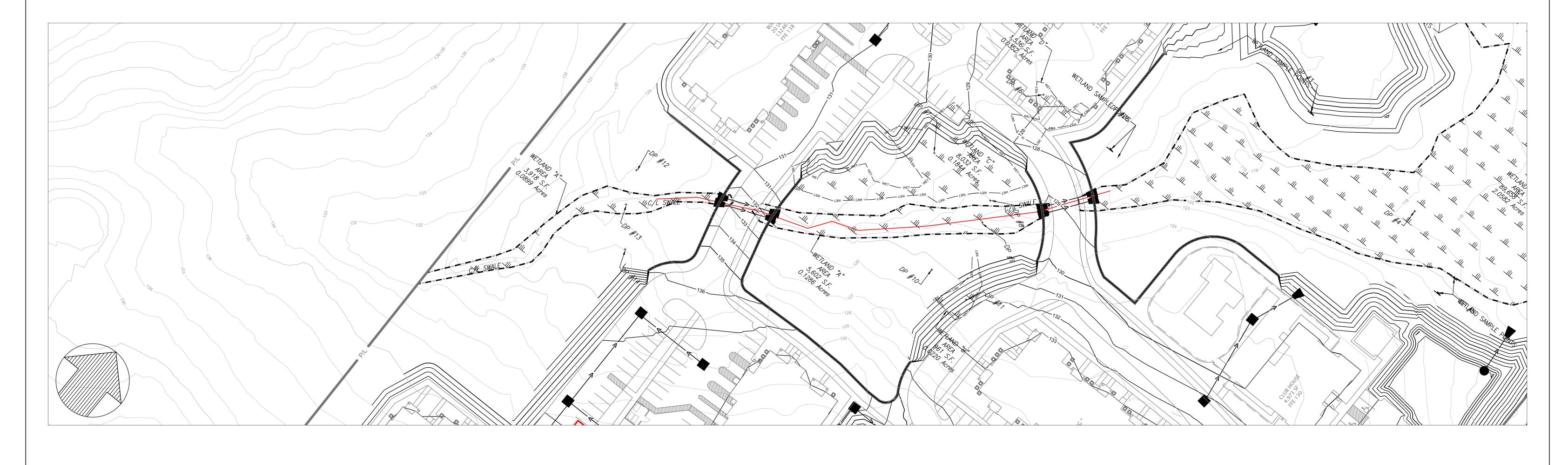
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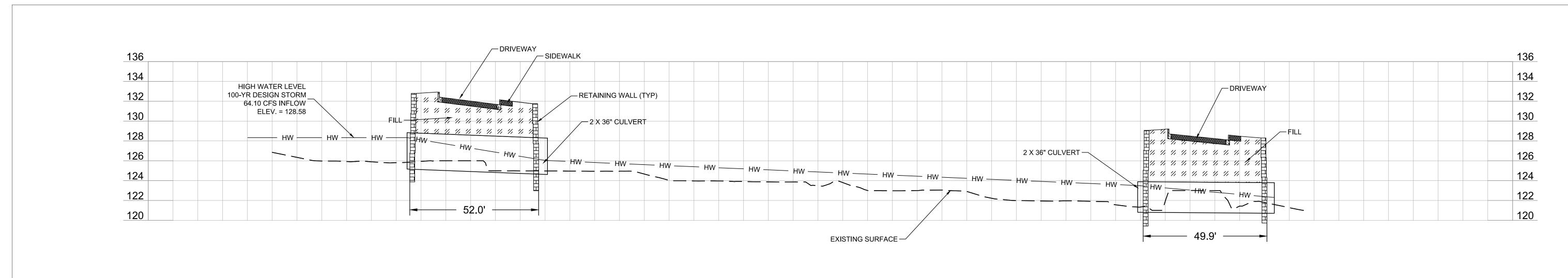
CHECKED BY:

APPROVED BY:

DESIGN ALTERNATIVE

DATE BY





GRAPHIC SCALE

WETLAND CROSSING PROFILE

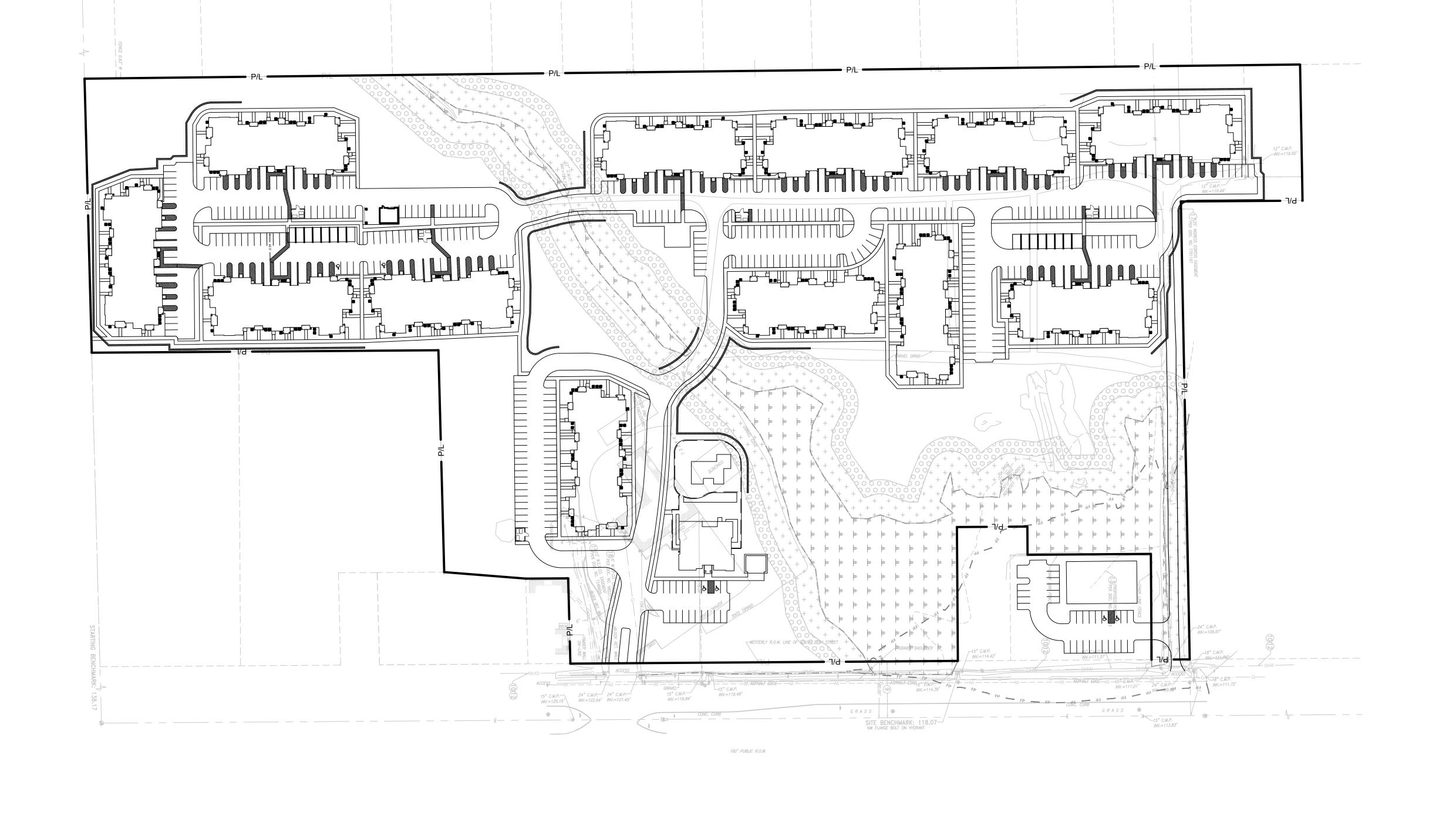
IN Single Source. Sound Solutions. GROUP

www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210 27TH STREET FRANKLIN, WI

FIDUCIARY RE - FRANKLIN

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| NO. REVISION | DATE | BY | SCALE:       | 1" = 40'-0"                           |
|              |      |    | PROJECT NO:  | 20282                                 |
|              |      |    | DESIGN DATE: |                                       |
|              |      |    | PLOT DATE:   | 2021-12-22                            |
|              |      |    | DRAWN BY:    |                                       |
|              |      |    | CHECKED BY:  |                                       |
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|              |      |    |              |                                       |



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LEGEND:

5" THICK CONCRETE WALK ASPHALT SURFACE HEAVY-DUTY ASPHALT HEAVY-DUTY CONCRETE

CURB & GUTTER (ACCEPT) (A) (C401)

CURB & GUTTER (REJECT)

PROPOSED RETAINING WALL

SITE PLAN OVERALL

## **GENERAL NOTES:**

- 1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- 2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
- 4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
- 5. DIMENSIONS ARE FROM FACE OF CURB OR EDGE OF PAVEMENT.
- 6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.

| G            |      |    |
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| NO. REVISION | DATE | BY |

SCALE: 1" = 80'-0" PROJECT NO: 20282 **DESIGN DATE:** PLOT DATE: 2021-12-22

DRAWN BY: CMM CHECKED BY: APPROVED BY: SHEET NO:

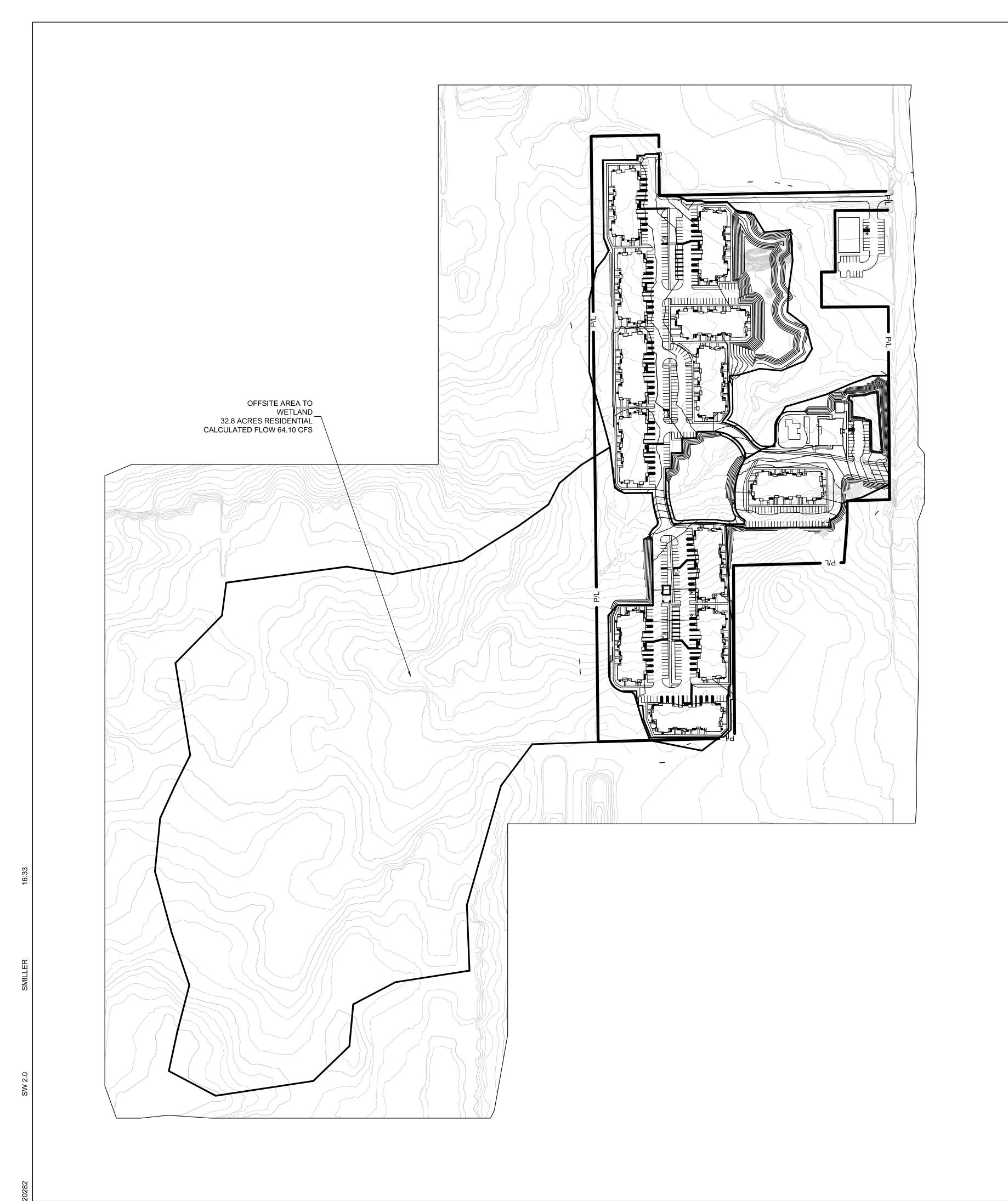
C100



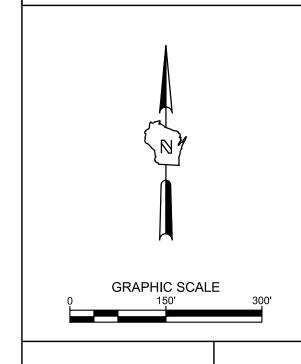
CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.



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Fax: 414-643-4210



FIDUCIARY RE - FRANKLIN 27TH STREET POST DEVELPMENT CONDITIONS

PRELIMINARY CONSTRUCTION

NO. REVISION DATE BY

| SCALE:      | 1" = 150'-0" |
|-------------|--------------|
| PROJECT NO: | 20282        |

SCALE: 1" = 150'-0"

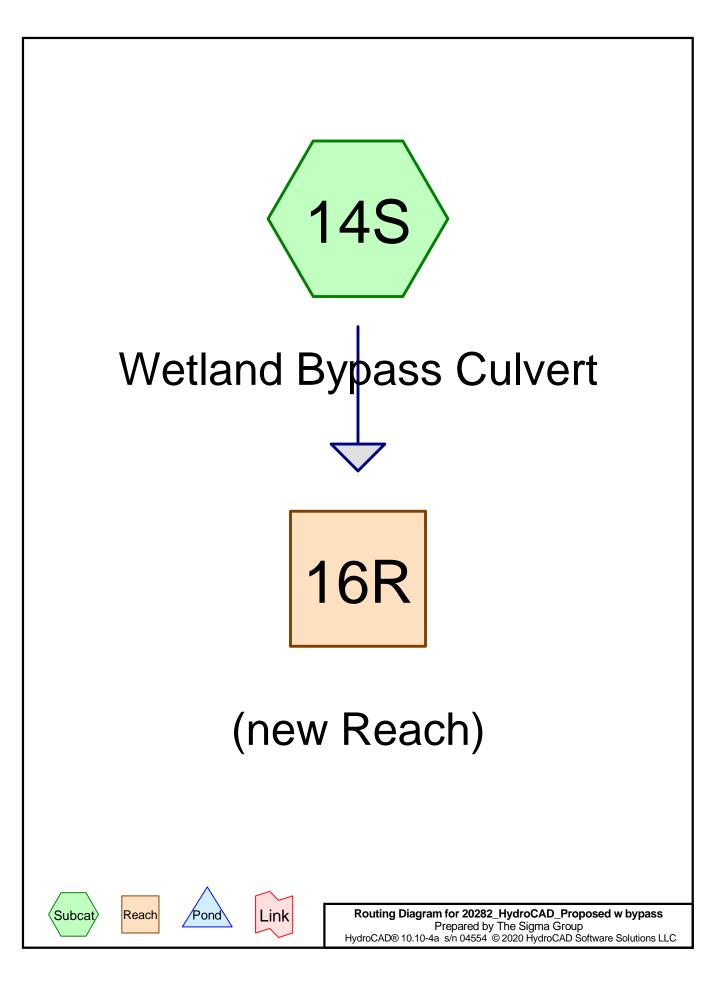
PROJECT NO: 20282

DESIGN DATE: ---
PLOT DATE: 2021-12-22

DRAWN BY: ---
CHECKED BY: ----

APPROVED BY:
SHEET NO:

SW 2.0



### 20282\_HydroCAD\_Proposed w bypass

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### **Ground Covers (selected nodes)**

| HSG-A   | HSG-B   | HSG-C   | HSG-D   | Other   | Total   | Ground               | Subcatchment |
|---------|---------|---------|---------|---------|---------|----------------------|--------------|
| (acres) | (acres) | (acres) | (acres) | (acres) | (acres) | Cover                | Numbers      |
| 0.000   | 32.828  | 0.000   | 0.000   | 0.000   | 32.828  | 2 acre lots, 12% imp | 14S          |
| 0.000   | 32.828  | 0.000   | 0.000   | 0.000   | 32.828  | TOTAL AREA           |              |

## 20282\_HydroCAD\_Proposed w bypass

MSE 24-hr 3 100-Year Rainfall=6.06"

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Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 14S: Wetland Bypass Culvert Runoff Area=32.828 ac 12.00% Impervious Runoff Depth=2.40" Flow Length=1,950' Slope=0.0300 '/' Tc=32.0 min CN=65 Runoff=66.04 cfs 6.552 af

**Reach 16R: (new Reach)**Avg. Flow Depth=1.64' Max Vel=2.14 fps Inflow=66.04 cfs 6.552 af n=0.100 L=550.0' S=0.0255 '/' Capacity=107.26 cfs Outflow=64.10 cfs 6.552 af

Total Runoff Area = 32.828 ac Runoff Volume = 6.552 af Average Runoff Depth = 2.40" 88.00% Pervious = 28.889 ac 12.00% Impervious = 3.939 ac Prepared by The Sigma Group

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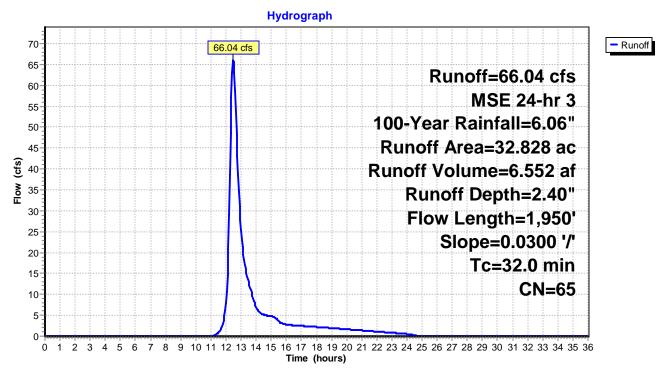
### Summary for Subcatchment 14S: Wetland Bypass Culvert

Runoff = 66.04 cfs @ 12.47 hrs, Volume= 6.552 af, Depth= 2.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs MSE 24-hr 3 100-Year Rainfall=6.06"

| _ | Area  | (ac) C | N Des   | cription     |            |                                 |
|---|-------|--------|---------|--------------|------------|---------------------------------|
|   | 32.   | 828 6  | 55 2 ac | re lots, 129 | % imp, HSC | G B                             |
|   | 28.   | 889 6  | 60.88.0 | 0% Pervio    | us Area    |                                 |
|   | 3.    | 939    | 98 12.0 | 0% Imperv    | ious Area  |                                 |
|   | _     |        |         |              |            |                                 |
|   | Tc    | Length | Slope   | Velocity     | Capacity   | Description                     |
| _ | (min) | (feet) | (ft/ft) | (ft/sec)     | (cfs)      |                                 |
|   | 22.1  | 300    | 0.0300  | 0.23         |            | Sheet Flow,                     |
|   |       |        |         |              |            | Grass: Short n= 0.150 P2= 2.64" |
|   | 9.9   | 1,650  | 0.0300  | 2.79         |            | Shallow Concentrated Flow,      |
|   |       | •      |         |              |            | Unpaved Kv= 16.1 fps            |
| _ | 32.0  | 1,950  | Total   |              |            |                                 |

### Subcatchment 14S: Wetland Bypass Culvert



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#### Summary for Reach 16R: (new Reach)

Inflow Area = 32.828 ac, 12.00% Impervious, Inflow Depth = 2.40" for 100-Year event

Inflow = 66.04 cfs @ 12.47 hrs, Volume= 6.552 af

Outflow = 64.10 cfs @ 12.60 hrs, Volume= 6.552 af, Atten= 3%, Lag= 7.9 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Max. Velocity= 2.14 fps, Min. Travel Time= 4.3 min Avg. Velocity = 0.70 fps, Avg. Travel Time= 13.1 min

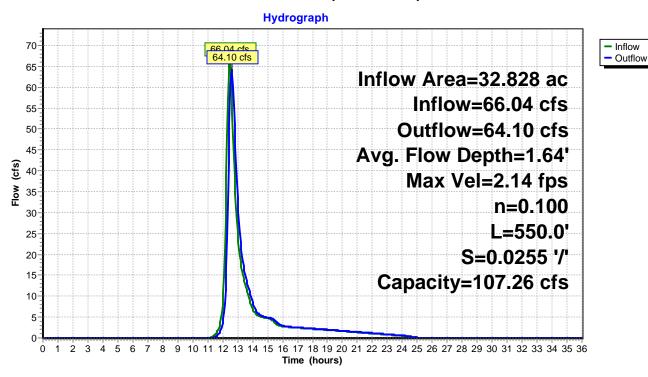
Peak Storage= 16,506 cf @ 12.53 hrs Average Depth at Peak Storage= 1.64', Surface Width= 34.70' Bank-Full Depth= 2.00' Flow Area= 44.0 sf, Capacity= 107.26 cfs

2.00' x 2.00' deep channel, n= 0.100 Earth, dense brush, high stage Side Slope Z-value= 10.0 '/' Top Width= 42.00' Length= 550.0' Slope= 0.0255 '/'

Inlet Invert= 140.00', Outlet Invert= 126.00'

‡

## Reach 16R: (new Reach)



Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

## Wetland Bypass - 2x 36 Inch Conc. Culvert

| Invert Elev Dn (ft) | = | 124.99                    |
|---------------------|---|---------------------------|
| Pipe Length (ft)    | = | 58.00                     |
| Slope (%)           | = | 1.67                      |
| Invert Elev Up (ft) | = | 125.96                    |
| Rise (in)           | = | 36.0                      |
| Shape               | = | Circular                  |
| Span (in)           | = | 36.0                      |
| No. Barrels         | = | 2                         |
| n-Value             | = | 0.012                     |
| Culvert Type        | = | Circular Concrete         |
| Culvert Entrance    | = | Groove end w/headwall (C) |

= 0.0018, 2, 0.0292, 0.74, 0.2

#### **Embankment**

Coeff. K,M,c,Y,k

Top Elevation (ft) = 131.00 Top Width (ft) = 38.00 Crest Width (ft) = 85.00

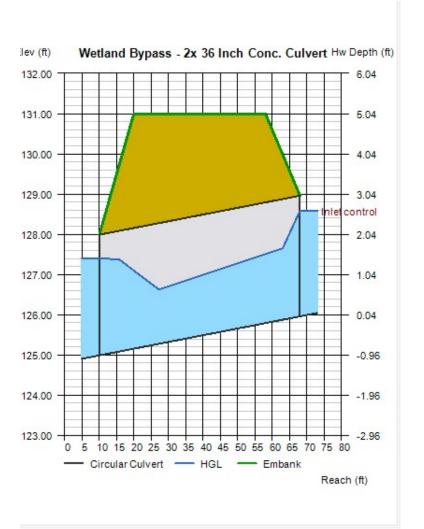
#### **Calculations**

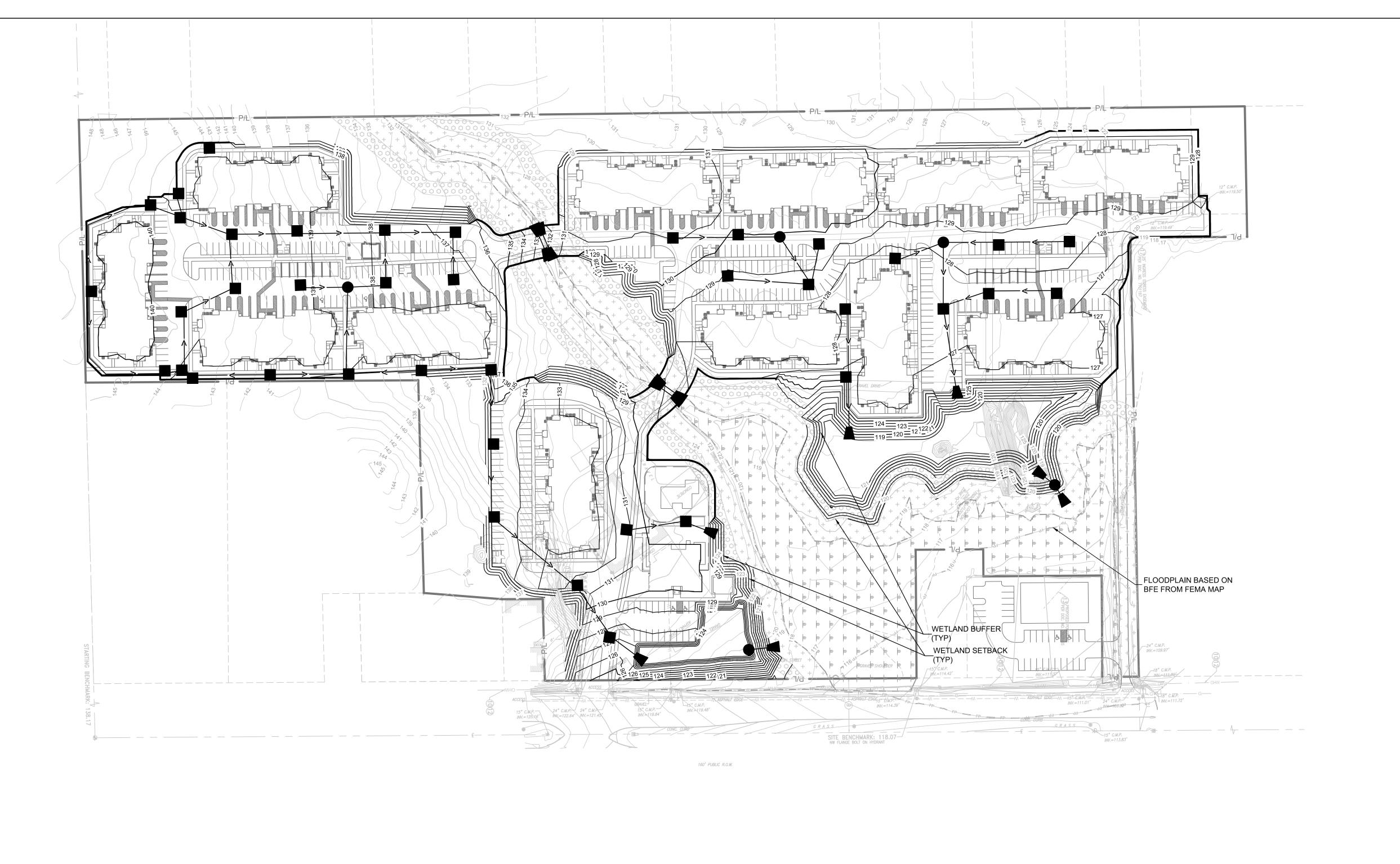
Qmin (cfs) = 64.10Qmax (cfs) = 64.10Tailwater Elev (ft) = (dc+D)/2

#### Highlighted

Qtotal (cfs) = 64.10Qpipe (cfs) = 64.10 Qovertop (cfs) = 0.00Veloc Dn (ft/s) = 5.25Veloc Up (ft/s) = 7.07HGL Dn (ft) = 127.41HGL Up (ft) = 127.79Hw Elev (ft) = 128.58Hw/D (ft) = 0.87

Flow Regime = Inlet Control





Single Source. Sound Solutions. GROUP www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210

## **LEGEND**:

5" THICK CONCRETE WALK C401 ASPHALT SURFACE HEAVY-DUTY ASPHALT HEAVY-DUTY CONCRETE **CURB & GUTTER** (A) (C401) (ACCEPT) CURB & GUTTER

PROPOSED RETAINING WALL

PROPOSED CONTOUR PROPOSED CURB & GUTTER SPOT GRADE 100.50 T/C 100.00 FL T/C: TOP OF CURB GRADE

PROPOSED ASPHALT SPOT GRADE

FL: FLOW LINE CURB GRADE

**EXISTING CONTOUR** 

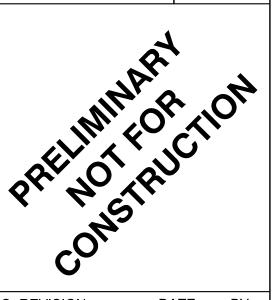
EXISTING SURFACE SPOT GRADE (MATCH)

PROPOSED SWALE

GRADING

## **GENERAL NOTES:**

- 1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- 2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE
- 4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
- 5. DIMENSIONS ARE FROM FACE OF CURB OR EDGE OF PAVEMENT.
- 6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.
- 7. EARTHWORK SHALL BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.



NO. REVISION DATE BY

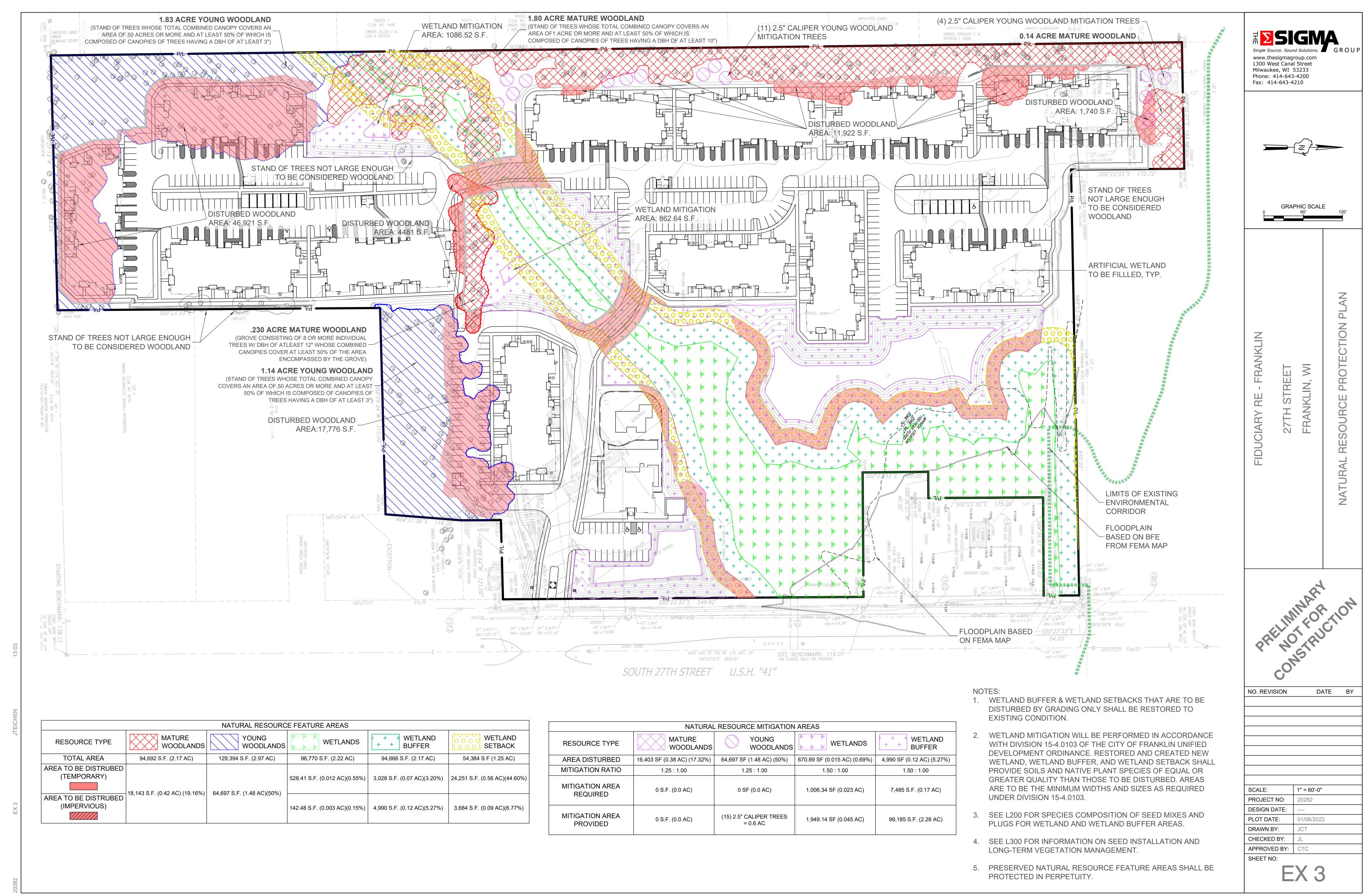
| SCALE:       | 1" = 80'-0" |
|--------------|-------------|
| PROJECT NO:  | 20282       |
| DESIGN DATE: | 8/32/2021   |
| PLOT DATE:   | 8/31/2021   |
| DRAWN BY:    | СМ          |
| CHECKED BY:  | SM          |
| APPROVED BY: | CTC         |
| SHEET NO:    |             |
| _            |             |

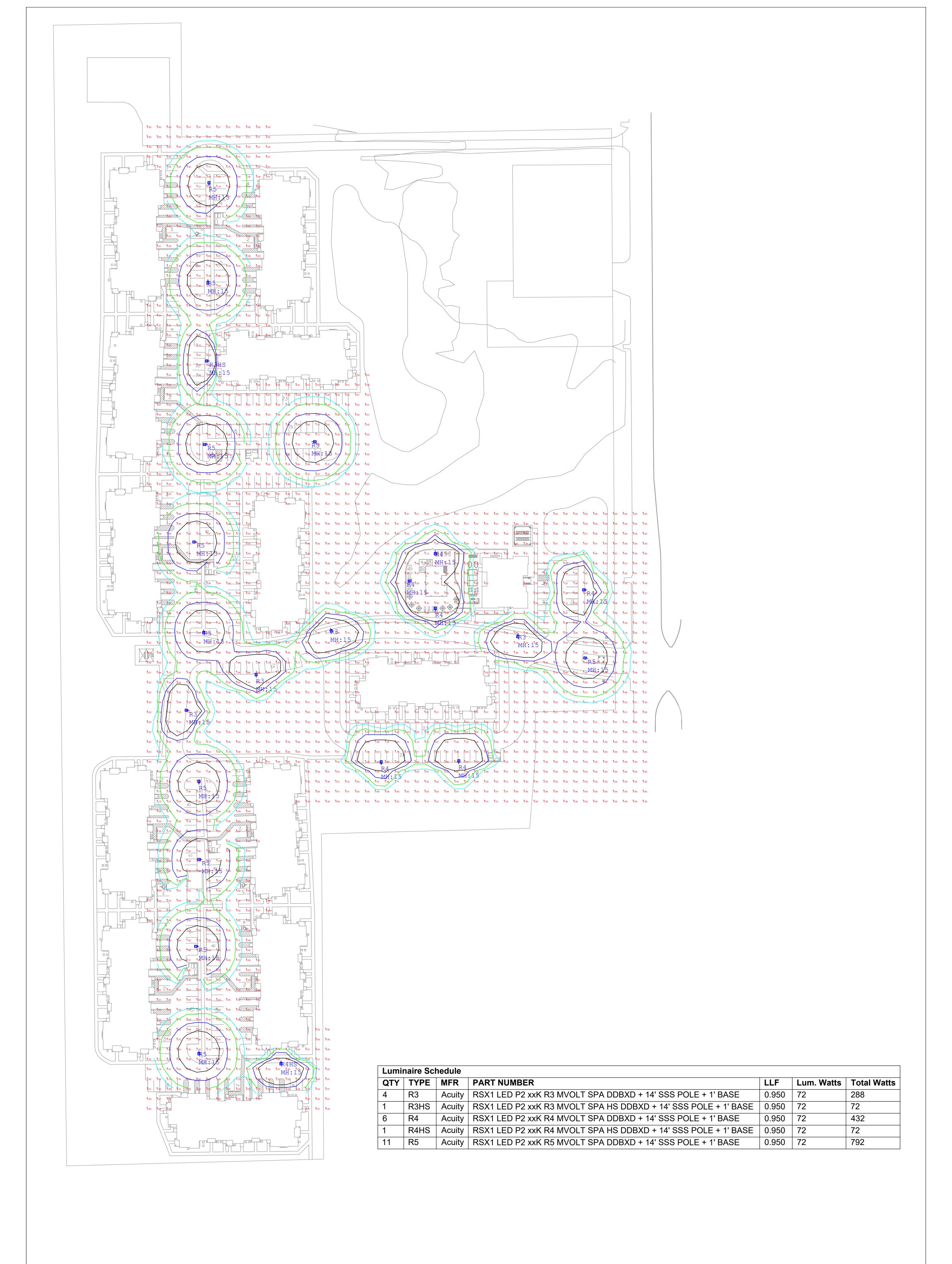
C200

CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.





| SEASONS AT FRANKLIN    |  |
|------------------------|--|
| FRANKLIN, WI           |  |
| LED SITE LIGHTING PLAN |  |

| DRAWN BY: JS       |
|--------------------|
| DATE: 9/9/2021     |
| SCALE: 1" = 60'-0" |

|           | # | DATE | COMMENTS |
|-----------|---|------|----------|
| 교         |   |      |          |
| REVISIONS |   |      |          |
| 3101      |   |      |          |
| S         |   |      |          |
|           |   |      |          |





## RSX1 LED Area Luminaire













## **Specifications**

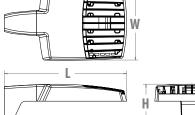
**EPA** 0.57 ft<sup>2</sup> (0.05 m<sup>2</sup>) (ft2@0°):

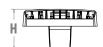
21.8" (55.4 cm) Length: (SPA mount)

Width: 13.3" (33.8 cm)

3.0" (7.6 cm) Main Body Height: 7.2" (18.4 cm) Arm

Weight: 22.0 lbs (10.0 kg) (SPA mount):





## Catalog

Notes

Туре

Hit the Tab key or mouse over the page to see all interactive elements

#### Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

## **Ordering Information**

#### **EXAMPLE:** RSX1 LED P4 40K R3 MVOLT SPA DDBXD

| RSX1 LED |                        |                                     |  |  |   |  |  |  |  |
|----------|------------------------|-------------------------------------|--|--|---|--|--|--|--|
| Series   | Performance<br>Package | Color<br>Temperature                | Distribution   | Voltage  | Mounting  |  |  |  |  |
| RSX1 LED | P1<br>P2<br>P3<br>P4   | 30K 3000K<br>40K 4000K<br>50K 5000K | R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide 1 R5S Type 5 Short 1 AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated | MVOLT (120V-277V) <sup>2</sup> HVOLT (347V-480V) <sup>3</sup> XVOLT (277V-480V) <sup>4</sup> (use specific voltage for options as noted) 120 <sup>3</sup> 277 <sup>5</sup> 208 <sup>3</sup> 347 <sup>5</sup> 240 <sup>3</sup> 480 <sup>5</sup> | SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)  RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)  MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon)  IS Adjustable slipfitter (fits 2-3/8" OD tenon) 6  WBA Wall bracket 1  WBASC Wall bracket with surface conduit box  AASP Adjustable tilt arm square pole mounting 6  AARP Adjustable tilt arm round pole mounting 6  AAWB Adjustable tilt arm with wall bracket 6  AAWSC Adjustable tilt arm wall bracket and surface conduit box 6 |  |  |  |  |

| Options  |  |  | Finish  |  |
|--|--|--|---|--|
| Shipped In<br>HS<br>PE<br>PEX<br>PER7<br>CE34<br>SF<br>DF<br>SPD20KV<br>FAO<br>DMG | House-side shield <sup>7</sup> Photocontrol, button style <sup>8,9</sup> Photocontrol external threaded, adjustable <sup>9,10</sup> Seven-wire twist-lock receptacle only (no controls) <sup>9,11,12,13</sup> Conduit entry 3/4"NPT (Qty 2) Single fuse (120, 277, 347) <sup>5</sup> Double fuse (208, 240, 480) <sup>5</sup> 20KV Surge pack (10KV standard) Field adjustable output <sup>9,13</sup> 0-10V dimming extend out back of housing for external control (control ordered separate) <sup>9,13</sup> | *Standalone and Networked Sensors/Controls (factory default settings, see table page 9)  NLTAIR2 | DDBXD DBLXD DNAXD DWHXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD | Dark Bronze<br>Black<br>Natural Aluminum<br>White<br>Textured Dark Bronze<br>Textured Black<br>Textured Natural Aluminum<br>Textured White |



#### **Ordering Information**

#### **Accessories**

RSX1HS RSX1 House side shield (includes 1 shield)

RSX1HSAFRR U RSX1 House side shield for AFR rotated optics (includes 1 shield)

External glares hield (specify finish) RSX1EGS (FINISH) U RSX1EGFV (FINISH) U External glare full visor (specify finish)

RSXRPA (FINISH) U RSX Universal round pole adaptor plate (specify finish)

RSXWBA (FINISH) U RSX WBA wall bracket (specify finish) 1

RSXSCB (FINISH) U RSX Surface conduit box (specify finish, for use with WBA, WBA not included)

DLL127F 1.5 JU Photocell -SSL twist-lock (120-277V) 18 DLL347F 1.5 CUL JU Photocell -SSL twist-lock (347V) 18 DLL480F 1.5 CUL JU Photocell -SSL twist-lock (480V) 18

DSHORT SBK U Shorting cap 18

#### NOTES

- Any Type 5 distribution, is not available with WBA.

  MYOLT driver operates on any line voltage from 120-277V (50/60 Hz).

  HYOLT driver operates on any line voltage from 347-480V (50/60 Hz).

  XYOLT driver not available with P1 or P2. XYOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XYOLT not available with fusing (SF or DF) and not available with PE or PEX.

  Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.

  Maximum tilt is 90° above horizontal.

  It may be ordered as an accessory.

- ne may be ordered as an accessory.

  Requires MVOLT or 347V.

  Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, PIRHIN).
- Requires 120V, 208V, 240V or 277V.

- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/-45° from horizontal aim per ANSI C136.10-2010. Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN. 13
- 14 Must be ordered with PIRHN.
- 15 16
- Requires MVOLT or HVOLT.

  Must be ordered with NLTAIR2. For additional information on PIRHN
- Must be ordered with fixture for factory pre-drilling.
  Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

#### **External Shields**



**House Side Shield** 



**External Glare Shield** 

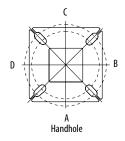


External 360 Full Visor

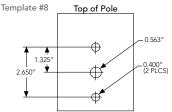
## **Pole/Mounting Informatiion**

Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

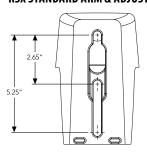
#### HANDHOLE ORIENTATION



#### **RSX POLE DRILLING**



### **RSX STANDARD ARM & ADJUSTABLE ARM**



#### **Round Tenon Mount - Pole Top Slipfitters**

| Tenon O.D. | RSX Mounting | Single    | 2 at 180° | 2 at 90°  | 3 at 120° | 3 at 90°  | 4 at 90°  |
|------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 2 - 3/8"   | RPA, AARP    | AS3-5 190 | AS3-5 280 | AS3-5 290 | AS3-5 320 | AS3-5 390 | AS3-5 490 |
| 2 - 7/8"   | RPA, AARP    | AST25-190 | AST25-280 | AST25-290 | AST25-320 | AST25-390 | AST25-490 |
| 4"         | RPA, AARP    | AST35-190 | AST35-280 | AST35-290 | AST35-320 | AST35-390 | AST35-490 |

#### **Drill/Side Location by Configuration Type**

|                   |                    | -      |            |            | **              |               | -1-              |
|-------------------|--------------------|--------|------------|------------|-----------------|---------------|------------------|
| Drilling Template | Mounting Option    | Single | 2 @ 180    | 2 @ 90     | 3 @ 120         | 3 @ 90        | 4 @ 90           |
|                   | Head Location      | Side B | Side B & D | Side B & C | Round Pole Only | Side B, C & D | Side A, B, C & D |
| #8                | Drill Nomenclature | DM19AS | DM28AS     | DM29AS     | DM32AS          | DM39AS        | DM49AS           |

#### RSX1 - Luminaire EPA

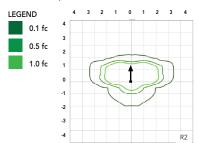
\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

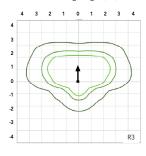
| Fixture Quantity & Mo<br>Configuration | ixture Quantity & Mounting<br>Configuration |      | 2 @ 90 | 2 @ 180 | 3 @ 90   | 3 @ 120 | 4 @ 90 | 2 Side<br>by Side | 3 Side<br>by Side | 4 Side<br>by Side |
|--|---|------|--------|---------|----------|---------|--------|-------------------|-------------------|-------------------|
| Mounting Type                          | Tilt  | -    | -1     |         | <u>.</u> | *       | +      | -                 |                   | •                 |
| SPA - Square Pole Adaptor              |   | 0.57 | 1.03   | 1.05    | 1.52     | 1.36    | 2.03   | 1.31              | 1.7               | 2.26              |
| RPA - Round Pole Adaptor               | 0°  | 0.62 | 1.08   | 1.15    | 1.62     | 1.46    | 2.13   | 1.36              | 1.8               | 2.36              |
| MA - Mast Arm Adaptor                  |   | 0.49 | 0.95   | 0.89    | 1.36     | 1.2     | 1.87   | 1.23              | 1.54              | 2.1               |
|  |   |      |        |         |          |         |        |                   |                   |                   |
|  | 0°  | 0.57 | 1.03   | 1.05    | 1.52     | 1.36    | 2.03   | 1.31              | 1.7               | 2.26              |
|  | 10°   | 0.68 | 1.34   | 1.33    | 2        | 1.74    | 2.64   | 1.35              | 2.03              | 2.71              |
|  | 20°   | 0.87 | 1.71   | 1.73    | 2.56     | 2.26    | 3.42   | 1.75              | 2.62              | 3.49              |
|  | 30°   | 1.24 | 2.19   | 2.3     | 3.21     | 2.87    | 4.36   | 2.49              | 3.73              | 4.97              |
| IS - Integral Slipfitter               | 40°   | 1.81 | 2.68   | 2.98    | 3.85     | 3.68    | 5.30   | 3.62              | 5.43              | 7.24              |
| AASP/AARP - Adjustable                 | 45°   | 2.11 | 2.92   | 3.44    | 4.2      | 4.08    | 5.77   | 4.22              | 6.33              | 8.44              |
| Arm Square/Round Pole                  | 50°   | 2.31 | 3.17   | 3.72    | 4.52     | 4.44    | 6.26   | 4.62              | 6.94              | 9.25              |
|  | 60°   | 2.71 | 3.66   | 4.38    | 5.21     | 5.15    | 7.24   | 5.43              | 8.14              | 10.86             |
|  | 70°   | 2.78 | 3.98   | 4.54    | 5.67     | 5.47    | 7.91   | 5.52              | 8.27              | 11.03             |
|  | 80°   | 2.76 | 4.18   | 4.62    | 5.97     | 5.76    | 8.31   | 5.51              | 8.27              | 11.03             |
|  | 90°   | 2.73 | 4.25   | 4.64    | 6.11     | 5.91    | 8.47   | 5.45              | 8.18              | 10.97             |

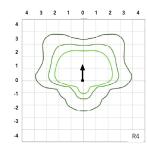
## **Photometric Diagrams**

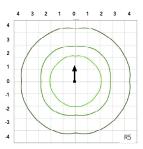
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

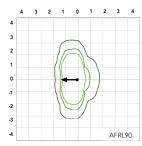
Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').

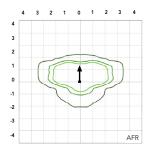


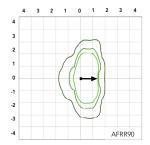












## **Performance Data**

# Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

| Ambient | Ambient | Lumen Multiplier |
|---------|---------|------------------|
| 0°C     | 32°F    | 1.05             |
| 5°C     | 41°F    | 1.04             |
| 10°C    | 50°F    | 1.03             |
| 15℃     | 59°F    | 1.02             |
| 20°C    | 68°F    | 1.01             |
| 25°C    | 77°F    | 1.00             |
| 30°C    | 86°F    | 0.99             |
| 35°C    | 95°F    | 0.98             |
| 40°C    | 104°F   | 0.97             |
| 45°C    | 113°F   | 0.96             |
| 50°C    | 122°F   | 0.95             |

## **Electrical Load**

|                     |                  |      |      |      | nt (A) |      |      |
|---------------------|------------------|------|------|------|--------|------|------|
| Performance Package | System Watts (W) | 120V | 208V | 240V | 277V   | 347V | 480V |
| P1                  | 51W              | 0.42 | 0.25 | 0.21 | 0.19   | 0.14 | 0.11 |
| P2                  | 72W              | 0.60 | 0.35 | 0.30 | 0.26   | 0.21 | 0.15 |
| P3                  | 109W             | 0.91 | 0.52 | 0.45 | 0.39   | 0.31 | 0.23 |
| P4                  | 133W             | 1.11 | 0.64 | 0.55 | 0.48   | 0.38 | 0.27 |

## **Projected LED Lumen Maintenance**

| Operating Hours          | 50,000 | 75,000 | 100,000 |
|--------------------------|--------|--------|---------|
| Lumen Maintenance Factor | >0.97  | >0.95  | >0.92   |

Values calculated according to IESNA TM-21-11 methodology and valid up to  $40^{\circ}$ C.

## **Performance Data**

#### **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| Performance<br>Package | System Watts | Distribution. |        |   | 30K<br>0K, 70 CR | 1) |     |        |   | 40K<br>K, 70 CR | l) |     |        |   | 50K<br>0K, 70 CR | l) |     |
|------------------------|--------------|---------------|--------|---|------------------|----|-----|--------|---|-----------------|----|-----|--------|---|------------------|----|-----|
| rackage                |              | Туре          | Lumens | В | U                | G  | LPW | Lumens | В | U               | G  | LPW | Lumens | В | U                | G  | LPW |
|                        |              | R2            | 6,482  | 1 | 0                | 1  | 126 | 7,121  | 1 | 0               | 1  | 139 | 7,121  | 1 | 0                | 1  | 139 |
|                        |              | R3            | 6,459  | 1 | 0                | 2  | 127 | 7,096  | 1 | 0               | 2  | 139 | 7,096  | 1 | 0                | 2  | 139 |
|                        |              | R3S           | 6,631  | 1 | 0                | 1  | 129 | 7,286  | 1 | 0               | 2  | 142 | 7,286  | 1 | 0                | 2  | 142 |
|                        |              | R4            | 6,543  | 1 | 0                | 2  | 128 | 7,189  | 1 | 0               | 2  | 141 | 7,189  | 1 | 0                | 2  | 141 |
| D1                     | F1W          | R4S           | 6,313  | 1 | 0                | 1  | 124 | 6,936  | 1 | 0               | 1  | 136 | 6,936  | 1 | 0                | 1  | 136 |
| P1                     | 51W          | R5            | 6,631  | 3 | 0                | 2  | 130 | 7,286  | 3 | 0               | 2  | 143 | 7,286  | 3 | 0                | 2  | 143 |
|                        |              | R5S           | 6,807  | 3 | 0                | 1  | 133 | 7,479  | 3 | 0               | 1  | 147 | 7,479  | 3 | 0                | 1  | 147 |
|                        |              | AFR           | 6,473  | 1 | 0                | 1  | 127 | 7,112  | 1 | 0               | 1  | 139 | 7,112  | 1 | 0                | 1  | 139 |
|                        |              | AFRR90        | 6,535  | 2 | 0                | 2  | 127 | 7,179  | 2 | 0               | 2  | 140 | 7,179  | 2 | 0                | 2  | 140 |
|                        |              | AFRL90        | 6,562  | 2 | 0                | 1  | 128 | 7,210  | 2 | 0               | 2  | 140 | 7,210  | 2 | 0                | 2  | 140 |
|                        |              | R2            | 8,991  | 2 | 0                | 1  | 123 | 9,878  | 2 | 0               | 1  | 135 | 9,878  | 2 | 0                | 1  | 135 |
|                        |              | R3            | 8,959  | 2 | 0                | 2  | 124 | 9,843  | 2 | 0               | 2  | 137 | 9,843  | 2 | 0                | 2  | 137 |
|                        |              | R3S           | 9,198  | 2 | 0                | 2  | 126 | 10,106 | 2 | 0               | 2  | 139 | 10,106 | 2 | 0                | 2  | 139 |
|                        |              | R4            | 9,077  | 2 | 0                | 2  | 126 | 9,972  | 2 | 0               | 2  | 139 | 9,972  | 2 | 0                | 2  | 139 |
| D2                     | 7214         | R4S           | 8,757  | 1 | 0                | 2  | 122 | 9,622  | 2 | 0               | 2  | 134 | 9,622  | 2 | 0                | 2  | 134 |
| P2                     | 72W          | R5            | 9,198  | 4 | 0                | 2  | 128 | 10,106 | 4 | 0               | 2  | 140 | 10,106 | 4 | 0                | 2  | 140 |
|                        |              | R5S           | 9,443  | 3 | 0                | 1  | 131 | 10,374 | 3 | 0               | 1  | 144 | 10,374 | 3 | 0                | 1  | 144 |
|                        |              | AFR           | 8,979  | 2 | 0                | 1  | 125 | 9,865  | 2 | 0               | 1  | 137 | 9,865  | 2 | 0                | 1  | 137 |
|                        |              | AFRR90        | 9,064  | 3 | 0                | 2  | 124 | 9,959  | 3 | 0               | 2  | 137 | 9,959  | 3 | 0                | 2  | 137 |
|                        |              | AFRL90        | 9,102  | 3 | 0                | 2  | 125 | 10,001 | 3 | 0               | 2  | 137 | 10,001 | 3 | 0                | 2  | 137 |
|                        |              | R2            | 12,808 | 2 | 0                | 1  | 117 | 14,072 | 2 | 0               | 2  | 129 | 14,072 | 2 | 0                | 2  | 129 |
|                        |              | R3            | 12,763 | 2 | 0                | 2  | 117 | 14,023 | 2 | 0               | 2  | 129 | 14,023 | 2 | 0                | 2  | 129 |
|                        |              | R3S           | 13,104 | 2 | 0                | 2  | 120 | 14,397 | 2 | 0               | 2  | 132 | 14,397 | 2 | 0                | 2  | 132 |
|                        |              | R4            | 12,930 | 2 | 0                | 2  | 119 | 14,206 | 2 | 0               | 2  | 130 | 14,206 | 2 | 0                | 2  | 130 |
| P3                     | 109W         | R4S           | 12,475 | 2 | 0                | 2  | 114 | 13,707 | 2 | 0               | 2  | 126 | 13,707 | 2 | 0                | 2  | 126 |
| rs rs                  | 109W         | R5            | 13,104 | 4 | 0                | 2  | 120 | 14,397 | 4 | 0               | 2  | 132 | 14,397 | 4 | 0                | 2  | 132 |
|                        |              | R5S           | 13,452 | 3 | 0                | 2  | 123 | 14,779 | 3 | 0               | 2  | 136 | 14,779 | 3 | 0                | 2  | 136 |
|                        |              | AFR           | 12,791 | 2 | 0                | 1  | 117 | 14,053 | 2 | 0               | 2  | 129 | 14,053 | 2 | 0                | 2  | 129 |
|                        |              | AFRR90        | 12,913 | 3 | 0                | 3  | 118 | 14,187 | 3 | 0               | 3  | 130 | 14,187 | 3 | 0                | 3  | 130 |
|                        |              | AFRL90        | 12,967 | 3 | 0                | 2  | 118 | 14,247 | 3 | 0               | 3  | 130 | 14,247 | 3 | 0                | 3  | 130 |
|                        |              | R2            | 14,943 | 2 | 0                | 2  | 112 | 16,417 | 2 | 0               | 2  | 123 | 16,417 | 2 | 0                | 2  | 123 |
|                        |              | R3            | 14,890 | 2 | 0                | 3  | 112 | 16,360 | 2 | 0               | 3  | 123 | 16,360 | 2 | 0                | 3  | 123 |
|                        |              | R3S           | 15,287 | 2 | 0                | 2  | 115 | 16,796 | 2 | 0               | 2  | 126 | 16,796 | 2 | 0                | 2  | 126 |
|                        |              | R4            | 15,085 | 2 | 0                | 3  | 113 | 16,574 | 2 | 0               | 3  | 125 | 16,574 | 2 | 0                | 3  | 125 |
| D4                     | 133W         | R4S           | 14,554 | 2 | 0                | 2  | 109 | 15,991 | 2 | 0               | 2  | 120 | 15,991 | 2 | 0                | 2  | 120 |
| P4                     |              | R5            | 15,287 | 4 | 0                | 2  | 115 | 16,796 | 4 | 0               | 2  | 126 | 16,796 | 4 | 0                | 2  | 126 |
|                        |              | R5S           | 15,693 | 4 | 0                | 2  | 118 | 17,242 | 4 | 0               | 2  | 130 | 17,242 | 4 | 0                | 2  | 130 |
|                        |              | AFR           | 14,923 | 2 | 0                | 2  | 112 | 16,395 | 2 | 0               | 2  | 123 | 16,395 | 2 | 0                | 2  | 123 |
|                        |              | AFRR90        | 15,065 | 3 | 0                | 3  | 113 | 16,551 | 3 | 0               | 3  | 124 | 16,551 | 3 | 0                | 3  | 124 |
|                        |              | AFRL90        | 15,128 | 3 | 0                | 3  | 114 | 16,621 | 3 | 0               | 3  | 125 | 16,621 | 3 | 0                | 3  | 125 |

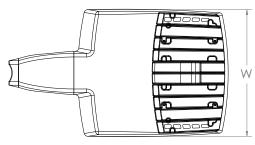


#### **Dimensions & Weights**

#### Luminaire Weight by Mounting Type

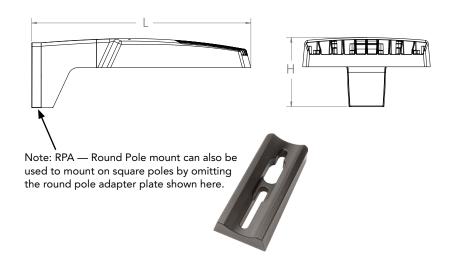
| Mounting Configuration | Total Luminaire Weight |
|------------------------|------------------------|
| SPA                    | 22 lbs                 |
| RPA                    | 24 lbs                 |
| MA                     | 22 lbs                 |
| WBA                    | 25 lbs                 |
| WBASC                  | 28 lbs                 |
| IS                     | 25 lbs                 |
| AASP                   | 25 lbs                 |
| AARP                   | 27 lbs                 |
| AAWB                   | 28 lbs                 |
| AAWSC                  | 31 lbs                 |

#### RSX1 with Round Pole Adapter (RPA)

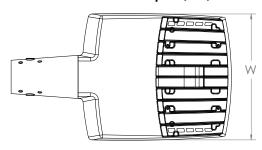


Length: 22.8" (57.9 cm) Width: 13.3" (33.8 cm)

Height: 3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm

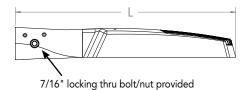


#### RSX1 with Mast Arm Adapter (MA)



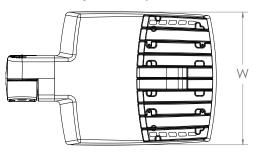
Length: 23.2" (59.1 cm) Width: 13.3" (33.8 cm)

Height: 3.0" (7.6 cm) Main Body 3.5" (8.9 cm) Arm



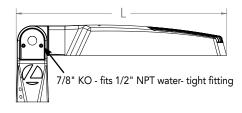


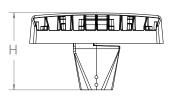
#### RSX1 with Adjustable Slipfitter (IS)



Length: 20.7" (52.7 cm) Width: 13.3" (33.8 cm)

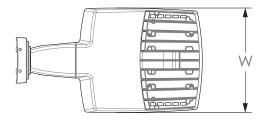
Height: 3.0" (7.6 cm) Main Body 7.6" (19.3 cm) Arm

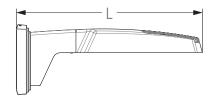


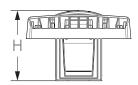




#### **RSX1 with Wall Bracket (WBA)**



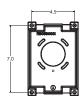


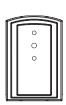


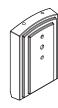
## Wall Bracket (WBA) Mounting Detail

Length: 23.6" (59.9 cm) Width: 13.3" (33.8 cm)

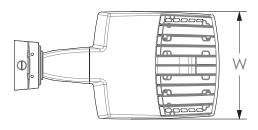
Height: 3.0" (7.6 cm) Main Body 8.9" (22.6 cm) Arm

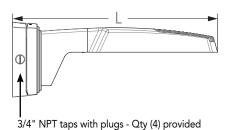


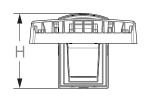




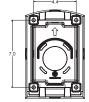
#### RSX1 with Wall Bracket with Surface Conduit Box (WBASC)

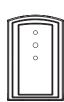


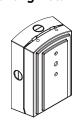




#### Surface Conduit Box (SCB) Mounting Detail





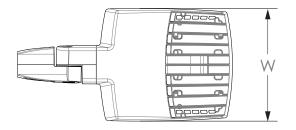


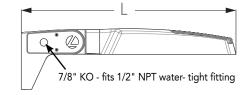
Length: 25.3" (64.3 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body

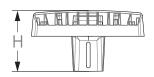
9.2" (23.4 cm) Arm



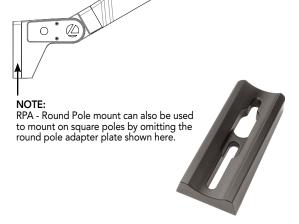
#### RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)







Length: 25.3" (65.3 cm) AASP 26.3" (66.8 cm) AARP Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body 7.2" (18.2 cm) Arm

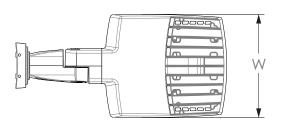


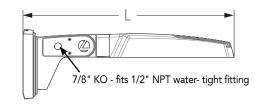
#### Notes

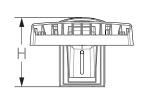
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

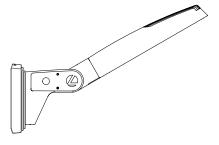
AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

#### RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)

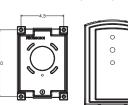


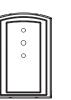


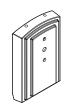










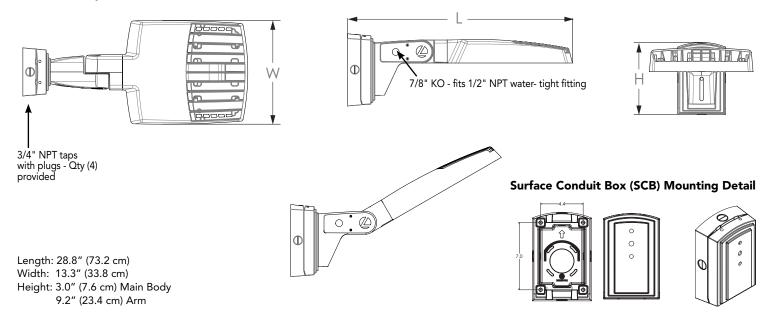


Length: 27.1" (68.8 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body

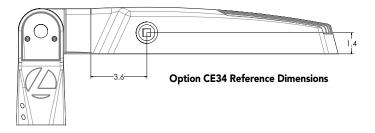
8.9" (22.6 cm) Arm



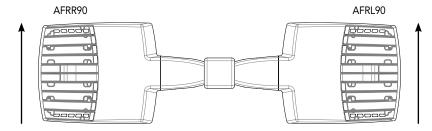
#### RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



#### **Additional Reference Drawings**



#### Automotive Front Row - Rotated Optics (AFRL90/R90)



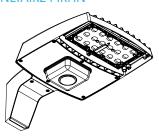
(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

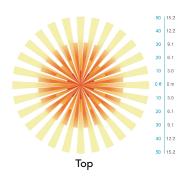


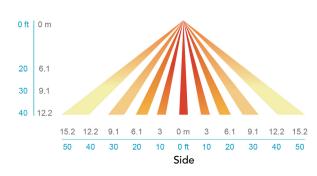
#### nLight Control - Sensor Coverage and Settings

#### nLight Sensor Coverage Pattern

**NLTAIR2 PIRHN** 







| l |               |                              | M                             | otion Sensor Defaul    | t Settings - Option PIRHN            |   |                                |
|---|---------------|------------------------------|-------------------------------|------------------------|--------------------------------------|---|--------------------------------|
|   | Option        | Dimmed State<br>(unoccupied) | High Level<br>(when occupied) | Photocell<br>Operation | Dwell Time<br>(occupancy time delay) | Ramp-up Time<br>(from unoccupied to occupied) | Ramp-down Time (from occupied) |
|   | NLTAIR2 PIRHN | Approx. 30% Output           | 100% Output                   | Enabled @ 1.5FC        | 7.5 minutes                          | 3 seconds                                     | 5 minutes                      |

\*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is titled.

#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

#### CONSTRUCTION

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

#### **FINISH**

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

#### OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 35, Type 4, Type 45, Type 55, AFR (Automotive Front Row), and AFR rotated AFRR90 and ARFL90.

#### ELECTRICA

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >192/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/ IEEE C62.41.2).

#### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

#### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

#### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

#### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at <a href="https://www.designlights.org/QPL">www.designlights.org/QPL</a> to confirm which versions are qualified.

which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

#### **BUY AMERICAN**

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.

Please refer to www.acuitybrands.com/buy-american for additional information.

#### WARRANTY

5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/customer-support/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Item D.1.



## CITY OF FRANKLIN

#### REPORT TO THE PLAN COMMISSION

## Meeting of March 3, 2022

## **Preliminary Plat – Cape Crossing**

**RECOMMENDATION:** City Development staff does <u>not</u> recommend approval of the Preliminary Plat as presented by the applicant. However, should the Plan Commission wish to consider approval of this Preliminary Plat, City Development staff recommends such approval subject to the conditions set forth in the attached draft resolution.

**Project Name:** Preliminary Plat – Cape Crossing subdivision

**Project Address:** 12200 W Ryan Road

Applicant: Neumann Developments, Inc

**Agent:** Bryan Lindgren. Neumann Developments, Inc.

**Property Owner:** Franklin DC Land LLC

Current Zoning: Planned Development District No. 40, Cape Crossing

2025 Comprehensive Plan: Residential and Areas of Natural Resources Features

**Use of Surrounding Properties:** Floodplain and natural resources areas on properties owned by

Wisconsin DNR to the north and Milwaukee Metropolitan Sewage District to the east, Wisconsin Electric Power Co. right-of-way to the southeast (future S.116<sup>th</sup> Street trail), residential single-family zoned multifamily to the south, residential subdivisions and golf course in the city of Muskego to the west.

**Applicant's Action Requested:** Recommendation to the Common Council for approval of this

Preliminary Plat.

Planner: Régulo Martínez-Montilva, AICP, Principal Planner

#### **Introduction:**

Preliminary Plat for the new Cape Crossing subdivision to be located on the north side of Ryan Road, next to Franklin-Muskego city limits. This proposal is for 130 single-family home sites on an 84-acre site.

The Cape Crossing Planned Development District (PDD) was conditionally approved by the Common Council on January 18, 2022, Ordinance 2022-2492 (appendix #1), which establishes the development standards for this subdivision. The former zoning was is R-3 – Suburban/Estate Single-Family Residence District.

A Concept Review for the Planned Development District was presented before the Common Council on August 3, 2021, the first concept version had 180 lots, then it was reduced to 142 lots and finally to the current design with 130 lots.

#### **Project description and analysis:**

The proposed 130-lot single-family residential subdivision consists of the new South Cape Crossing Boulevard connecting to Ryan Road, and two new public internal streets: Oxbow Lane and Winding Way. The total new linear right-of-way to be dedicated to the city is 6,507 feet: 250 feet for the 80-foot wide South Cape Crossing Boulevard, and the rest for Oxbow Lane and Winding Way designed to the typical 60-foot minor street section.

Per the recommendations of the Traffic Impact Analysis prepared by TADI dated November 16, 2021, acceleration and deceleration lanes are proposed at the intersection of Ryan Road and the new S. Cape Crossing Boulevard as depicted in Sheet C-2 Details.

Site Intensity and Capacity calculations have been prepared (UDO §15-3.0500) and reviewed as part of the Cape Crossing Planned Development District. The total gross site area is 84.01 acres, the gross density is 1.70 dwelling units per acre and the net density is 2.60 dwelling units per acre. The net buildable site area is 53.59 acres, excluding land dedicated for right-of-way purposes, protected natural resources and open space.

It is unlikely that the Cape Crossing subdivision would connect to future development to the west, north or east, due to the presence of a gas pipeline, overhead high tension wires to the east, wetland and floodplain to the east and north, as well as wetlands, woodlands and city limits to the west. Future road connections to this development other than access to Ryan Road is not anticipated.

The Cape Crossing Planned Development District (PDD) has two areas with different developments standards: The Villas and The Estates. The Villas is the south half of the subdivision and allows for smaller lots with a minimum lot size of 9,000 feet, 76 lots are located in The Villas area. The Estates is the north half with 54 larger lots, 12,000 square feet minimum. All lots comply with the development standards set forth in the PDD for The Villas and The Estates.

Lots 2, 3 and 4 did not comply with the minimum 60-foot street frontage of UDO Section 15-5.0101.B.1. The applicant has revised these lots accordingly following staff review comments (comment #18).

In addition to the 130 single-family residential lots and right-of-way areas, this plat has 6 outlots. Outlot 1 is the largest (25.33 acres) and it is intended for natural resources, stormwater areas, landscape buffering (including public path), gas line and overhead high tension wires. Outlot 2 is for the proposed 12-foot wide emergency access; Outlot 3 is for landscape buffering (including public path) and natural resources; Outlot 4 is for the clubhouse, open space and stormwater area; Outlot 5 is for a fire pit, open space and private path; and Outlot 6 is for a potential trail head.

No residential lot would have direct access to Ryan Road because it is prevented by Outlots 1 and 3, as well as landscape buffer easements along Ryan Road.

The proposed subdivision will be served by municipal water and public sanitary sewer.

City Development staff requested information about the estimated site improvements cost for this subdivision (comment #8). The applicant has not provided this information and stated that "the site improvement cost breakdown will be provided once the plan are prepared and initial bids are received". Note that per Section 15-7.0502 Plat Data, subsection Z, all site improvement cost shall be submitted as part of the Preliminary Plat. The attached resolution includes a condition requiring site improvement cost information as part of the Final Plat application (condition #14).

#### Pedestrian amenities

All new streets in this development, S. Cape Crossing Boulevard, S. Winding Way and W. Oxbow Lane, would have sidewalks on both sides, 5-foot wide and 1 feet off the right-of-way line, in accordance with the typical street sections for urban collector streets and urban minor streets.

Following staff review comments based on the Comprehensive Master Plan (comments #1-2), the applicant added sidewalks to S. Cape Crossing Boulevard, as well as a 10-foot wide public pedestrian path on the north side of Ryan Road. The west section of this path (west of the WE Energies right-of-way) would be located within Outlots 3 and 4 as part of the landscape bufferyard easement, and the east section on the Ryan Road right-of-way, south of the existing overhead power lines.

Note that the proposed path layout would impact wetland (W-4) on the north side of Ryan Road, this wetland impact would be subject to the pertinent wetland permitting or exemption by the Wisconsin DNR and US Army Corp of Engineers. If this wetland is not exempt from state and federal wetland regulations, a Natural Resource Special Exception or practicable alternatives analysis by the City of Franklin would also be required.

The subject path would end near the Franklin-Muskego city limits. It is worth noting that "Currently, there is no plan or design to put a path along the north side of Ryan Drive from North Cape Road to the City of Muskego limits" as stated by the Muskego Public Works and Development Director, Scott Kroeger (appendix #2).

The final path design, including but not limited to the crossing of S. Cape Boulevard and curb ramps, shall be subject to review and approval by the Engineering Department.

#### Stormwater Management and other Engineering approvals and required improvements

Stormwater areas are being proposed on Outlots 1 & 4. The applicant must submit a Stormwater Management Plan and calculations to the Engineering Department for review, and will require final Engineering Department approval as part of the review of the Final Plat Application. Section 15-8.0100 of the UDO sets forth the required improvements for all land divisions. The master grading is also subject to review by the Engineering Department. At the time of building permit review for each lot, lot grading shall be consistent with the master grading plan.

## Natural Resource Protection Plan (NRPP)

A Natural Resource Protection Plan (NRPP) has been prepared by Stantec Consulting Services Inc, dated August 14, 2022 (appendix 3). The following natural resources have been identified on the subject site: 6 wetlands areas with associated wetland buffers and setbacks, mature woodlands and floodplain. The mature woodlands, located on the northwest corner, and the floodplain area, located on the northeast corner would not be impacted by this subdivision.

The preliminary grading plan (sheet C-3) indicates impact to wetland W-4, as well as buffers and setbacks of wetlands W-2 and W-3. The impact to wetland W-4 and associated buffers and setback is for the purpose of a public pedestrian path as discussed previously in the "Pedestrian amenities" section. The proposed impacts to the wetland buffers of wetland W-3 is for grading of stormwater areas; and for grading of Lot 33 within the buffer of wetland W-2. Grading activities within the 30-foot wetland buffer are not permitted per the UDO, unless a Natural Resource Special Exception is granted, the attached resolution is not approving any impact to wetlands or wetland buffers (condition #6). Grading within the 50-foot wetland setback is permitted, as long as a permanent vegetative cover is established after grading.

#### Signage:

The plat depicts the monument sign in the median of the future S. Cape Crossing Boulevard. It is recommended to place this subdivision monument outside future right-of-way areas and corner vision triangles (condition #7).

A subdivision monument sign or other similar signage would require separate City review and approval.

#### Other required documents

§15-7.0603 requires submittal of any Declaration of Deed Restrictions, Protective Covenants, Conservation Easements, and Homeowners' Association prior to approval of the Final Plat.

Improvements including streets and utilities must be installed prior to recording of the Final Plat (§15-2.0303.A). If complete construction is not practicable, the applicant may enter into a Subdivider's ("Developer's") agreement with the City of Franklin, and provide a letter of credit for improvements (§15-2.0303.B). Should the final plat be recorded in two phases, the applicant would need to provide the financial guaranty in the amount required for each phase of the final plat prior to the recording of that phase.

#### Recommendation

City Development staff does <u>not</u> recommend approval of the Preliminary Plat as presented by the applicant, because the proposed grading within the wetland buffer is not permitted unless a Natural Resource Special Exception is granted.

However, should the Plan Commission wish to consider approval of this Preliminary Plat, City Development staff recommends such approval subject to the conditions set forth in the attached draft resolution.

## **Appendices**

- 1. Cape Crossing Planned Development District (PDD), Ordinance 2022-2492. January 18, 2022.
- 2. E-mail from City of Muskego Planning Manager Adam Trzebiatowski, dated February 23, 2022.
- 3. Natural Resource Protection Plan (NRPP) prepared by Stantec Consulting Services Inc, dated August 14, 2022, excluding appendix B-C.

MILWAUKEE COUNTY
[Draft 2-24-22]

RESOLUTION NO. 2022-

A RESOLUTION CONDITIONALLY APPROVING A
PRELIMINARY PLAT FOR CAPE CROSSING SUBDIVISION
(AT 12200 WEST RYAN ROAD)
(NEUMANN DEVELOPMENTS, INC., APPLICANT)

WHEREAS, the City of Franklin, Wisconsin, having received an application for approval of a preliminary plat for Cape Crossing subdivision, such plat being a part of the Southwest 1/4 and Northwest 1/4 of the Southwest 1/4 of Section 19, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin, described as follows: Beginning at the southwest corner of the Southwest 1/4 of said Section 19; thence North 01°22'14" West along the west line of said Southwest 1/4, 2658.45 feet to the northwest corner of said Southwest 1/4; thence South 89°33'48" East along the north line of said Southwest 1/4, 1413.03 feet to the east line of the west 1/2 of said Southwest 1/4 as described by the Original Section Survey; thence South 00°36'57" East along said east line, 2174.70 feet to the northwesterly line of The Milwaukee Electric Railway and Light Company (now Wisconsin Electric Power Company) as recorded in the Register of Deeds office for Milwaukee County, in Volume 1395, Page 367 and a point on a curve; thence southwesterly 599.21 feet along the arc of said curve to the right, whose radius is 7777.60 feet and whose chord bears South 36°38'24" West, 599.06 feet to the south line of said Southwest 1/4; thence North 89°31'45" West along said south line, 1015.31 feet to the Point of Beginning. ALSO that part of the Southwest 1/4 of the Southwest 1/4 of Section 19, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin, described as follows: Commencing at the southwest corner of the Southwest 1/4 of said Section 19; thence South 89°31'45" East along the south line of said Southwest 1/4, 1142.36 feet to the southeasterly line of The Milwaukee Electric Railway and Light Company (now Wisconsin Electric Power Company) as recorded in the Register of Deeds office for Milwaukee County, in Volume 1395, Page 367, a point on a curve and the Point of Beginning 2; Thence northeasterly 387.26 feet along the arc of said curve to the left, whose radius is 7877.60 feet and whose chord bears North 36°51'54" East, 387.22 feet to the east line of the west 1/2 of said Southwest 1/4 as described by the Original Section Survey; thence South 00°36'57" East along said east line, 311.75 feet to the south line of said Southwest 1/4; thence North 89°31'45" West along said south line, 235.67 feet to the Point of Beginning 2. CONTAINING 3,659,363 square feet (84.0074 acres) of land, more specifically, of the property located at 12200 West Ryan Road, bearing Tax Key Nos. 890-9991-001 and 890-9991-002, Neumann Developments, Inc., applicant; said preliminary plat having been reviewed by the City Plan Commission and the Plan Commission having recommended approval thereof at its meeting on March 3, 2022, pursuant to certain conditions: and

WHEREAS, the Common Council having reviewed such application and Plan

| NEUMANN DEVELOPMENTS, INC. – PRELIMINARY PLAT |
|---|
| RESOLUTION NO. 2022-                          |
| Page 2  |

Commission recommendation and the Common Council having determined that such proposed preliminary plat is appropriate for approval pursuant to law upon certain conditions.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the Preliminary Plat of Cape Crossing subdivision, as submitted by Neumann Developments, Inc., as described above, be and the same is hereby approved, subject to the following conditions:

- 1. That any and all objections made and corrections required by the City of Franklin, by Milwaukee County, and by any and all reviewing agencies, shall be satisfied and made by the applicant.
- 2. That all land development and building construction permitted or resulting under this Resolution shall be subject to impact fees imposed pursuant to §92-9 of the Municipal Code or development fees imposed pursuant to §15-5.0110 of the Unified Development Ordinance, both such provisions being applicable to the development and building permitted or resulting hereunder as it occurs from time to time, as such Code and Ordinance provisions may be amended from time to time.
- 3. Franklin DC Land, LLC, successors and assigns and any developer of the Cape Crossing 130 lot, 6 outlot and 6,579 linear feet of right-of-way subdivision development shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the Cape Crossing 130 lot, 6 outlot and 6,579 linear feet of right-of-way subdivision development, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
- 4. The approval granted hereunder is conditional upon Neumann Developments, Inc. and the Cape Crossing 130 lot, 6 outlot and 6,579 linear feet of right-of-way subdivision development project for the property located at 12200 West Ryan Road: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
- 5. The Cape Crossing 130 lot, 6 outlot and 6,579 linear feet of right-of-way subdivision development project shall be developed in substantial compliance with the terms and provisions of this Resolution.

# NEUMANN DEVELOPMENTS, INC. – PRELIMINARY PLAT RESOLUTION NO. 2022-\_\_\_\_\_Page 3

- 6. This Preliminary Plat approval is contingent upon the applicant obtaining a Natural Resource Special Exception for impacts to protected natural resources, including but not limited to grading within the wetland buffer, prior to recording the Final Plat. In case of impacts attributable to the pedestrian path on the north side of Ryan Road, a practicable alternatives analysis pursuant to City of Franklin Ordinance No. 2016-2224 may be appropriate.
- 7. This Preliminary Plat resolution is not approving the placement of any monument sign within the proposed right-of-way areas. The proposed subdivision monument sign shall be relocated outside existing or proposed right-of-way areas, and vision triangles. Signage shall be subject to issuance of a Sign Permit from the City Development Department.
- 8. The applicant shall submit a Lighting Plan, as defined in the Unified Development Ordinance as part of the Final Plat application.
- 9. Pursuant to the Unified Development Ordinance §15-7.0301, the Final Plat application should include a Landscape Plan with location, extent, type (common name and scientific name in the case of plant materials), and sizes of proposed landscaping and landscape plantings in all areas of the proposed development, designated as a "Landscape Bufferyard Easement".
- 10. Written conservation easements and landscape bufferyard easements shall be submitted as part of the Final Plat application for Common Council review and approval, and recording with the Milwaukee County Register of Deeds Office at the time of recording the Final Plat.
- 11. All protected natural resources to remain (as depicted on the Natural Resource Protection Plan) shall be shown on the face of the plat, and included within a Conservation Easement, as part of the Final Plat application. A "Conservation Easement Restrictions" note shall also be depicted on the face of the plat as part of the Final Plat application.
- 12. A draft of the declaration of deed restrictions, protective covenants, and the legal instruments and rules for any proposed Wisconsin non-profit membership corporation (homeowners association) whereby the subdivider intends to regulate land uses in the proposed subdivision and otherwise protect the proposed development shall be submitted to the City as part of the Final Plat for review and approval solely as to form and as such may pertain to existing city rules and regulations.
- 13. The Final Plat shall be in full compliance with all pertinent City of Franklin Design Standards and Construction Specifications.

| NEUMANN DEVELOPMENTS, INC. – PRELIMINARY PL. | ΑT |
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| RESOLUTION NO. 2022                          |    |
| Page 4                                       |    |

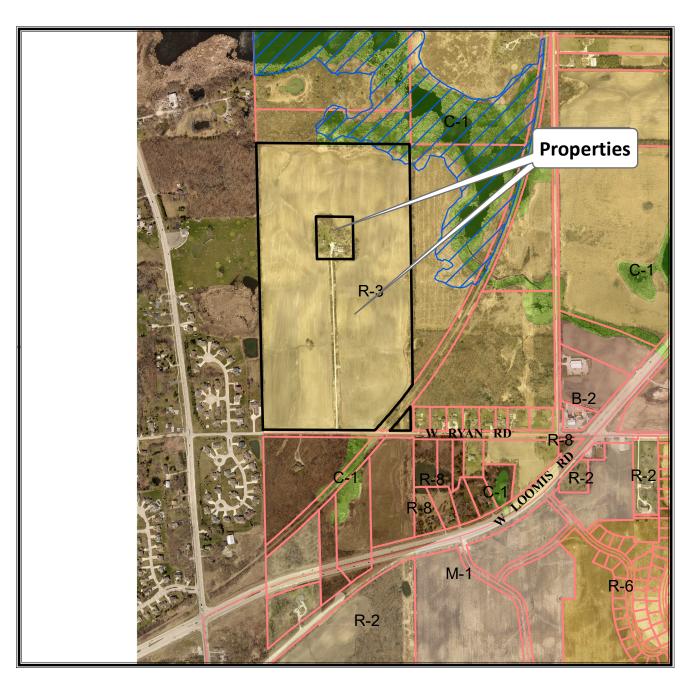
- 14. Site improvement cost information, itemized in the categories listed in the city's Subdivision Development Agreement, shall be included in the Final Plat application.
- 15. The applicant shall be responsible for filing a Subdivision Development Agreement consistent with all regulations of the Unified Development Ordinance and Municipal Code, as may be amended, for the Final Plat. Said Subdivision Development Agreement shall be approved by the Common Council.
- 16. Grading, stormwater management, erosion control and utility plans shall be subject to review by the Engineering Department.
- 17. The final path design on the north side of Ryan Road, including but not limited to the crossing of S. Cape Boulevard and curb ramps, shall be subject to review and approval by the Engineering Department.
- 18. Separate site plan approval shall be required for amenity areas, such as clubhouse and fire pit.

|           | •             | gular meeting of the, 202 | Common Council of the City of Franklin this 22.   |
|-----------|---------------|---------------------------|---|
|           | -             | ed at a regular med       | eting of the Common Council of the City of, 2022. |
|           |               |                           | APPROVED:   |
|           |               |                           |   |
|           |               |                           | Stephen R. Olson, Mayor                           |
| ATTEST:   |               |                           |   |
|           |               |                           |   |
| Sandra L. | Wesolowski, C | ity Clerk                 |   |
| AYES      | NOES          | ABSENT                    |   |



Address: 12200 W. Ryan Road

TKNs: 890-9991-001 and 890-9991-002



Planning Department (414) 425-4024

0 500 1,000 2,000 Feet

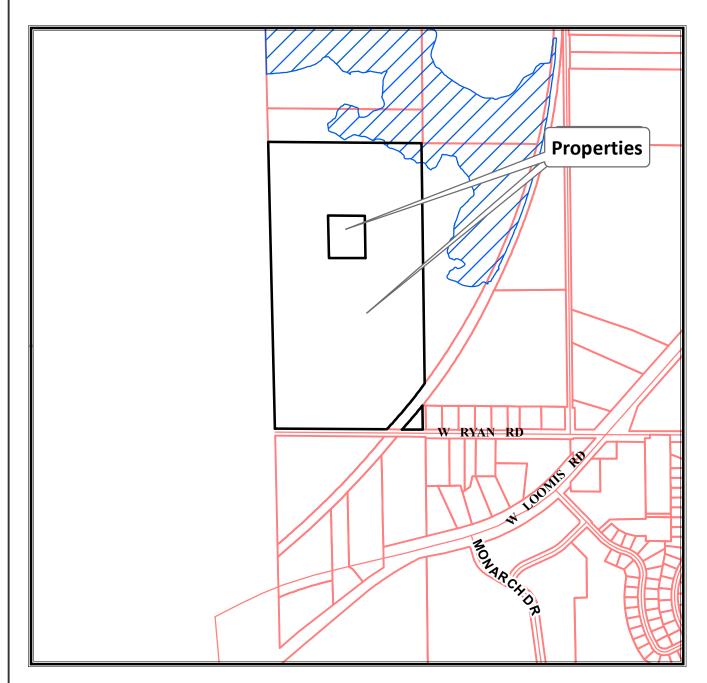
NORTH 2021 Aerial Photo

This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.

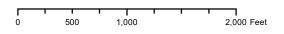


Address: 12200 W. Ryan Road

TKNs: 890-9991-001 and 890-9991-002



Planning Department (414) 425-4024



NORTH 2021 Aerial Photo

This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.

MILWAUKEE COUNTY

#### **ORDINANCE NO. 2022-2492**

AN ORDINANCE TO CREATE SECTION 15-3.0445 OF THE
FRANKLIN UNIFIED DEVELOPMENT ORDINANCE ESTABLISHING
PLANNED DEVELOPMENT DISTRICT NO. 40 (CAPE CROSSING) AND
TO REZONE PROPERTY FROM R-3 SUBURBAN/ESTATE SINGLE-FAMILY RESIDENCE
DISTRICT AND C-1 CONSERVANCY DISTRICT
TO PLANNED DEVELOPMENT DISTRICT NO. 40
(12200 WEST RYAN ROAD)

WHEREAS, a petition for zoning change having been filed to change the zoning on a tract of land from R-3 Suburban/Estate Single-Family Residence District and C-1 Conservancy District to a Planned Development District, which tract of land is located at 12200 West Ryan Road, bearing Tax Key Nos. 890-9991-001 and 890-9991-002, and which is more particularly described below;

WHEREAS, the Plan Commission having determined that the proposed Planned Development District No. 40 (*Cape Crossing*) is in conformance with the City of Franklin Comprehensive Master Plan and contains more than 3 acres;

WHEREAS, a Public Hearing was held before the Plan Commission on the 9th day of December, 2021, and the Plan Commission having reviewed the Planned Development District No. 40 petition and having found that the proposed Planned Development District conforms to the standards for adoption of a Planned Development District, and having recommended to the Common Council that the creation of Planned Development District No. 40 be approved; and

WHEREAS, the Common Council having reviewed the petition and recommendation following the Public Hearing and having determined that the adoption of an ordinance to create Planned Development District No. 40 will promote the health, safety and welfare of the Community.

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

**SECTION 1:** 

§15-3.0102 (Zoning Map) of the Unified Development Ordinance of the City of Franklin, Wisconsin, is hereby amended to provide that the zoning district designation for the property described below be changed from R-3 Suburban/Estate Single-Family Residence District and C-1 Conservancy District to Planned Development District No. 40 (*Cape Crossing*) as is created under SECTION 2 of this ordinance:

LEGAL DESCRIPTION: Being a part of the Southwest 1/4 and Northwest 1/4 of the Southwest 1/4 of Section 19, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin, described as follows: Beginning at the southwest corner of the Southwest 1/4 of said Section 19; thence North 01°22'14" West along the west line of said

Southwest 1/4, 2658.45 feet to the northwest corner of said Southwest 1/4; thence South 89°33'48" East along the north line of said Southwest 1/4, 1413.03 feet to the east line of the west 1/2 of said Southwest 1/4 as described by the Original Section Survey; thence South 00°36'57" East along said east line, 2174.70 feet to the northwesterly line of The Milwaukee Electric Railway and Light Company (now Wisconsin Electric Power Company) as recorded in the Register of Deeds office for Milwaukee County, in Volume 1395, Page 367 and a point on a curve; thence southwesterly 599.21 feet along the arc of said curve to the right, whose radius is 7777.60 feet and whose chord bears South 36°38'24" West, 599.06 feet to the south line of said Southwest 1/4; thence North 89°31'45" West along said south line, 1015.31 feet to the Point of Beginning.

#### **ALSO**

That part of the Southwest 1/4 of the Southwest 1/4 of Section 19, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin, described as follows: Commencing at the southwest corner of the Southwest 1/4 of said Section 19; thence South 89°31'45" East along the south line of said Southwest 1/4, 1142.36 feet to the southeasterly line of The Milwaukee Electric Railway and Light Company (now Wisconsin Electric Power Company) as recorded in the Register of Deeds office for Milwaukee County, in Volume 1395, Page 367, a point on a curve and the Point of Beginning 2; Thence northeasterly 387.26 feet along the arc of said curve to the left, whose radius is 7877.60 feet and whose chord bears North 36°51'54" East, 387.22 feet to the east line of the west 1/2 of said Southwest 1/4 as described by the Original Section Survey; thence South 00°36'57" East along said east line, 311.75 feet to the south line of said Southwest 1/4; thence North 89°31'45" West along said south line, 235.67 feet to the Point of Beginning 2.

**SECTION 2:** 

§15-3.0445 of the Unified Development Ordinance of the City of Franklin, Wisconsin, is hereby created to read as follows:

Section 15-3.0445 PLANNED DEVELOPMENT DISTRICT NO. 40 (CAPE CROSSING)

#### A. Exhibits.

This Planned Development District shall be constructed, operated and maintained in conformance with the following listed Exhibits, all containing matters approved hereunder or by the separate approval of the Common Council as set forth below, and all applicable terms and provisions of the Municipal Code and the Unified Development Ordinance not

enumerated herein and not contrary to the terms or provisions of this ordinance, including, but not limited to such permits as are required under Division 15-8.0200 Construction, Division 15-8.0300 Construction Site Erosion Control and Division 15-8.0600, as well as the Development Agreement required as a condition of approval of Exhibit A, below. The plans contained in the following listed Exhibits may be adjusted in minor detail and so noted prior to construction upon the written approval of the City Engineer or City Planning manager in order to comply with all of the conditions of this Ordinance.

- 1. Exhibit A: Concept Plan entitled "Cape Crossing" prepared by Anthony Zanon, Pinnacle Engineering Group, dated November 23, 2021.
- 2. Exhibit B: Natural Resource Protection Plan prepared by Eric C. Parker, Stantec Consulting Services, Inc. dated August 2017.
- 3. **Developer**: The applicant, Neumann Developments, Inc.
- B. **District Intent.** It is the intent of the Planned Development District No. 40 (Cape Crossing) to allow for single-family residential development with reduced lot size and increased lot coverage. The Planned Development District No. 40 consists of two (2) areas with different development standards: The Estates Area and The Villas Area.

## C. General Requirements.

- 1. The site shall be developed in substantial compliance with the district standards and specific development standards for The Estates Area and The Villas Area set forth in this Ordinance.
- D. **District Standards.** Planned Development District No. 40 is further intended to have the following development standards:

(a) Permitted uses: Single-family residential, clubhouse and amenity areas depicted in Exhibit A.

(b) Total lots: 130 lots, maximum

(c) Maximum gross density: 1.70 dwelling units/acre

(d) Maximum net density: 2.61 dwelling units/acre

(e) Minimum open space ratio: 0.42

#### E. The Estates Area.

1. **Development Standards.** The Estates Area is further intended to have the following development standards:

Lots: 54 lots, maximum (a)

(b) Minimum lot size: 12,000 square feet

85 feet, measured at setback line Minimum lot width, (c)

Minimum front setback: 25 feet (d)

Minimum corner setback: 25 feet (e)

Minimum side setback: 10 feet (f)

25 feet Minimum rear setback: (g)

(h) Maximum lot coverage: 0.25

(i) Maximum building height,

> Principal structure: 2.5 stories / 30 feet, whichever is greater

1 story / 15 feet, whichever is greater Accessory structure:

#### F. The Villas Area.

1. Development Standards. The Villas Area is further intended to have the following development standards:

(a) Lots: 76 lots, maximum

Minimum lot size: 9,000 square feet (b)

70 feet/90 feet for corner lots, measured at (c) Minimum lot width,

setback line

(d) Minimum front setback: 25 feet

25 feet Minimum corner setback: (e)

Minimum side setback: (f)

7.5 feet

(g) Minimum rear setback: 25 feet

(h) Maximum lot coverage: 0.30

(i) Maximum building height,

Principal structure:

2.5 stories / 30 feet, whichever is greater

Accessory structure: 1 story / 15 feet, whichever is greater

#### G. Plat Review.

1. The applicant shall be responsible for filing a Preliminary Plat of Subdivision consistent with all requirements of the Unified Development Ordinance.

- 2. The applicant shall submit a Landscape Plan and Lighting Plan, as defined in the Unified Development Ordinance as part of the Preliminary Plat submittal.
- 3. The applicant shall be responsible for filing a Final Plat of Subdivision consistent with all requirements of the Unified Development Ordinance.
- 4. The applicant shall be responsible for filing a Subdivision Development Agreement consistent with all regulations of the Unified Development Ordinance and Municipal Code, as may be amended, for the Final Plat. Said Subdivision Development Agreement shall be approved by the Common Council.
- 5. A Homeowner Association document shall accompany the Final Plat including deed restrictions specifying the maintenance of common areas. Said document shall be recorded after approval by the City of Franklin Attorney.
- 6. Grading, stormwater management, erosion control and utility plans shall be subject to review by the Engineering Department.
- 7. All protected natural resources indicated in the Natural Resource Protection Plan, including wetlands, wetland buffers, wetland setbacks and mature woodlands shall be protected by a conservation easement in accordance with the Unified Development Ordinance.

## H. Conditions of Approval.

The development of PDD No. 40 upon the adoption of 15-3.0445 shall occur and be in compliance with the Exhibit A Concept Plan (including the conditions of approval below, which are to be completed prior to the approval of the Final Plat).

- 1. The drainage easement along the west property line (or city limits) should include landscaping screening between lots 6-15 as long as it is acceptable to the Engineering Department. The applicant should submit a landscape plan for this area with the Preliminary Plat.
- 2. The applicant should submit written approval from the holder of the 15-foot West Shore pipe line easement (Doc. 3875551) as a requirement for the grading plans associated with the Final Plat.

SECTION 3: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 4: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

SECTION 5:

This ordinance shall take effect and be in force from and after its passage and publication.

Introduced at a regular meeting of the Common Council of the City of Franklin this 18th day of January, 2022, by Alderman Hanneman.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this 18th day of January, 2022.

APPRØVED:

Stephen R. JOIson, Mayor

ATTEST:

Sandra L. Wesolowski, City Clerk

AYES 4 NOES 3 ABSENT 0 (Mayor Olson broke the tie)

## **Regulo Martinez-Montilva**

From: Adam Trzebiatowski <ATrzebiatowski@cityofmuskego.org>

Sent: Wednesday, February 23, 2022 11:34 AM

**To:** Regulo Martinez-Montilva

**Cc:** Heath Eddy; Glen Morrow; Scott Kroeger

**Subject:** RE: North Cape Crossing

**Attachments:** doc04271320220223110402.pdf

**Follow Up Flag:** Follow up **Flag Status:** Flagged

Hi Regulo,

Thanks for the update on those plans and that development. I passed your question onto Scott Kroeger, our Public Works & Development Director and here are his comments:

"Currently, there is no plan or design to put a path along the north side of Ryan Drive from North Cape Road to the City of Muskego limits. I have attached a map showing the planned Franklin trail plan. The City of Muskego was going to use DPW forces and recycled asphalt millings to finish the last portion of this trail (highlighted area). However it sounds like WDNR will not approve this route."

Please let me know if you have any further questions.

Thanks.



Adam Trzebiatowski, AICP
Planning Manager
City of Muskego
Department of Public Works & Development
Planning Services Division
W182 S8200 Racine Avenue
Phone: (262) 679-5598

Fax: (262) 679-5614

Email: adamt@cityofmuskego.org
Web: www.cityofmuskego.org

This message originates from Adam Trzebiatowski. It contains information that may be confidential or privileged and is intended only for the individual named above. It is prohibited for anyone to disclose, copy, distribute or use the contents of this message without permission, except as allowed by Wisconsin Public Records Laws. If this message is sent to a quorum of a governmental body, my intent is the same as though it were sent by regular mail and further distribution is prohibited. All personal messages express views solely of the sender, which are not attributed to the municipality I represent, and may not be copied or distributed without this disclaimer.

# Natural Resource Protection Plan

Franklin DC Land, LLC City of Franklin, Milwaukee County, Wisconsin Stantec Project #: 193705469 Lead Investigator: Eric C. Parker



Prepared for: Mr. Patrick Dempsey Franklin DC Land, LLC 142 East Capitol Drive, Suite 200 Hartland, WI 53029

Prepared by: Stantec Consulting Services Inc. 12075 Corporate Parkway, Suite 200 Mequon, Wisconsin 53092 Phone: (414) 218-4450

Fax: (262) 241-4901

## **Sign-off Sheet**

This document entitled Natural Resource Protection Plan was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Franklin DC Land, LLC (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment considering the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not consider any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party because of decisions made or actions taken based on this document.

Prepared by

(signature)

Eric C. Parker, PWS, Senior Scientist

Reviewed by

(signature)

Brian S. Lennie, Senior Scientist

Independent Review by

(signature)

Carol R. McCoy, Project Manager



Franklin DC Land LLC TABLE OF CONTENTS August 14, 2017

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Franklin DC Land LLC INTRODUCTION
August 14, 2017

## 1.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) performed an investigation of natural resources per the City of Franklin's Unified Development Ordinance (UDO) on the Franklin DC Land, LLC property (the "Property") on behalf of Franklin DC Land, LLC. The Property is approximately 81.57 acres and is in the southwest quarter of Section 19, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin. Specifically, the Property is located at 12200 West Ryan Road, approximately 600 feet east of County Trunk Highway (CTH) OO (North Cape Road) (Figure A).

The purpose and objective of the investigation was to: 1) determine the type, location, and extent of natural resources within the Property; and 2) for the natural resource types present, to delineate their boundaries. Field work was completed by Eric C. Parker of Stantec on June 26<sup>th</sup> and 27<sup>th</sup>, 2017. Six wetlands, including one shoreland wetland, one mature woodland, and floodplain were identified within the Property. Additionally, the approximate locations of nearby off-site wetlands and waterways (both contiguous and non-contiguous) were sketched on adjacent parcels to the Property.

The wetlands identified in this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers (USACE), state regulation under the jurisdiction of the Wisconsin Department of Natural Resources (WDNR), and local jurisdiction under the City of Franklin. The remaining natural resources are subject to the City of Franklin's UDO. Stantec recommends Stantec's wetland delineation report (provided as a separate report) be submitted to City planning staff, the WDNR, and USACE for final jurisdictional review and concurrence.



Franklin DC Land LLC METHODS August 14, 2017

## 2.0 METHODS

#### 2.1 FEATURE DETERMINATIONS

The following natural resources features were investigated for presence on the Property per Section 15-4.0102 of the UDO: Steep Slopes, Woodlands and Forests, Lakes and Ponds, Streams, Shore Buffers, Floodplain/Floodway, Wetlands and Shoreland Wetlands, Wetland Buffers, and Wetland Setbacks.

## 2.2 STEEP SLOPES

Steep slopes as defined in the UDO are greater than or equal to 10 percent. The protection standard varies for slopes steeper than 20 percent, and additionally for slopes steeper than 30 percent.

Contours available through the United States Digital Service / Natural Resource Conservation Service (USDS/NRCS) National Elevation Data 30 meter (NED) for Milwaukee County were obtained and slopes were identified using GIS, calculated from the NED.

## 2.3 WOODLANDS AND FORESTS

The UDO defines woodlands and forests as either "Mature" or "Young":

**Mature**: An area or stand of trees whose total combined canopy covers an area of one (1) acre or more and at least fifty (50) percent of which is composed of canopies of trees having a diameter at breast height (DBH) of at least ten (10) inches; or any grove consisting of eight (8) or more individual trees having a DBH of at least twelve (12) inches whose combined canopies cover at least fifty (50) percent of the area encompassed by the grove. However, no trees planted and grown for commercial purposes should be considered a mature woodland.

**Young**: An area or stand of trees whose total combined canopy covers an area of one-half (0.50) acre or more and at least fifty (50) percent of which is composed of canopies of trees having a diameter at breast height (DBH) of at least three (3) inches. However, no trees planted and grown for commercial purposes shall be considered a young woodland.

Once determined as either young or mature based on the above definitions, the edges of the woodland are defined by the vertical plane of the outer drip-line of the exterior trees.

## 2.4 LAKES AND PONDS

Determinations of navigability and jurisdiction of waterbodies such as lakes or ponds, was beyond the scope of the investigation. However, if observed, waterbodies and/or other connections to off-site wetland or aquatic features that may be under federal or state authority were identified.



Franklin DC Land LLC METHODS August 14, 2017

#### 2.5 STREAMS

Determinations of navigability and jurisdiction of waterways such as rivers, streams, and ditches, was beyond the scope of the investigation. However, if observed, waterways and/or other connections to off-site wetland or aquatic features that may be under federal or state authority were identified.

#### 2.6 SHORE BUFFERS

The UDO defines shore buffers as: All of that land area located within seventy-five (75) feet landward of the ordinary high water mark of all ponds, streams, lakes, and navigable waters (as determined by the Wisconsin Department of Natural Resources) and parallel to that ordinary high water mark, which is to remain undisturbed as a Natural Resource Feature (including undisturbed natural vegetation). Shore buffers do not include any area of land adjacent to any stream enclosed within a drainage structure, such as a pipe or culvert. The area of shore buffers (in square feet and acres) shall be measured and graphically delineated on the "Natural Resource Protection Plan." A shore buffer is also a setback.

## 2.7 FLOODPLAIN/FLOODWAY

Floodplain boundaries were identified and delineated based on the Federal Emergency Management Agency (FEMA) Flood Hazard Zone Mapping per the Flood Insurance Rate Map for the City of Franklin, obtained from FEMA.

#### 2.8 WETLANDS AND SHORELAND WETLANDS

Wetland determinations and delineations on the Property were based on the methods described in Stantec's "Wetland Delineation Report" (dated August 2017). Of the six wetlands identified and delineated on the Property, only Wetlands W-2 and W-3 may be considered Shoreland Wetland because they are within 1,000 feet of the water bodies along Ryan Creek east of the Property.

The uppermost wetland boundaries were surveyed with a Global Positioning System (GPS) capable of sub-meter accuracy and mapped using Geographical Information Systems (GIS) software.

#### 2.9 WETLAND BUFFERS

The UDO defines the buffer for wetlands and shoreland wetlands as 30 feet out from the wetland boundary.

## 2.10 WETLAND SETBACKS

The UDO defines the setbacks for wetlands and shoreland wetlands as 50 feet out from the wetland boundary. This is also defined as 20 feet out from the wetland buffer.



Franklin DC Land LLC RESULTS August 14, 2017

## 3.0 RESULTS

## 3.1 SITE DESCRIPTION

The Property is a total of 81.56 acres in size and is comprised of active agricultural fields, a few grassy swales, a residential yard with patches of trees at the end of the driveway, and six wetlands. An electric transmission line easement is present along the east edge of the Property which is subjected to periodic management of woody vegetation. The Property is somewhat hilly, sloping to the northeast from topographic highs of approximately 814 feet mean sea level (msl) in the southwestern part of the site to topographic lows in wetlands in the northeast corner of the Property that are approximately 786 feet msl. Residential development bounds the Property to the northwest, portions of the west, the southwest, and the southeast; Valley Green Golf Course bounds the property on a portion of the west; and woodlands bound the property on portions of the west and east, along the north and south of Ryan Road.

#### 3.2 STEEP SLOPES

No areas on the Property were identified through GIS as having slopes greater than 10 percent. Contours for the Property are depicted on Figure B in Appendix A.

### 3.3 WOODLANDS AND FORESTS

One mature woodland was identified in the northwest corner of the Property and was named WD-1 (Figure B, Appendix A). The canopy trees in this woodland were all greater than 12 inches' diameter at breast height (DBH). The portion of WD-1 that is on the Property is 0.79-acre and is dominated by bur oak (Quercus macrocarpa, FAC). Other woody species observed in this woodland included red oak (Quercus rubra, FACU), shagbark hickory (Carya ovata, FACU), slippery elm (Ulmus rubra, FAC), and common buckthorn (Rhamnus cathartica, FAC). The edges of WD-1 are depicted in the photographs in Appendix B.

#### 3.4 LAKES AND PONDS

There are no lakes or ponds located on the Property. Three ponds are near the west side and off the southwest corner of the Property. These ponds are depicted on Figure B.

## 3.5 STREAMS

There are no streams on the Property. The nearest stream is Ryan Creek which is on the properties to the north and east and approximately depicted on Figure B.

#### 3.6 SHORE BUFFERS

There are no shore buffers on the Property.



Franklin DC Land LLC RESULTS August 14, 2017

## 3.7 FLOODPLAIN/FLOODWAY

Per the Federal Emergency Management Agency (FEMA), there are 0.69-acres of mapped floodplain in the northwest corner of the Property all within wetland W-2.

## 3.8 WETLANDSAND SHORELAND WETLANDS

Six wetland areas were identified and delineated within the Project Area. Details on each wetland and how they were delineated may be viewed in Stantec's wetland delineation report. However, based on the proximity of ponds within Ryan Creek on the properties to the east and north of the Property, two of these wetlands (W-2 and W-3) may be considered "shoreland wetlands". The wetlands delineated by Stantec are summarized in Table 2 below.

Table 1 Summary of Wetlands Identified within the Project Area

| Wetland            | Wetland Classification                        | Adjacent Surface   | Acreage       |
|--------------------|---|--|---------------|
|                    | (WWI Type)                                    | Waters   | (in Property) |
| Wetland 1          | Farmed Wetland (Point                         | Potentially isolated,                                      | 0.20 acre     |
| (W-1)              | Symbol)                                       | drain tiles to W-2   |               |
| Wetland 2          | Wet Meadow/ Shallow                           | Drains northeasterly                                       | 2.33 acre     |
| (W-2)              | Marsh (E2H) & Shrub Carr                      | to Ryan Creek  |               |
| Wetland 3<br>(W-3) | Farmed Wetland (None<br>Depicted)             | Potentially isolated,<br>drain tiles east to<br>Ryan Creek | 0.67 acre     |
| Wetland 4<br>(W-4) | Shallow Marsh / Wet<br>Meadow (None Depicted) | None – Potentially isolated                                | 0.04 acre     |
| Wetland 5          | Farmed Wetland (None                          | None – Potentially   | 0.10 acres    |
| (W-5)              | Depicted)                                     | isolated   |               |
| Wetland 6<br>(W-6) | Hardwood Swamp (T3K)                          | None – Potentially<br>isolated                             | 0.06 acres    |
|                    |   | Total Acres  | 3.40          |

#### 3.9 WETLAND BUFFERS

Wetland buffers are depicted on Figure B, which are 30 feet out from the edges of all delineated wetlands. Wetlands that are near the Property are also depicted, as well as their buffers that extend onto the Property.

#### 3.10 WETLAND SETBACKS

Wetland setbacks are also depicted on Figure B, which are 20 feet further out from the edges of all delineated wetlands than the wetland buffers. Again, wetlands that are near the Property are depicted, as well as their setbacks that extend onto the Property.



Franklin DC Land LLC CONCLUSION August 14, 2017

## 4.0 CONCLUSION

Stantec identified and delineated natural resources that must be protected and mitigated per the City of Franklin's UDO on the Property on behalf of Franklin DC Land, LLC. This work was completed based on the field work completed by Eric Parker on June 26<sup>th</sup> and 27<sup>th</sup>, 2017.

The Property is comprised of active agricultural land planted to soybeans, upland grass swales, and a residential area with corresponding access drive to Ryan Road. The Property is approximately 81.56 acres and is in the southwest quarter of Section 19, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin. Specifically, the Property is located at 12200 West Ryan Road, approximately 600 feet east of CTH OO (North Cape Road) (Figure A, Appendix A). The purpose and objective of the natural resources investigation was to identify the extent and spatial arrangement of natural resources as defined by the City of Franklin's UDO within the Property. The following natural resources were identified and delineated on the Property: two steep slopes, one mature woodland, one floodplain area, six wetland areas (two of which are considered shoreland wetlands), and their associated wetland buffers and setbacks.

Prior to beginning work on the Property or disturbing or altering identified natural resources in any way, Stantec recommends that the owner obtain the necessary permits or other agency regulatory review and concurrence regarding the proposed work to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.



### NATURAL RESOURCE PROTECTION PLAN

Franklin DC Land LLC Appendix A– Figures August 14, 2017

### 5.0 REFERENCES

Federal Emergency Management Agency (FEMA). Flood Insurance Rate Mapping (FIRM) floodplain mapping. City of Franklin, Milwaukee County, WI.

USDS/NRCS – National Cartography & Geospatial Center. National Elevation Data 30 meter (NED), Milwaukee County, WI.

United States Geological Survey (USGS). Wisconsin 7.5 Minute Series (Topographic) Maps. 1:24,000. Reston, VA: United States Department of the Interior, USGS.

WDNR, Division of Water. (2010). [24k hydrography geospatial data layer]. Available online: <a href="mailto:ttp://dnrftp01.wi.gov/geodata/hydro">ttp://dnrftp01.wi.gov/geodata/hydro</a> 24k/.



### NATURAL RESOURCE PROTECTION PLAN

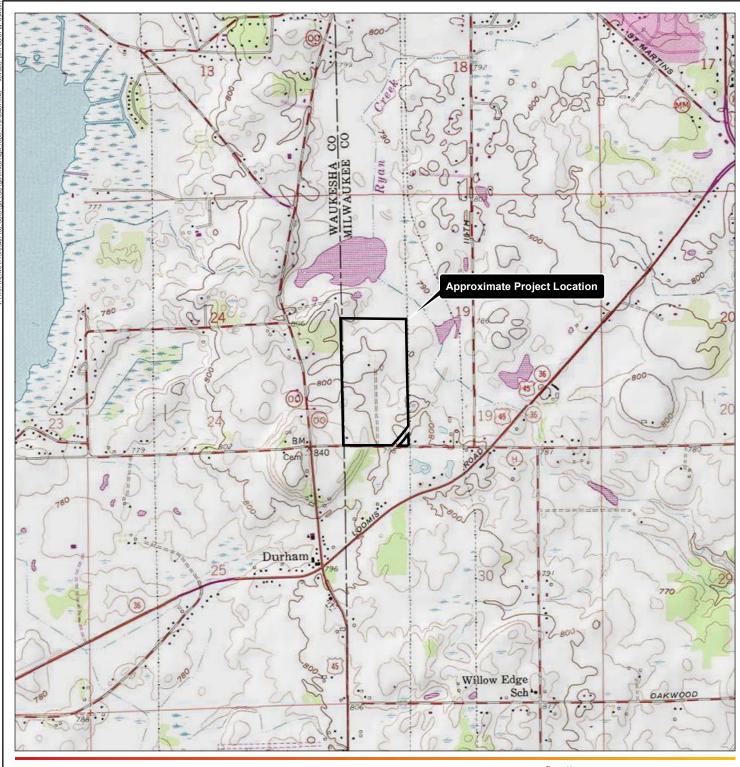
Franklin DC Land LLC Appendix A– Figures August 14, 2017

## Appendix A - Figures

Figure A. Project Location and Topography

Figure B. Natural Resource Protection Plan







<u>Legend</u>

Approximate Project Boundary

- N. Coordinate System: N.A.D. 1983 StatePlane Wisconsin South FIPS 4803 Feet 2. Data Sources Include: Stantec, WD.OT, WD.NR 3. Background: USGS 7.5' Topographic Quadrangles

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Figure No. Α

Title

#### **Project Location and Topography**

Client/Project Franklin DC Land, LLC

Project Location
TSN, R21E, S19, Prepared by JM on 2017-06-12
C, of franklin, Technical Review by SF on 2017-08-19
Milwaukee Co., WI Independent Review by EP on 2017-08-09

2,000 Feet 1:24,000 (at original document size of 8.5x11)









- Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
- Data Sources Include: Stantec, WDOT, WDNR
   Orthophotography: NAIP 2015

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

#### **Legend**

Approximate Project Boundary 2ft Elevation Contour

Tile Inlet

Tile Blowout

Field Delineated Wetland Area \*

30 Foot Wetland Setback 50 Foot Wetland Setback

Offsite Pond

Slopes > 10%\*\*

\*Dashed Where Inferred Offsite \*\* Not Visible Within Dataframe Figure No.

FEMA Flood Hazard Area

100-year Floodzone

Field Mapped Woodland

DNR 24k Hydrography

Waterbody

Mature Woodland

Perennial Stream

Intermittent Stream

#### **Natural Resource Protection Plan**

Client/Project Franklin DC Land, LLC

Project Location T5N, R21E, S19, C. of Franklin, Milwaukee Co., WI 193705469 Prepared by AJS on 2017-08-1 Technical Review by MP on 2017-08-01 Independent Review by EP on 2017-08-09

0 250 500 Feet 1:6,000 (at original document size of 8.5x11)





#### **MEMORANDUM**

Date: February 11, 2022

To: Bryan Lindgren. Neumann Developments, Inc.

From: Department of City Development

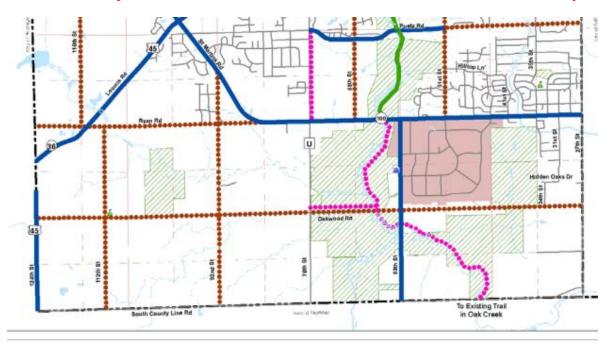
Régulo Martínez-Montilva, AICP, Principal Planner

RE: Review comments - Cape Crossing Preliminary Plat. 12200 W Ryan Rd.

Please be advised that city staff has reviewed this Preliminary Plat application originally submitted on December 13, 2021, and resubmitted with revisions on January 26, 2022. Department comments are as follows:

#### **City Development Department comments**

1. **Bicycle/Pedestrian Facility along Ryan Road.** Based on the Comprehensive Master Plan, Map 7.4 Bicycle and Pedestrian Circulation Facilities. City Development staff recommends the installation of a sidewalk per City of Franklin specifications on the north side of Ryan Road. A 10' wide asphalt path along Ryan Road will be installed within the 30' landscape and buffer easement on Outlot 3. The path will be in the easement to avoid conflict with the utilities within Ryan Road.



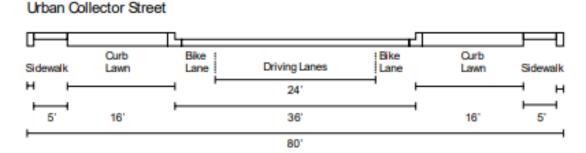


### Bicycle and Pedestrian Circulation Facilities



#### Comprehensive Master Plan, Map 7.4 Bicycle and Pedestrian Circulation Facilities

2. **Sidewalks for Road "A".** The Road "A" right-of-way is 80 feet in width, therefore it is considered a collector street. Per the Comprehensive Master Plan, Table 7.8 Cross-Sections for Arterial and Collector Streets, City Developments staff recommends sidewalks per City of Franklin specifications on both sides of Road "A", to connect to the Road "B" sidewalks and the sidewalks recommended for Ryan Road in the previous comment. Added sidewalk to the entrance road. 5' sidewalk, 1' off the right-of-way. The boulevard island in this entrance road remained as proposed as the island essentially creates two access roads in the case of a blockage on one side or the other as discussed at previous Plan Commission and Council meetings.



Comprehensive Master Plan, Table 7.8 Cross-Sections for Arterial and Collector Streets

3. **Acceleration and deceleration lanes.** Per the recommendations of the Traffic Impact Analysis prepared by TADI dated November 16, 2021, acceleration and deceleration lanes are recommended at the intersection of Ryan Road and Road "A", please provide detail of this intersection. These were shown on the preliminary civil plans. A detail was now added to the preliminary plat on sheet 2.

#### Unified Development Ordinance (UDO) §15-7.0502 Plat Data

- 4. **Existing and proposed contours.** Pursuant to subsection C, please depict the proposed contours at vertical intervals of not more than two feet, within the exterior boundaries of the Preliminary Plat and extending to the centerline of adjacent public streets. For clarity, you can add a second sheet to the Preliminary Plat. The existing and proposed contours are now shown on sheet 3.
  - City Development staff recommends to depict the 30-foot wetland buffer and the limit of disturbance line with the proposed contours to attest that the wetland buffers would not be disturbed. The natural resources are shaded on sheet 3 of the plat. Proposed conservation easements are also shown on sheet 3. See note 13 below for additional information.
- 5. **Street grades.** Please add the proposed street grades to attest compliance with the maximum street grades set forth in UDO §15-5.0103.D: 6% for collector and minor streets (Roads "A" & "B"), and 8% for pedestrian ways within outlots. Proposed street and pedestrian grades are labeled on sheet 3.

- 6. **Existing Street Pavements.** Per subsection G, please add the following information for Ryan Road: "Type, width, and elevation of any existing street pavements within the exterior boundaries of the plat or immediately adjacent thereto together with any legally established centerline elevation, all to mean sea level (National Geodetic Vertical Datum of 1929)". This information is shown on sheet 3.
- 7. **Street names.** Per subsection K, please add the proposed names for "A" and "B", please use "street" rather than "road". Roads are intended to be thoroughfares according the city's street naming system. Proposed street names have been added to the plat.
- 8. **Project Summary.** According to subsection Z, the project summary should include all site improvement costs. Please add estimated site improvement costs for each phase. It is recommended to breakdown the cost in the categories listed in the Subdivision Development Agreement template, exhibit D (attached). Attached is an updated project summary. The improvement cost breakdown will be provided once the plans are prepared and initial bids are received.
- 9. **Zoning.** Please revise sheet 1, note 8, the zoning is now Planned Development District No. 40 Cape Crossing. Revised preliminary plat accordingly.

### Planned Development District (PDD) conditions of approval, Ordinance 2022-2492

- 10. **Lighting Plan.** Per Section 2.G.2 of PDD Ordinance 2022-2492 (attached), a lighting plan is required to attest compliance with the requirements of UDO §15-8.0115 Street Lights. A lighting plan will be prepared and submitted with the construction drawings. This work will be coordinated with WE Energies and the City.
- 11. **Landscape screening.** The Preliminary Plat depicts a 25-foot buffer for landscaping along the west boundary, approximately in the section west of lots 5-12 and 20-23, as required in condition of approval #1, section 2.H of the PDD Ordinance. However, the landscape plan does not depict any existing or proposed trees in this area. Existing trees may be used to meet this condition as long as a tree survey is prepared and submitted as part of the plat. Pursuant to UDO §15-7.0301, the Landscape Plan must include:

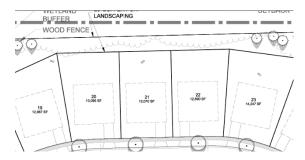
"Location, Extent, Type, and Sizes of Landscape Materials and Plantings. Location, extent, type (common name and scientific name in the case of plant materials), and sizes of proposed landscaping and landscape plantings in all areas of the proposed development, Subdivision, Certified Survey Map, or Condominium which are designated as a "Landscape Bufferyard Easement" or for areas which are to serve as landscaped entrances or other special landscaped features of the development, Subdivision, Certified Survey Map, or Condominium".

Proposed landscaping is now being shown in the easement areas. Prior to final landscape plan preparation and final approval, a tree inventory will be conducted to determine existing vegetation in these areas, and final proposed plantings will be adjusted to reflect existing plan material.

The city's template for landscape bufferyard easements is attached for your reference. If the Preliminary Plat and Final Plat are approved, this easement must be recorded concurrently with the Final Plat. The easement will be prepared using the City template and will be submitted at the time of final plat submittal.

Pursuant to UDO §15-5.0102.A, the following note must be added to the plat: "Landscape Bufferyard Easement: This strip is reserved for the planting of trees and shrubs; the building of structures hereon is prohibited." This note was added to sheet 1.

Note: the landscape buffer label is incomplete, Landscape Plan, sheet L-3.



### Additional City Development staff comments

12. **Improvements for land divisions.** Section 15-8.0100 of the UDO sets forth the required improvements for all land divisions. Closely review and incorporate that information onto the Preliminary Plat, or associated plans, as appropriate. Additional information about these requirements, and any questions about them, can be directed to the Engineering Department.

Note that improvements including streets and utilities must be installed prior to recording of the Final Plat (§15-2.0303.A). Alternatively, the applicant may enter into a Subdivider's ("Developer's") agreement with the City of Franklin, and provide a letter of credit for improvements (§15-2.0303.B). Comment only. All requirements and the process will be followed as described.

- 13. **Conservation Easement.** All present natural resource features identified in the Natural Resource Protection Plan (NRPP) shall be protected by a conservation easement. For clarity, please shade all the natural resource areas to be protected or include separate sheet in the plat for this information. Attached is the city's conservation easement template, if the Preliminary Plat and Final Plat are approved, this easement must be recorded concurrently with the Final Plat per UDO Sec. 15-7.0603B. The natural resources are identified on sheet 3 of the plat. The resources will be covered by a conservation easement as shown. Wetlands and wetland buffers will be impacted to install the pedestrian path along Ryan Road and to install watermain into the site from the City watermain in Ryan Road. Wetland buffer will be impacted to grade the storm water facilities in the center of the site and for lot grading on the north end of the site. These areas will be restored with native grass. The areas are noted on sheet 3.
- 14. **Deed restrictions.** Note that §15-7.0603 requires submittal of any Declaration of Deed Restrictions, Protective Covenants, and Homeowners' Association prior to approval of the Final

Plat. These documents are subject to review by the City Attorney. Comment only, no change. Will be submitted with the final plat.

- 15. **Signage.** If a subdivision monument sign is proposed in the future, it requires a separate application through the City Development Department. Comment only, no change. There will be a subdivision monument sign and a separate application will be submitted once the sign is designed.
- 16. Please note that stormwater management, utilities, grading and erosion control must be submitted separately to the Engineering Department. For more information, please call 414-425-7510. The final design is being worked on. Plans will be submitted to the engineering department for review and approval.
- 17. Separate site plan approval required for amenity areas, such as clubhouse and fire pit. Comment only, no change. Separate site plans will be submitted for each of these items once they are designed.

### **Engineering Department comments**

- 18. Lots 4 & 5 should meet the 60-ft minimum frontage. Revised lots 2, 3 and 4 accordingly. Lot 5 met and still meets this requirement.
- 19. Must show the NAD83 & NAVD 88 is being utilized on this proposal. Coordinated with Ronnie Asuncion in Engineering to use NAD27 and NGVD29 as this project was originally surveyed in 2016 with those systems. It is understood all new projects in Franklin moving forward are to be on the datums.
- 20. Must show all the public utility easements (water main, sanitary, and stormwater) and a separate easement document for review and approval, including the proposed monument sign at the median and the proposed twelve (12) feet wide emergency access easement. All easements will be designed during the design phase and will be coordinated with the City and utility companies and shown on the final plat. Associated easement documents will then be prepared when the final plat is prepared.
- 21. Must show that the vision triangle on the intersection at west Ryan Road meets the required sixty (60) feet space clearance. The vision corner at Ryan Road has been revised to be 60'x60' and is shown on the plat.
- 22. Must show that the proposed monument/column is outside of the easement. Proposed columns were shifted to be at least 12' from the right-of-way line. Will coordinate the exact location with the utility companies during the design phase to insure no conflicts with easements.
- 23. Must show all utility easements (min.12-feet wide)such as; WE-Energies, AT&T, etc. Utility easements will be shown on the final plat after coordination with the utility companies during the design phase. A note stating such was added to the preliminary plat.

- 24. Must refer to the Unified Development Ordinance Division-15 for plat submittal. Comment only.
- 25. Must meet the minimum access of sixty (60) feet on the public street measured at the right of way line or in the cul-de-sac measured at the arc. See lots 2, 3 & 4. Revised lots 2, 3 and 4 accordingly.
- 26. Must show street naming with South & West prefix direction. Comment taken into account when proposing road names.
- 27. Note: Per Police Department recommendation, do not use names that sound similar like Bridge View; Ridgeview; sometimes, in the height of anxiety, people don't enunciate their words clearly. Also, avoid using the suffix direction like Cordgrass Circle North and Cordgrass Circle South. Comment taken into account when proposing road names.
- 28. Must submit a final plat for a full review. Will submit after the preliminary plat and construction plan review and approval.

#### **Fire Department comments**

Franklin Fire Department Construction and Alteration Requirements (2021-2022)

- 29. Follow all relevant WI DSPS and IBC code requirements for fire protection systems for given occupancy, use, and construction types. Comment only, no change.
- 30. Pre-existing fire alarm and fire sprinkler systems shall be maintained in compliance with relevant code. Not applicable, no existing systems.
- 31. Fire Extinguisher placement as per NFPA 10. Comment only, no change.
- 32. Fire Department Connection (FDC) and hydrant placement must be acceptable to AHJ (applies to new construction). The proposed onsite watermain including hydrant locations are being designed. A full set of engineering drawings will be submitted to the City for review once the design is complete.
- 33. At no time may any Hazardous, Combustible, or Flammable Materials exceed allowable quantities. Comment only, no change.
- 34. Master Key set required for placement in Knox Box (if required). Comment only, no change.
- 35. Location/Density of Fire Hydrants shall be approved by the fire department. The proposed onsite watermain including hydrant locations are being designed. A full set of engineering drawings will be submitted to the City for review once the design is complete.
- 36. Permitting and submittal instructions for fire protection system review and inspection can be found at: https://www.franklinwi.gov/Departments/Fire.htm Comment only, no change.
- 37. Further comments forthcoming upon site plan review. Comment only, no change.

### **Police Department comments**

38. The PD has no comment regarding this request. Comment only, no change.

### **Inspection Services Department comments**

39. Inspection Services has no comments on the proposal at this time. Comment only, no change.



# **CAPE CROSSING**

Neumann Developments is requesting Preliminary Plat approval for Cape Crossing, located on the North side of Ryan Road at 12200 W Ryan Road. Neumann Developments has been creating single-family residential subdivisions in South-Eastern and South-Central Wisconsin since the year 2000. Neumann Developments, Inc. has had the proud distinction to have their communities selected for the Metropolitan Builders Association Parade of Homes in seven of the past nine years!

### Project Summary for Cape Crossing:

- Total Number of Lots = 130
- Roadway = 6,579 LF
- Gross Density = 1.70
- Net Density = 2.61
- Open Space Ratio = .42
- The Villas South Half of property
  - $\circ$  Total lots = 76
  - $\circ$  Min. Lot Size = 9,000SF
  - $\circ$  Min Lot Width at setback = 70'/90' corner lots
  - Min Front Setback = 25'
  - o Min Side Setback = 7.5' / 25' street corners
  - Min Rear Setback = 25'
  - o Average Lot Size = 9,947 SF
  - Max Lot Coverage = .30
- The Estates North Half of property
  - $\circ$  Total lots = 54
  - $\circ$  Min. Lot Size = 12,000SF
  - o Min Lot Width at setback = 85'
  - o Min Front Setback = 25'
  - Min Side Setback = 10'
  - o Min Rear Setback = 25'
  - o Average Lot Size = 13,292 SF
  - Max Lot Coverage = .25

0

• Current Zoning is Planned Development District

The proposed development utilizes an access point at West Ryan Road.



All lots and storm water management facilities are located in upland. The preliminary plat submitted is substantially similar to the site plan and approved plans included in the Planned Development District zoning.

A trail system will be built to connect residents to amenities and through internal outlots. Additionally, public sidewalks will allow for walkability and a 12' paved emergency access pedestrian path will serve as connection to the future interurban trail and trail head on Ryan Road.

Cape Crossing will be a deed restricted community with an incorporated homeowner's association. The responsibilities of the homeowner's association include management of the storm water management facilities and commonly owned land. The deed restrictions will reflect the minimum home size, construction materials, and other pertinent details regarding the community standards. The minimum home size floor areas in the Villas are anticipated to be 1,500 square feet for a ranch/one story home and 1,700 square feet for two-story homes and in the Estates 1,800 square feet for a ranch/one story home and 2,000 square feet for a two-story home.

### **Market Analysis**

### **Projected Value Analysis**

76 Villas Single Family Homes x \$450,000 = \$34,200,000

54 Estates Single Family Homes x \$550,000 = \$29,700,000

Total = \$63,900,000

**Projected Absorption Rate** = 35 Units per year

We anticipate the absorption rate of the development to generate 2.92 units to sell per month or approximately 35 units per year.

**Projected School Impact** = Less than 0.6 \* 130 units = 78 (78) students

There are several factors present in most parts of the country that tend to reduce education expenses per housing unit. The first is the average number of school-aged children present in the units. According to the American Housing Survey, there is, on average, only a little over one schoolaged child for every two households in the U.S. The number is about 0.6 per household for single-family and under 0.4 per household for multifamily. So education costs per housing unit are lower than costs per pupil, simply because there is less than one pupil per household.

**Projected Tax Revenue** \$63,900,000/1000 (63,900\*19.21)/130 = \$9,442 per unit

**Projected Population Impact** 3.13 residents per home (130 \*3.13) = 407 residents \*2015 American Community Survey, 1-Year Estimates, US Census Bureau

NEUMANN DEVELOPMENTS, INC. \* N27 W24025 PAUL CT. SUITE 100 \* PEWAUKEE, WI 53072 262-542-9200 \* FAX: 262-349-9324 \* NEUMANNDEVELOPMENTSINC.COM



### Financial Plan for Project Implementation

Neumann Developments will make and install the public improvements reasonably necessary and will provide security to ensure that we will make those improvements within a reasonable time. Neumann Developments will post a Letter of Credit, at the commencement of the project in an amount not to exceed 120 percent of the estimated total cost to complete the required public improvements. This Letter of Credit will provide security for no more than 14 months after the date of public improvements for which the security is provided are substantially completed and upon substantial completion of the public improvements (binder coat installation on roads).

### **Building Schedule**

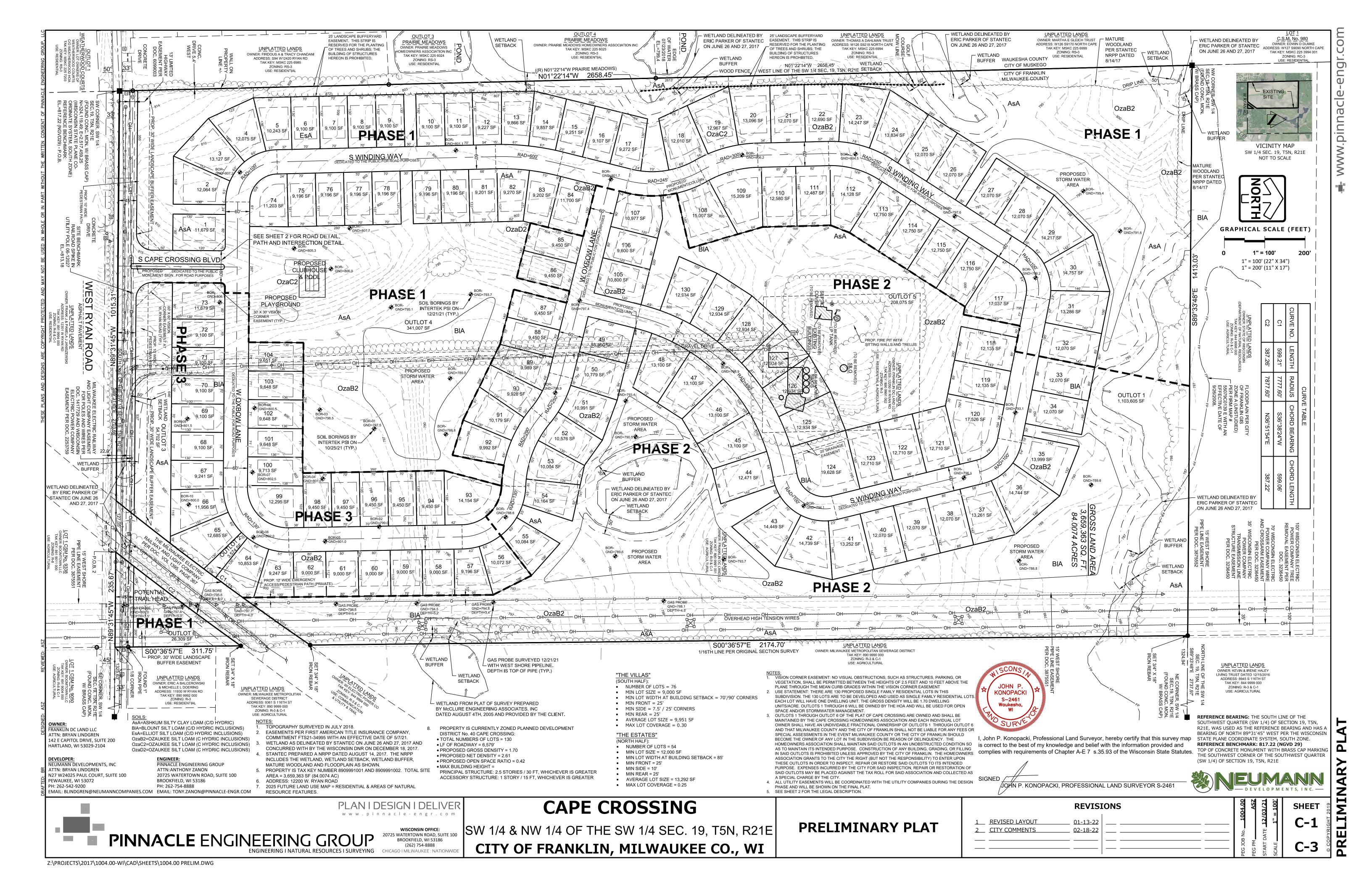
It is anticipated that grading of the project will be begin in spring 2022 with building permit availability in fall 2022.

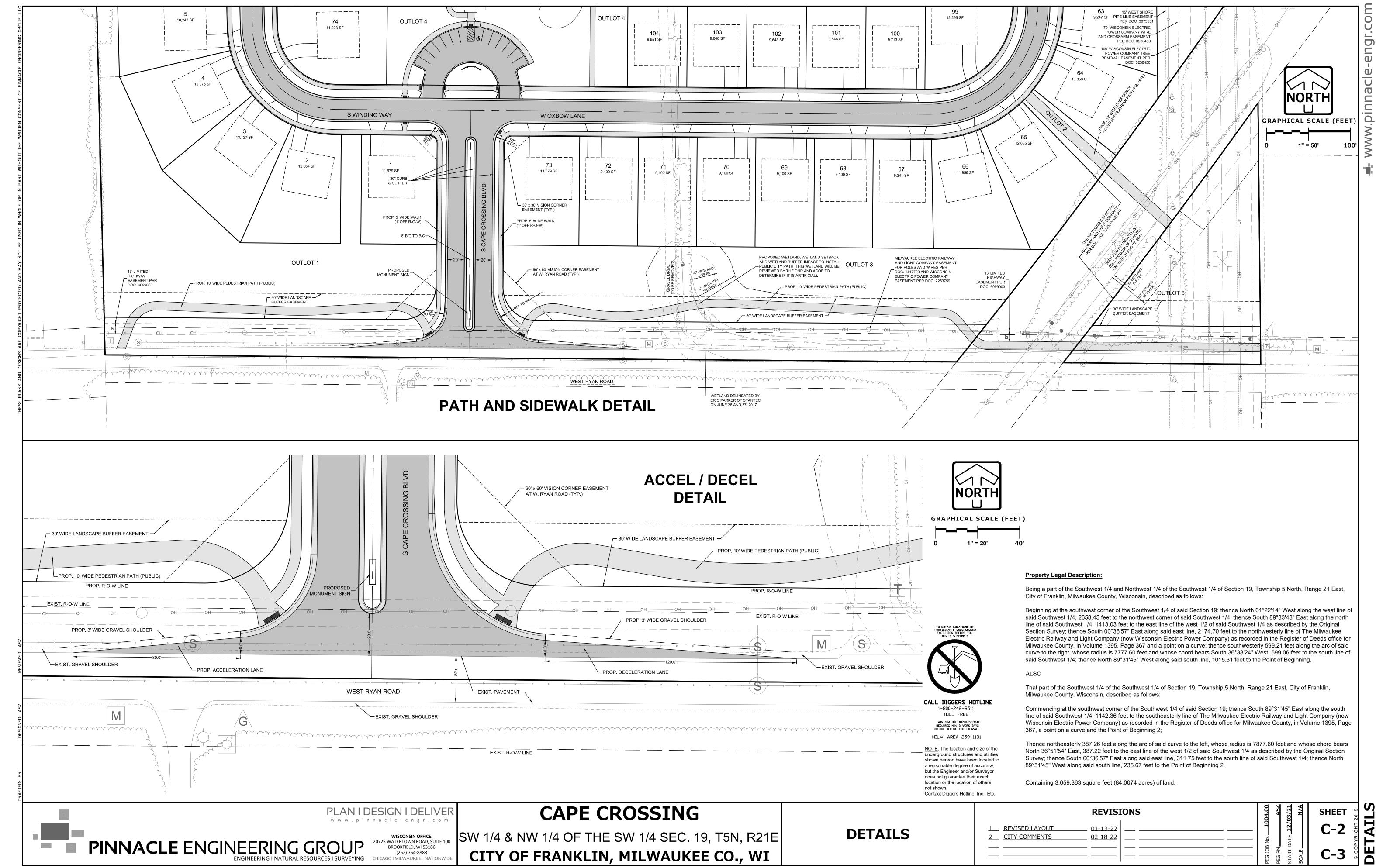
### **Market Conditions**

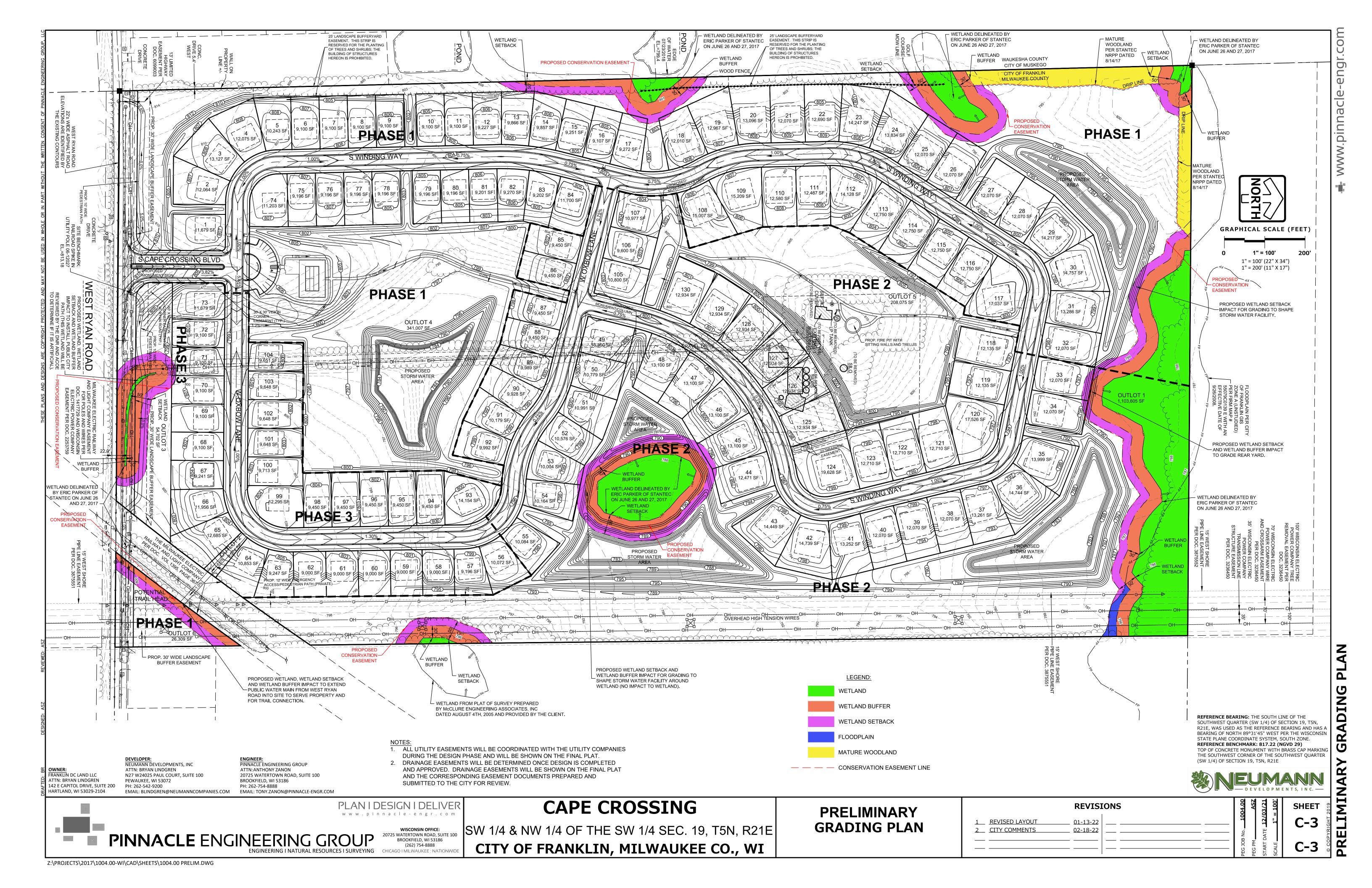
The market statistics for new residential homes has been and remains incredibly strong. In Franklin, inventory of homes available for sale in September was a mere 1.65 months, prices were up 11.78% year over year, with 80% of homes selling in under 30 days. We take a long-range vision in land development planning and the great location, schools, businesses, and community that attract people to Franklin will continue to keep demand for new homes in the community strong. By the time this proposed development is ready to bring homes to market in late 2022 and 2023 we are confident that the demand will be there as well.

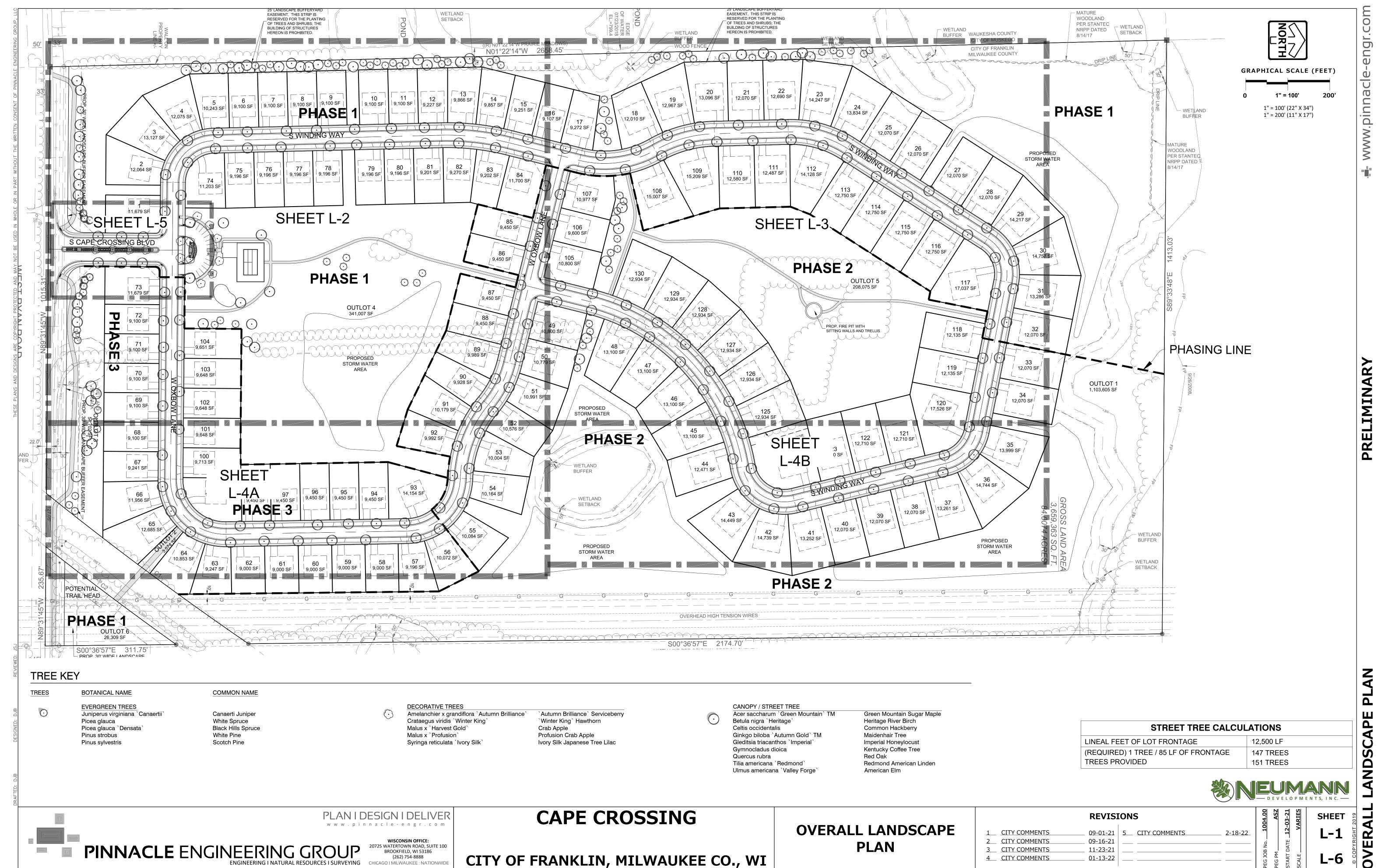


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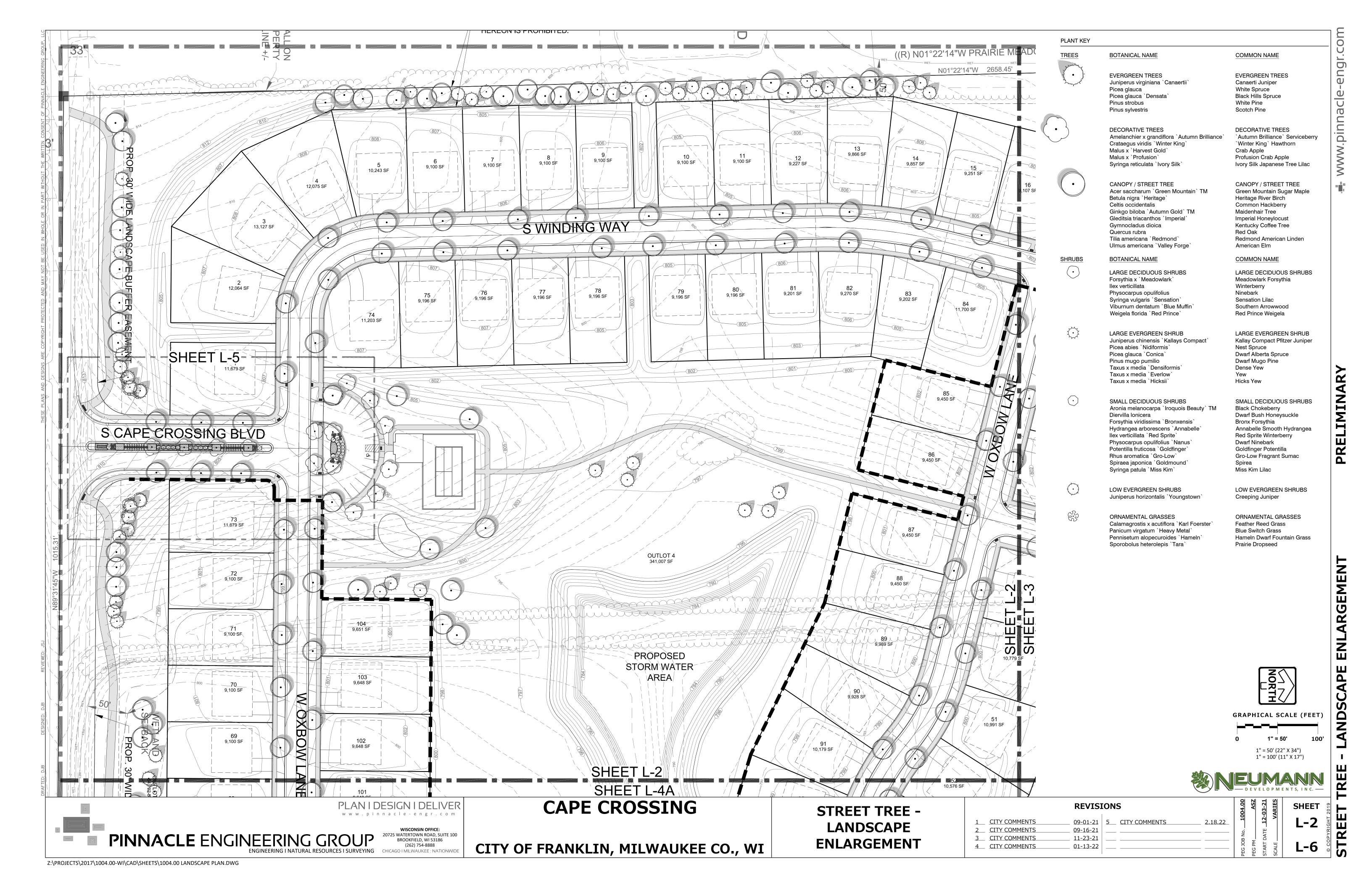


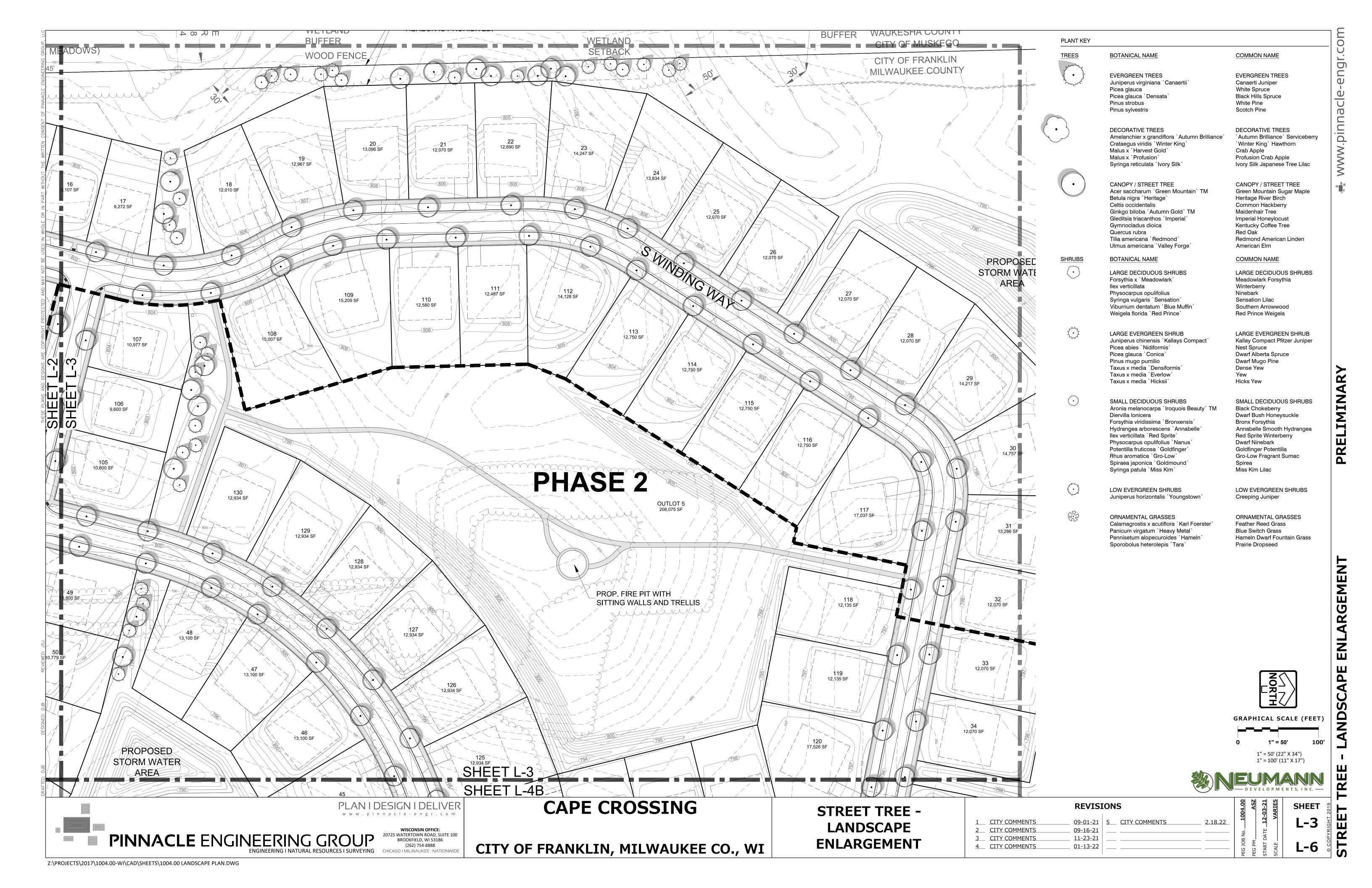


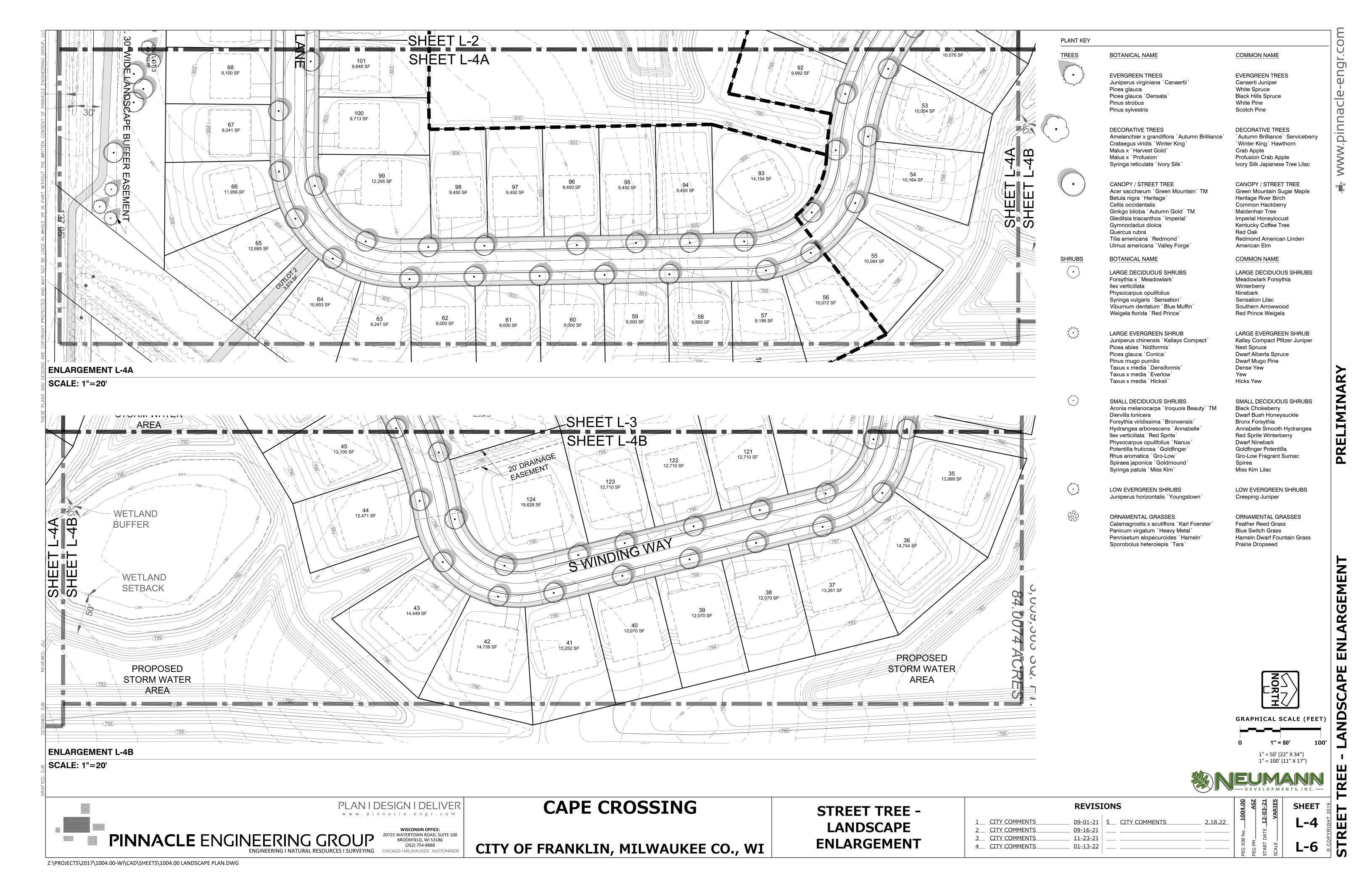


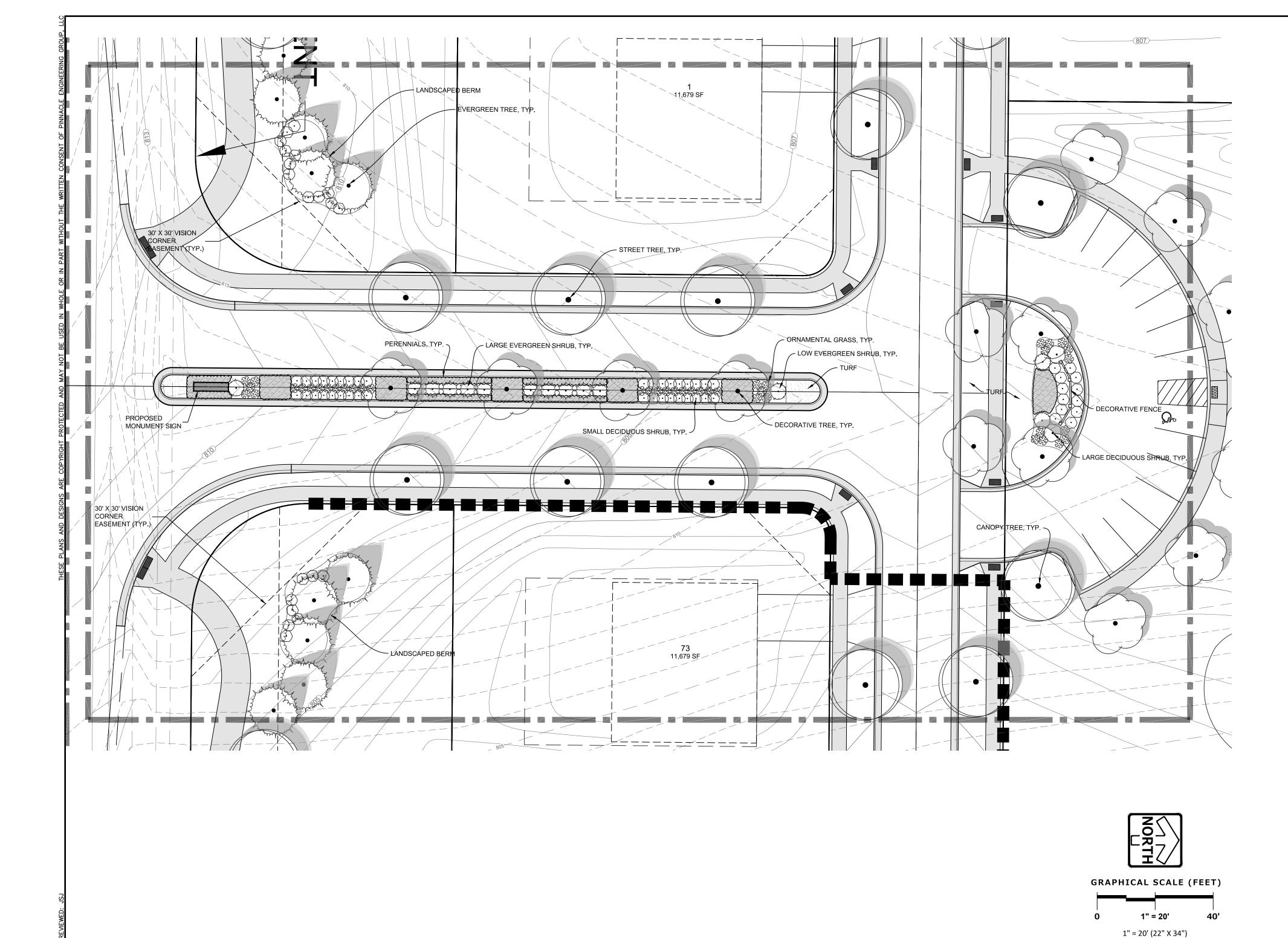


Z:\PROJECTS\2017\1004.00-WI\CAD\SHEETS\1004.00 LANDSCAPE PLAN.DWG









**BOTANICAL NAME COMMON NAME** <u>QTY</u> **EVERGREEN TREES EVERGREEN TREES** Juniperus virginiana `Canaertii` Canaerti Juniper Picea glauca White Spruce Picea glauca `Densata` Black Hills Spruce Pinus strobus White Pine Pinus sylvestris Scotch Pine DECORATIVE TREES DECORATIVE TREES Amelanchier x grandiflora `Autumn Brilliance` `Autumn Brilliance` Serviceberry Crataegus viridis `Winter King` `Winter King` Hawthorn Crab Apple Malus x `Harvest Gold` Malus x `Profusion` Profusion Crab Apple Syringa reticulata `Ivory Silk` Ivory Silk Japanese Tree Lilac CANOPY / STREET TREE CANOPY / STREET TREE Acer saccharum `Green Mountain` TM Green Mountain Sugar Maple Betula nigra `Heritage` Heritage River Birch Celtis occidentalis Common Hackberry Ginkgo biloba `Autumn Gold` TM Maidenhair Tree Gleditsia triacanthos `Imperial` Imperial Honeylocust Kentucky Coffee Tree Gymnocladus dioica Quercus rubra Red Oak Tilia americana `Redmond` Redmond American Linden Ulmus americana `Valley Forge` American Elm **COMMON NAME BOTANICAL NAME** <u>SHRUBS</u> LARGE DECIDUOUS SHRUBS LARGE DECIDUOUS SHRUBS Forsythia x `Meadowlark` Meadowlark Forsythia llex verticillata Winterberry Physocarpus opulifolius Ninebark Sensation Lilac Syringa vulgaris `Sensation` Viburnum dentatum `Blue Muffin` Southern Arrowwood Weigela florida `Red Prince` Red Prince Weigela LARGE EVERGREEN SHRUB LARGE EVERGREEN SHRUB Kallay Compact Pfitzer Juniper Juniperus chinensis `Kallays Compact` Picea abies `Nidiformis` Nest Spruce Picea glauca `Conica` Dwarf Alberta Spruce Pinus mugo pumilio Dwarf Mugo Pine Taxus x media `Densiformis` Dense Yew Taxus x media `Everlow` Taxus x media `Hicksii` Hicks Yew SMALL DECIDUOUS SHRUBS SMALL DECIDUOUS SHRUBS Aronia melanocarpa `Iroquois Beauty` TM Black Chokeberry Diervilla Ionicera Dwarf Bush Honeysuckle Forsythia viridissima `Bronxensis` Bronx Forsythia Annabelle Smooth Hydrangea Hydrangea arborescens `Annabelle` Red Sprite Winterberry Ilex verticillata `Red Sprite` Physocarpus opulifolius 'Nanus' Dwarf Ninebark Potentilla fruticosa `Goldfinger` Goldfinger Potentilla Rhus aromatica `Gro-Low` Gro-Low Fragrant Sumac Spiraea japonica `Goldmound` Syringa patula `Miss Kim` Miss Kim Lilac LOW EVERGREEN SHRUBS LOW EVERGREEN SHRUBS Juniperus horizontalis `Youngstown` Creeping Juniper ORNAMENTAL GRASSES ORNAMENTAL GRASSES Calamagrostis x acutiflora `Karl Foerster` Feather Reed Grass Panicum virgatum `Heavy Metal` Blue Switch Grass Pennisetum alopecuroides `Hameln` Hameln Dwarf Fountain Grass Sporobolus heterolepis `Tara` Prairie Dropseed <u>QTY</u> **BOTANICAL NAME COMMON NAME PERENNIALS PERENNIALS** 780 sf Coreopsis verticillata `Zagreb` Zagreb Thread Leaf Coreopsis Hemerocallis x `Stella de Oro` Stella de Oro Daylily Heuchera x `Obsidian` Coral Bells Nepeta x faassenii `Walkers Low` Walkers Low Catmint

PLANT SCHEDULE

**DEVELOPER:** NEUMANN DEVELOPMENTS, INC ATTN: BRYAN LINDGREN N27 W24025 PAUL COURT, SUITE 100 PEWAUKEE, WI 53072 PH: 262-542-9200 EMAIL: BLINDGREN@NEUMANNCOMPANIES.COM

**ENGINEER:** PINNACLE ENGINEERING GROUP ATTN: ANTHONY ZANON 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 PH: 262-754-8888



PLAN I DESIGN I DELIVER www.pinnacle-engr.com WISCONSIN OFFICE: 20725 WATERTOWN ROAD, SUITE 100 **PINNACLE** ENGINEERING GROUP BROOKFIELD, WI 53186

(262) 754-8888

**CAPE CROSSING** CITY OF FRANKLIN, MILWAUKEE CO., WI

**ENTRANCE LANDSCPE ENLARGEMENT** 

1" = 40' (11" X 17")

1 CITY COMMENTS 09-01-21 2 CITY COMMENTS 09-16-21 3 CITY COMMENTS 11-23-21 <u>01-13-22</u> 4 CITY COMMENTS

Phlox subulata `Emerald Blue`

Sedum x `Autumn Joy`

Syringa patula `Miss Kim`

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EMAIL: TONY.ZANON@PINNACLE-ENGR.COM **REVISIONS** 

Emerald Blue Moss Phlox

Autumn Joy Sedum

Miss Kim Lilac

### **GENERAL PLANTING NOTES**

- 1. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- 3. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
- NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
- 5. ALL PLANT MATERIAL SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL REFER TO SOIL PLACEMENT NOTES.

FLAG GUYS FOR SAFETY

MAINTENANCE PERIOD.

PREVENT SETTLING

ROUGHEN EDGES OF PLANTING PIT

SHRUB PLANTING

EARLY SPRING.

TREE WITH STRONG CENTRAL LEADER (DO NOT CUT LEADER)

PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES.

TREE STAKING IF REQUIRED (ONLY 1 OF 3 @ 120 DEG. SHOWN

TREE WRAP TO FIRST BRANCH (MAPLES AND OTHER THIN BARKED

DECIDUOUS TREES). PLACE WRAP IN LATE FALL AND REMOVE

4' X 4" A.M. LEONARD RIGID PLASTIC MESH TREE GUARD, BG48

TREE WATERING BAG. INSTALL SAME DAY TREE IS PLANTED. BAG

3" DEEP SHREDDED HARDWOOD MULCH IN 6'-0" DIAMETER RING. DO

NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. NO MOUNDING.

PLANTING MIXTURE BACKFILL TAMP PLANTING MIX AROUND BASE TO STABILIZE TREE. INSTALL (1) SLOW RELEASE FERTILIZER

REMOVE ALL TWINE, ROPE, WIRE, BURLAP AND PLASTIC WRAP FROM

PACKET FOR EVERY CALIPER INCH OF TREE. INSTALL AGAINST

TOP HALF OF ROOT BALL. IF WIRE BASKET, CUT IN (4) PLACES AROUND THE ROOT BALL AND FOLD DOWN 8" INTO PLANTING PIT.

- ROOT BALL ON UNEXCAVATED OR COMPACTED PEDESTAL TO

SHALL BE FILLED ONCE PER WEEK THROUGH THE MAINTENANCE

CROWN OF ROOT BALL 1" ABOVE FINISHED GRADE LEAVING

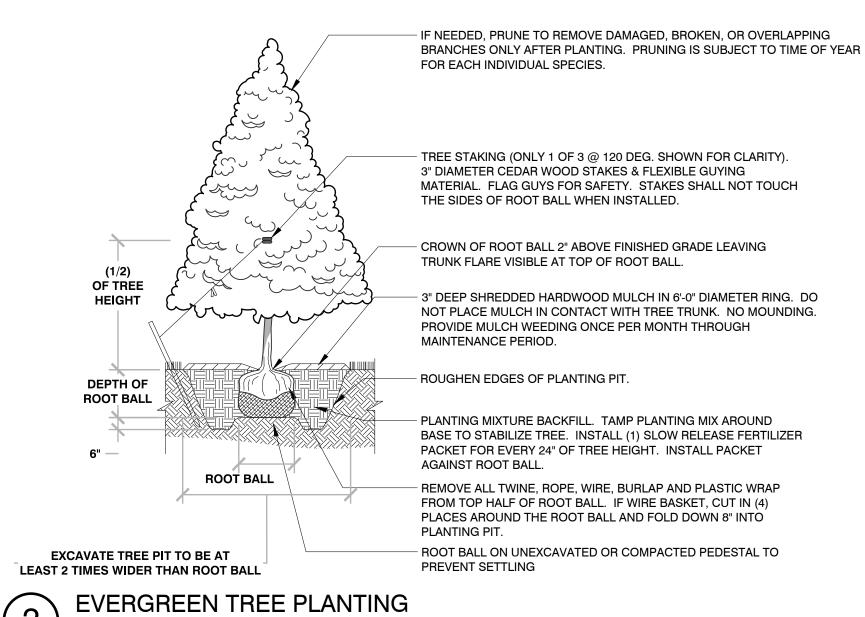
PROVIDE MULCH WEEDING ONCE PER MONTH THROUGH

TRUNK FLARE VISIBLE AT TOP OF ROOT BALL.

FOR CLARITY). STEEL STAKES & FLEXIBLE GUYING MATERIAL.

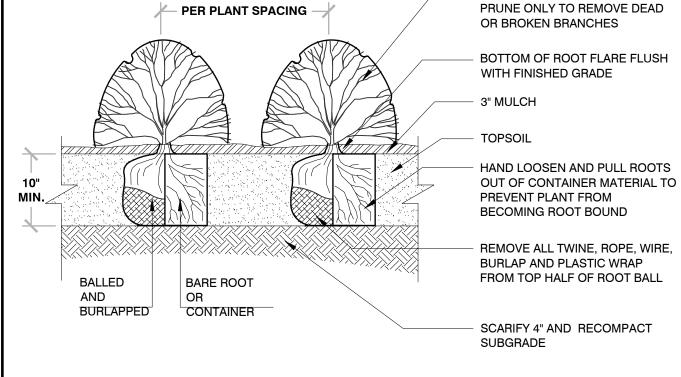
- WHILE PLANTING TREES AND SHRUBS, BACKFILL 2 OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- 8. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
- 9. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURE AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- 10. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- 11. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 12. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
- 13. TREES SHALL BE PLANTED A MINIMUM OF 15' FROM ANY UTILITY POLES, 8' FROM UNDERGROUND UTILITIES, 10' FROM HYDRANTS, 5' FROM DRIVEWAYS, AND 3' FROM SIDEWALKS.
- 14. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE

- ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
- 15. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS. FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- 16. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- 17. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- 18. STREET TREES SHALL BE GUARANTEED FOR A PERIOD OF THREE (3) YEARS FROM TIME OF OWNER ACCEPTANCE. DEAD OR UNDER PERFORMING PLANT MATERIAL, AS DEEMED BY CITY INSPECTIONS, SHALL BE REPLACED UP TO TWO (2) TIMES PER SEASON FOR THE DURATION OF THE WARRANTY PERIOD.
- 19. ALL OTHER PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF TWO (2) YEARS FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- 20. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE WRITTEN INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.



### SOIL PLACEMENT NOTES

- 1. LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION. STICKS. RUBBISH AND OTHER EXTRANEOUS MATTER.
- 2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT. 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- 3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- 5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- 7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- 8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- 9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.



(1/2 - 2/3)

OF TREE

HEIGHT

**DEPTH OF** 

**ROOT BALL** 

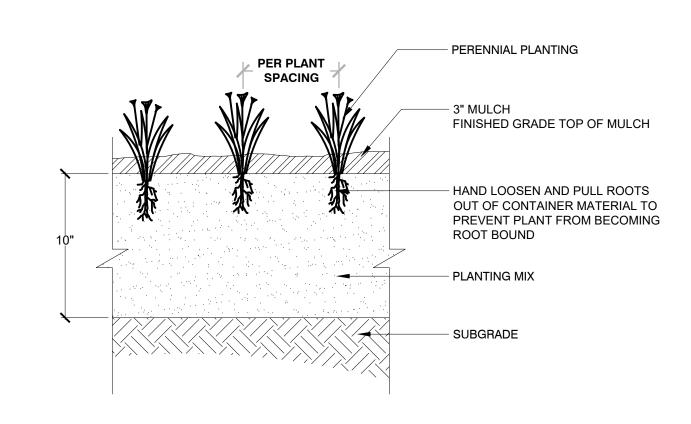
**EXCAVATE TREE PIT TO BE AT** 

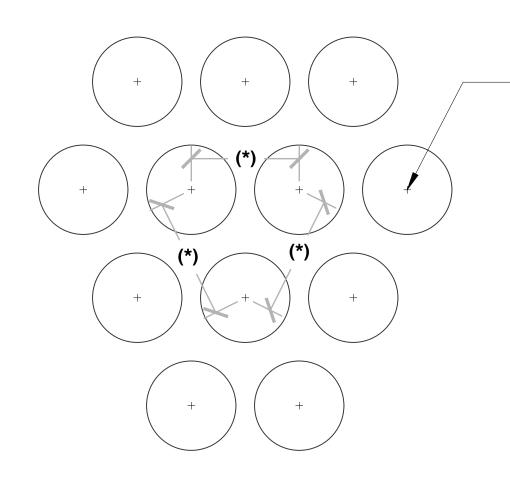
LEAST 2 TIMES WIDER THAN ROOT BALL

TREE PLANTING

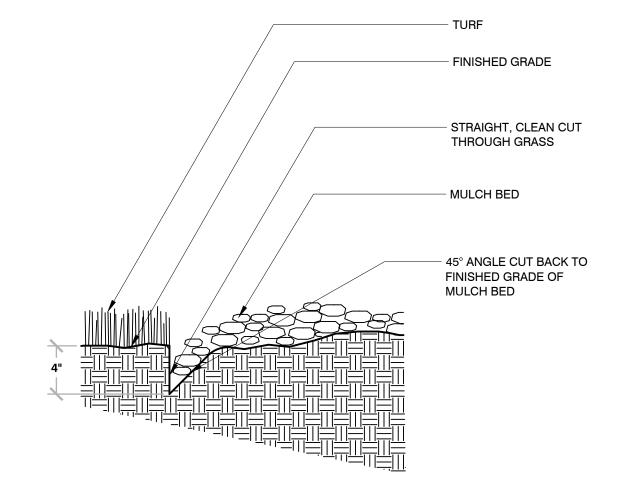
ROOT BALL

- SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING SCARIFY SIDES AND BOTTOMS OF HOLE
- PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS
- TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
- WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS
- BACKFILL VOIDS AND WATER SECOND TIME.
- PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE





(\*) = SPECIFIED PLANT SPACING PER PLANTING LIST



SHRUB PLANTING

329333-02

PERENNIAL PLANTING

PLAN I DESIGN I DELIVER

**PLANT SPACING** 

3293-02

SHRUB OR **PERENNIAL** 

RENCHED BED EDGE

3293-03

**PINNACLE** ENGINEERING GROUP

20725 WATERTOWN ROAD, SUITE 100

**CAPE CROSSING** 

CITY OF FRANKLIN, MILWAUKEE CO., WI

LANDSCAPE DETAILS & **NOTES** 

**REVISIONS** 1 CITY COMMENTS 09-01-21 2 CITY COMMENTS 09-16-21 11-23-21 3 CITY COMMENTS 4 CITY COMMENTS 01-13-22



### CITY OF FRANKLIN

#### REPORT TO THE PLAN COMMISSION

### Meeting of March 3, 2022

### **Certified Survey Map and Land Division Variance**

**RECOMMENDATION:** City Development Staff recommends approval of the Certified Survey Map (CSM) and Land Division Variance applications submitted by Karley J Blake & Jacob W Mutter subject to the conditions in the attached draft resolutions.

**Project Name:** Blake Certified Survey Map and Land Division Variance

**Project Location:** 0 W Lake Pointe Drive (839 9996 007)

**Property Owner:** Crescent Construction

**Applicant:** Karley J Blake & Jacob W Mutter

**Current Zoning:** R-8 Multiple-Family Residence District

**2025 Comprehensive Plan:** Residential and Areas of Natural Resource Features

**Applicant's Action Requested:** Recommendation for approval of Certified Survey Map,

and approval of the Land Division Variance request.

**Planner:** Marion Ecks, Associate Planner

### Introduction

On December 22, 2021, the applicant submitted an application for a one-lot Certified Survey Map to allow for development of a single family home. The property is Outlot 1 of CSM No. 6416, located at a stub of W. Lakepoint Dr.

The applicant has provided a Natural Resource Protection Plan; the property includes wetland and woodland. The applicant has also submitted applications to rezone the property from R-8 Multiple Family Residence District to R-6 Suburban Single Family Residence District and request a Natural Resource Special Exception (NRSE) for impacts to wetland setbacks.

#### **Project Description and Analysis**

### Certified Survey Map (CSM):

The proposed Certified Survey Map request is for the removal of the outlot designation on this 3.45 acre parcel of CSM No. 6416. Properties designated as outlots may not be developed without removal of the designation via a CSM. The property is vacant of improvements or structures, and contains young woodland and a large wetland complex. The previous CSM does not designate any roads on this lot; W. Lakepoint Drive terminates at the northwest corner of the parcel. The applicant proposes to dedicate a 2,269 square foot area to the City and connect a driveway to this stub of W. Lake Pointe Drive.

The lot is currently zoned R-8 Multiple Family Residence District (UDO Section 15-3.0209). The applicant proposes to rezone the property to R-6 Suburban Single-Family Residence District (UDO Section 15-3.0207); this application is under review by the Department of City Development, pending approval of the Certified Survey Map. The proposed lot meets the

minimum area and general setback requirements of the existing and proposed zoning. It should be noted that all residential developments in R-8 Zoning require Special Use approval.

The applicant proposes to install a driveway in a portion of the wetland setback, which requires approval of a Natural Resource Special Exception. This application is also under review by the Department of City Development. Staff notes that required conservation easements cannot be drafted until the NRSE process is complete.

The applicant submitted this Certified Survey Map application on December 22, 2021. Pursuant to Wisconsin Statutes §236.34(1m)(f)., the approving authority (Common Council) shall take action within 90 days of application submittal unless a time extension is granted by the applicant, the review time frame for this application expires on March 22, 2022.

#### Land Division Variance:

According to UDO §15-5.0101.B.1, §15-5.0106.C, etc, a CSM must "be designed so as to provide each lot with a minimum of 60 feet frontage along a public street." The applicant is seeking a Land Division Variance to waive this requirement. Section 15-9.0310B.1 of the City of Franklin Unified Development Ordinance states, "No variance to the provisions of Divisions 15-5.0100, 15-8.0100, and 15-8.0200 of this Ordinance shall be granted unless the Plan Commission finds by the greater weight of the evidence that all the following facts and conditions exist:

**1.** There is exceptional, extraordinary, or unusual circumstances or conditions where a literal enforcement of the requirements of this Ordinance would result in severe hardship.

<u>Staff comment</u>: The subject property has a significant quantity of natural resources, including a 0.9 acre wetland complex and related setbacks. Installation of a cul-de-sac to meet the street frontage requirement would necessitate impacts to additional natural resources including wetland buffer. The natural resource constraints would make further division of the parcel impractical.

**2.** Such hardships should not apply generally to other properties or be such a recurrent nature as to suggest that the land division portions of the Unified Development Ordinance should be changed.

Staff comment: There are approximately 60 street stubs (incomplete streets ending at the edge of a subdivision or other development) in the City of Franklin, many of which similarly terminate into a lot without road dedications or other reservations to require the future development of a street. Since the City does not have complete adopted mapping of a future street grid, there is no mechanism to require installation of a street at this location. However, other similar parcels may be subdivided in future to have multiple lots accessed by cul-de-sacs or roads, or may not be similarly constrained by natural resources.

**3.** Such variance is necessary for the preservation and enjoyment of substantial property rights possessed by other properties in the same vicinity.

<u>Staff comment</u>: Installation of a cul-de-sac to meet the street frontage requirement would require a greater area of right of way adjacent to neighboring properties, and greater impacts to natural resources.

**4.** That the variance will not create substantial detriment to adjacent property and will not materially impair or be contrary to the purpose and spirit of this Ordinance or the public interest.

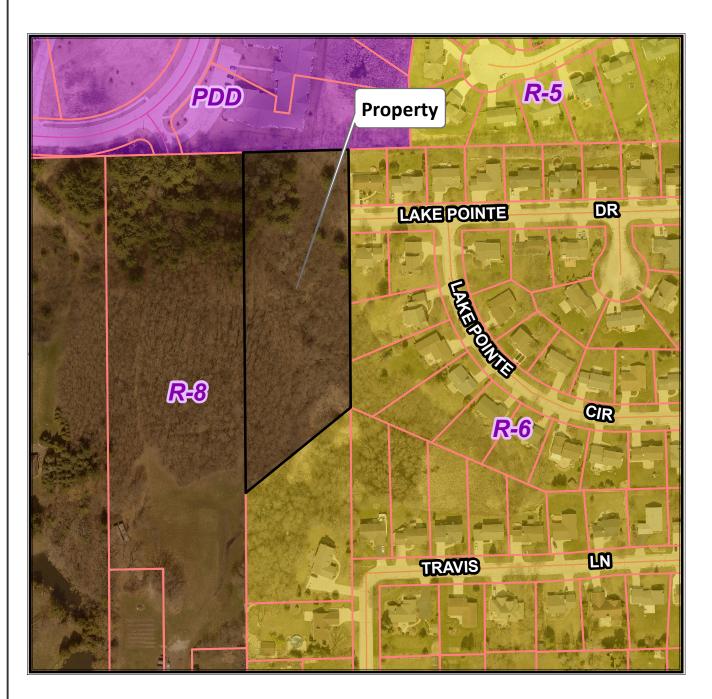
<u>Staff comment</u>: The proposed stub dedication minimizes the area of right-of-way adjacent to neighboring properties. Cul-de-sacs are generally designed to accommodate multiple homes; the proposed development is for one home. The proposed lot otherwise meets the standards of the current and proposed zoning.

### Recommendation

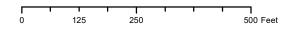
Staff recommends approval of the Certified Survey Map and Land Division Variance subject to the conditions set forth in the attached draft resolutions.



TKN: 839 9996 007



Planning Department (414) 425-4024

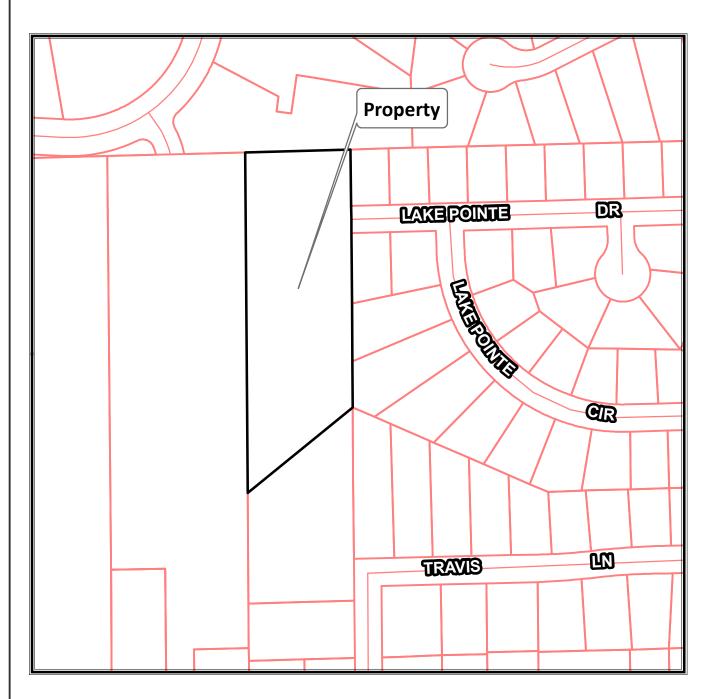


NORTH 2021 Aerial Photo

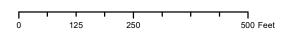
This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.







Planning Department (414) 425-4024



NORTH 2021 Aerial Photo

This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.

#### STATE OF WISCONSIN

### CITY OF FRANKLIN PLAN COMMISSION

#### MILWAUKEE COUNTY

[redraft 2-24-22]

RESOLUTION NO. 2022-\_\_\_\_

A RESOLUTION CONDITIONALLY APPROVING A LAND DIVISION VARIANCE FOR A 1 LOT CERTIFIED SURVEY MAP, BEING OUTLOT 1 OF CERTIFIED SURVEY MAP NO. 6416, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 5 NORTH, RANGE 21 EAST, IN THE CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN (KARLEY J. BLAKE AND JACOB W. MUTTER, APPLICANTS) (AT GENERALLY THE WEST END OF WEST LAKE POINTE DRIVE)

WHEREAS, the City of Franklin, Wisconsin, having received an application from Karley J. Blake and Jacob W. Mutter, for a land division variance to allow for the creation of a lot without the required public street frontage, such variance being necessary as a concurrent application for approval of a certified survey map, such map being Outlot 1 of Certified Survey Map No. 6416, being a part of the Southwest 1/4 of Section 16, Township 5 North, Range 21 East, in the City Of Franklin, Milwaukee County, Wisconsin, more specifically, of the property located at the abrupt, west dead end of West Lake Pointe Drive (on the east property line of the parcel, abutting the northwest portion of Lake Pointe Estates subdivision), bearing Tax Key No. 839-9996-007, Karley J. Blake and Jacob W. Mutter, applicants; and

WHEREAS, §15-9.0310 of the Unified Development Ordinance allows for Land Division Variances in part from the provisions of Division 15-5.0100, §15-5.0101.B.1. providing that public street frontage is required; and

WHEREAS, §15-9.0310 of the Unified Development Ordinance sets forth findings which must be made by the Plan Commission and approved by a majority vote of the entire membership of the Plan Commission (4 votes) for approval of a Land Division Variance application.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the Commission makes the following findings upon the greater weight of the evidence that all the following facts and conditions exist:

1. There are exceptional, extraordinary, or unusual circumstances or conditions where a literal enforcement of the requirements of this Ordinance would result in severe hardship, to wit:

The subject property has a significant quantity of natural resources, including a 0.9 acre wetland complex and related setbacks. Installation of a cul-de-sac to meet the street frontage requirement would necessitate impacts to additional

| A RESOLUTION CONDITIONALLY APPROVING A LAND DIVISION V | ARIANCE |
|--|---------|
| FOR KARLEY J. BLAKE AND JACOB W. MUTTER                |         |
| RESOLUTION NO. 2022-                                   |         |
| Page 2   |         |

natural resources including wetland buffer. The natural resource constraints would make further division of the parcel impractical.

2. Such hardships should not apply generally to other properties or be of such a recurrent nature as to suggest that the land division portions of the Unified Development Ordinance should be changed, to wit:

There are approximately 60 street stubs (incomplete streets ending at the edge of a subdivision or other development) in the City of Franklin, many of which similarly terminate into a lot without road dedications or other reservations to require the future development of a street. Since the City does not have complete adopted mapping of a future street grid, there is no mechanism to require installation of a street at this location. However, other similar parcels may be subdivided in future to have multiple lots accessed by cul-de-sacs or roads, or may not be similarly constrained by natural resources.

3. Such variance is necessary for the preservation and enjoyment of substantial property rights possessed by other properties in the same vicinity, to wit:

Installation of a cul-de-sac to meet the street frontage requirement would require a greater area of right of way adjacent to neighboring properties, and greater impacts to natural resources.

4. That the variance will not create substantial detriment to adjacent property and will not materially impair or be contrary to the purpose and spirit of this Ordinance or the public interest, to wit:

The proposed stub dedication minimizes the area of right-of-way adjacent to neighboring properties. Cul-de-sacs are generally designed to accommodate multiple homes; the proposed development is for one home. The proposed lot otherwise meets the standards of the current and proposed zoning.

BE IT FURTHER RESOLVED, that the application by Karley J. Blake and Jacob W. Mutter, for a Land Division Variance, upon the above findings, be and the same is hereby approved, subject to the approval of the aforesaid certified survey map application by Karley J. Blake and Jacob W. Mutter.

|           |                |                     | PROVING A LAND DIVISION VARIANCE                       |
|-----------|----------------|---------------------|--|
|           |                | E AND JACOB V       | V. MUTTER  |
|           | ΓΙΟΝ ΝΟ. 2022  |                     |  |
| Page 3    |                |                     |  |
|           |                | gular meeting of, 2 | the Plan Commission of the City of Franklin this 2022. |
|           | •              | _                   | meeting of the Plan Commission of the City of, 2022.   |
|           |                |                     | APPROVED:  |
| ATTEST:   |                |                     | Stephen R. Olson, Mayor                                |
| Sandra L. | Wesolowski, Ci | ty Clerk            | _  |
| AYES      | NOES           | ABSENT              |  |

MILWAUKEE CONTY [Redraft 2-24-22]

RESOLUTION NO. 2022-

A RESOLUTION CONDITIONALLY APPROVING A 1 LOT CERTIFIED SURVEY MAP, BEING OUTLOT 1 OF CERTIFIED SURVEY MAP NO. 6416, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 5 NORTH, RANGE 21 EAST, IN THE CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN (KARLEY J. BLAKE AND JACOB W. MUTTER, APPLICANTS) (GENERALLY THE WEST END OF WEST LAKE POINTE DRIVE)

WHEREAS, the City of Franklin, Wisconsin, having received an application for approval of a certified survey map, such map being Outlot 1 of Certified Survey Map No. 6416, being a part of the Southwest 1/4 of Section 16, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, more specifically, of the property located at the abrupt, west dead end of West Lake Pointe Drive (on the east property line of the parcel, abutting the northwest portion of Lake Pointe Estates subdivision), bearing Tax Key No. 839-9996-007, Karley J. Blake and Jacob W. Mutter, applicants; said certified survey map having been reviewed by the City Plan Commission and the Plan Commission having recommended approval thereof pursuant to certain conditions; and

WHEREAS, the Common Council having reviewed such application and Plan Commission recommendation and the Common Council having determined that such proposed certified survey map is appropriate for approval pursuant to law upon certain conditions.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the Certified Survey Map submitted by Karley J. Blake and Jacob W. Mutter, as described above, be and the same is hereby approved, subject to the following conditions:

- 1. That any and all objections made and corrections required by the City of Franklin, by Milwaukee County, and by any and all reviewing agencies, shall be satisfied and made by the applicant, prior to recording.
- 2. That all land development and building construction permitted or resulting under this Resolution shall be subject to impact fees imposed pursuant to §92-9 of the Municipal Code or development fees imposed pursuant to §15-5.0110 of the Unified Development Ordinance, both such provisions being applicable to the development and building permitted or resulting hereunder as it occurs from time to time, as such Code and Ordinance provisions may be amended from time to time.
- 3. Each and any easement shown on the Certified Survey Map shall be the subject of separate written grant of easement instrument, in such form as provided within the

# KARLEY J. BLAKE AND JACOB W. MUTTER – CERTIFIED SURVEY MAP RESOLUTION NO. 2022-\_\_\_\_\_Page 2

City of Franklin Design Standards and Construction Specifications and such form and content as may otherwise be reasonably required by the City Engineer or designee to further and secure the purpose of the easement, and all being subject to the approval of the Common Council, prior to the recording of the Certified Survey Map.

- 4. Karley J. Blake and Jacob W. Mutter, successors and assigns, and any developer of the Karley J. Blake and Jacob W. Mutter 1 lot certified survey map project, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
- 5. The approval granted hereunder is conditional upon Karley J. Blake and Jacob W. Mutter and the 1 lot certified survey map project for the property generally located at the west end of West Lake Pointe Drive: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
- 6. The applicant must receive grant of a Land Division Variance (§15-9.0310) from Plan Commission to waive the standards of UDO §15-5.0101.B.1 and §15-5.0106.C requiring a minimum of 60 feet frontage along a public street, prior to recording of the Certified Survey Map.
- 7. The applicant shall enter into a written contract ("Subdivider's Agreement") for the installation of public improvements, prior to recording of the Certified Survey Map (§15-9.0309.F).
- 8. Future development of the site shall require recording of conservation easements (§15-4.0103.B.1.d, §15-7.0201.H, etc.) prior to the issuance of any building permit.

BE IT FURTHER RESOLVED, that the Certified Survey Map, certified by owner, Crescent Construction Inc., be and the same is hereby rejected without final approval and without any further action of the Common Council, if any one, or more than one of the above conditions is or are not met and satisfied within 180 days from the date of adoption of this Resolution.

| KARLEY J. BLA<br>RESOLUTION N<br>Page 3   |   | MUTTER – CERTIFIED SURVEY MAP  |
|---|---|--|
| within 180 days of<br>and pursuant to<br>procedures for the<br>obtain the recording | of the date of adoption<br>all applicable statu<br>e recording of a certifing of the Certified Su | , that upon the satisfaction of the above conditions of this Resolution, same constituting final approval, tes and ordinances and lawful requirements and fied survey map, the City Clerk is hereby directed to creek Map, certified by owner, Crescent Construction Deeds for Milwaukee County. |
|   | l at a regular meeting  | of the Common Council of the City of Franklin this _, 2022.  |
| Passed and  | l adopted at a regular r  | meeting of the Common Council of the City of   |
| Franklin this   | day of  | , 2022.  |
|   |   | APPROVED:  |
|   |   | Stephen R. Olson, Mayor  |
| ATTECT  |   | Stephen R. Olson, Mayor  |
| ATTEST:   |   |  |
| Sandra L. Wesold  | owski, City Clerk   |  |
| AYESN   | OES ABSENT  | ·  |

### Legal Description

Outlot 1 of Certified Survey Map No. 6416 – Southwest ¼ of Section 16, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin.

### **Project Summary**

### General

The site is located in the SW ¼ of Section 16, Township 5 North, Range 21 East in the City of Franklin, Milwaukee County, Wisconsin – it abuts the northwest portion of Lake Pointe Estates subdivision. The parcel is approximately 3.45 acres and is currently zoned R-8 Multiple-Family Residence District with intention of re-zoning to R-6 Suburban Single-Family Residence District.

The parcel contains approximately 0.9 acres of delineated wetland (assured wetland delineation completed by Thompson and Associates Wetland Service on May 12, 2021). The wetland extends north to the center of the parcel from the southeast corner of the parcel. The land slopes to the wetland at varying degrees and is covered with mature hardwood forest on the west side of the parcel and mature conifer forest on the north end of the parcel.

### Proposed Development

The proposed development for the site looks to maximize and maintain the natural resources of the parcel while developing the parcel to an extent consistent with adjacent parcels within the Lake Pointe Estates subdivision. The wetland boundaries, as determined by Thompson and Associates Wetland Service, May 12, 2021, would be respected fully with no additional impact to the identified wetland buffer per Wisconsin Department of Natural Resources and City of Franklin requirements, respectively. A Natural Resource Special Exception will be requested to allow for driveway and landscaping impacts, primarily rain gardens to effectively manage storm water runoff (see Storm Water Management Plan), to the wetland setback due to the expanse and location of the wetland within the parcel. Invasive common buckthorn (Rhamnus cathartica), absent from previous ecologist survey and delineations (circa 2002), has begun to severely impact the parcel (Wetland Delineation Report can be provided upon request) by significantly affecting the mature hardwood forest and wetland established on the property (see Figure 1-3). Lack of development of the property has resulted in inadequate incentive to reduce and remove this invasive species which will continue to propagate the established natural resources both within the parcel as well as adjacent to the parcel. The proposed development of the parcel will require removing invasive common buckthorn from areas with the highest concentration (see Natural Resource Protection Plan) of the invasive species while also establishing an incentive for the developer (i.e. home owner) to continue to remove invasive common buckthorn throughout the rest of the parcel to maintain the valuable natural resources that still exist.

The development proposal includes re-zoning from a higher-density R-8 Multiple-Family Residence District to a more density-appropriate R-6 Single-Family Residential District and removing the current outlot designation from the parcel. The development would include erecting a two-story, single-family home, roughly 3,500sq.ft. in size, as well as a potential secondary, detached garage as a future development. It is believed, due to the extent of the natural resources on the property, that developments typical to R-8 zoning would exceed the Natural Resource Protection Standards (Unified Development Ordinance §15-4.0101) established by the City of Franklin and would likely require more severe impacts to the established wetlands. However, R-6 zoning, which is consistent with the parcels east and south of the identified site, would be more appropriate to meet the Natural Resource Protection Standards while also developing the site fully. The Comprehensive Master Plan (2025) identifies the site as a residence area and area of natural resource. Yet maintaining the parcel as an outlot will not incentivize removal of the invasive common buckthorn infiltrating the parcel. Thus, allowing the parcel to be developed to R-6 zoning standards will elicit motivation to maintain the valuable natural resources that still exists.

The proposed development will also support the community by improving the dead-end located at the west end of W Lake Pointe Drive. Currently, without an established cul-de-sac typically required (§15-5.0106.C), or an adequate extended right-of-way at the end of W Lake Pointe Drive, this type of abrupt dead-end (Figure 4) can create access and service difficulties for emergency services, delivery services (i.e. USPS), and the department of public works (i.e. snow plows), among other agencies. For example, currently during winter months, snow from W Lake Pointe Drive is pushed directly on to this parcel via City of Franklin snow removal efforts; with enough snow, the fire hydrant located in the north right-of-way at the end of W Lake Pointe Drive (Figure 5), becomes blocked with >8-foot-high snow drifts. The proposed development would extend, to City of Franklin Design Standards and Construction Specifications, W Lake Pointe Drive an estimated 30 feet beyond the fire hydrant and would establish a functional rightof-way at the newly constructed west end of W Lake Pointe Drive to allow for snow removal efforts to be contained to the public right-of-way. The extension of the road and right-of-way would also allow for increased space for emergency services, delivery services, etc. to more effectively access and serve residences already established on W Lake Pointe Drive since gutters, curb, etc. would not be extended on the south side of the road (e.g. flat, inhibited, surface available to turn around emergency vehicles, snow plows, etc.) but instead would contain a 3 foot gravel shoulder. A 90-foot radius cul-de-sac typically required by the City of Franklin to terminate existing subdivision roadways (§15-5.0106.C) would not be feasible for this parcel due to the proximity of established wetlands to W Lake Pointe Drive (see Natural Resource Protection Plan). The extension of the road, in addition to the single-family home development, still meets the established Natural Resource Protection Standards (§15-4.0101) required of the parcel.

Per determination of the City of Franklin City Engineer, Plumbing Inspector and Department of Water Utility, the proposed development would also be required to connect to both city water and city sewer. Discussion on what these utility connections would entail continue with the Engineering department.

# List of Figures



Figure 1. Area of nearly 100% coverage of invasive common buckthorn located at the end of W Lake Pointe Drive (see Natural Resource Protection Plan).



Figure 2-3. Examples of invasive common buckthorn infiltrating and out-competing beneficial natural resources within the mature hardwood forest areas.



Figure 4. Abrupt dead-end located at the west end of W Lake Pointe Drive on the east property line of parcel.



Figure 5. Proximity of fire hydrant to the dead-end located at the west end of W Lake Pointe Drive.

Date: February 18, 2022

To: City Development Staff

From: Karley Blake and Jacob Mutter

RE: Blake & Mutter TNK 839 9996 007 – Certified Survey Map – Staff Comments

Please see comments and responses *italicized* below reflecting the determinations and additional conversations that Karley Blake and Jacob Mutter have had with City Staff as of 2/18/2022.

# **City of Franklin Department of City Development**

Date: February 3, 2022

To: Karley Blake and Jacob Mutter

From: City Development Staff

RE: Blake & Mutter TNK 839 9996 007 – Certified Survey Map – Staff Comments

Please be advised that City Staff has reviewed the above application. Department comments are as follows for the Certified Survey Map submitted by Karley Blake and Jacob Mutter and date stamped by the City of Franklin on December 22, 2021.

# **Department of City Development**

# **Unified Development Ordinance (UDO) Requirements**

The lot is zoned R-8 Multiple Family Residence District (UDO Section 15-3.0209). The applicant proposes to rezone the property to R-6 Suburban Single-Family Residence District (UDO Section 15-3.0207).

1. The proposed lots meet the minimum lot area and general setback requirements of the existing and proposed zoning.

A Rezoning application has been submitted to request rezoning from R-8 Multiple Family Residence District to R-6 Suburban Single-Family Residence District which would result in the parcel (TKN 839 9996 007) ("parcel") obtaining consistent zoning with adjacent parcels to the south and east.

2. Note that all residential developments in R-8 Zoning require Special Use approval.

Approval of rezoning the parcel to R-6 Zoning would eliminate the need for Special Use approval — City Staff are in agreement that no application for Special Use is needed at this time.

# Certified Survey Map (CSM)

Division 15-7.0700: Certified Survey Map describes the required elements of a CSM:

3. Please be aware that §15-7.0701: General Standards for CSMs, requires that the standards of Part 8: Improvements and Construction be met for all development resulting from this CSM.

It has been determined by Franklin Engineering and Department of Public Works that a road extension, the width of the driveway, would be needed so that driveway access would be perpendicular to Lake Pointe Drive – this allows for appropriate road access needed for snow removal from Lake Pointe Drive. Discussion with the Engineering department continue as to what additional public improvements, if any, are needed.

4. Depict all existing watercourses, drainage easements, and other features pertinent to proper land division including natural features and their setbacks and buffers, and all lands reserved for future acquisition (§15-7.0702.A-E).

No further natural features or easements are anticipated beyond what has been provided on the corresponding Natural Resource Protection Plan ("NRPP") Map. The full wetland delineation report will also be provided electronically for further review by the Planning Department.

5. The scale indicated is 1 inch = 100 feet, however the printed scale bar measures less than one inch (§15-7.0702.I.). Materials provided must be to scale.

This has been corrected on the latest revision of the Certified Survey Map ("CSM").

6. Please include existing zoning R-8 Zoning and zoning boundary lines (§15-7.0702.M).

This has been corrected on the latest revision of the CSM.

7. Show the location of Soil Boring Tests (§15-7.0702.O) and Soil Percolation Tests (§15-7.0702.O). The results of these tests must be submitted along with the CSM.

The Sewer Connections ordinance (§190-22.B.1), in accordance with the determination provided by the City Engineer, Plumbing Inspector and

Department of Water Utility on 8/19/2021 (email communication provided by Tyler Beinlich, Assistant City Engineer), is requiring that any building development on the parcel be connected to the public sanitary sewer main. Therefore, development of the parcel will not be supported by a Private Onsite Wastewater Treatment System as outlined in Chapter SPS 383 (previously Chapter ILHR 83, revised December 2011) of the Wisconsin Administrative Code nor then would qualify for the requirements outlined in Chapter SPS 385 (previously Chapter ILHR 85, revised December 2011) of the Wisconsin Administrative Code. Thus, Soil Percolation Tests (§15-7.0702.0) would not be relevant to the submission of the CSM.

Additionally, soil sampled as part of the wetland delineation completed May 12, 2021 did not indicate any hydric soils present from the nine samples collected outside of the delineated wetland boundaries. In combination with acknowledging that the water table is over 50ft deep (Map 20 of SEWRPC Technical Report 37), there is minimal concern that development would occur in an area of concerning soil conditions.

8. Please depict any proposed deed restriction, and landscape or conservation easements, required by §15-7.0702.P. Deed restrictions and/or conservation easements as required by this Ordinance shall be filed with the CSM. Please submit easement(s) for recording.

The Planning Department has determined that because resolution has not yet been defined in regards to the Natural Resource Special Exemption ("NRSE") application, identifying conservation easements on the parcel at this time would be unsuitable. No additional deed restrictions have been discovered.

9. Note that additional information may required by the City Planner, Plan Commission, City Engineer, or Common Council, in accordance with §15-7.0702.R.

## Design Standards for Land Divisions

UDO Division 15-5.0100: Design Standards for Land Divisions governs the arrangement of and access to roads, right-of-way and other infrastructure, and the dimensions of lots and easements.

- 10. §15-5.0105.B.1 and §15-5.0106.C require a minimum of 60 feet frontage along a public street. *See Engineering Comments* 
  - a. The applicant may request a Land Division Variance (§15-9.0310) or install a cul-de-sac.

A Board of Zoning and Building Appeals Review application, including corresponding documents, requesting a Land Division Variance has been submitted for review by the Planning Commission to request a simple road

extension in contrast to installing a cul-de-sac as outlined in the Design Standards for Land Divisions.

11. Note that for Certified Survey Maps requiring the installation of public improvements, the Subdivider shall enter into a written contract ("Subdivider's Agreement") prior to approval of the Certified Survey Map (§15-9.0309.F).

An electronic copy of the Subdivider's Agreement will be provided for initial review however, additional discussions regarding its requirement for this specific development are still in progress. Alternative options (e.g. bonding option) may be otherwise desired by the City of Franklin depending on the magnitude of the public improvements.

## Natural Resource Protection Plan

Division 15-4.0100 governs the preservation of natural resources. All development in the City of Franklin shall comply with the natural resource protection standards set forth in Table 15-4.0100, and be described by a Natural Resource Protection Plan (NRPP) as defined by Division 15-7.0200.

12. Please submit conservation easements for those natural resources to be protected under the NRPP (§15-4.0103.B.1.d, §15-7.0201.H, etc.)

The Planning Department has determined that because resolution has not yet been defined in regards to the NRSE application, identifying conservation easements on the parcel at this time would be unsuitable.

13. Per the requirements of Table 15-4.0100, disturbances to or removal of wetlands or wetland buffer, or of other natural resources protected under this ordinance require a Natural Resource Special Exception. Staff notes than the applicant has submitted an NRSE for impacts to wetland resources.

A NRSE application has been submitted to request impacts specific to the wetland setback — no impacts to the 30ft wetland buffer nor to the wetland itself are being requested. Of the roughly 18,700sqft. of wetland setback, it is estimated that <10% of the setback (or  $\sim2\%$  of the total wetland, wetland buffer and wetland setback area) would be impacted by a single lane driveway to provide access for the proposed single-family home development.

14. Staff recommends a complete legend on the NRPP.

A legend has been included on the latest revision of the NRPP Map.

Please include the following required information on the NRPP:

15. Date of the plan and any applicable revision dates (§15-7.0201.D).

*This has been included on the latest revision of the NRPP Map.* 

16. The location of proposed easements (§15-7.0201.F, §15-7.0201.K).

The Planning Department has determined that because resolution has not yet been defined in regards to the NRSE application, identifying conservation easements on the parcel at this time would be unsuitable. No additional easements have been identified.

17. The location of any easements on (immediately adjacent to) the property line on neighboring properties (§15-7.0201.H)

No easements (e.g. cross access easements) for neighboring properties have been discovered.

18. Note that wetland delineations used in the NRPP cannot be older than 5 years, per the standards of §15-4.0102.G. Electronic copies of delineation reports should be submitted with the NRPP.

The wetland delineation reflected on both the corresponding CSM and NRPP Map was completed May 12, 2021. The full wetland delineation report will also be provided electronically for further review by the Planning Department.

- 19. Location of any disturbances to natural resources, including temporary disturbances for grading or other work. (§15-7.0201.J)
  - b. Are any temporary disturbances proposed?

Temporary disturbances to natural resources on the property would include typical disturbances required directly adjacent to the foundation of the proposed single-family home in a radius distance suitable to effectively construct the single-family home. None of the temporary disturbances are anticipated to impact the wetland, wetland buffer or wetland setback.

c. Are any disturbances to the wetland buffer proposed?

No disturbances, temporary or permanent, are anticipated for the wetland or wetland buffer. A permanent disturbance needed to install a driveway for access to the single-family home is anticipated for the wetland setback (see #13 above).

20. Please include a graphic scale bar (§15-7.0201.L)

This has been included on the latest revision of the NRPP Map.

21. If a wetland has been exempted by the Wisconsin Department of Natural Resources, please provide documentation of the exemption and indicate the exemption on the NRPP.

The wetland located on the parcel has not, to our knowledge, been exempt by the Wisconsin Department of Natural Resources nor has an application for such exemption been submitted.

## **General Planning Comments**

### **CSM**

22. The applicant may request, in writing, a delay of the review by Plan Commission and Common Council to allow for a resolution to the design requirements and other comments.

# Natural Resource Protection Plan

23. Staff notes that the site is constrained by a large wetland complex. While there is a portion of the property which could accommodate a house, access to that portion of the lot requires a Natural Resource Special Exception for permanent impacts to wetland setback by installation of a driveway.

# **Engineering Comments**

- 1. Must resolve all technical issues identified by Milwaukee County. Upon receipt of the comments from the County, the City comments below may be revised to reflect changes required by the County.
  - On page 3 of 4, under Common Council Approval, insert the sentence "and dedication accepted by....."

No technical issues were identified by Milwaukee County. Page 4 of 4 has been updated in the latest revision of the CSM to reflect "Approved and dedication accepted by the Common Council of the...".

- 2. Must have a minimum 60-ft frontage along a public street.
  - SECTION 15-5.0101 STREET ARRANGEMENT
  - Access to Public Streets Required. The Certified Survey Map or Subdivision shall be designed so as to provide each lot with a minimum of 60 feet frontage along a public street.

A Board of Zoning and Building Appeals Review application, including corresponding documents, requesting a Land Division Variance has been submitted for review by the Planning Commission to request a simple road extension in contrast to installing a cul-de-sac as outlined in the Design Standards for Land Divisions.

3. Must insert in the plat the note "Land is served by public sewer and water."

This has been updated on the latest revision of the CSM.

Note: Need to submit a proposed plan for the road improvement for review and approval.

An initial road extension proposal was provided electronically to the Engineering Department for review. Once alignment is gained as to what additional public improvements, if any, are needed, the proposal will be updated accordingly in addition to the feedback provided by the Engineering Department on 2/16/22, and then re-submitted for Engineering Department review.

# **Milwaukee County**

Milwaukee County Register of Deeds Comment Letter is attached.

The Comment Letter provided by the Milwaukee County Register of Deeds reflected "We did not review the Natural Resources Protection Plan. No other comments."

# **Planning Department**

9229 West Loomis Road Franklin, Wisconsin 53132

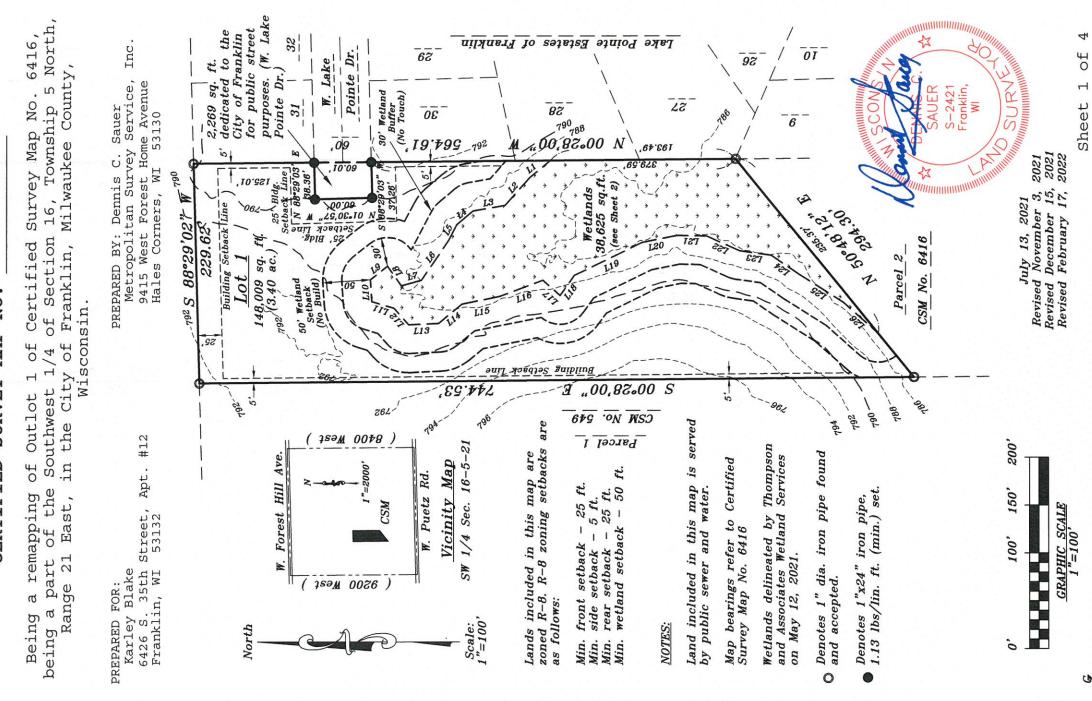
Email: generalplanning@franklinwi.gov



Phone: (414) 425-4024 Fax: (414) 427-7691 Web Site: <u>www.franklinwi.gov</u>

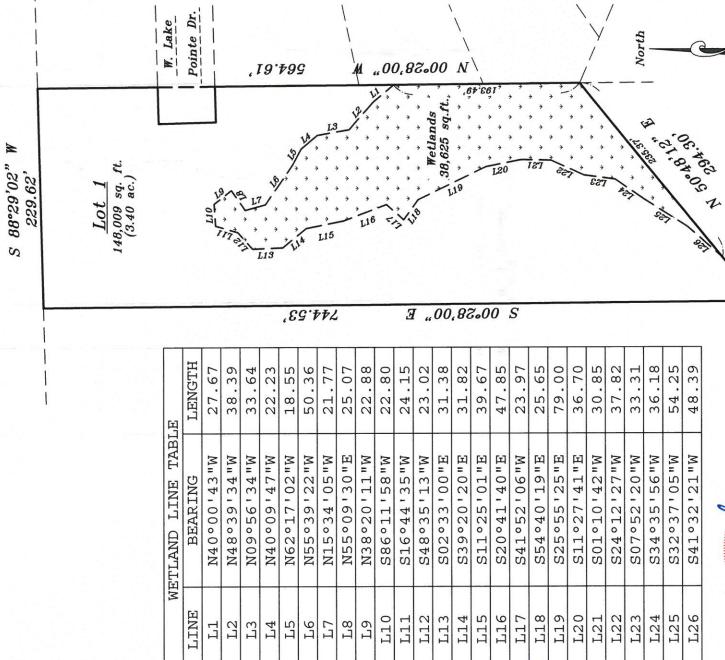
# Findings and Factors in the Review of Land Division Variances

| Date:   | Case No   |
|---|---|
| Property Owner:   |   |
| Property Address:   |   |
| variance to the provisions of Divisions 1: shall be granted unless the Plan Commiss | ranklin Unified Development Ordinance states, "No 5-5.0100, 15-8.0100, and 15-8.0200 of this Ordinance ion finds by the greater weight of the evidence that all d so indicates in the minutes of its proceedings: |
|   | r unusual circumstances or conditions where a literal s Ordinance would result in severe hardship.  |
|   |   |
|   | ally to other properties or be such a recurrent nature as ons of the Unified Development Ordinance should be  |
|   |   |
| 3. Such variance is necessary for the prespossessed by other properties in the same | servation and enjoyment of substantial property rights ne vicinity.   |
|   |   |
|   | ostantial detriment to adjacent property and will not<br>ne purpose and spirit of this Ordinance or the public  |
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# CERTIFIED SURVEY MAP NO.

North, 6416 16, Township 5 No Milwaukee County, Survey Map No. of Section Franklin, M Certified of Outlot 1 of Certi Southwest 1/4 of Se in the City of Frank Wisconsin. in of remapping coart of the e 21 East, i part ge 21 being a r Range Being





Sevised November 3, 2021
Revised December 15, 2021
Revised February 17, 2022

GRAPHIC SCALE
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Sheet 2 of 4

# 8 MAP SURVEY CERTIFIED

County, 6416, being 16, Township Milwaukee Survey Map No. 64: 1/4 of Section 16, Franklin, Southwest City of Certified 1 of the theof in of Outlot 1/4 East, Southwest remapping 21 Range the Wisconsin of North, Being

# SURVEYOR'S CERTIFICATE

SS OF WISCONSIN) COUNTY) MILWAUKEE STATE

the City 150,278 of the Southwest 1/4 of Range 21 East, in the Outlot contain certify: of remapping the Sout lands do hereby Said ed and mapped, a 1 6, being a part of Township 5 North, R Professional Land Surveyor, Wisconsin. divided County, 1, No. 62. Certified Survey Map No. Southwest 1/4 of Section of Franklin, Milwaukee square feet (3.45 acres). surveyed, Sauer, have ບ່ Dennis

direction theand map by said land. division of land owner survey, Inc., such Crescent Construction, made have Н That

exterior boundaries That such map is a correct representation of all the of the land surveyed and the land division thereof made.

and Division of dividing 236.34 with the provisions of Chapter 236 I the Unified Development Ordinance in surveying, Code Wisconsin State Statutes and the Unified 15, of the City of Franklin Municipal mapping the same. have fully complied Н

July 13, 2021 Date Revised 1/13/21 12/15/21

Professional Land Surveyor

S-242

DENNIS C. SAUER S-2421
FRANKLIN, WILLIAM SURVEYOR SURVEYO

Drexel PREPARED FOR: Karley Blake 7213 W. Drex 7213 W. Dr Franklin,

Inc. Metropolitan Survey Service, 9415 West Forest Home Avenue PREPARED BY: Dennis MI Corners,

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# CORPORATE OWNER'S CERTIFICATE

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Commission Expires: of Wisconsin Public Notary State

# COMMON COUNCIL APPROVAL

of of city day the of Council this Common on the ρλ accepted No. dedication Resolution 20 and Franklin, APPROVED

Mayor R. Olson, Franklin Stephen City of

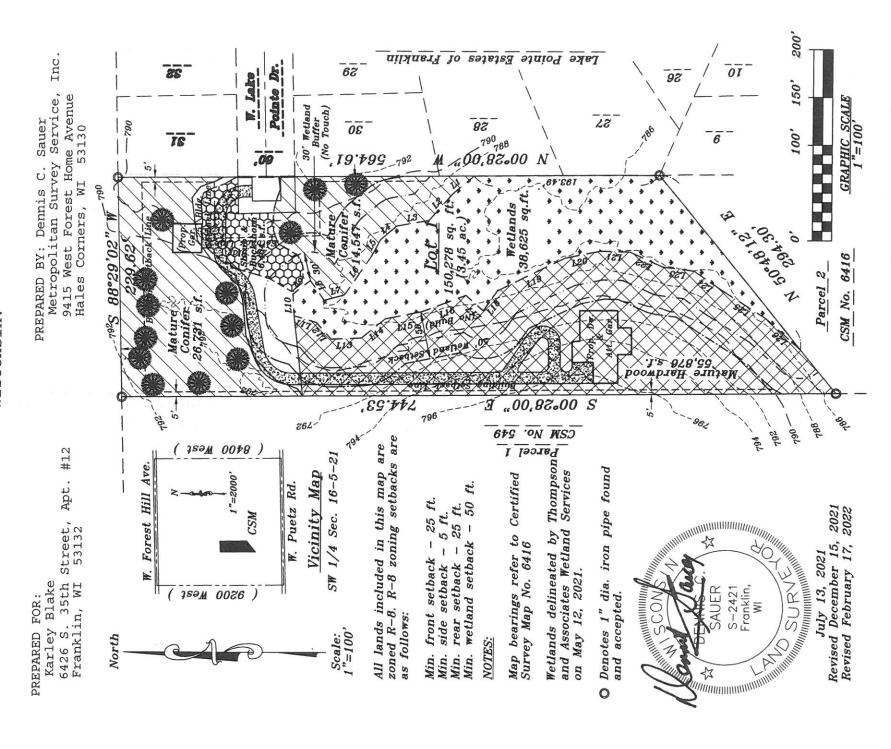
Clerk Wesolowsi, City of Franklin Sandra L.

Sheet WIND SURVEYOR Revised

S-2421 FRANKLIN,

# PROTECTION RESOURCE NATURAL

of Outlot 1 of Certified Survey Map No. 6416, Southwest 1/4 of Section 16, Township 5 North, in the City of Franklin, Milwaukee County, Wisconsin. in of Being a remapping being a part of the Range 21 East,



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| Square feet  7 Resource  |                               |                        |                           |   |                 |
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# Legend

| Property Line | House Setback Line | Wetland Boundary | 30' Wetland Buffer | 50' Wetland Setback |
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# Meeting of March 3, 2022

# **Site Plan Application**

**RECOMMENDATION:** City Development Staff recommends (1) Approval of waivers and modifications as specified, and (2) Approval of the Site Plan, subject to the conditions in the draft Resolutions.

**Property Owner:** SFT Franklin Oakwood LLC (JAMS-4, LLC, as shown on Site

Plan Application dated July 26, 2021)

**Applicant:** H.S.A. Acquisitions, Inc.

**Project Address:** 3303 West Oakwood Road (TKN 951-9994-001)

**Agents:** Werner H. Brisske, Partners in Design

Matthew Carey, Pinnacle Engineering, Inc.

**Zoning:** PDD-39 Mixed Use Business Park

South 27<sup>th</sup> Street Design Overlay

**Use of Surrounding Properties:** North: Residential zoned R-2 and R-3 and Ascension Hospital

zoned B-7

West: Office/warehouse (under construction) zoned PDD-39 East: Food converting facility (approved) zoned PDD-39 South: Conservancy outlot (as per CSM 9362) zoned PDD-39

**Site Plan Proposal:** To permit construction of a 271,780-square foot warehouse

building, with 201 parking spaces, 30 loading docks and 4 large overhead doors, 3 driveway accesses for West Oakwood Road,

and a single truck access to South Hickory Street.

**Staff Planner:** Heath Eddy, AICP, Planning Manager

# **INTRODUCTION**

On July 13, 2021, the applicant submitted applications for a Site Plan and Special Use to develop a single, 271,780 square foot industrial building intended for flexible end users on the northwestern quarter of the parcel identified as Tax Key Number 951-9994-001, which is located in the Business Park section of Planned Development District No. 39 (PDD-39). The development does not currently have tenants. The applicants are seeking Site Plan approval to begin construction of the structure along with all site development aspects; a Special Use application public hearing will be conducted at the March 15, 2022 Plan Commission meeting, which will focus on the applicant's request for approval to accommodate likely future users in the areas of "eCommerce, Distribution, and Warehousing," along with "Overnight Truck Parking of Vehicles More Than 8,000 Pounds Gross Vehicle Weight."

A number of approval items are being deferred to future users. Signage is not currently proposed; future tenants will need to request sign approval, though the applicant is requesting a waiver of the approval process as provided below. Trash enclosures will be designed to meet the needs of future users and will require updating the site plan. The applicant is also not able to specify the desired hours of operation for the development without tenants.

## PROJECT DESCRIPTION AND ANALYSIS

The proposed building is designed to present a cohesive façade to along West Oakwood Road. The building is proposed for 271,780 square feet of initial floor area, with the potential for a second-floor office or other space as the individual unit requires. The façade includes four entrances, each of which is articulated with covered walkways, benches, and bicycle parking located at either end of the building. These end points will include more detailed corner features on the northeast and northwest corners. A total of 201 parking spaces are provided for standard motor vehicles at the front of the building, including 7 total ADA spaces. The rear will include loading bays for delivery traffic for each tenant, and parking for up to 72 large trucks.

The proposed design will route motor vehicle traffic along West Oakwood Road, with large truck traffic following the truck routing of PDD-39; trucks enter the site from the future South Hickory Street, then exit the subject property from the eastern access driveway adjacent to the approved truck entrance to Saputo Cheese USA property. While PDD-39 requires cross-access for both pedestrian and vehicular circulation, such access is not allowed under federal requirements for food production facilities. Therefore, the applicant will be permitted to have separate access to West Oakwood Road.

Building materials consist of painted precast concrete wall panels, glazing, and metal details such as coping and awnings. The applicant notes that these are typical materials for buildings of this type for the market they hope to attract, however these materials do not conform to the requirements of the PDD. §15-3.0444B.D.4.iii. requires brick, stone, tile, and custom architectural masonry as a preferred primary materials; precast concrete should only be used as a secondary material (§15-3.0444B.D.4.iv). The applicant has requested a modification of this standard, among those detailed below.

The proposed site design meets requirements regarding the quantity and diversity of plantings for the PDD. The Landscape Surface Ratio or LSR for the PDD is 0.25, meaning that 25% of any individual site must consist of greenspace. The proposed Site Plan meets this standard.

The proposed buildings meet the dimensional standards of the PDD with regard to building height and size, setbacks, and general parking design. However, in a number of respects the applicants would like to request waivers of design standards. These properties are subject to the requirements of both the design standards of PDD 39, and additionally, the 27<sup>th</sup> St. Design Overlay.

## REQUESTED WAIVERS AND MODIFICATIONS

The Applicant is requesting waivers or modifications of the following standards. Staff suggestions and recommendations are noted below.

# PDD-39 Design Standards, Section 15-3.0444B.D. Business Park Area Design Standards

1. §15-3.0444B.D.1.a.iv. states "Parking in front of buildings shall be designed primarily for visitors and high turnover usage with employee parking to be located to the side-yard or rear-yard."

- **Staff's Recommendation:** The applicant requests this requirement be waived, so as to have all employee and visitor parking in front of the buildings. Staff concurs that separation of the public from heavy vehicles would be appropriate and <u>recommends approval of this waiver.</u>
- 2. §15-3.0444B.D.1.a.vi. states "All parking, loading, and unloading areas shall be screened from adjacent streets and sites utilizing landscaping, berms and/or decorative fences."
  - **Staff's Recommendation:** The applicant requests the requirement to screen the rear property line be waived. Staff concurs that this screening is unnecessary, <u>and recommends approval of the requested waiver.</u>
- 3. §15-3.0444B.D.2.c.iii. states "Sidewalks shall be provided along the entire length of any façade containing a public entrance, leaving room for foundation planting beds, and shall connect to existing or planned public sidewalks or pedestrian/bike facilities."
  - **Staff's Recommendation:** The applicant requests to provide pedestrian facilities in the parking lot, and two cross-connections with the Oakwood Road sidewalk, along with bicycle parking facilities near the east and west ends of the proposed building. <u>Staff recommends approval of this modification</u>.
- 4. §§15-3.0444B.D.4.a.iii. and iv. state "Brick, stone, tile, and custom architectural masonry units are preferred primary materials for the solid (non-window) portion of new buildings or additions." and "Precast concrete, cast stone, plain/smooth concrete masonry units and EIFS are acceptable accent and secondary materials for the solid portion of any buildings or additions."
  - **Staff's Recommendation:** The applicant requests to be permitted to use articulated, painted precast concrete wall panels for the exterior walls. <u>Staff recommends approval of these modifications.</u>
- 5. §15-3.0444B.D.5. Signage Standards, states "All signs must be in accordance with the Municipal Code, as amended, approved by the Plan Commission, and be subject to issuance of a Sign Permit through the Inspection Department. On-site directional signage may be allowed in any area needed to control traffic or parking provided such signage has received approval from the Department of City Development."
  - **Staff's Recommendation:** The applicant requests waiver of the Plan Commission review of the proposed signs for the site, and defer such review and approval to the Department of City Development under a Sign Permit Application. *Staff recommends approval*.

# UDO, Part 3, Division 15-3.0350, Section 15-3.0351 – South 27th Street Design Overlay District

The South 27<sup>th</sup> St. Design Overlay ordinance states that the overlay's intent is for South 27<sup>th</sup> Street to "be a local, regional and statewide destination for people to work, live, shop, recreate, and interact with one another." Many of the standards encourage design features geared towards an attractive commercial, public-facing aesthetic. They are not appropriate for industrial users, and staff believes it would be appropriate to waive or modify the sections as requested.

1. §15-3.0352.A. states "Not more than 50% of the off-street parking spaces shall be located directly between the front façade of the building and the public street."

- **Staff's Recommendation:** The applicant requests to have all employee and visitor parking in front of the buildings. See also Item 1a.iv. in the PDD-39 above.
- 2. §15-3.0352.B. states "Parking lots in which the number of spaces significantly exceeds the minimum number of parking spaces required under §15-5.0203 are not permitted."
  - **Staff's Recommendation:** The applicant requests additional parking given that the types of tenants for this development are not known, and the additional number (201 vs. 136 minimum) is necessary for flexibility, and in case a second-story is constructed inside any of the proposed tenant spaces. *Staff recommends approval of this modification*.
- 3. §15-3.0353.C.4. states "Sidewalks shall be provided along the entire length of any façade containing a public entrance, leaving room for foundation planting beds."
  - **Staff's Recommendation:** The applicant requests to provide pedestrian facilities as shown on the proposed Site Plan. See also Item 2.c.iii. in PDD-39 above.
- 4. §15-3.0353.G. states "Each development which contains a building over 50,000 square feet in area shall provide public central area(s)..."
  - **Staff's Recommendation:** The applicant requests this requirement be waived, as this type of feature is not typical for an industrial warehouse building. <u>Staff recommends approval of this waiver.</u>
- 5. §15-3.0355.A.3., A.4., A.6., and A.10. which state
  - a. "3. Brick, stone, and terra-cotta are preferred primary materials for new buildings or additions."
  - b. "4. The use of false brick or other "faux" sidings is discouraged."
  - c. "6. Painting of brick and stone is discouraged."
  - d. "10. Multi-story buildings that allow for a mix of retail, office, or residential uses are preferred."
  - **Staff's Recommendations:** The applicant is requesting modifications to allow for the use of articulated painted precast concrete wall panels as the primary outside façade material. This type of material is the standard for most buildings of this type. In addition, the applicant is requesting to not require multi-story; the applicant states that a second story may be added as needed for individual tenant spaces but is not intended at the outset. <u>Staff recommends approval of these modifications.</u>
- 6. §15-3.0355.C.4. states "Building materials shall be unified throughout the building, and shall complement other buildings in the vicinity..."
  - **Staff's Recommendation:** The applicant requests this requirement be modified in favor of the proposed materials and level of articulation. *Staff recommends approval of this modification*.
- 7. §15-3.0355.C.5. states "A minimum of 20% of all the combined facades of the structure shall employ actual façade protrusions or recesses. A minimum of 20% of all of the combined linear roof eave or parapet lines of the structure shall employ differences in height. Roofs with particular

slopes may be required by the City to complement existing buildings or otherwise establish a particular aesthetic objective. Ground floor facades that face and are on properties that are in any part within 100 feet of public streets shall have arcades, display windows, entry areas, awnings, or other such features along no less than 50% of their horizontal length. The integration of windows into building design is strongly encouraged."

**Staff's Recommendation:** The applicant requests a modification to the technical requirements of this section, though believes the proposed design meets the intent of this requirement. <u>Staff recommends approval of this modification.</u>

8. §15-3.0355.C.8. states "Modest building setbacks are encouraged. Where buildings are proposed to be distance from the public street, the overall development design shall include smaller buildings on pads or outlots closer to the street."

**Staff's Recommendation:** The applicant requests a waiver of this requirement, since short building setbacks would conflict with the expectation to separate parking and loading areas on-site. *Staff recommends approval of this waiver*.

# **Natural Resource Protection Plan**

As part of the land division procedure (CSM) to create this parcel, a Natural Resource Protection Plan was submitted and approved. The proposed site plan does not contemplate additional impacts to natural resources which would alter that NRPP or require further approval.

# **STAFF RECOMMENDATION:**

The Department of City Development staff recommends approval of the Site Plan, subject to the conditions in the draft resolutions.

# CITY OF FRANKLIN PLAN COMMISSION

MILWAUKEE COUNTY [Draft 2-22-22]

RESOLUTION NO. 2022-

A RESOLUTION APPROVING A SITE PLAN FOR THE DEVELOPMENT OF AN APPROXIMATELY 271,753 SQUARE FOOT SPECULATIVE INDUSTRIAL BUILDING WITH ASSOCIATED PARKING, LOADING AREAS AND STORMWATER FACILITIES (GENERALLY LOCATED AT WEST OAKWOOD ROAD, THE NORTHWEST 1/4 OF THE PARCEL ADJACENT TO THE FUTURE HICKORY STREET (LOT 1 OF CERTIFIED SURVEY MAP NO. 9362)) (HSA COMMERCIAL, INC., D/B/A HSA COMMERCIAL REAL ESTATE, APPLICANT, SFT FRANKLIN OAKWOOD, LLC, PROPERTY OWNER)

WHEREAS, HSA Commercial, Inc., d/b/a HSA Commercial Real Estate having applied for approval of a proposed site plan for the development of an approximately 271,753 square foot speculative industrial building generally located at West Oakwood Road, at the northwest 1/4 of the parcel adjacent to the future Hickory Street (Lot 1 of Certified Survey Map No. 9362), with parking for cars in front of the buildings on Oakwood Road, loading areas for trucks at the rear (including overnight truck parking) and stormwater facilities; and

WHEREAS, the Plan Commission having reviewed such proposal and having found same to be in compliance with the applicable terms and provisions of §15-3.0421 of the Unified Development Ordinance and in furtherance of those express standards and purposes of a site plan review pursuant to Division 15-7.0100 of the Unified Development Ordinance.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the Site Plan for the development of an approximately 271,753 square foot speculative industrial building generally located at West Oakwood Road, at the northwest 1/4 of the parcel adjacent to the future Hickory Street (Lot 1 of Certified Survey Map No. 9362), with parking for cars in front of the buildings on Oakwood Road, loading areas for trucks at the rear (including overnight truck parking) and stormwater facilities, as depicted upon the plans dated February 21, 2022, attached hereto and incorporated herein, is hereby approved, subject to the following terms and conditions:

- 1. The property subject to the Site Plan shall be developed in substantial compliance with, and operated and maintained pursuant to the Site Plan for the HSA Commercial, Inc., d/b/a HSA Commercial Real Estate industrial building dated February 21, 2022.
- 2. HSA Commercial, Inc., d/b/a HSA Commercial Real Estate, successors and assigns, and any developer of the HSA Commercial, Inc., d/b/a HSA Commercial Real Estate industrial building development project, shall pay to the City of Franklin the amount

HSA COMMERCIAL, INC., D/B/A HSA COMMERCIAL REAL ESTATE – SITE PLAN RESOLUTION NO. 2022-\_\_\_\_\_Page 2

of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the HSA Commercial, Inc., d/b/a HSA Commercial Real Estate industrial building development project, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.

- 3. The approval granted hereunder is conditional upon the HSA Commercial, Inc., d/b/a HSA Commercial Real Estate industrial building development project for the property generally located at West Oakwood Road, at the northwest 1/4 of the parcel adjacent to the future Hickory Street (Lot 1 of Certified Survey Map No. 9362): (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
- 4. That the HSA Commercial, Inc., d/b/a HSA Commercial Real Estate industrial building shall be developed and constructed pursuant to such Site Plan within one year from the date of adoption of this Resolution, or this Resolution and all rights and approvals granted hereunder shall be null and void, without any further action by the City of Franklin.
- 5. The applicant shall obtain a waiver from the Plan Commission of the Planned Development District No. 39 (Mixed Use Business Park) Design Standards Section 15-3.0444B.D.1.a.iv. (Parking required and location regulated).
- 6. The applicant shall obtain a waiver from the Plan Commission of the Planned Development District No. 39 (Mixed Use Business Park) Design Standards Section 15-3.0444B.D.1.a.vi. (Parking required and location regulated).
- 7. The applicant shall obtain a modification from the Plan Commission of the Planned Development District No. 39 (Mixed Use Business Park) Design Standards Section 15-3.0444B.D.2.c.iii. (Bicycle and pedestrian amenities) provided that the applicant provide bicycle parking amenities as shown on the proposed Site Plan.
- 8. The applicant shall obtain a waiver from the Plan Commission of the Planned Development District No. 39 (Mixed Use Business Park) Design Standards Section 15-3.0444B.D.4.a.iii. and iv. (Building Character and Design) provided that the applicant implements the proposed building design as submitted with the Site Plan Application.

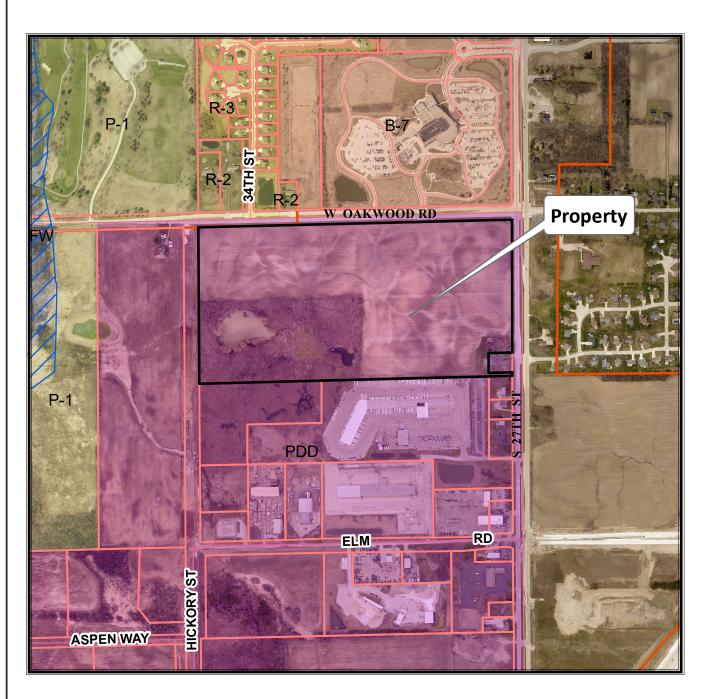
HSA COMMERCIAL, INC., D/B/A HSA COMMERCIAL REAL ESTATE – SITE PLAN RESOLUTION NO. 2022-\_\_\_\_\_Page 3

- 9. The applicant shall obtain a waiver from the Plan Commission of the Planned Development District No. 39 (Mixed Use Business Park) Design Standards Section 15-3.0444.B.D.5. (Signage Standards) provided the applicant shall obtain approval of a Sign Permit through the Department of City Development.
- 10. The applicant shall obtain a waiver from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0352.A. (Parking required and location regulated).
- 11. The applicant shall obtain a modification from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0352.B. (Number of Parking Spaces Limited) to permit a maximum of 201 parking spaces for regular motor vehicles, and 72 large truck parking spaces.
- 12. The applicant shall obtain a waiver from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0353.C.4. (Pedestrian Considerations) to permit development of the attached Site Plan.
- 13. The applicant shall obtain a waiver from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0353.G. (Central Areas/Features) in favor of the proposed arrangement of existing covered walk areas, benches, and bicycle parking accommodations.
- 14. The applicant shall obtain modifications from the Plan Commission of the South 27th Street Design Overlay District Standards Sections 15-3.0355.A.3., A.4., A.6., and A.10. (Building Character and Design) to permit use of articulated, painted precast concrete wall panels, and to permit a single-story building in lieu of required multistory development.
- 15. The applicant shall obtain a modification from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0355.C.4. (Building Materials) in lieu of the proposed exterior materials.
- 16. The applicant shall obtain a modification from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0355.C.5. (Building Design) to permit the proposed architectural articulation as provided on the attached Site Plan.
- 17. The applicant shall obtain a waiver from the Plan Commission of the South 27th Street Design Overlay District Standards Section 15-3.0355.C.8. (Building Location).

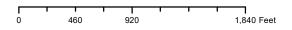
|             | IMERCIAL, IN<br>TION NO. 2022 |                          | OMMERCIAL REAL ESTATE – SITE PLAN   |
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| inst        |                               | with the required in     | substrate so as to be sufficient for landscaping rrigation as specified in Unified Development                          |
| Cor         | nstruction Plan               | , Erosion Control        | of the Stormwater Management Plan, Utilities<br>Plan, and driveway access from the City<br>suance of a building permit. |
|             |                               | ular meeting of the, 202 | e Plan Commission of the City of Franklin this 22.  |
|             |                               | d at a regular med       | eting of the Plan Commission of the City of, 2022.  |
|             |                               |                          | APPROVED:   |
|             |                               |                          | Stephen R. Olson, Chairman  |
| ATTEST:     |                               |                          |   |
| Sandra L. \ | Wesolowski, Ci                | ty Clerk                 |   |
| AYES        | NOES                          | ABSENT                   |   |



TKN: 951 9994 001



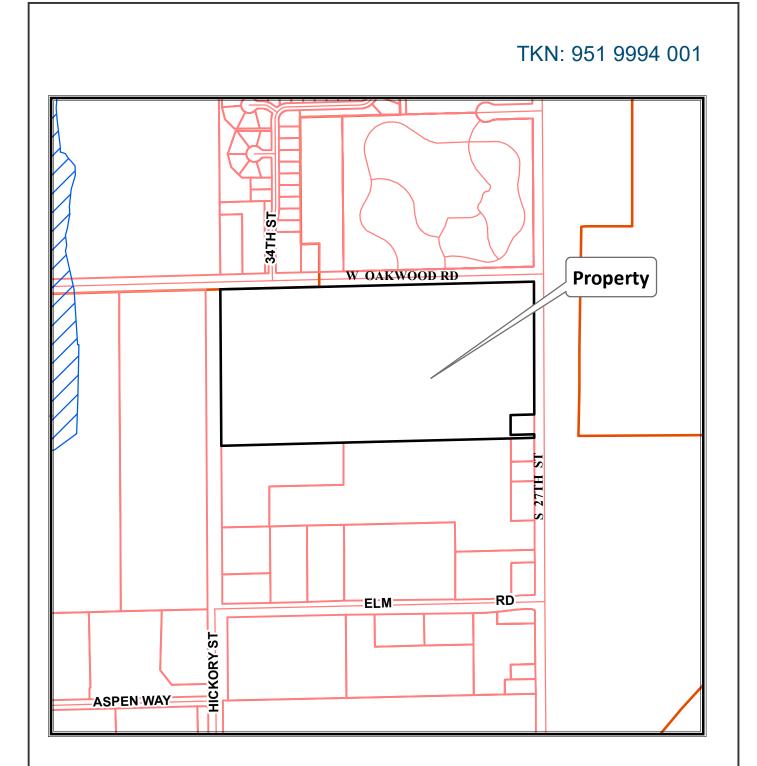
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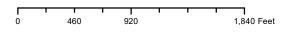
NORTH 2021 Aerial Photo

This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.





Planning Department (414) 425-4024





This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.

# WEST OAKWOOD ROAD DEVELOPMENT - FRANKLIN, WI

# **PROJECT SUMMARY:**

The project development will be located in the proposed Gateway Area district situated along West Oakwood Road. HSA Commercial will be developing a speculative industrial building. The building is situated at the intersection of South Hickory Street and West Oakwood Road. The proposed development will be a Class A industrial development that reflects best in class design standards for the asset class.

The building will be approximately 271,800 square feet. The building will be constructed with load bearing precast concrete painted wall panels and interior steel columns and roof framing. The proposed design for the building includes two primary corner entrances and two secondary entry features each with their own storefront and covered walkways. Additional windows and clerestory windows are provided. The car traffic has been separated from truck traffic for safety purposes. Car parking is in front of the building to the north with access from West Oakwood Road. Truck loading is from the west with access at future South Hickory Street and from the east with a shared truck access drive from West Oakwood Road. The shared access drive will be located between the building and adjacent west site. Two accessible routes will connect the building entrances to West Oakwood Road for pedestrian and bike access. Stormwater detention ponds are located on the west of the site for onsite stormwater management and to provide visual amenities. Our discussions with City staff have revealed that the Natural Resources Protection Plan on file with the city will be adequate for this development proposal.

The estimated project value for the development of the west building and site work is \$20,000,000. The estimated project schedule is to break ground on the buildings in the fourth quarter of 2021 for completion in the third quarter of 2022.

# <u>DIVISION 15-3.0700</u> SPECIAL USE STANDARDS AND REGULATIONS <u>SECTION 15-3.0701</u> GENERAL STANDARDS FOR SPECIAL USES

- **A.** <u>General Standards</u>. No special use permit shall be recommended or granted pursuant to this Ordinance unless the applicant shall establish the following:
- 1. **Ordinance and Comprehensive Master Plan Purposes and Intent.** The proposed use and development will be in harmony with the general and specific purposes for which this Ordinance was enacted and for which the regulations of the zoning district in question were established and with the general purpose and intent of the City of Franklin Comprehensive Master Plan or element thereof.
  - Response: The development will be located in the proposed Gateway Area district situated at the intersection of the future South Hickory Street and West Oakwood Road. HSA Commercial will be developing a Class A speculative industrial building in which Tenants have not yet been identified. To ensure the success of the project in the COVID -19 era, in which businesses are making decisions on locations under rapidly accelerated time frames, the applicant is requesting additional uses to be considered as approved Permitted Uses for the development. The current Gateway area zoning approves Office/Light Industrial Corporate Headquarters use classification as a Permitted Use as well as Indoor Warehouse, Distribution and Storage as a Permitted Accessory Use. The applicant is requesting that business classifications of eCommerce Fulfillment, Warehousing, and Distribution uses are considered Permitted Uses. The proposed development will be a Class A industrial development that reflects best in class design standards for the asset class. The additional approved permitted uses align with the types of businesses that are expanding in the area which will enhance long term property value and maximize assessed property increment to help support **TID 4.**
- 2. **No Undue Adverse Impact.** The proposed use and development will not have a substantial or undue adverse or detrimental effect upon or endanger adjacent property, the character of the area, or the public health, safety, morals, comfort, and general welfare and not substantially diminish and impair property values within the community or neighborhood.
  - Response: The proposed development site is situated next to the future South Hickory Street on the west and West Oakwood Road to the north. The development is bordered by a pond and wooded area to the south. On the east, the development is adjacent a similar future office/industrial use. All employee, vendor and logistics access will be directed to the south side of the property. West Oakwood Road is already a commercial grade road.
- 3. **No Interference with Surrounding Development.** The proposed use and development will be constructed, arranged, and operated so as not to dominate the immediate vicinity or to interfere with the use and development of neighboring property in accordance with the applicable zoning

district regulations.

- Response: The development is within the Gateway Area which is a Business/Industrial Park in nature and consistent with other uses in this proposed park.
- 4. **Adequate Public Facilities.** The proposed use and development will be served adequately by essential public facilities and services such as streets, public utilities including public water supply system and sanitary sewer, police and fire protection, refuse disposal, public parks, libraries, schools, and other public facilities and utilities or the applicant will provide adequately for such facilities.
  - Response: The development will be adequately serviced by all existing public utilities, infrastructure, and services.
- 5. **No Traffic Congestion.** The proposed use and development will not cause undue traffic congestion nor draw significant amounts of traffic through residential streets. Adequate measures will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.
  - Response: The development is at the intersection of the future South Hickory Street and West Oakwood Road. There should be no reason for traffic from the development to funnel into residential neighborhoods in the area.
- 6. **No Destruction of Significant Features.** The proposed use and development will not result in the destruction, loss, or damage of any natural, scenic, or historic feature of significant importance.
  - Response: The proposed development will be located on an unimproved site within the Gateway Area district. The proposed development will have on-site detention ponds helping to blend into the natural environment and will offer prospective tenants nature-based amenities that will help attract growing businesses to the area.
- 7. **Compliance with Standards.** The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified by the Common Council pursuant to the recommendations of the Plan Commission. The proposed use and development shall comply with all additional standards imposed on it by the particular provision of this Division and Ordinance authorizing such use.

As part of our application and this submittal, we are requesting some exceptions to the applicable design standards. The requested exceptions are in blue text below. We are also identifying areas where we exceed the design standards – these are in green text.

# PDD No. 39 Design Standards, Section 15-3.0444A.D. Gateway Area Design Standards

<u>Item 3b.</u> Central Areas/Features required. Each development which contains a building over forty-thousand (40,000) square feet in area shall provide central area(s) or feature(s) such as a patio/seating area, pedestrian plaza with benches, outdoor playground area, water feature, and/or other such deliberately designated areas or focal points that adequately enhance the development or community. All such area shall be openly accessible to the public, connected

to the public and private sidewalk system, designed with materials compatible with the building and remainder of the site, and maintained over the life of the building and project.

Request: We have located stormwater detention ponds at the intersection of the future South Hickory Street on the west and West Oakwood Road to provide a water feature visible from the public way. The ponds also act as a buffer to the building. Each building entrance features architectural walkway protection at the parking lot leading to a covered entry plaza with a bench. However, the intended uses for the building are not "public" in nature and amenities such as a playground area are inappropriate.

<u>Item 4a.i.</u> All principal buildings shall be multi-story and exhibit quality architectural design. Corner building shall also serve as landmarks with distinctive architectural character, including such features as towers, rounded walls, recessed entries, or other unique features.

Request: We have created large glazed openings at the corners of the building with clerestory windows above. This provides the ability of a future tenant to build a two-story office while also providing the look of a multi-story building from initial construction. We have also provided architectural covered walkways and large canopies at our four building entries.

**Item 4a.iii.** Brick and stone are preferred primary materials for the solid (non-window) portion of the new buildings or additions.

Request: Articulated, painted precast concrete wall panels are utilized for the exterior walls of the building. This is the industry standard for a Class A building of this type. In addition, we are calling for the use of a stone pattern form liner on the lower 10'-6" of a great deal of the walls facing West Oakwood Road. Finally, our arcaded covered walkway piers are further upgraded to a stone masonry. No concrete masonry units or EIFS is used in the buildings.

<u>Item 4a.xi</u>. Commercial buildings shall have at least 60% of their ground floor front elevations with transparent windows.

Request: We have created large glazed openings at the corners of the building and at the two center entries with clerestory windows above. Additional larger individual windows are provided along the front elevation. The proposed design provides 30.7% glazing on the north elevation and 8.6% on the west elevation. Providing 60% glazing at the front elevation is not desired or typically provided for a Class A building of this type.

<u>Item 5.</u> All signs must be in accordance with the Municipal Code, as amended, approved by the Plan Commission, and be subject to issuance of a Sign Permit through the Inspection Department. On-site directional signage may be allowed in any area needed to control traffic or parking provided such signage has received approval from the Department of City Development.

Request: We request a waiver of the Plan Commission review of the proposed signs for the site and defer the review and approval to the Department of City Development under a Sign Permit Application. We note that the PDD-39 prohibits Wall Signs.

<u>Item 7.</u> Supplemental Design Guidelines. It is intended that the *applicable* design guidelines set forth in South 27<sup>th</sup> Street Corridor Plan, and the *applicable* design standards in the South 27<sup>th</sup> Street Design Overlay District, be utilized - *as a supplemental guide* - to the mandatory

design standards set forth elsewhere in this Ordinance pertaining to the Business Park Area portion of the Planned Development District No. 39. The purpose of these supplemental guidelines are to serve as general recommendations to further encourage good quality design in new building and site design, which in turn will support an attractive, interesting, safe, and sustainable District. It is also intended that these supplemental guidelines serve as the supplemental design elements or improvements to be incorporated into any project which requires compensation for any waiver of the additional design standard as set forth in this Ordinance. In particular, it is *encouraged* that the design standards, set forth in Section 15-3.0355B and Section 15-3.0355C of South 27<sup>th</sup> Street Design Overlay District *be considered*.

Response: The intent as identified in bold text above is noted to encourage considering use of the Supplemental Design Guidelines where applicable, as a supplemental guide. In line with our intent to provide an industrial building which is aesthetically pleasing and appropriate for its use and location in the business park, the following indicates how the proposed design relates to these encouraged guidelines.

# <u>Village of Franklin Zoning, Chapter UDO, Part 3, Division 15-3.0350, Section 15-3.0351</u> – South 27<sup>th</sup> Street Design Overlay District

<u>15-3.0352.A.</u> Parking required and Location Regulated. Not more than 50% of the off-street parking spaces shall be located directly between the front façade of the building and the public street, unless additional buildings in the overall development are or will be located between the main building and the public street. Such additional buildings must be sufficient in size, location, and number to provide an effective visual break between the public street and the parking lot.

Request: The speculative nature of this building is intended to be extremely flexible to meet needs of potential companies searching for a facility of this type. The goal is to separate the car traffic from truck traffic for safety purposes through primary employee and visitor car parking located in parking lot on the north side of the building while any truck maneuvering being confined to the south sides of the buildings. The flexible nature of this site plan features pavement areas on the south side of the building to be stripped as additional car parking almost equivalent to that provided on the north. It is our opinion that our site planning for flexibility with this potential parking achieves the spirit of locating 50% of the parking behind the building. Enhanced landscaping beyond the minimum requirements is being provided between the car parking and adjacent public ways.

Provided: The proposed design provides large entrance canopies and architectural walkway protection at each of the proposed tenant entrances to accent the entries and provide rain cover while the pedestrian enters the building. The weather protection extends 89' beyond the minimum 30' required at the corner entrances and 38' beyond the minimum 30' required at the center entries.

<u>15-3.0352.B.</u> Number of Parking Spaces Limited. Parking lots in which the number of spaces significantly exceeds the minimum number of parking spaces required under 15-5.0203 are not permitted.

Request: The minimum required parking spaces under the UDO 15-5.0203 section is 136 per the staff comments. We are requesting 201 car parking spaces. This is a speculative

development and actual parking needs will vary with the prospective tenants. This parking ratio is consistent with the other similar developments and necessary for marketability.

<u>15-3.0353.G.</u> Central Areas/Features. Each development which contains a building over 50,000 square feet in area shall provide central area(s) or feature(s) such as a patio/seating area, pedestrian plaza with benches, outdoor playground area, water feature, and/or other such deliberately designated areas or focal points that adequately enhance the development or community. All such areas shall be openly accessible to the public, connected to the public and private sidewalk system, designed with materials compatible with the building and remainder of the site, and maintained over the life of the building and project.

Request: We request a waiver for this requirement. The proposed design does not include any specific central area/feature as these are not typical for buildings of this type. However, we have located our stormwater detention pond at the intersection of the future South Hickory Street and West Oakwood Road to act as water feature visible from the public way. We have also provided architectural covered walkways and benches at our four building entries.

# **15-3.0355.A.** Building Character and Design.

3. Brick, stone and terra-cotta are preferred primary materials for new buildings or additions.

Request: See our response under PDD-39, item 4.a.iii above and UDO, section 15-3.0355.B.3.b below.

4. The use of false brick or other "faux" sidings is discouraged.

Request: See our response under PDD-39, item 4.a.iii above and UDO, section 15-3.0355.B.3.b below.

6. Painting of brick and stone is discouraged.

Request: See our response under PDD-39, item 4.a.iii above and UDO, section 15-3.0355.B.3.b below.

10. Multi-story buildings that allow for a mix of retail, office or residential uses are preferred.

Request: The development is within the Gateway Area which is a Business/Industrial Park in nature and consistent with other uses in this proposed park. The speculative nature of this building is intended to be extremely flexible to meet needs of potential companies searching for a facility of this type. Facilities of this type are typically one story. Our two-story glazed corner entry design does allow for a tenant to construct a two-story office or two-story space.

<u>15-3.0355.B.3.b.</u> Exterior building materials shall convey an impression of durability. Materials such as masonry, stone, stucco, and wood are encouraged. Metal is not allowed as the primary exterior building material, though it may be used for accents including awnings.

Request: As also stated in response to Item 4a.iii. in the PDD No. 39 above, articulated, painted precast concrete wall panels are utilized for the exterior walls of the building. This is the industry standard for a Class A building of this type. Metal and stone masonry accents are incorporated into our design.

<u>15-3.0355.B.5.a.</u> Decorative devices – such as molding, entablature, and friezes – are expected at the roofline. Where such ornamentation is present in the form of a linear molding or board, the band must be at least eight inches wide.

Request: The proposed design includes a simple color coordinated metal coping at the top of the wall.

<u>15-3.0355.B.6.</u> Change in Relief of Building. Buildings must include changes in relief on at least 10% of their primary façade for pedestrian interest and scale. Relief changes include cornices, bases, fenestration, fluted masonry, or other treatments.

Provided: The proposed design provides façade articulation in the form of precast recesses and projections at the entrance areas for a total of 25.9% of the building's north facade. In addition, there are grade level windows, clerestory windows and paint changes to provide further visual interest/relief. Approximately 20.5% of the north elevation, the bottom 10'-6" of the building, incorporates 'stone' form liner to provide additional texture to the building. In addition, we are providing a stone pier arcade with articulated covered walkways leading to entry canopies across 37% of the north façade.

<u>15-3.0355.B.7.a.</u> Windows which allow views to the interior activity or display areas are expected. Windows shall include sills at the bottom and pediments at the top. Glass curtain walls, reflective glass, and painted or darkly tinted glass shall not be used.

Request: The glazing at these buildings will typically be to office areas that are part of the overall function of the tenant's operations. These are not typically retail or showroom display areas as seem to be intended by the language in the standards.

15-3.0355.C.5 Building Design. The building exterior shall be unified in design throughout the structure, and shall complement other buildings in the vicinity. The building shall employ varying building setbacks, height, roof treatments, door and window openings, and other structural and decorative elements to reduce apparent size and scale. A minimum of 20% of all the combined facades of the structure shall employ actual façade protrusions or recesses. A minimum of 20% of all of the combined linear roof eave or parapet lines of the structure shall employ differences in height, with such differences being six feet or more as measured eave to eave or parapet to parapet for buildings over 50,000 square feet. Roofs with particular slopes may be required by the City to complement existing buildings or otherwise establish a particular aesthetic objective. Ground floor facades that face and are on properties that are in any part within 100 feet of public streets shall have arcades, display windows, entry areas, awnings, or other such features along no less than 50% of their horizontal length. The integration of windows into building design is strongly encouraged.

Request: We request a waiver for the technical aspects of this requirement. However, we feel the design does meet the intent of the requirement. As noted in response to 15-3.0355.B.6 above, the proposed design provides façade articulation in the form of precast recesses and projections at the entrance areas for a total of 15.9% of all combined facades and 37% of the north facade is articulated with arcades and canopies. The proposed design also provides varying parapet heights at the entrance areas with a combined percentage of varied parapet being 14% of all the combined linear parapets. The proposed elevations indicate the relative heights to vary from 2'-3" to 4'-3". An accent paint scheme and additional glazing are used to further accentuate the entrance areas. These recesses, projections and elevation changes are appropriate for the visual impact of the entrances

and the proportions of each element. As stated previously, the proposed design also provides large entrance canopies and architectural walkway protection at each of the proposed tenant entrances to accent the entries and provide rain cover while the pedestrian enters the building.

<u>15-3.0355.C.6</u> Building Entrances. Public building entryways shall be clearly defined and highly visible on the building exterior design, and shall be emphasized by on-site traffic flow patterns. Two or more of the following design features shall be incorporated into all public building entryways: canopies or porticos, overhangs, projections, arcades, peaked roof forms, arches, outdoor patios, display windows, distinct architectural details. Unless exempted by the Plan Commission all sides of the building that directly face or abut a public street or public parking area shall have at least one public entrance, except that the City shall not require building entrances on more than two sides of any building.

Request: The proposed design includes a canopy element in front of the future South Hickory Street although the main entry is on the north side of the building.

<u>15-3.0355.C.8</u> Modest building setbacks are encouraged. Where buildings are proposed to be distant from a public street, the overall development design shall include smaller buildings on pads or outlots closer to the street.

Request: We request a waiver from this requirement. The building setback on the north to allow space for employee / visitor parking and provide separation between car and truck traffic.

**B.** <u>Special Standards for Specified Special Uses</u>. When the zoning district regulations authorize a special use in a particular zoning district and that special use is indicated as having special standards, as set forth in Section 15-3.0702 and 15-3.0703 of this Division, a Special Use Permit for such use in such zoning district shall not be recommended or granted unless the applicant shall establish compliance with all such special standards.

Response: The applicant is requesting that business classifications of eCommerce Fulfillment, Warehousing, and Distribution uses be considered Permitted Uses, which may be approved by the Zoning Administrator, and not subject to the requirements of Section 15-3.0702 and 15-3.0703.

- C. <u>Considerations</u>. In determining whether the applicant's evidence establishes that the foregoing standards have been met, the Plan Commission and the Common Council shall consider the following:
- 1. **Public Benefit**. Whether and to what extent the proposed use and development at the particular location requested is necessary or desirable to provide a service or a facility that is in the interest of the public convenience or that will contribute to the general welfare of the neighborhood or community.

Response: The proposed Class A development will be attractive to many different types of industrial operations who will be looking to capitalize on the access that West Oakwood Road provides to Interstate 94. The development will be a catalyst project for TID 4 which will establish immediate assessed property value increment.

2. **Alternative Locations**. Whether and to what extent such public goals can be met by the location

of the proposed use and development at some other site or in some other area that may be more appropriate than the proposed site.

Response: The proposed Class A development site presents an optimal site plan layout which is inclusive of all of the amenities that progressive industrial tenants are searching for. The site is located in the Gateway Area District section of TID 4 which allows the community of Franklin to attract immediate investment and increment, while preserving future development sites closer to the 27th Street corridor for signature corporate headquarter developments.

3. **Mitigation of Adverse Impacts**. Whether and to what extent all steps possible have been taken to minimize any adverse effects of the proposed use and development on the immediate vicinity through building design, site design, landscaping, and screening.

Response: The proposed Class A development promotes maximum density development which maximizes the per acre assessed value of land in the community. HSA Commercial was drawn to the natural features of the community of Franklin and they have long been a proponent of creating sustainable long-term development that protects the environment. Maximum per acre development ensures that the community maximizes property value while also protecting its natural resources. The opportunity to leverage the natural environment surrounding the development as part of necessary greenspace requirements will ensure that the community of Franklin will experience both a development that blends into the environment and a development that immediately provides a return on investment to the community in TID 4.

4. **Establishment of Precedent of Incompatible Uses in the Surrounding Area**. Whether the use will establish a precedent of, or encourage, more intensive or incompatible uses in the surrounding area.

Response: The proposed development will be the first Class A development in the Gateway Area district and it will set the bar for the continuing development of properties along the West Oakwood Road corridor.

#### **MEMORANDUM**

Date: February 11, 2022

To: Werner H. Brisske, AIA, Partners in Design

CC: Matthew Carey, Pinnacle Engineering, Inc.

From: Department of City Development.

RE: Special Use and Site Plan, TKN 951-9994-001 (3303 W. Oakwood Road)

Please be advised that City Staff has reviewed the above REVISED applications received on January 6, 2022, for a Special Use Application requesting approval of an "E-Commerce" use and for "Overnight Truck Parking for Vehicles Larger than 8,000 Pounds Gross Vehicle Weight", and a Site Plan for development of a 271, 753 square foot flex office/industrial space including 30 loading docks and 4 overhead doors, plus four front façade entrances. Per agreement with the applicant, the Site Plan Application will be reviewed by the Plan Commission at their March 3, 2022 regular meeting, while the Special Use Application public hearing will be held at the March 17, 2022 Plan Commission meeting. Please note the following comments:

PEG comment responses are in BLUE.

#### **Department of City Development**

1. Natural Resource Protection Plan. Staff is reviewing the current Natural Resource Protection Plan as submitted. However, per coordination review of the sewer extension with SEWRPC, the grading slope will be altered on the east woodland disturbance, changing the finished slope to 3:1 from 4:1. Staff anticipates that change will alter the total disturbance of the woodland area in the adjacent Outlot and requests an updated NRPP map which reflects that change.

NRPP has been updated per the slope changes. Approval was also provided by SEWRPC per email from Joel Dietl on 2/3/22.

**2. Parking Increase Needed.** Staff notes that the Site Plan shows 201 parking spaces, while the minimum required is 136. Per Section 15-3.0352B, a modification to permit "substantially more" than the minimum number will be required. (See also below under South 27<sup>th</sup> Street Design Overlay District waiver/modifications justifications required).

This is a speculative development and the actual parking needs will vary with the prospective tenants. This parking ratio is consistent with other similar developments and necessary for marketability.

- **3.** Landscaping. Staff generally found the Landscape Plan to be compliant, though there are a few edits and recommendations:
  - a) Note that per UDO Table 15-5.0302, the minimum planting standards for canopy trees are 2.5 inches caliper; for evergreen trees, 4 feet tall; for "decorative" trees, 1.5

inches caliper; and for shrubs, 3 feet tall. The Plant Schedule on Sheet L-6 has variable requirements which don't entirely match UDO standards.

#### Tree sizes have been updated.

- **b)** Generally, the City doesn't want any trees planted within 10 feet (on-center) of a water main or sanitary sewer line. There were a few instances involving a total of 8 trees as follows:
  - i. 1 Black Hills Spruce (PGD) over the Water Main on the northwest end of the front façade;
  - ii. 1 Black Hills Spruce (PGD) close to the Sanitary Sewer on the northeast end of the front façade, and 1 Autumn Fantasy Maple (AF4) located between the Sanitary Sewer and Water Main, same area.
  - iii. 1 Sterling Silver Linden (TSS) located a little close to the same Water Main, further east in the parking island.
  - iv. On the southwest side of the site, 2 Swamp Bur Oak (QXS2) and 2 Shademaster Locust (GTS) located a little too close to the Water Main.

Tree locations have been shifted.

The applicant should check with the Assistant City Engineer regarding planting shrubs over Water Mains/Sanitary Sewer lines or trees located within 10 feet of stormwater lines.

#### Understood

- c) UDO Section 15-5.0302F requires at least 4 different species of each type of landscape material, with a minimum of 10 plants for each species. Also, no more than 35 percent of each material can be any one plant species.
  - Tree species have been added and specified numbers have been updated to be in line with the chart in section 15-5.0302F.
- **d)** Staff will recommend that soil substrate is sufficient for landscaping installation along with the required irrigation as specified in UDO Section 15-5.0303.

#### Understood

- **4. Minor Edits.** Staff noted a couple of minor edits to the Site Plan that have no impact on proposed design locations, such as the required Corner Side Yard distance (adjacent Hickory Street) is 25 feet; and the Landscape Surface Ratio is identified as 25.2% on Sheet C-3 and 0.5 (50%) on Sheet L-1. Also, Sheet C-3 of the Civil Set identifies 201 parking spaces while Sheet A1.2 of the Architecture Set identifies 205 parking spaces.
  - The correct parking count is 201 spaces. Landscape Surface Ratio on sheet L-1 has been updated to match sheet C-3. Corner Side Yard setback updated to 25'.
- 5. **PDD 39 Design Standards.** PDD 39 includes a specific set of design requirements in Section 15-3.0444B.D. (Business Park Area Design Standards) that extend requirements

beyond those contained in UDO §§15-5.0200 (Parking); 15-5.0300 (Required Landscaping); 15-5.0400 (Lighting Standards); and the requirements of the Sign Code (Municipal Code Chapter 210). Staff notes the following sections requiring waivers/modifications and requested by the applicant, and provides staff comments (in *italics*) and recommendations (in *bold/italics*):

**1.a.iv.** Parking in front of buildings shall be designed primarily for visitors and high turnover usage with employee parking to be located to the side yard or rear yard.

Request: In the design of industrial buildings, the goal is to separate the car traffic from truck traffic for safety purposes. All of the employee and visitor car parking is located in parking lots on the north side of the buildings and any truck maneuvering being confined to the south sides of the buildings. Staff Comment: Staff supports with proviso that landscaping fronting Oakwood Road is designed to mitigate the viewshed into the site.

#### Understood.

**1.a.vi.** All parking, loading, and unloading areas shall be screened from adjacent streets and sites utilizing landscaping, berms, and/or decorative fences.

Request: The car parking and truck court (loading area) will be screened from the public streets via berms and landscaping. Screening to the south is not practical since there is a significant grade change and slope upward. Screening efforts in this location would not have any appreciable or useful effect.

Staff Comment: Staff supports as placing any significant screening along the south lot line adjacent a conservation outlot doesn't materially improve the design.

**2.c.iii.** Sidewalks shall be provided along the entire length of any façade containing a public entrance, leaving room for foundation planting beds, and shall connect to existing or planned public sidewalks or pedestrian/bike facilities.

Request: The proposed plan provides three sidewalks and crosswalks that connect the building entrances to the public sidewalks on the opposite sides of the adjacent streets in lieu of a continuous walk across the front of the buildings. We feel that this provides more direct pedestrian access between the building entrances and the public sidewalk. It also allows us to maintain a wider landscape strip between the building and the parking lot and have less total impervious area on the site.

Staff Comment: Staff supports the proposed version. The applicant's submission includes a continuous sidewalk along the Oakwood Road (front) façade and connects to the Oakwood Road sidewalk with two connections that are marked through the drive aisle space.

**4.a.iii.** Brick, stone, tile, and custom architectural masonry units are preferred primary materials for the solid (non-window) portion of new buildings or additions. **iv.** Precast concrete, cast stone, plain/smooth concrete masonry units and EIFS are acceptable accent and secondary materials for the solid portion of any buildings or additions.

Request: Articulated, painted precast concrete wall panels are utilized for the exterior walls of the building. This is the industry standard for a Class A building of this type. No concrete masonry units or EIFS is used in the buildings.

Staff Comment: Staff finds this consistent with other approvals in PDD-39 (H.S.A. 1<sup>st</sup> approval; Wangard; Saputo). The applicant differentiates the first "floor" (lower 10.5 feet) with a different color and provides enhancements at the front façade entrances. The pattern is simplified but continued along the side and rear facades.

**5. SIGNAGE STANDARDS.** All signs must be in accordance with the Municipal Code, as amended, approved by the Plan Commission, and be subject to issuance of a Sign Permit through the Inspection Department. On-site directional signage may be allowed in any area needed to control traffic or parking provided such signage has received approval from the Department of City Development.

Staff Comment: Staff suggests the applicant request a waiver of Plan Commission review for new signs. The current Site Plan doesn't include a sign, or a sign location. If waived, administrative review of a Sign Permit Application would be the only step required. The applicant should note that PDD-39 prohibits Wall Signs.

We request a waiver of the Plan Commission review of the proposed signs for the site and defer the review and approval to the Department of the City Development under a Sign Permit Application. We note that the PDD-39 prohibits Wall Signs.

- 7. SUPPLEMENTAL DESIGN GUIDELINES (see Comment #6 below)
- 6. **South 27**<sup>th</sup> **Street Design Overlay District Requirements.** PDD 39 requires compliance with the South 27<sup>th</sup> Street Design Overlay District standards. Staff notes the following sections requiring waivers/modifications and requested by the applicant, and provides staff comments (in *italics*) and recommendations (in *bold/italics*):
  - **15-3.0352A.** Parking required and Location Regulated. Not more than 50% of the off-street parking spaces shall be located directly between the front facade of the building and the public street, unless additional buildings in the overall development are or will be located between the main building and the public street. Such additional buildings must be sufficient in size, location, and number to provide an effective visual break between the public street and the parking lot.

Request: As also stated in response to Item 1a.iv. in the PDD No. 39 above, in the design of industrial buildings, the goal is to separate the car traffic from truck traffic for safety purposes. All of the employee and visitor car parking is located in parking lots on the north side of the buildings and any truck maneuvering being confined to the south sides of the buildings.

Staff Comment: This request is logical given the limitations required for food safety. Staff supports with proviso that landscaping fronting South 27<sup>th</sup> Street and Oakwood Road is designed to mitigate the viewshed into the site.

#### Understood.

**15-3.0352.B.** Number of Parking Spaces Limited. Parking lots in which the number of spaces significantly exceeds the minimum number of parking spaces required under §15-5.0203 are not permitted.

Staff Comment: The applicant proposes 201 (205?) parking spaces, whereas the minimum

required under UDO §15-5.0203 is 136. Staff recommends the applicant request a modification of this requirement and provide a rationale for the additional parking.

Understood. 201 spaces are proposed. This is a speculative development and the actual parking needs will vary with the prospective tenants. This parking ratio is consistent with other similar developments and necessary for marketability.

**15-3.0353.C.4.** Sidewalks shall be provided along the entire length of any façade containing a public entrance, leaving room for foundation planting beds.

Request: As also stated in response to Item 2.c.iii. in the PDD No. 39 above, the proposed plan provides three sidewalks and crosswalks that connect the building entrances to the public sidewalks on the opposite sides of the adjacent streets in lieu of a continuous walk across the front of the buildings. We feel that this provides more direct pedestrian access between the building entrances and the public sidewalk. It also allows us to maintain a wider landscape strip between the building and the parking lot and have less total impervious area on the site.

Staff Comment: Staff supports the proposed version. The applicant's submission includes a continuous sidewalk along the Oakwood Road (front) façade and connects to the Oakwood Road sidewalk with two connections that are marked through the drive aisle space.

**15-3.0353.G.** Central Areas/Features. Each development which contains a building over 50,000 square feet in area shall provide central area(s) or feature(s) such as a patio/seating area, pedestrian plaza with benches, outdoor playground area, water feature, and/or other such deliberately designated areas or focal points that adequately enhance the development or community. All such areas shall be openly accessible to the public, connected to the public and private sidewalk system, designed with materials compatible with the building and remainder of the site, and maintained over the life of the building and project.

Staff Comment: Staff suggests the applicant request a waiver of this. What the applicant provides is sufficient given the use type; however, this standard is for something much more aggressive.

We request a waiver for this requirement. The proposed design does not include any specific central area/feature as these are not typical for buildings of this type. However, we have located our stormwater detention pond at the intersection with the future South Hickory Street and West Oakwood Road to act as a water feature visible from the public way. We have also provided architectural covered walkways and benches at our four building entries.

**15-3.0354.C.2.** The interior landscaping shall be provided within landscaped islands a minimum of 250 square feet in area. Landscaped islands shall be three feet shorter than the depth of any adjacent space. A landscaped island nine feet in width and 30 feet in length with rounded ends, placed alongside two parking stalls each 18 feet in depth placed end to end, would meet all dimensional requirements for landscaped islands, provided the dimensions are measured from the inside of any curbs.

Staff Comment: The applicant's proposal is consistent with the overall design requirements in Section 15-3.0354. However, this requirement is very specific, and the applicant isn't proposing this is most island locations, so staff suggests a modification request for this.

Landscape islands have been modified to meet the specified design requirements. This includes having islands that are 125 SF in area or greater and also 17' long. The comment above for 250 SF island pertains to parking lots that are "double loaded". This proposed lot configuration is "single loaded". This was also discussed with Heath Eddy via email on 2/15/22.

**15-3.0355A.3.** Brick, stone and terra-cotta are preferred primary materials for new buildings or additions. **A.4.** The use of false brick or other "faux" sidings is discouraged. **A.6.** Painting of brick and stone is discouraged.

Staff Comments: Staff suggests submitting modification requests for these two sections. They aren't "requirements" per se (given the language) but this is consistent with Items 4.a.ii. and 4.a.iv. under PDD-39 Design Standards above. Staff has no issues with these requests.

See response as noted in the separate "Zoning Request" document.

**15-3.0355.A.10.** Multi-story buildings that allow for a mix of retail, office or residential uses are preferred.

Staff Comments: Again, as per above, a waiver request for this should be provided just to clean it up. Staff supports this request.

The development is within the Gateway Area which is a Business/Industrial Park in nature and consistent with other uses in this proposed park. The speculative nature of this building is intended to be extremely flexible to meet needs of potential companies searching for a facility of this type. Facilities of this type are typically one story. Our two-story glazed corner entry design does allow for a tenant to construct a two-story office or two-story space.

**15-3.0355.C.4.** Building materials shall be unified throughout the building, and shall complement other buildings in the vicinity. Exterior building materials shall be of high and comparable aesthetic quality on all sides. Building materials such as glass, brick, decorative concrete block, or stucco shall be used. Decorative architectural metal with concealed fasteners may be approved if sensitively incorporated into the overall design of the building.

Request: As also stated in response to Item 4a.iv. in the PDD No. 39 above, articulated, painted precast concrete wall panels are utilized for the exterior walls of the building. This is the industry standard for a Class A building of this type.

Staff Comment: The applicant's proposal is consistent with other designs proposed in this area.

**15-3.0355.C.5.** The building exterior shall be unified in design throughout the structure, and shall complement other buildings in the vicinity. The building shall employ varying building setbacks, height, roof treatments, door and window openings, and other structural and decorative elements to reduce apparent size and scale. A minimum of 20% of all of the combined facades of the structure shall employ actual facade protrusions or recesses. A minimum of 20% of all of the combined linear roof eave or parapet lines of the structure shall employ differences in height, with such differences being six feet or more as measured eave to eave or parapet to parapet for buildings over 50,000 square feet. Roofs with particular slopes may be required by the City to complement existing buildings or otherwise establish a particular aesthetic objective. Ground floor facades that face and are on properties that are in any part within 100 feet of public streets shall have arcades,

display windows, entry areas, awnings, or other such features along no less than 50% of their horizontal length. The integration of windows into building design is strongly encouraged.

Staff Comment: The applicant should request a modification of this requirement in lieu of what is provided on the architectural design. Please provide a summary of how the proposed design differentiates from this specific standard. Staff would support the proposed modification.

We request a waiver for the technical aspects of this requirement. However, we feel the design does meet the intent of the requirement. See additional information on separate Zoning Request document.

**15-3.0355.C.8.** Modest building setbacks are encouraged. Where buildings are proposed to be distant from a public street, the overall development design shall include smaller buildings on pads or outlots closer to the street.

Staff Comment: Again, a request for waiver of this is more about tightening up the compliance with the standard. Staff supports this waiver.

We request a waiver from this requirement. The building setback on the north is to allow for employee/visitor parking and provide separation between car and truck traffic.

#### **Engineering Department Comments**

Please refer to the review from Tyler Beinlich, Assistant City Engineer, dated January 19, 2022, and the review from Harwood Engineering Consultants, dated January 26, 2022.

Updated plans addressing the Engineering comments have also been submitted.

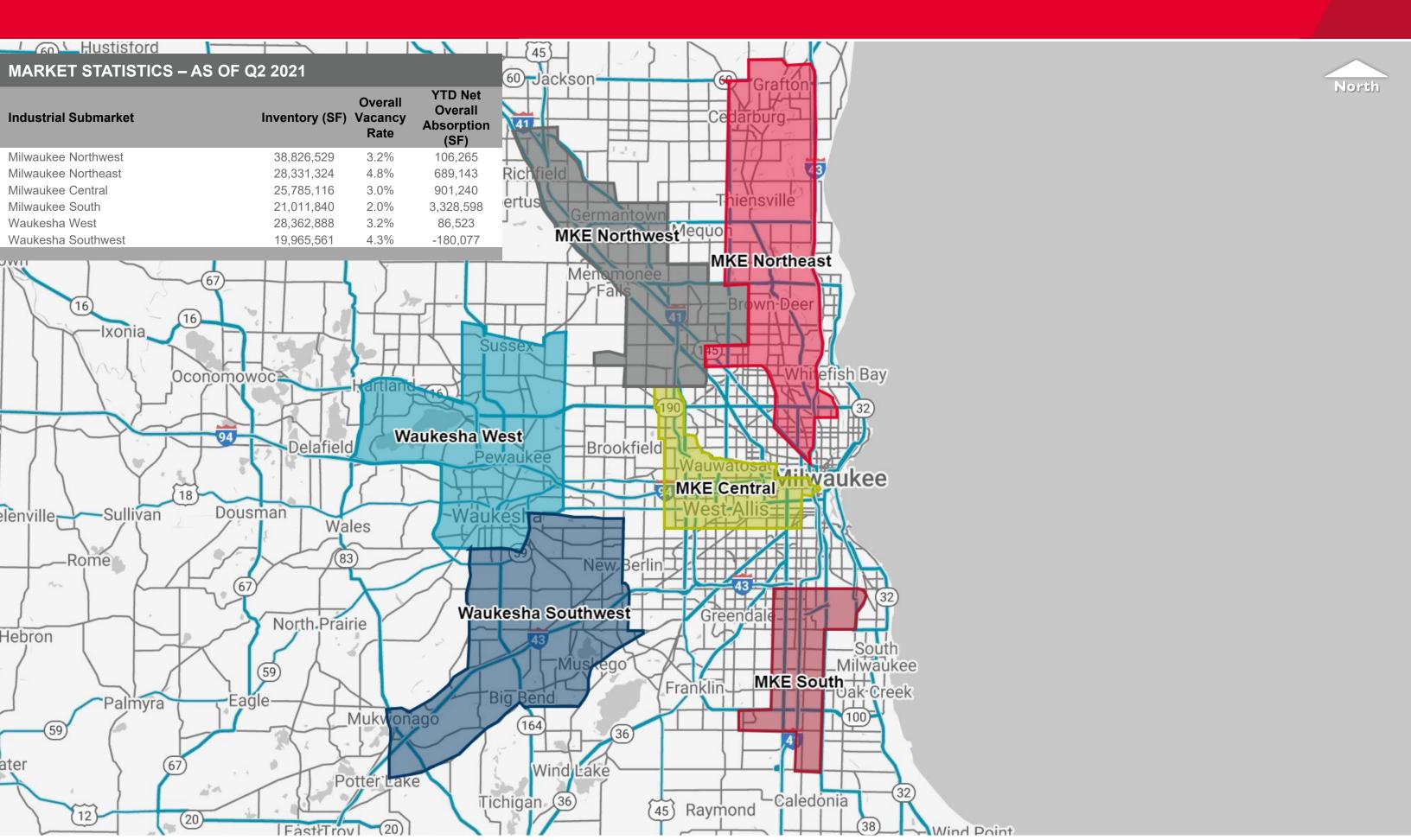
#### **Fire Department Comments**

7. FD has no comments on the special use application.

#### **Inspection Services Department Comments**

8. Inspection Services has no comments on the subject proposal at this time.

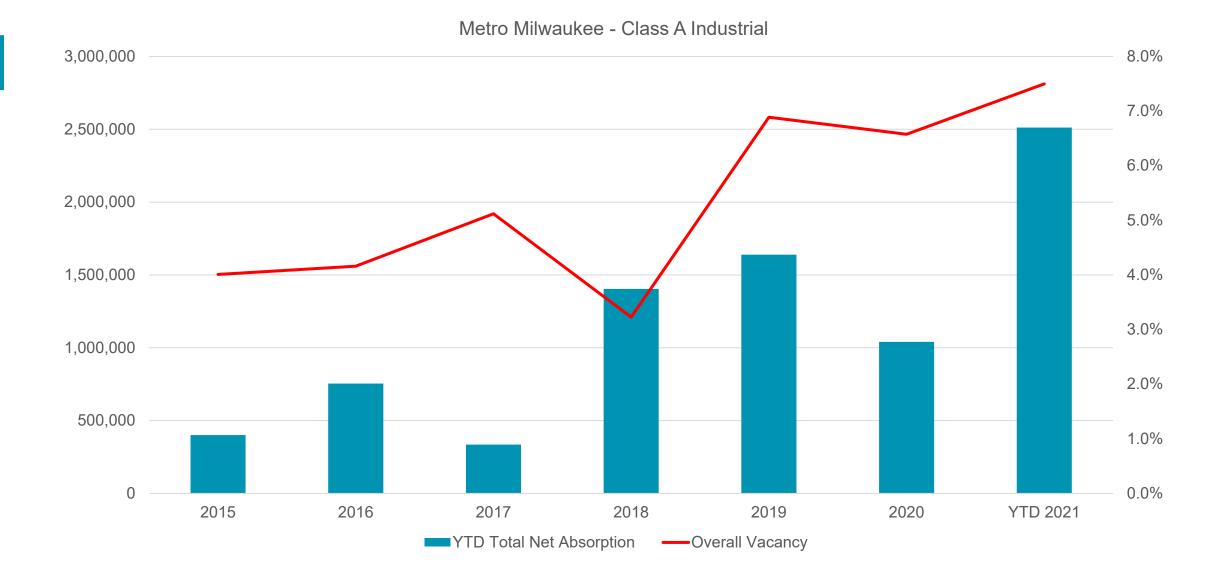
## METRO MILWAUKEE INDUSTRIAL





## Metro Milwaukee Class A Industrial

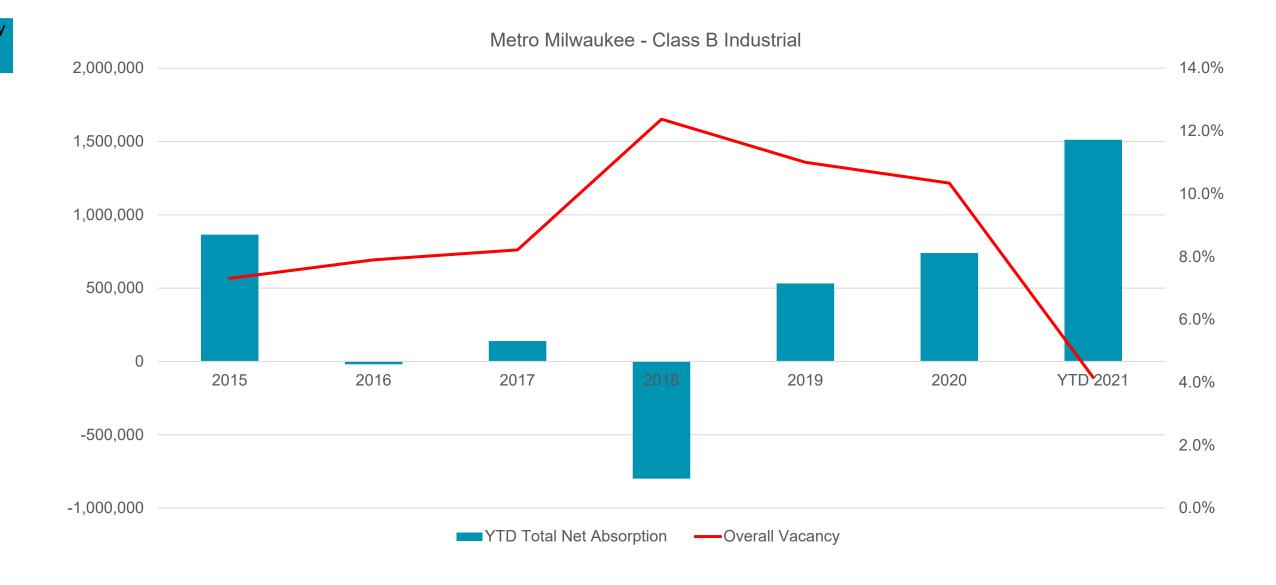
|      | Overall<br>Absorption | Overall Vacancy |
|------|-----------------------|-----------------|
| 2015 | 400,341               | 4.0%            |
| 2016 | 754,533               | 4.2%            |
| 2017 | 335,306               | 5.1%            |
| 2018 | 1,403,884             | 3.2%            |
| 2019 | 1,639,273             | 6.9%            |
| 2020 | 1,040,637             | 6.6%            |
| 2021 | 2,511,845             | 7.5%            |





## Metro Milwaukee Class B Industrial

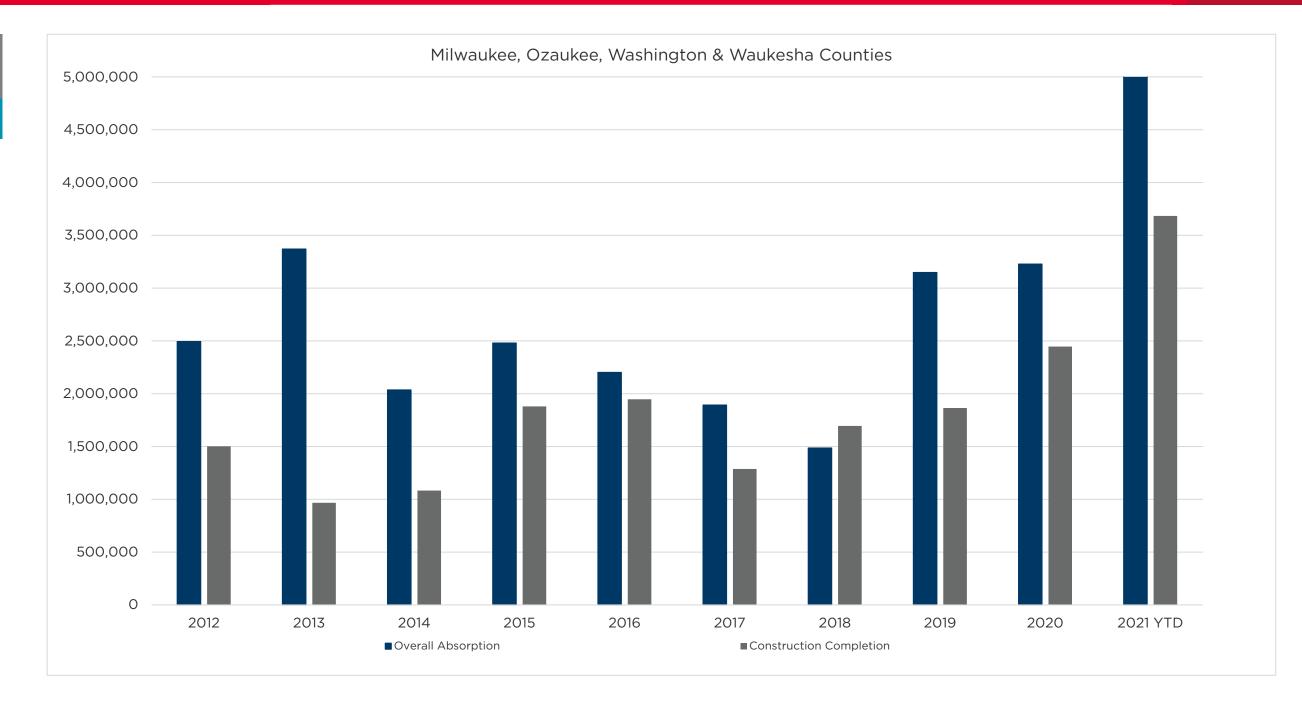
|      | Overall<br>Absorption | Overall Vacancy |
|------|-----------------------|-----------------|
| 2015 | 864,706               | 7.3%            |
| 2016 | -19,813               | 7.9%            |
| 2017 | 139,073               | 8.2%            |
| 2018 | -799,040              | 12.4%           |
| 2019 | 531,844               | 11.0%           |
| 2020 | 739,322               | 10.3%           |
| 2021 | 1,512,014             | 4.2%            |





## Metro Milwaukee Industrial

| Milwaukee | , Ozaukee, W<br>Waukesha | /ashington,                |
|-----------|--------------------------|----------------------------|
|           |                          | Construction<br>Completion |
| 2012      | 2,494,506                | 1,501,819                  |
| 2013      | 3,370,177                | 966,997                    |
| 2014      | 2,036,566                | 1,082,949                  |
| 2015      | 2,479,939                | 1,879,686                  |
| 2016      | 2,201,818                | 1,947,459                  |
| 2017      | 1,892,872                | 1,287,067                  |
| 2018      | 1,486,188                | 1,694,856                  |
| 2019      | 3,158,773                | 2,941,510                  |
| 2020      | 2,543,828                | 2,446,383                  |
| YTD 2021  | 5,395,458                | 3,684,000                  |



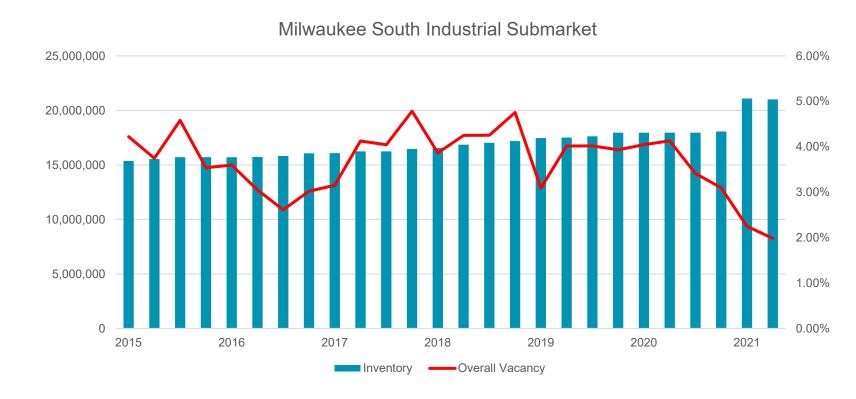


## MILWAUKEE SOUTH INDUSTRIAL SUBMARKET

| MARKET STATISTICS – AS OF Q2 2021          |                   |                |                            |                                    |  |
|--|-------------------|----------------|----------------------------|------------------------------------|--|
| Industrial Submarket                       | # of<br>Buildings | Inventory (SF) | Overall<br>Vacancy<br>Rate | YTD Net Overall<br>Absorption (SF) |  |
| Total Milwaukee South Industrial Submarket | 266               | 21,011,840     | 2.0%                       | 3,328,598                          |  |
| Class A - Investor                         | 34                | 7,262,850      | 2.1%                       | 2,770,472                          |  |
| Class B – Investor                         | 74                | 5,844,041      | 2.0%                       | 97,966                             |  |
| Flex – Investor                            | 24                | 776,619        | 11.1%                      | 29,800                             |  |

| DEVELOPER CONSTRUCTION ACTIVITY – LAST 12 MONTHS                     |             |            |                   |  |
|--|-------------|------------|-------------------|--|
| Project  | Building SF | Completion | Comments          |  |
| COMPLETIONS  |             |            |                   |  |
| Ryan Business Park, Oak Creek  | 2,600,000   | Q4 2020    | 100% Leased       |  |
| Dickman III – 10650 OakView Parkway, Oak Creek                       | 110,000     | Q4 2020    | 38% Leased        |  |
| HSA – 610 W Rawson Avenue, Oak Creek                                 | 180,178     | Q4 2019    | 39% Leased        |  |
| Seefried Industrial Properties – Spec – 9705 S Oakwood,<br>Oak Creek | 88,309      | Q4 2019    | 100% Vacant       |  |
| St. John Properties – 2 Spec Buildings – 140 E Rawson,<br>Oak Creek  | 93,680      | Q4 2019    | Flex – 82% Vacant |  |
| HSA -102 W OakView Parkway, Oak Creek                                | 132,000     | Q2 2019    | 100% Leased       |  |
| UNDER CONSTRUCTION   |             |            |                   |  |
| HSA Pennsylvania, Cudahy   | 125,000     |            | Q4 2021 delivery  |  |
| Dickman IV – OakView Parkway, Oak Creek                              | 157,000     |            | Q4 2021 delivery  |  |
| PROPOSED   |             |            |                   |  |
| HSA III – OakView Parkway, Oak Creek                                 | 155,000     |            |                   |  |
| Capstone – 9900 S 13th Street, Oak Creek                             | 199k & 190k |            |                   |  |
| HSA – Oakwood Avenue, Franklin                                       | 230,000     |            |                   |  |
| Frontline – 9141 S 13th Street, Oak Creek                            | 351,201     |            |                   |  |
| Ursa Investors – 550 W Grange, Milwaukee                             | 160,800     |            |                   |  |
| Wangard – Oakwood Road   | 236k & 300k |            |                   |  |

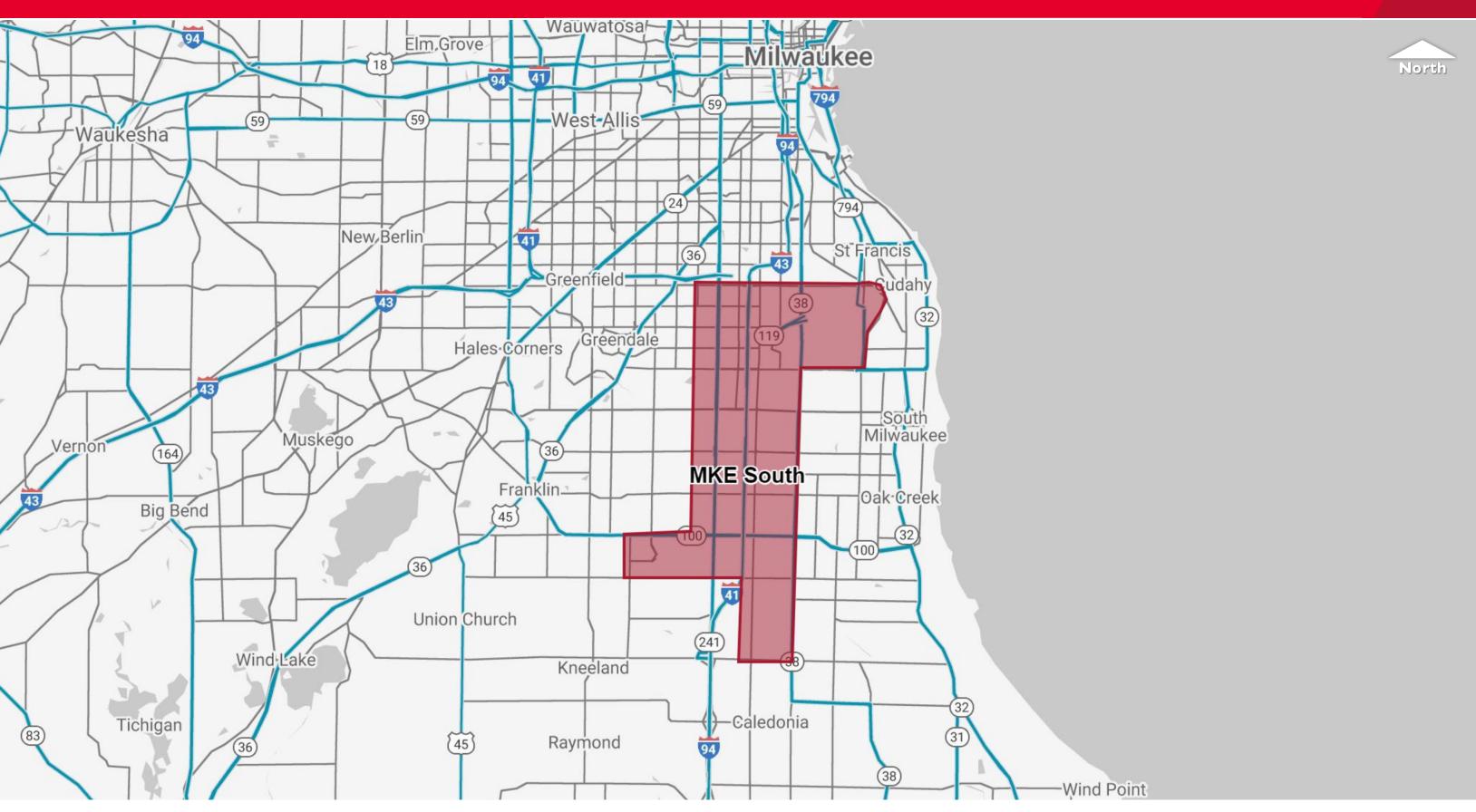
| LEASING ACTIVITY  |   |                               |
|---|---|-------------------------------|
| Address   | Tenant  | Leased SF                     |
| 9705 S Oakwood Park Drive, Franklin   | Niche Cocoa   | 44,425                        |
| Ryan Business Park, Oak Creek   | Confidential  | 2,600,000                     |
| 5211 S 3 <sup>rd</sup> Street, Milwaukee  | Oshkosh Corporation   | 359,988                       |
| 3326 E Layton Avenue, Cudahy  | NPS Corp  | 164,000 (Renewal / Expansion) |
| 10650 OakView Parkway, Oak Creek  | Stella & Chewy's  | 110,000                       |
| 100 W Oakwood Road, Oak Creek   | Yaskawa America   | 139,095 (Renewal)             |
| 102 W OakView Parkway, Oak Creek  | AIM Logistics   | 132,000                       |
| 5315 S 3 <sup>rd</sup> Street, Milwaukee  | Cargo Force   | 56,000                        |
| 9705 S Oakwood Park Drive, Franklin   | AST Logistics   | 53,075                        |
| 5170-5250 S 6th Street, Milwaukee   | J.H Findorff & Sons   | 48,000                        |
| 9720 S Oakwood Park Drive, Franklin The Boerke Company, Inc. / Independently Owned and Operated / | Innovative Fiber A Member of the Cushman & Wakefield Alliance | 20,883                        |



| RECENT SALE COMPS                        |                |              |           |          |                 |
|--|----------------|--------------|-----------|----------|-----------------|
| Address                                  | Building<br>SF | Sale Price   | Price PSF | Date     | Comments        |
| 9720 S Oakwood Park Drive, Franklin      | 54,434         | \$3,690,000  | \$67.79   | 5/18/21  | Class B         |
| 7747 S 6th Street, Oak Creek             | 30,000         | \$2,425,000  | \$80.83   | 5/27/21  | Owner/User Sale |
| 5315 & 5319-5375 S 3rd Street, Milwaukee | 201,200        | \$9,700,000  | \$48.21   | 2/10/21  | Class B         |
| 130 W Edgerton Avenue, Milwaukee         | 120,400        | \$5,485,126  | \$45.56   | 12/18/20 | Class B         |
| 5831 S Pennsylvania Avenue, Cudahy       | 128,000        | \$7,138,000  | \$55.77   | 10/12/20 | Class A - 6.9%  |
| 9750 S Oakwood Park Drive, Franklin      | 54,434         | \$3,100,000  | \$56.95   | 9/17/20  | Owner/User Sale |
| 111 W Oakview Parkway, Oak Creek         | 164,007        | \$25,290,000 | \$154.20  | 6/24/20  | Class A         |

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|       |

## MILWAUKEE SOUTH INDUSTRIAL SUBMARKET



The Boerke Company, Inc. / Independently Owned and Operated / A Member of the Cushman & Wakefield Alliance



Date: 1/19/2022

To: Matthew Carey, P.E., Pinnacle Engineering

From: Tyler Beinlich, P.E., City of Franklin

Re: HSA Franklin (Oakwood Rd Development) - City of Franklin Engineering Department Review Comments

Please note – submitted plans are reviewed for conformance with City of Franklin ordinances, standards, specifications, and other requirements related to engineering. Additional comments may arise as a result of the plan progression and further reviews. This review is separate from any review and requirements from the City of Franklin Planning Department and Inspection Services.

#### General

- Coordinate with Ruekert & Mielke, Inc for work adjacent to and connecting to S Hickory Street
  - a. R&M, Inc contact: Anthony Petersen, P.E. (apetersen@ruekert-mielke.com, 262-953-3028)
  - b. Tentative plan is to start construction on S Hickory Street in spring 2022
    - In contact with Ruekert & Mielke and coordinating improvements connecting to Hickory Street. Resubmitted plans include the most current design information for the S Hickory Street design.
- 2. Coordinate with Ruekert & Mielke, Inc on the Oakwood Rd median/turn lane modifications
  - a. R&M, Inc is under contract with the City to design modifications to the median on Oakwood Rd that will allow for left turn access into the east-most HSA driveway and west-most driveway of the property to the east. This could potentially impact the proposed additional left turn into the middle driveway of HSA along Oakwood Rd.
  - b. R&M, Inc contact: Anthony Petersen, P.E. (apetersen@ruekert-mielke.com, 262-953-3028)
    - In contact with Ruekert & Mielke and coordinating improvements connecting to Oakwood Road. Resubmitted plans include the most current design information for the Oakwood Road turn lanes.
- 3. Contact City Arborist for all tree removal/planting in the City's right-of-way
  - a. Tom Riha (DPW Forester/Arborist): 414-425-2592
    - Three trees are currently proposed to be relocated along Oakwood Road. Does this require the Forester to be contacted? If so, is this typically done by the Contractor?
- 4. Required to sawcut, remove, and replace minimum 18-inches of pavement adjacent to curb and gutter removal/replacement on Oakwood Rd (matching existing pavement structure)
  - Added callout "saw cut and remove 18" of pavement adjacent to curb removal and replace in-kind" at driveway
    entrances and islands to be removed on C-14 and showed pavement to be replaced in sheet C-15
- 5. Follow City of Franklin Design Standards and Specifications for bedding and backfill of utilities in City ROW
  - Understood, plan sheet C-15 calls for all Utility Work in ROW to follow City standards and specifications.
- 6. Will Fill/Soil Disturbing permit
  - Will be provided prior to construction starting and once a contractor is selected
- 7. Will need ROW permit for work within City ROW
  - a. City inspector may be required (at developer expense) for any work within City ROW
    - Will be provided prior to construction starting and once a contractor is selected
- 8. Please provide Water Main Easement (Appendix G of City Design Standards and Specs)
  - Water Main Easement (along with the necessary Conservation Easement and Stormwater Easement) document will be provided at a future submittal once all easement locations have been firmly approved. Proposed easement location is shown on Sheets C-7 to C-12.
- 9. Please provide Storm Water Facilities Maintenance Agreement (Appendix Q)
  - Draft copy of the maintenance agreement has been included with this submittal.
- 10. Please provide Storm Water Management Access Easement (Appendix N)
  - Storm Water Easement (along with the necessary Water Main Easement and Conservation Easement) document will be provided at a future submittal once all easement locations have been firmly approved. Proposed easement location is shown on Sheets C-3, 4,6.
- 11. Please provide a Plat of Survey



- Sheet C-2 provides the existing conditions (topo survey) of the site. A recent ALTA survey has also been submitted electronically.
- 12. City inspector may be required (at developer expense) for sanitary lateral connection
  - a. Contact City of Franklin Sewer & Water and Engineering Dept. minimum 48-hours prior to work
    - i. Sewer & Water (414) 421-2613, Engineering (414) 425-7510
    - Understood
- 13. City inspector may be required (at developer expense) for storm sewer work within ROW
  - a. Contact City of Franklin DPW minimum 48-hours prior to work
    - i. DPW (414) 425-2592
    - Understood
- 14. City inspector required for water main work (at developer expense)
  - Understood
- 15. Contact City of Franklin DPW for any sign removals/moves within ROW
  - a. DPW (414) 425-2592
    - Understood
- 16. Erosion control inspections required by City inspector (at developer expense)
  - a. Minimum weekly and 0.5"+ rainfall event inspections
  - b. Contractor to perform weekly and 0.5"+ rainfall event inspections as well and keep copies on-site
    - Understood
- 17. Plan Commission approval required for driveways wider than 24 feet
  - a. City UDO 15-5.0207 Openings. Openings for vehicular ingress and egress shall not exceed 24 feet at the street right-of-way line and 30 feet at the roadway, unless a greater distance is approved by the Plan Commission in a non-residential district.
    - Understood, we would like to seek approval of the driveways that are proposed as they are necessary for semi-truck access.
- 18. For all driveways the transition of the curb & gutter from 18" to 30" should be outside City ROW
  - Moved the curb transitions south so it is out of the City ROW.
- 19. Include or reference traffic control details for any traffic control required to complete work on Oakwood Rd
  - i. Follow WisDOT standard detail drawings from 15C/D for lane closures, shoulder closures, and flagging work as required
  - ii. Lane closures and/or flagging need to be approved by City, minimum 72-hours advanced notice
    - Understood. Necessary traffic control plans and details will be provided in the future once a work sequence and schedule for the Oakwood Road improvements (by others) is determined.
- 20. Include a sampling/monitoring manhole on sanitary line
  - Sanitary line has SAN Sampling MH 51.0 on sheet C-6.
- 21. Restoration of areas near wetlands (buffer, setback) should be non-aggressive species, native vegetation is preferred. Do not use fertilizer in the buffer, setback areas. City prefers to not have synthetic material in the wetland buffer, setback areas.
  - Landscape plan currently has applicable, no-mow seed mix proposed in these areas along the southern edge of the development.
- 22. Per <u>City UDO 15-8.0305</u> All defined Protected Natural Resources shall be protected with a double row of silt fence and a single line of four-foot orange construction fence.
  - Added call out to specify double silt fence and construction fence along south disturbance limits on Sheet C-13.
     Silt fence not necessary at southeast corner as this area is higher and drains into the site.
  - b. Heavy duty silt fence may be used in place of the double row of silt fence3
  - c. May only be needed in the two locations on the south end of the site
- 23. Please include construction sequencing City requires that storm water management facilities (temporary or permanent) are installed, rough grade certified by design Engineer, and approved by the City, prior to any impervious surfaces being installed or mass site grading and prior to building permits being released
  - Construction site sequencing has been added to Sheet C-17



- 24. Show proposed approximate location and dimensions of material stockpiles and necessary erosion control measures
  - Added 2 stockpile locations, one to the north and one to the southeast with silt fence on Sheet C-13
- 25. Any storm sewer in ROW must be reinforced concrete pipe
  - Currently, no new storm pipe is proposed in the ROW. Only some storm structure work.

### Sheet C-6 (Hydrant 91.0 info has been moved to sheet C-15 as it located entirely in the ROW)

- 1. Hydrant assembly 91.0 shown in two different locations in plans
  - Renamed the west hydrant assembly 72.1
- 2. Hydrant assembly 91.0 no need to add extra valve, move hydrant further west away from curb radius
  - Removed text that called out valve and shifted hydrant 5 feet away from curb radius.
  - b. No bollards in ROW
    - Removed text calling out bollards.
- 3. Connect to Ex WM 90.0 difference in the proposed and existing invert elevations? 722.60 vs 722.68
  - Fixed the proposed invert to match existing invert.

#### **Sheet C-8**

- 1. Show insulation at storm sewer crossing water main
  - Added insulation in water main profile C-8 where storm crosses over water main
- 2. Show more detail and what fittings will be used in order to complete the wet connection of the 16" water main in S Hickory St
  - PEG is discussing adding a 8" WM stub to ROW with Ruekert & Mielke to avoid open cut impacts to roadway. Stub
    from Hickory St will most likely be extended to the ROW line. Final design will be coordinated prior to Construction
    Document issuance.

#### Sheet C-11

- 3. Hydrant assembly 91.0 shown in two different locations in plans
  - Renamed second hydrant 91.0 to 72.1

#### Sheet C-13

- 1. Provide inlet protection on all inlets on Oakwood Rd within limits of HSA site
  - Placed inlet protection in all inlets along Oakwood within project limits
- Additional inlet protection may be required on S Hickory St
  - Added note to install inlet protection along hickory street if needed
- 3. Include a concrete washout area and detail
  - Added concrete washout area near construction entrance and added detail to C-19

#### Sheet C-14

- 1. Coordinate with City of Franklin Department of Public Works for street lighting work
  - a. The City uses Pro Electric for electrical/lighting work and may require an inspector (at developer expense)
  - b. Coordinate with City of Franklin DPW minimum of 48-hours prior to any work
    - i. DPW (414) 425-2592, Kevin Schlueter (Superintendent), Rich Katzfey (Asst Superintendent)
      - PEG's reduced scope only includes the central left turn lane in Oakwood and no impacts to existing light poles are proposed.
- 2. Provide pavement, curb and gutter grades/slopes of proposed turn lane
  - Grades and slopes for proposed turn lane can be found on sheet C-16
- 3. Relocate inlet in proposed left turn lane to middle driveway to the new curb line of turn lane
  - · Moved inlet to the new curb line

#### Sheet C-15

- 1. See Figure 16-B of the City of Franklin Design Standards and Specifications for rebuilding storm sewer inlet
  - a. Pro-Rings required, grate as specified
    - Understood, added City of Franklin detail to sheet C-21
- 2. 8-inch white paint for turn lane channelizing lines
  - Added 8" stipe to legend and updated plans to call out correct stripe thickness.
- 3. All pavement in ROW should follow City Standards (include driveways)
  - a. 6-inch HMA (4-inch lower, 2-inch upper), 8-inch base agg.
    - Updated driveway hatch to reflect correct payement specifications.



- 4. Concrete sidewalk in ROW (no reinforcement)
  - a. 5-inch concrete, 4-inches of ¾-inch base aggregate dense below (City specs being updated to this)
    - Updated legend to reflect correct sidewalk specifications.
  - b. Cross slope 1.5%, driveways should be constructed so that 2% cross slope is not exceeded in the walkway
    - Added note "2% max slope in walkway"

#### Sheet C-17

- 1. Site/Paving Notes #9 replace Vill of PP with City of Franklin
  - Replaced text with City of Franklin
- 2. Site/Paving Notes #17 for any pavement in the ROW, the temperature at time of placement (base and surface courses) should be 40 degrees and rising, follow WisDOT Standard Spec 450.
  - Added this text to note: For pavement within city of franklin right-of-way, the temperature at time of
    placement (base and surface courses) should be 40 degrees and rising, following WISDOT standard spec
    450.
- 3. Utility Notes Water main material, installation, bedding and backfill should follow City of Franklin Design Standards and Specifications
  - a. Sanitary and storm within ROW should follow City Standards and Specifications as well
    - Updated storm, water main, and sanitary notes to specify material, installation, bedding and backfill located within the City of Franklin ROW should follow City of Franklin Design Standards and Specifications
- 4. Utility Notes #8 Storm contact City DPW, Sanitary or Water contact City Sewer and Water Department minimum 48-hours for to schedule inspection
  - Updated note: 8. The contractor shall contact the City of Franklin public works department 48-hours in advance of storm connections to the city-owned system to schedule inspections. The contractor shall contact the City of Franklin sewer and water department 48-hours in advance of sanitary and water connections to the city-owned system to schedule inspections.
- 5. Erosion and Sed Control Notes City Standard is 95% permanent vegetation established prior to removal of erosion control devices
  - Added note #22: Prior to removal of erosion control devices, the site shall have 95% permanent vegetation established.

#### Sheet C-19

- 6. City curb ramp detail can be removed, curb ramps in ROW should follow WisDOT standard detail drawings
  - Removed city detail and added WISDOT SDD 08D05-d: curb ramps types 4B and 4B1 on Sheet C-22.
- 7. Note the 4-inch conduit required in Figure 15 for the driveways in City ROW
  - Added 4-inch conduit and called out on C-15
- 8. No reinforcement in sidewalk in City ROW
  - Added note to detail for no reinforcement within city R.O.W.

#### Sheet C-20

- 1. Show 10-yr, 100-yr water elevations on pond detail
  - Added 100-yr and 10-yr water elevations to pond detail

#### Sheet C-21

- 1. See Figure 40 of the City of Franklin Design Standards and Specifications for utilities vertical separation
  - a. 18-inch minimum for sanitary, 24-inch minimum for storm sewer
    - Removed PEG separation detail and added in City of Franklin detail
- 2. Bollards are okay around hydrants outside of ROW, but a minimum of 36-inches clearance around hydrants required
  - Added note to detail: minimum of 36-inches clearance around hydrants required



civil . landscape design . structural . mechanical . electrical . plumbing / fire protection . lighting design . security technolog

To : Tyler Beinlich, P.E., City of Franklin

From: Brad Seubert, P.E., Harwood Engineering Consultants

Date : January 26, 2022

Re: Oakwood Road Development - West

#### **Items Reviewed:**

Stormwater Management Report Dated: 12-9-21

- Pinnacle Engineering Group Comment Responses Dated: 2-17-22

#### **General Comments:**

- 1. Please respond to each item below. <u>A written response addressing each item shall be included in your submittal</u>.
- 2. The submitted plans have been reviewed for general conformance with State and Municipal and MMSD design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the stormwater management.
- 3. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
  - Understood
- 4. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
  - Understood
- 5. As a guide to the review response: Items in *italics* are resolved or acknowledged, items in regular font are to be addressed yet, items in **Bold** are additional feedback to remaining original comment.

#### **Stormwater Management Comments:**

- 1. Soils mapping shows the site has type C and type C/D soils. Adjust curve numbers to match existing soils types.
  - Curve numbers have been adjusted accordingly to use type C soils
- 2. Existing site appears to have two discharge points. The eastern portion drains south towards a discharge point at the middle of the site and ultimately to the existing pond to the south. The western portion of the site drains southwest and bypasses the pond. Please spilt the existing conditions to show the existing discharge at the two locations.
  - Stormwater modeling has been updated to incorporate the 2 discharge points
- 3. There appears to be a significant area to the west of this site that drains through the site. Design must accommodate offsite flows and not create drainage issues on neighboring properties. Coordinate with the designer of the site to east.
  - The east offsite area from the proposed Saputo Cheese development site has been incorporated into the stormwater management design
- 4. Design must include all disturbed areas of the site. Including undetained areas on the south side of

the site.

- Stormwater Management design has been updated to include the undetained areas on the south side of the site
- Adjust drainage boundaries to match proposed conditions. PR-1 currently includes undetained areas around the proposed basin. Boundary between PR-1 and undetained does not match proposed grading.
  - Proposed drainage areas have been revised to more closely match the proposed grading
- 6. Provide information on the start and end times used for the volumetric calcs.
  - The start and end times are 11.75 and 19.50, based on MMSD required start time and a critical time period of 7.75 hours according to the Root River watershed
- 7. Adjust Tc times to show actual Tc times. Show and label Tc paths on drainage maps. Minimum Tc time shall be 6 minutes.
  - Tc lines and calculations have been provided and incorporated for all drainage areas
- 8. Adjust winter season dates in SLAMM.
  - WinSLAMM winter season dates have been revised to 12/06-03/28
- 9. Provide storm sewer calcs including drainage maps.
  - Storm sewer calcs and a design drainage area map has been added to the report
- 10. 36" outlet pipe from the pond will be sticking out of the ground. Revise grading to provide adequate cover of outlet pipe.
  - The outlet pipe size has been reduced and the layout has been updated to ensure adequate cover over the pond outlet pipe
- 11. Pond outlet pipe will daylight to the ditch along the proposed Hickory street and ultimately to the storm sewer proposed for Hickory street. Coordinate outlet location with the Hickory street plans. Provide information that proposed flow from this site has been coordinated with the Hickory street plans and that the proposed Hickory Street drainage facilities can accommodate this flow.
  - Understood. Coordination is currently underway with the Hickory Street designers.

#### **Erosion Control Plan Comments:**

- 1. Silt fence limits are difficult to see. Please make silt fence line bolder.
  - The silt fence linetype has been made bolder
- 2. Specify size of rip rap and end sections and provide calcs showing the sizing is appropriate.
  - Rip rap at end sections no have a length and width dimension specified
- 3. Silt fence is not an appropriate erosion control method at locations of concentrated flow. Provide rock bag silt fence reliefs at basin outlet and any other concentrated flow locations.
  - Rock bag silt fence reliefs have been added to the plans at concentrated flow locations
- 4. Provide information on how stormwater will be routed to the basin during mass grading and before storm sewer is installed. Temporary diversion berms are likely needed.
  - Diversion swales and berms have been added to route water to the pond during mass grading
- Provide a site specific construction sequence that outlines when the basin and utilities will be constructed.
  - A construction site sequencing note block has been added to the erosion control plan sheet

## **LEGEND PROPOSED** STORM SEWER MANHOLE STORM SEWER CATCH BASIN (ROUND CASTING) STORM SEWER CATCH BASIN (RECTANGULAR CASTING) PRECAST FLARED END SECTION CONCRETE HEADWALL AIR RELEASE ASSEMBLY FIRE HYDRANT **BUFFALO BOX** CLEANOUT SANITARY SEWER FORCE MAIN STORM SEWER WATER MAIN FIRE PROTECTION UTILITY CROSSING GRANULAR TRENCH BACKFILI ELECTRICAL CABLE OVERHEAD WIRES CAUTION EXISTING UTILITIES NEARBY OR PEDESTAL POWER POLE POWER POLE WITH LIGHT **GUY WIRE** STREET SIGN GAS MAIN TELEPHONE LINE CONTOUR SPOT ELEVATION PRIMARY ENVIRONMENTAL CORRIDOR FLOODWAY FLOODPLAIN HIGH WATER LEVEL (HWL) NORMAL WATER LEVEL (NWL) DIRECTION OF SURFACE FLOW DITCH OR SWALE DIVERSION SWALE OVERFLOW RELIEF ROUTING TREE WITH TRUNK SIZE SOIL BORING TOPSOIL PROBE FENCE LINE, TEMPORARY SILT FENCE LINE, WIRE FENCE LINE, CHAIN LINK OR IRON FENCE LINE, WOOD OR PLASTIC

## **ABBREVIATIONS**

|       | 7 12 2 1 1          |     |                                |
|-------|---------------------|-----|--------------------------------|
| BL    | BASE LINE           | NWL | NORMAL WATER LEVEL             |
| С     | LONG CHORD OF CURVE | PC  | POINT OF CURVATURE             |
| C & G | CURB AND GUTTER     | PT  | POINT OF TANGENCY              |
| CB    | CATCH BASIN         | PVI | POINT OF VERTICAL INTERSECTION |
| CL    | CENTERLINE          | R   | RADIUS                         |
| D     | DEGREE OF CURVE     | ROW | RIGHT-OF-WAY                   |
| EP    | EDGE OF PAVEMENT    | SAN | SANITARY SEWER                 |
| FF    | FINISHED FLOOR      | ST  | STORM SEWER                    |
| FG    | FINISHED GRADE      | Т   | TANGENCY OF CURVE              |
| FL    | FLOW LINE           | TB  | TOP OF BANK                    |
| FP    | FLOODPLAIN          | TC  | TOP OF CURB                    |
| FR    | FRAME               | TF  | TOP OF FOUNDATION              |
| FW    | FLOODWAY            | TP  | TOP OF PIPE                    |
| HWL   | HIGH WATER LEVEL    | TS  | TOP OF SIDEWALK                |
| INV   | INVERT              | TW  | TOP OF WALK                    |
| L     | LENGTH OF CURVE     | WM  | WATER MAIN                     |
| MH    | MANHOLE             | Δ   | INTERSECTION ANGLE             |

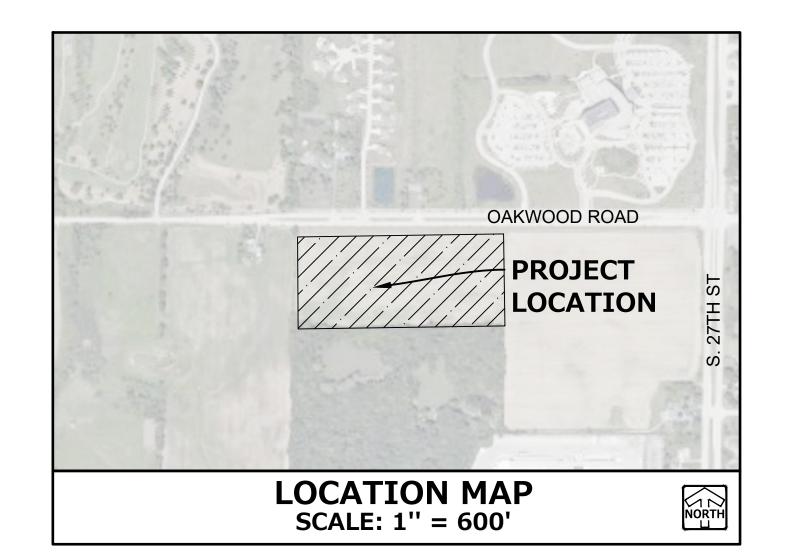
# ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

# WEST OAKWOOD ROAD DEVELOPMENT-WEST

# FRANKLIN, WISCONSIN

**PLANS PREPARED FOR** 





## **GENERAL NOTES**

**SCALE:** 1" = 1000'

**BENCHMARKS** 

REFERENCE BENCHMARKS:

VERTICAL DATUM: NAVD88

BENCHMARK 1 = EAST INVERT ELEVATION OF SANITARY

OAKWOOD ROAD

HORIZONTAL DATUM: STATE PLANE NAD 83 SEWRPC

MANHOLE FOUND IN THE NORTH SIDE OF

- AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL STATE FEDERAL OR OTHER GOVERNING AGENCY'S LAWS ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
- A GEOTECHNICAL REPORT HAS BEEN PREPARED BY ECS MIDWEST, LLC DATED AUGUST 2, 2021, FOR THE PROJECT SITE. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE FROM BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
- THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.
- QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.

REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.

- PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
- COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS
- SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
- 0. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE
- . SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
- . CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
- 14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

## REQUIRED SUBMITTALS FOR **APPROVAL**

- 1. HOT MIX ASPHALT- MIX DESIGN
- 2. CONCRETE PAVEMENTS (EXTERIOR) MIX DESIGN & JOINT PLAN
- 3. PAVEMENT STONE BASE COURSE GRADATION
- 4. PIPE BEDDING & TRENCH BACKFILL GRADATION
- 5. MANHOLE BACKFILL GRADATION
- 6. PAVEMENT MARKING PAINT

## REQUIRED SUBMITTALS FOR RECORDS

- 1. WATER MAIN PIPES, VALVES, HYDRANTS & FITTINGS
- 2. SANITARY SEWER PIPE & FITTINGS
- 3. STORM SEWER PIPE, STRUCTURES, & FITTINGS
- 4. TRACER WIRE
- 5. UNDERGROUND UTILITY LOCATION RECORD DRAWINGS
- 6. ADA SIGN & TRUNCATED DOMES, PAINT & STENCILS
- 7. CHEMICAL SOIL STABILIZATION MIX DESIGN (IF APPLICABLE)

## **PROJECT TEAM CONTACTS**

## **CIVIL ENGINEER:**

MATT CAREY, P.E. PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186

**INDEX OF SHEETS** 

.6955 WEST WISCONSIN AVENUE BROOKFIELD, WI 53005 (312)-683-7224

## SITE DIMENSIONAL & PAVING PLAN C-4 - C-5 **GRADING PLAN UTILITY PLAN**

**COVER SHEET** 

C-6 C-7 - C-12 PUBLIC WATER MAIN PLAN AND PROFILE

**EXISTING CONDITIONS PLAN** 

C-13 **EROSION CONTROL PLAN** 

C-1

C-2

C-3

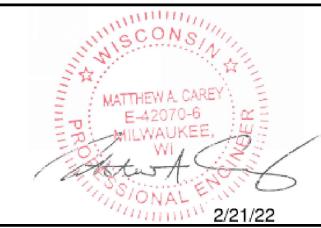
C-14 OAKWOOD ROAD DEMOLITION PLAN

C-15 OAKWOOD ROAD PAVING & UTILITY PLAN C-16 OAKWOOD ROAD GRADING & EROSION CONTROL PLAN

C-17 **GENERAL NOTES** 

**CONSTRUCTION DETAILS** C-18 - C-22

LANDSCAPE PLANS L-1 - L-6



Toll Free (800) 242-8511 Milwaukee Area (414) 259-1181 Hearing Impaired TDD (800) 542-2289 www.DiggersHotline.com

#### PINNACLE ENGINEERING GROUP, LLC **ENGINEER'S LIMITATION**

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THI KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

**REVISIONS** 



CONCRETE SIDEWALK

**REVERSE PITCH CURB & GUTTER** 

CURB AND GUTTER

DEPRESSED CURB

EASEMENT LINE

PLAN I DESIGN I DELIVER

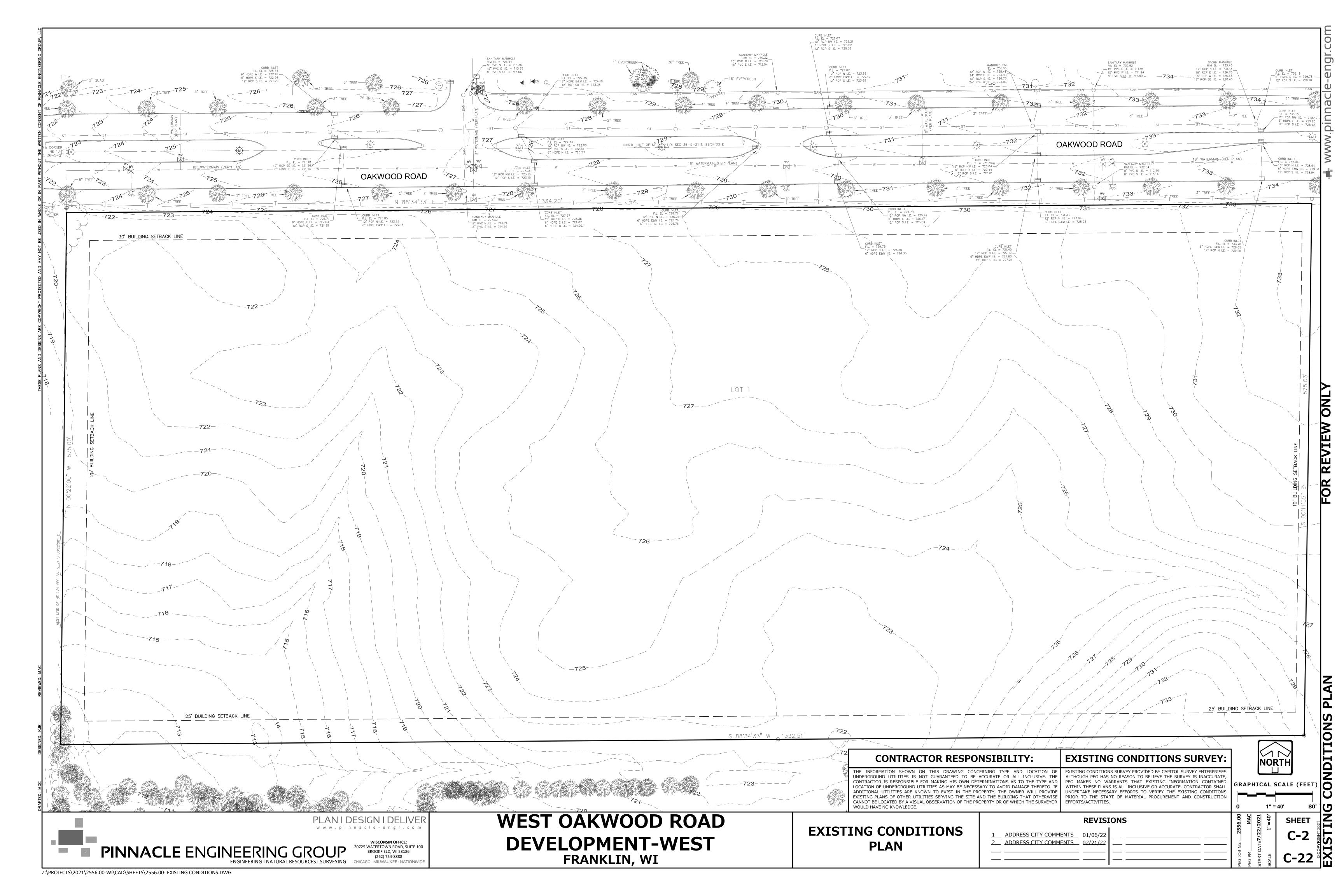
20725 WATERTOWN ROAD, SUITE 100

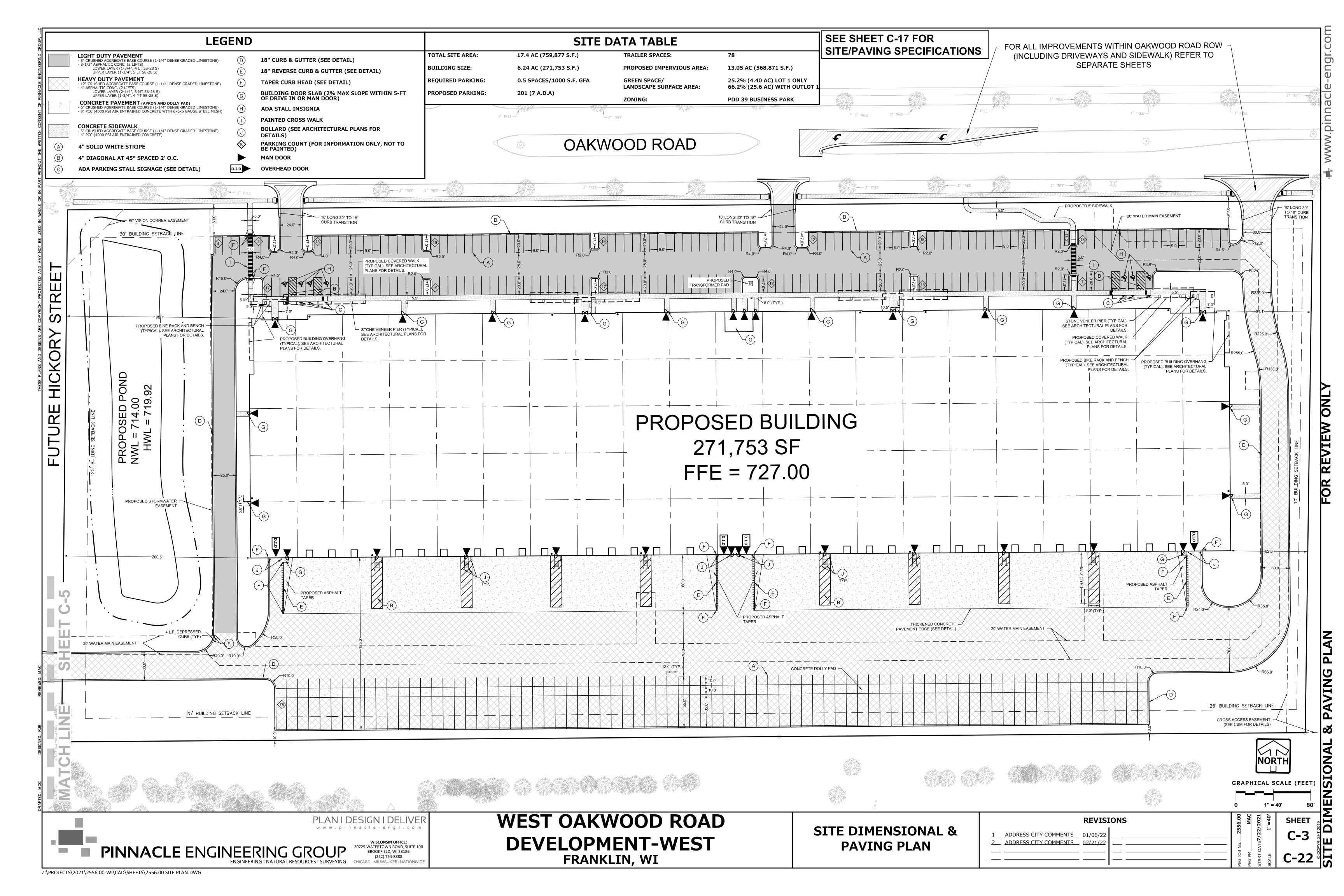
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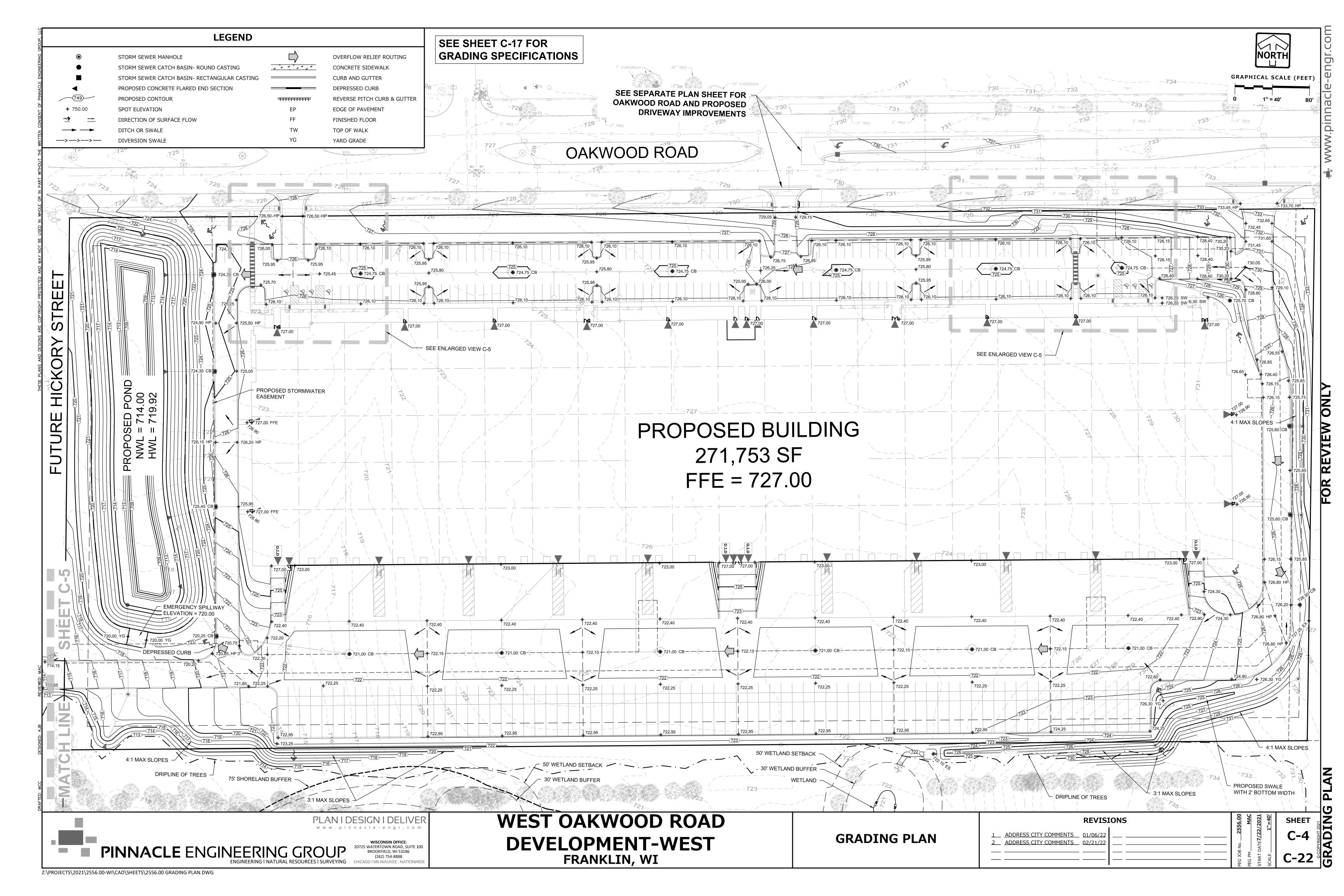
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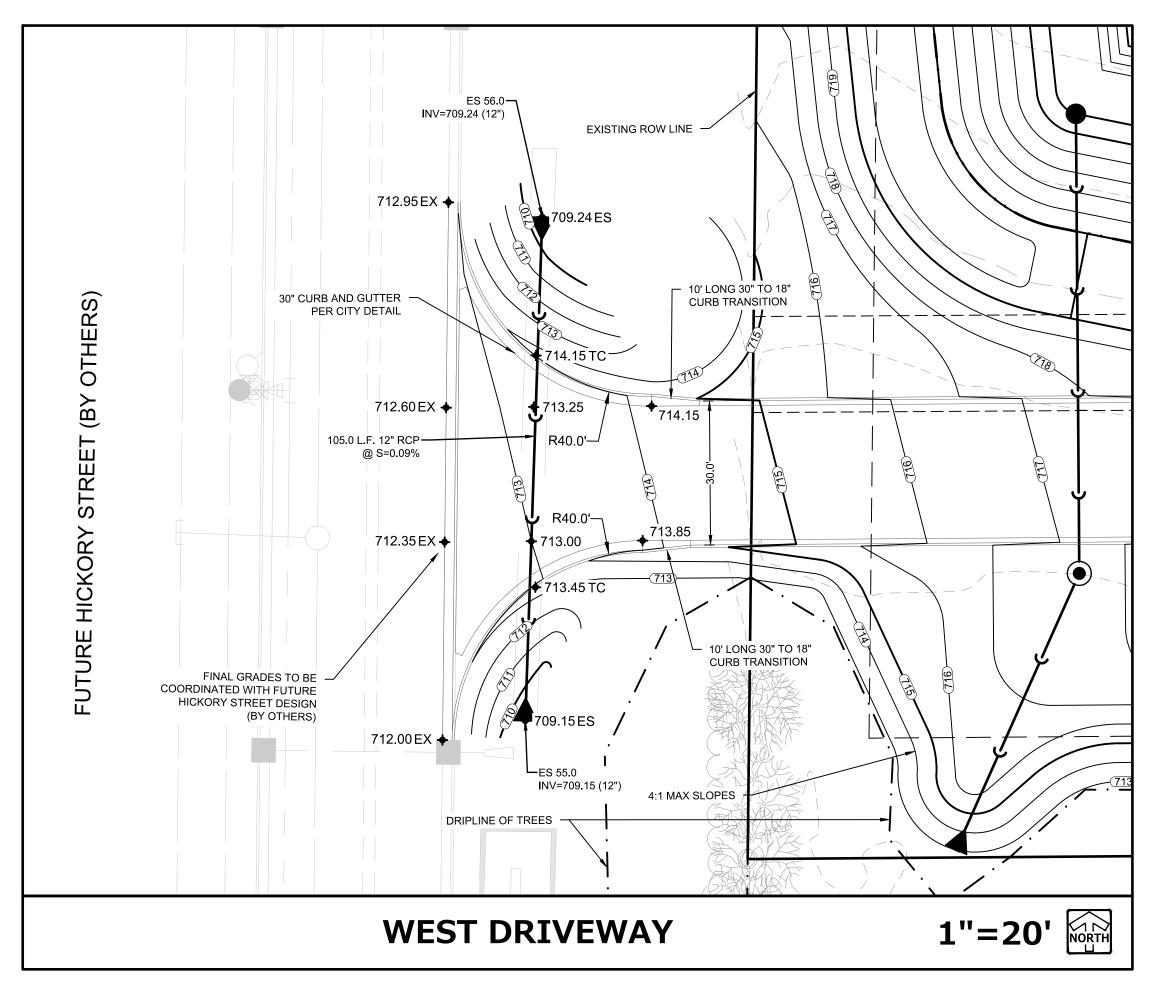
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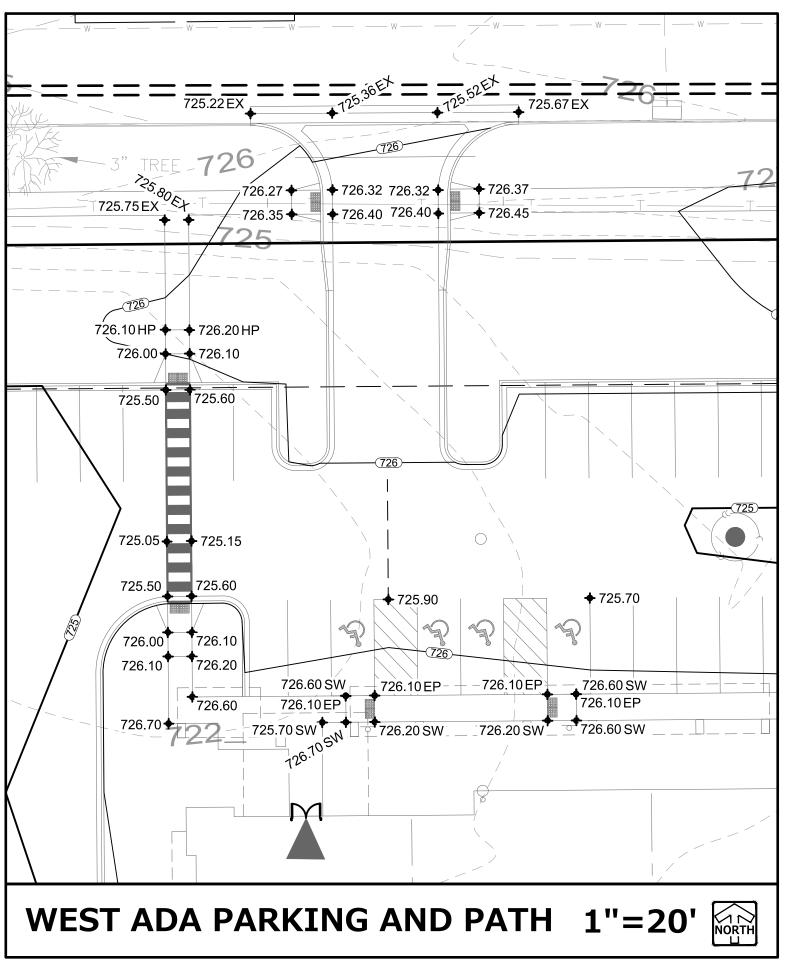
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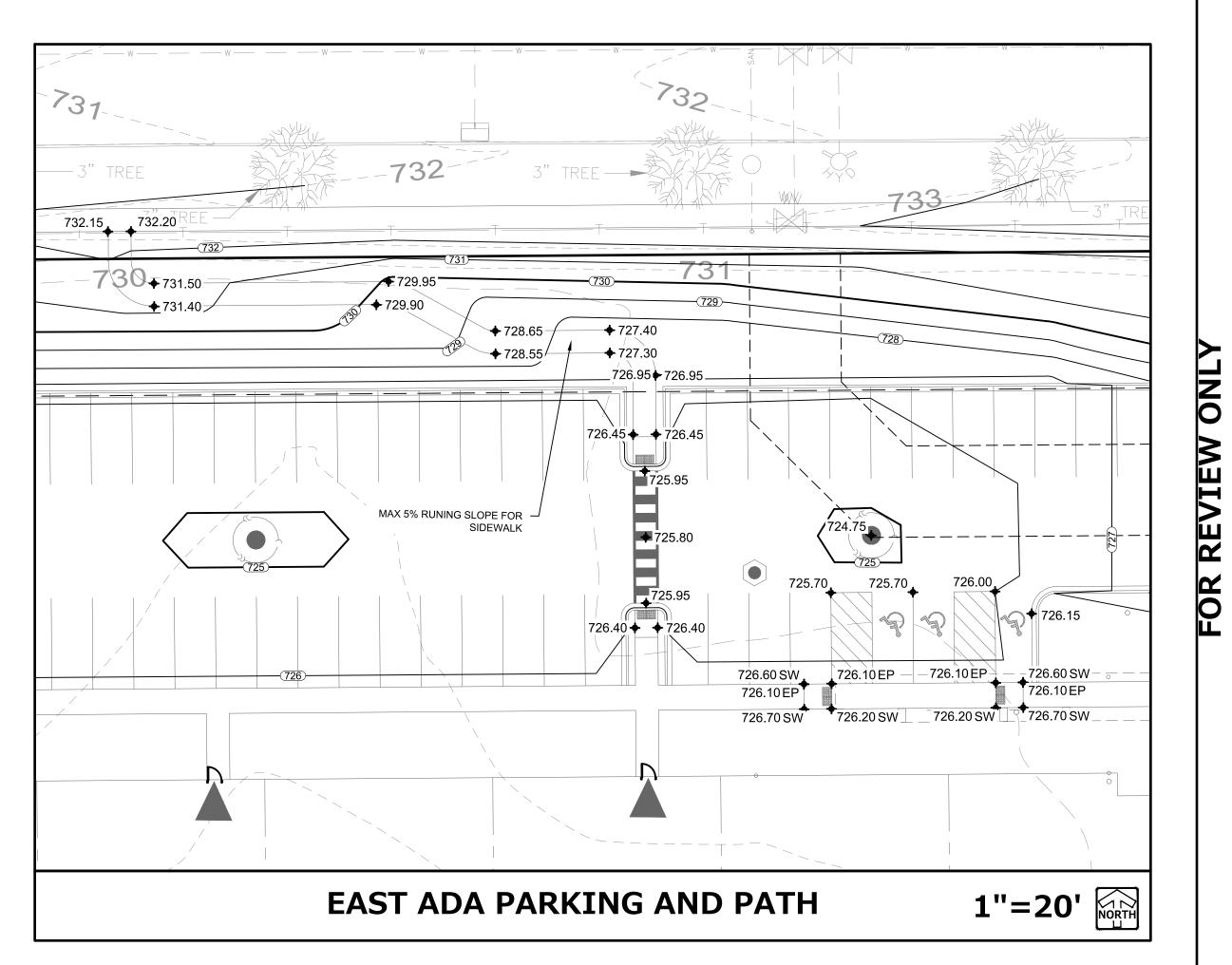












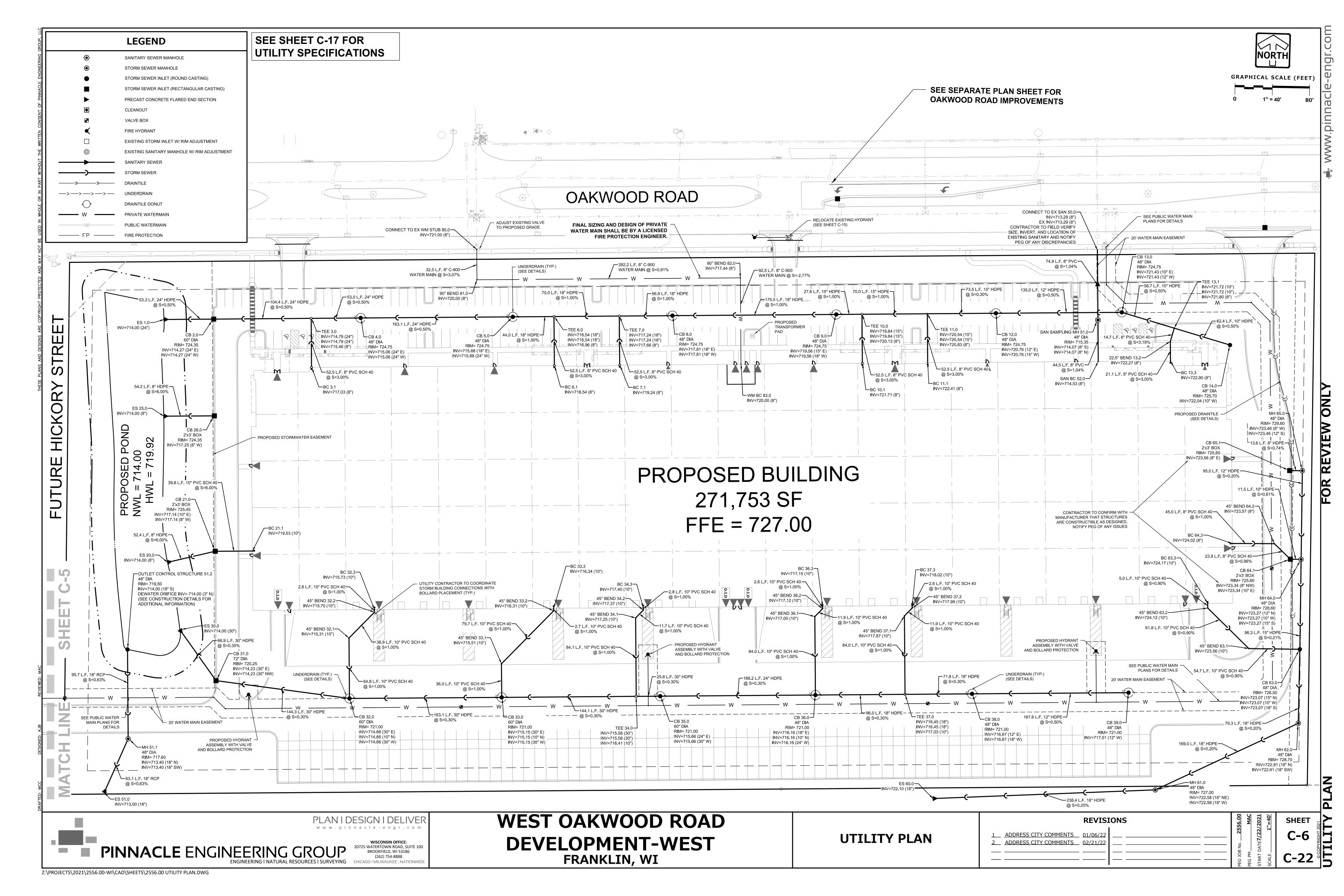
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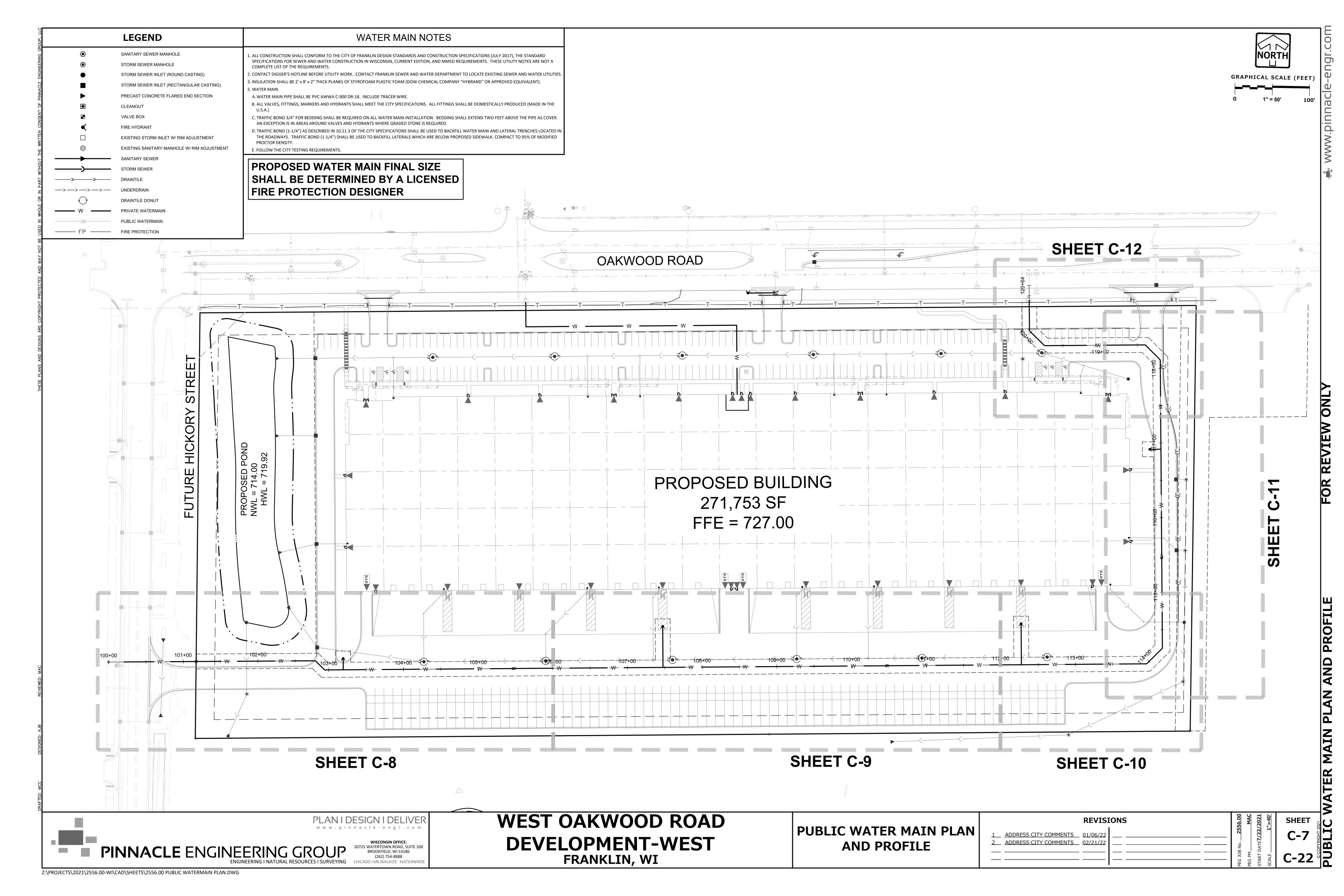
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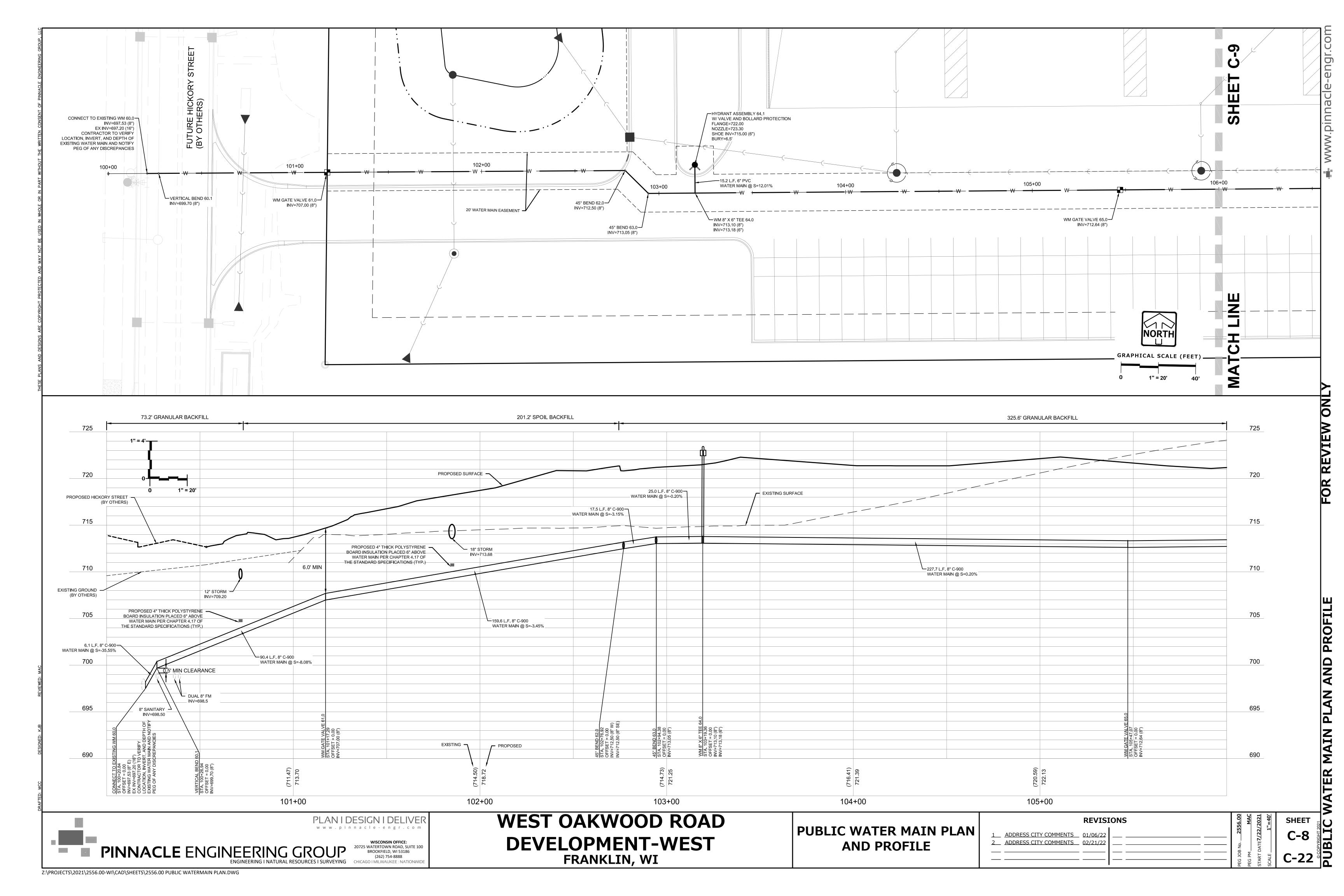
**GRADING PLAN** 

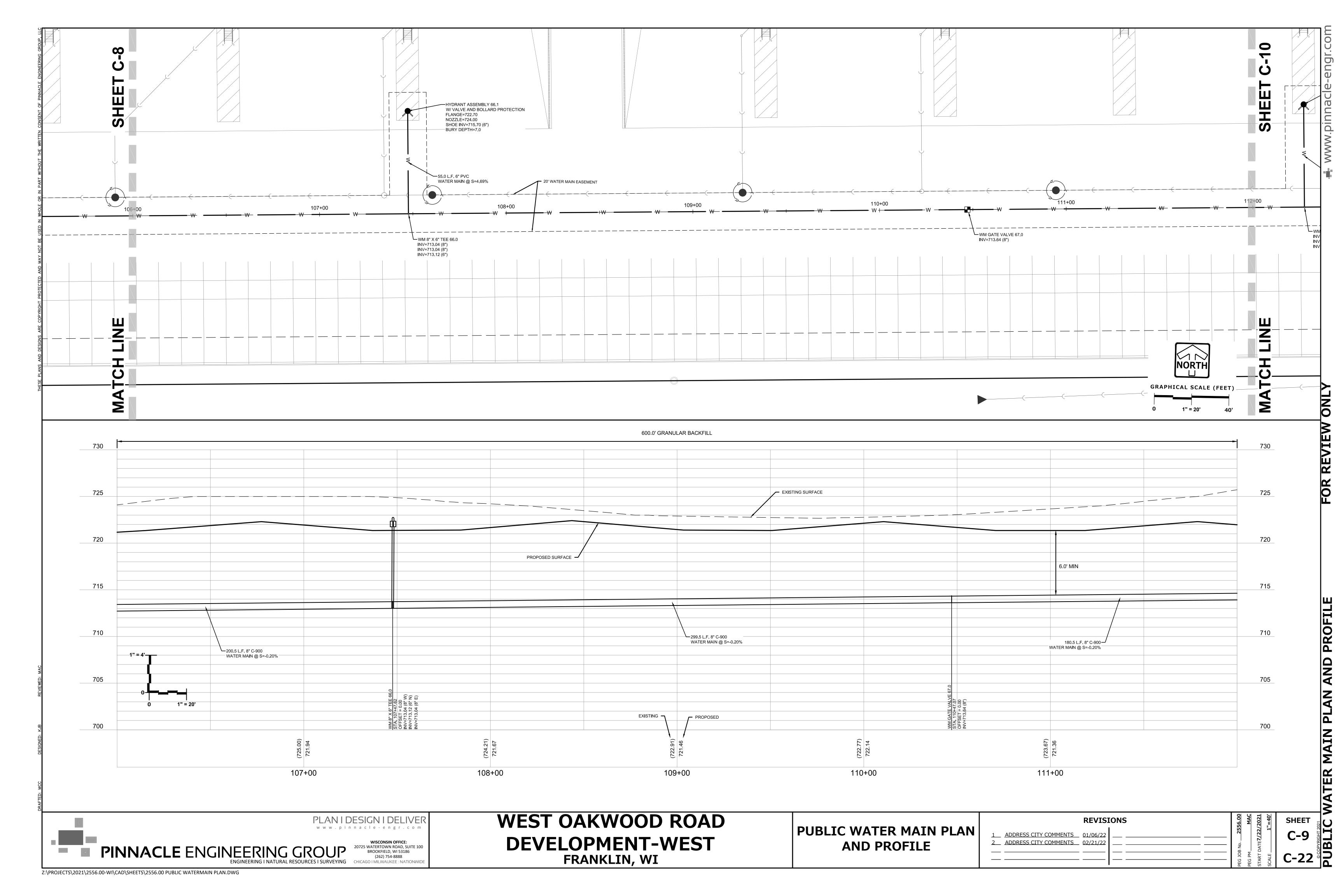
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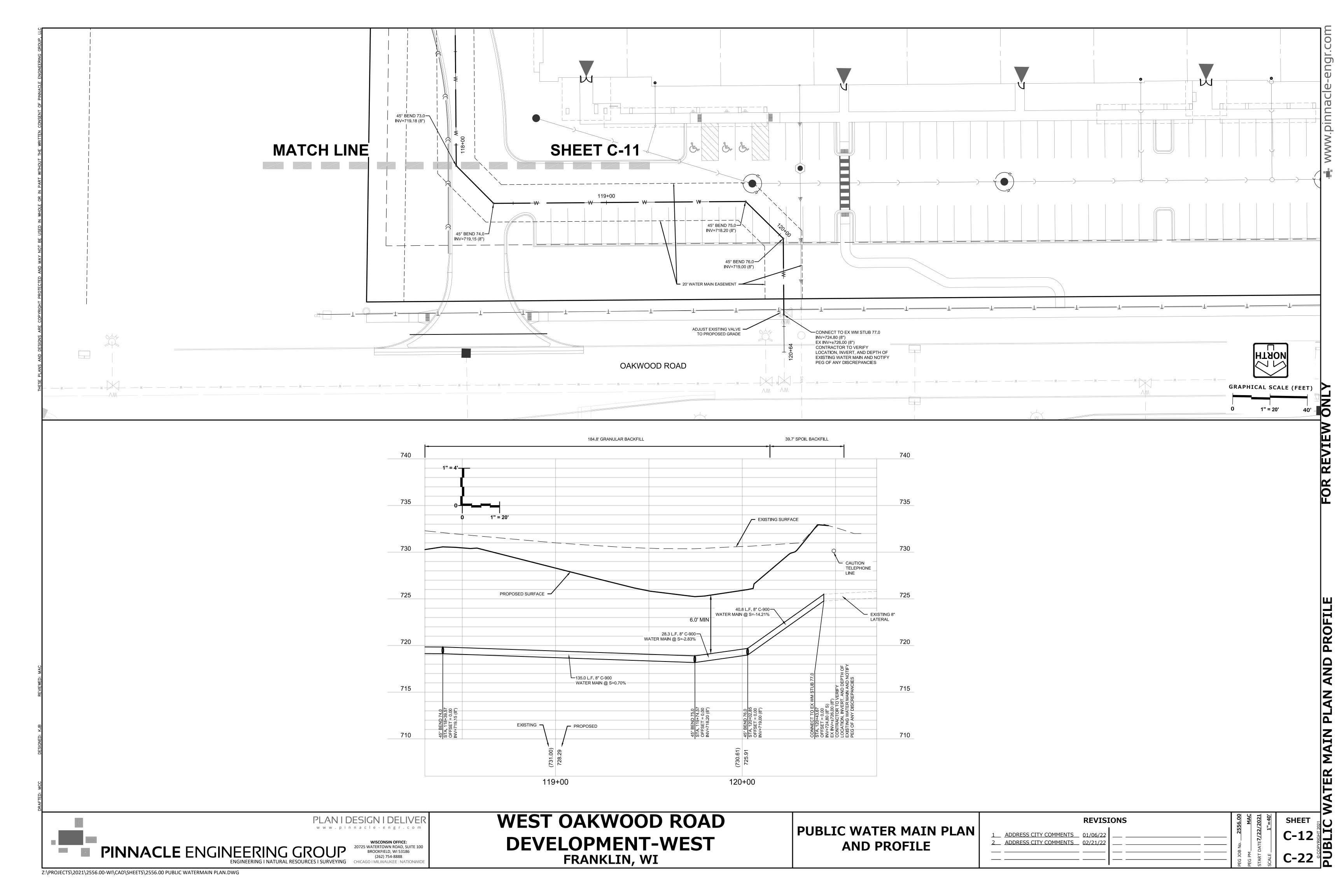
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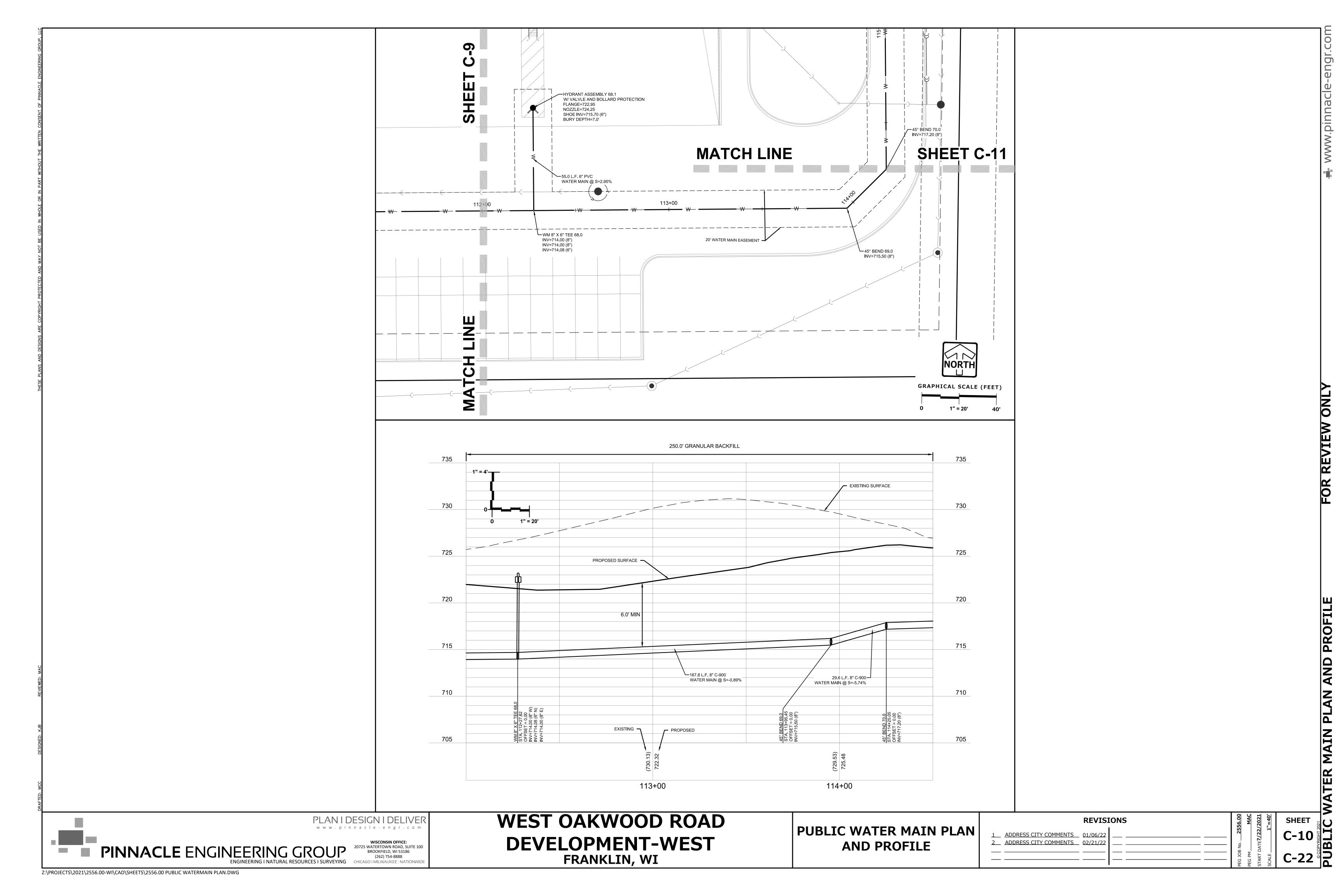


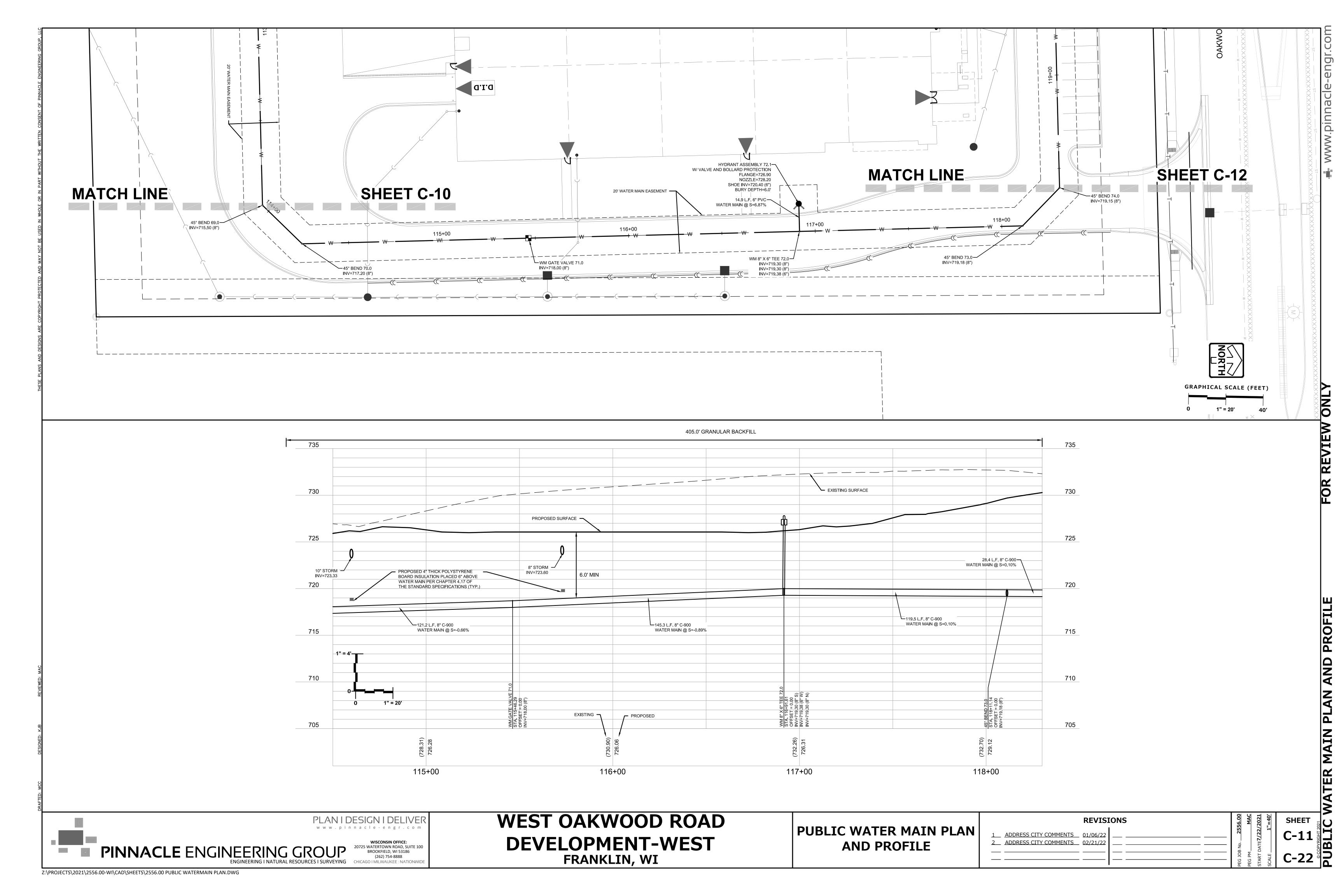


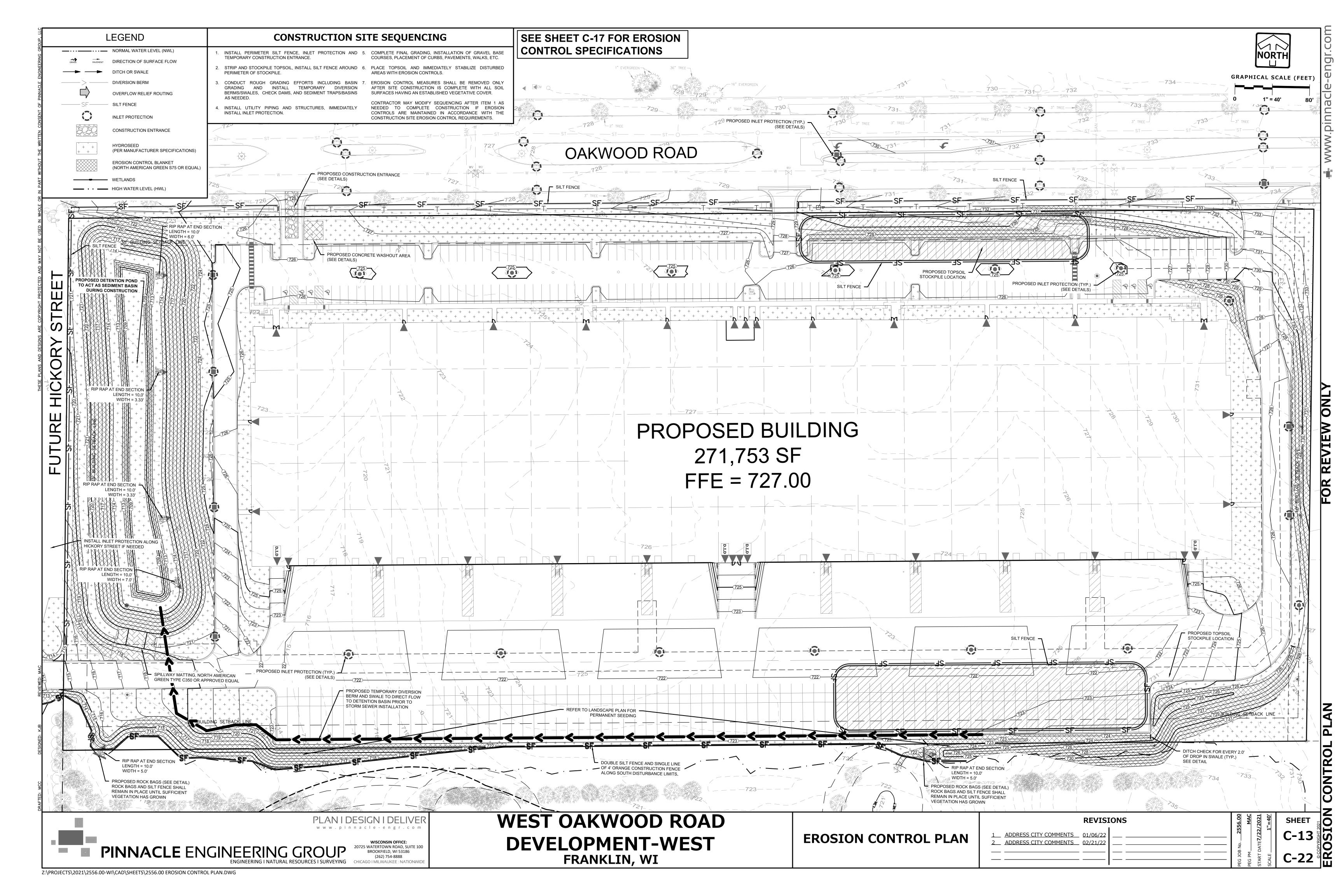


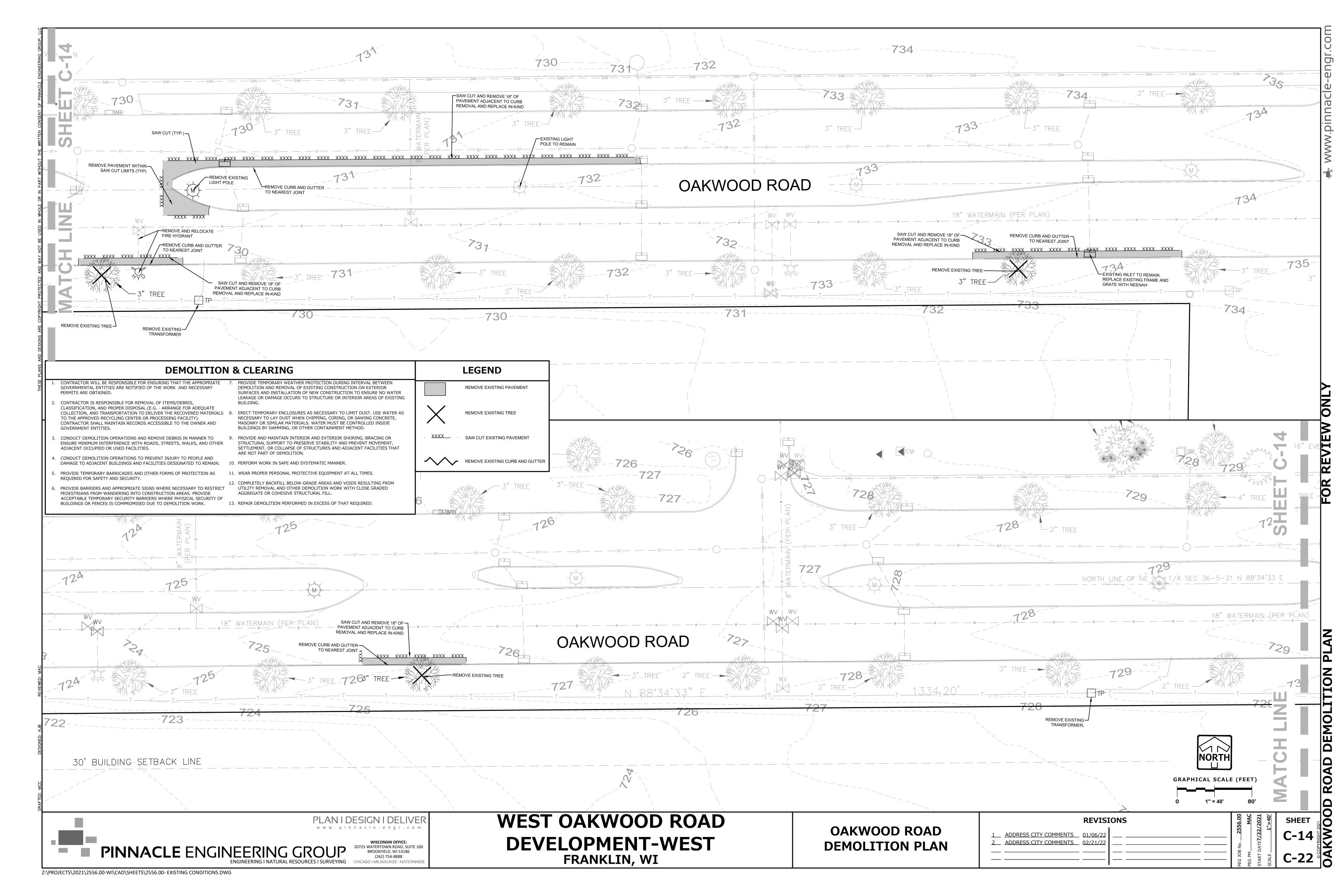


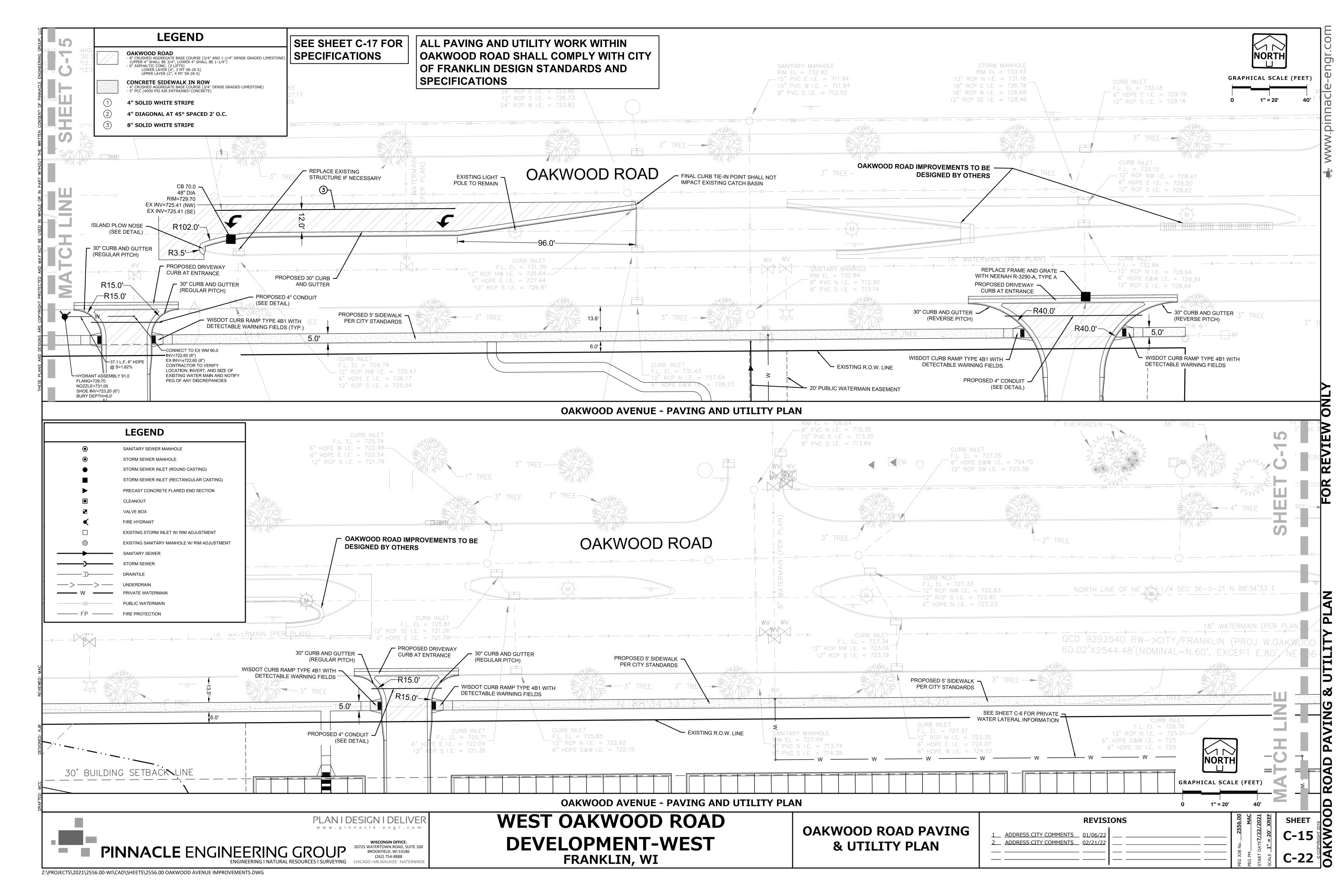


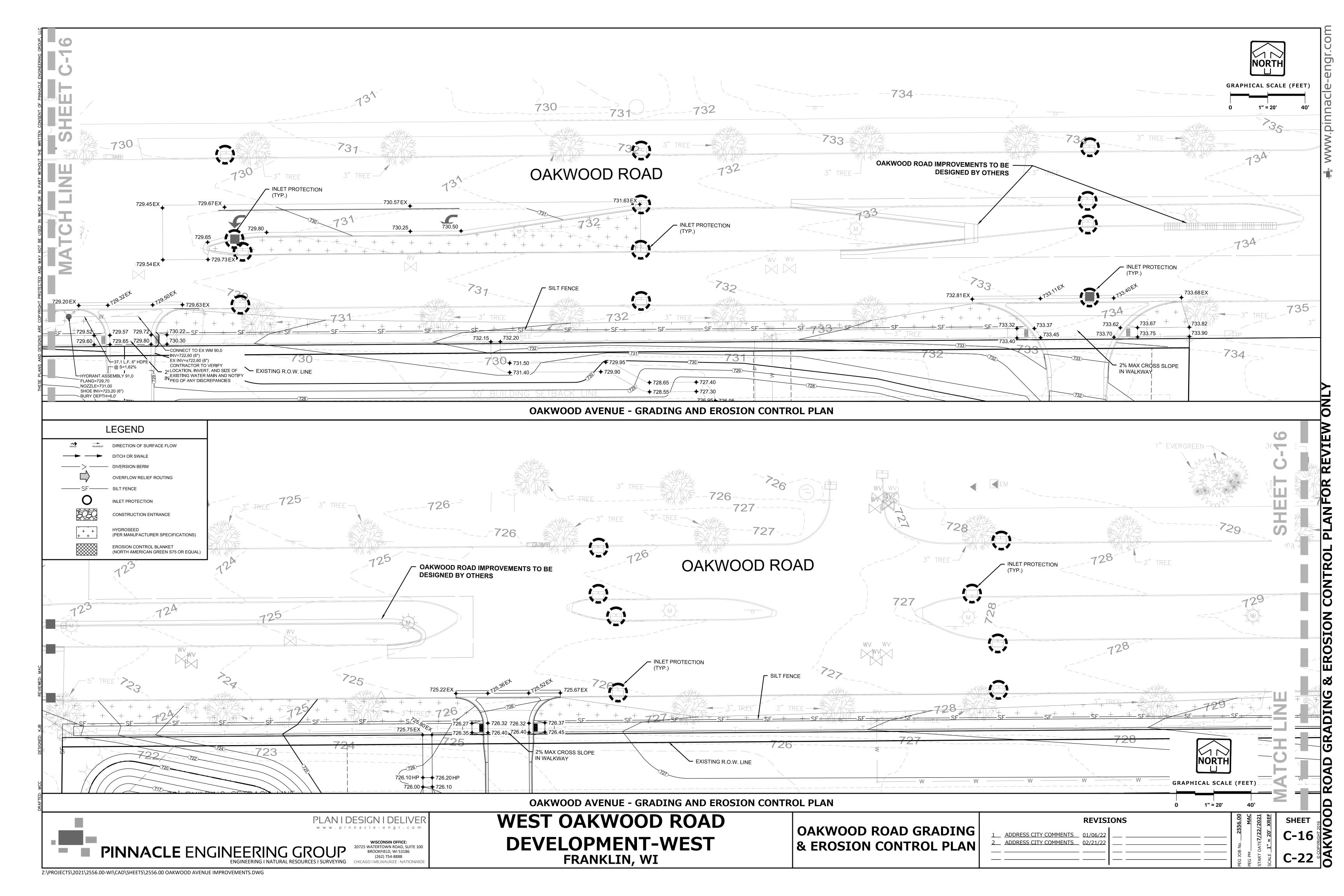












#### **SITE/PAVING NOTES**

- . ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. ALL PAVING DIMENSIONS ARE TO FACE OF CURB OR TO EDGE OF PAVEMENT: EXCEPT FOR THE SETBACK FROM PARKING LOTS, MANEUVERING LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE
- ALL PROPOSED CURB AND GUTTER SHALL BE 18" STANDARD CURB AND GUTTER (SEE DETAIL). UNLESS OTHERWISE NOTED. CURB AND GUTTER DRAINING AWAY FROM THE FACE OF CURB IS NOTED AS REVERSE CURB AND GUTTER.
- 3. ALL RADII ARE MEASURED TO FACE OF CURB UNLESS NOTED OTHERWISE.
- 4. BUILDING DIMENSIONS AND ADJACENT PARKING AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING, SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE (1-800-242-8511) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
- IMPROVEMENTS ADJACENT TO BUILDING IF SHOWN SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS, AND DETAILS.
- REFER TO ELECTRICAL PLANS FOR LIGHTING LOCATIONS, SPECIFICATIONS, AND
- 8. SEE ADDITIONAL NOTES AND DETAILS ON SITE DIMENSIONAL PLANS AND
- 9. ALL PAVING SHALL CONFORM TO STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE CITY OF FRANKLIN ORDINANCES, AND SPECIFICATIONS CONTAINED WITHIN THIS
- 10. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.
- 11. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.
- 12. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT OUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.
- 13. DO NOT PLACE MARKING OVER UNSOUND PAVEMENTS. IF THESE CONDITIONS EXIST, NOTIFY OWNER. STARTING INSTALLATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.
- 14. LAYOUT MARKINGS USING GUIDE LINES, TEMPLATES AND FORMS. STENCILS AND TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS. "FREE HAND" PAINTING OF ARROWS, SYMBOLS, OR WORDING SHALL NOT BE ALLOWED. APPLY STRIPES STRAIGHT AND EVEN.
- 15. PROTECT ADJACENT CURBS, WALKS, FENCES, AND OTHER ITEMS FROM RECEIVING
- 16. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.
- 17. ASPHALTIC CONCRETE PAVING SPECIFICATIONS-

CODES AND STANDARDS: THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACING SHALL BE IN ACCORDANCE WITH THE REOUIREMENTS OF SECTIONS 450, 455, 460 AND 465 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, EDITION OF 2005, HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS THE STATE HIGHWAY SPECIFICATIONS.

WEATHER LIMITATIONS: APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50° F (10° C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35° F (1° C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° (4°C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY, BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30° F (-1°C) FOR PAVEMENT WITHIN CITY OF FRANKLIN RIGHT-OF-WAY THE TEMPERATURE AT TIME OF PLACEMENT (BASE AND SURFACE COURSES) SHOULD BE 40 DEGREES AND RISING, FOLLOWING WISDOT STANDARD SPEC 450.

GRADE CONTROL: ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.

CRUSHED AGGREGATE BASE COURSE: THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY

BINDER COURSE AGGREGATE: THE AGGREGATE FOR THE BINDER COURSE HALL CONFORM TO SECTIONS 460.2.7 AND 315, STATE HIGHWAY SPECIFICATIONS.

SURFACE COURSE AGGREGATE: THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 465, STATE HIGHWAY SPECIFICATIONS

ASPHALTIC MATERIALS: THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.

HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING

SURFACE PREPARATION: NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS

#### **GRADING NOTES**

- CONTRACTOR SHALL VERIFY ALL GRADES, ENSURE ALL AREAS DRAIN PROPERLY AND REPORT ANY DISCREPANCIES TO PINNACLE ENGINEERING GROUP PRIOR TO THE START OF ANY
- 2. ALL EXISTING CONTOURS REPRESENT EXISTING SURFACE GRADES UNLESS OTHERWISE NOTED. ALL PROPOSED GRADES SHOWN ARE FINISH SURFACE GRADES UNLESS OTHERWISE
- 3. SPOT ELEVATIONS REPRESENT THE GRADE ALONG THE EDGE OF PAVEMENT UNLESS

OTHERWISE NOTED.

4. ALL EXCAVATIONS AND MATERIAL PLACEMENT SHALL BE COMPLETED TO DESIGN ELEVATIONS AS DEPICTED IN THE PLANS.

> CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATION(S) OF ALL GRADING QUANTITIES. WHILE PEG ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS. INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARD OF CARE, THEREFORE NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.

THE CONTRACTOR MAY SOLICIT APPROVAL FROM ENGINEER/OWNER TO ADJUST FINAL GRADES FROM DESIGN GRADES TO PROVIDE AN OVERALL SITE BALANCE AS A RESULT OF FIELD CONDITIONS.

- GRADING ACTIVITIES SHALL BE IN A MANNER TO ALLOW POSITIVE DRAINAGE ACROSS DISTURBED SOILS, WHICH MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES TO PREVENT PONDING, AND IF NECESSARY PUMPING TO ALLEVIATE PONDING. CONTRACTOR SHALL PREVENT SURFACE WATER FROM ENTERING INTO EXCAVATIONS. IN NO WAY SHALL OWNER BE RESPONSIBLE FOR REMEDIATION OF UNSUITABLE SOILS CREATED/ORIGINATED AS A RESULT OF IMPROPER SITE GRADING OR SEQUENCING, CONTRACTOR SHALL SEQUENCE GRADING ACTIVITIES TO LIMIT EXPOSURE OF DISTURBED SOILS DUE TO WEATHER.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR MEETING MINIMUM COMPACTION STANDARDS. THE CONTRACTOR SHALL NOTIFY ENGINEER/OWNER IF PROPER COMPACTION CANNOT BE OBTAINED. THE PROJECT'S GEOTECHNICAL CONSULTANT SHALL DETERMINE WHICH IN-SITU SOILS ARE TO BE CONSIDERED UNSUITABLE SOILS. THE ENGINEER/OWNER AND GEOTECHNICAL TESTING CONSULTANT WILL DETERMINE IF REMEDIAL MEASURES WILL BE NECESSARY.
- 7. IN THE EVENT THAT ANY MOISTURE-DENSITY TEST(S) FAIL TO MEET SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PERFORM CORRECTIVE WORK AS NECESSARY TO BRING THE MATERIAL INTO COMPLIANCE AND RETEST THE FAILED AREA AT NO COST TO THE
- 8. WITH THE AUTHORIZATION OF THE ENGINEER/OWNER, MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON FILL AREAS IN AN EFFORT TO DRY. CONTRACTOR SHALL CLEARLY FIELD MARK THE EXTERIOR LIMITS OF SPREAD MATERIAL WITH PAINTED LATH AND SUBMIT A PLAN TO THE ENGINEER/OWNER THAT IDENTIFIES THE LIMITS. UNDER NO CONDITION SHALL THE SPREAD MATERIAL DEPTH EXCEED THE MOST RESTRICTIVE OF: THE EFFECTIVE TREATMENT DEPTH OF MACHINERY THAT WILL BE USED TO TURNOVER THE SPREAD MATERIAL; OR THE MAXIMUM COMPACTION LIFT DEPTH.
- 9. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
- 10. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ADEQUATE AND SAFE TEMPORARY SHORING, BRACING, RETENTION STRUCTURES, AND EXCAVATIONS.
- 11. THE SITE SHALL BE COMPLETED TO WITHIN 0.10-FT (+/-) OF THE PROPOSED GRADES AS INDICATED WITHIN THE PLANS PRIOR TO PLACEMENT OF TOPSOIL OR STONE. CONTRACTOR IS ENCOURAGED TO SEQUENCE CONSTRUCTION SUCH THAT THE SITE IS DIVIDED INTO SMALLER AREAS TO ALLOW STABILIZATION OF DISTURBED SOILS IMMEDIATELY UPON COMPLETION OF INDIVIDUAL SMALLER AREAS.
- 12. CONTRACTOR SHALL CONTACT "DIGGER'S HOTLINE" FOR LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR PROTECTING SAID UTILITIES FROM ANY DAMAGE DURING CONSTRUCTION.
- 13. CONTRACTOR SHALL PROTECT INLETS AND ADJACENT PROPERTIES WITH SILT FENCING OR APPROVED EROSION CONTROL METHODS UNTIL CONSTRUCTION IS COMPLETED. CONTRACTOR SHALL PLACE SILT FENCING AT DOWN SLOPE SIDE OF GRADING LIMITS.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING FACILITIES OR UTILITIES. ANY DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.
- . WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH TH APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES, GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE
- RIGHT-OF-WAY IN-KIND INCLUDING LANDSCAPING. 16. CONTRACTOR SHALL COMPLY WITH ALL CITY OF FRANKLIN CONSTRUCTION STANDARDS/ORDINANCES.
- 17. LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 4-INCH TOPSOIL REPLACEMENT. 18. TOPSOIL BERMING SHALL ACHIEVE 90% STANDARD PROCTOR DENSITY AT 3%(±) OPTIMUM
- 19. SURVEY BENCHMARKS AND MAPPING HAS BEEN PROVIDED BY PINNACLE ENGINEERING GROUP.IN NO WAY DOES PEG WARRANT THE BASEMAP IS ALL INCLUSIVE OR REPRESENTATIVE OF ACTUAL CONDITIONS. CONTRACTOR SHALL PROVIDE CHECKS AS NECESSARY TO VERIFY THE BASEMAP CONTENT AND ACCURACY.

#### UTILITY NOTES

- EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND/OR TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.
- ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (LATEST EDITION AND ADDENDUM) AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
- UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE CITY OF FRANKLIN SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES SPS 382.
- LENGTHS OF PROPOSED UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN, LENGTHS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY, CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPUTATIONS OF MATERIALS REQUIRED TO COMPLETE WORK. LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.
- CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT EXISTING UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH FINISHED GRADES OF THE AREAS DISTURBED DURING
- CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF PROPOSED UTILITIES AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS PRIOR TO ATTEMPTING CONNECTIONS AND BEGINNING UTILITY CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
- ALL NEW ON-SITE SANITARY, STORM AND WATER UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.
- THE CONTRACTOR SHALL CONTACT THE CITY OF FRANKLIN PUBLIC WORKS DEPARTMENT 48-HOURS IN ADVANCE OF STORM CONNECTIONS TO THE CITY-OWNED SYSTEM TO SCHEDULE INSPECTIONS. THE CONTRACTOR SHALL CONTACT THE CITY OF FRANKLIN SEWER AND WATER DEPARTMENT 48-HOURS IN ADVANCE OF SANITARY AND WATER CONNECTIONS TO THE CITY-OWNED SYSTEM TO SCHEDULE
- ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES ARE SHOWN ON THE ARCHITECTURAL PLANS AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
- ID. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROPER AUTHORITIES FOR ANY REQUIRED PERMITS, AUTHORIZATIONS, TRAFFIC CONTROL AND ANY PERMIT FEES REQUIRED.
- 1. FIELD TILE CONNECTION ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE SIZE, TYPE AND NUMBER OF WATER MAIN BENDS, HORIZONTAL AND VERTICAL, REQUIRED TO COMPLETE CONSTRUCTION. COST FOR BENDS, HORIZONTAL AND VERTICAL, SHALL BE INCIDENTAL AND INCLUDED IN THE OVERALL COST OF THE CONTRACT.
- 13. STORM SEWER SPECIFICATIONS -

STORM SEWER MATERIAL, INSTALLATION, BEDDING AND BACKFILL LOCATED WITHIN CITY OF FRANKLIN RIGHT-OF-WAY SHOULD FOLLOW CITY OF FRANKLIN DESIGN STANDARDS AND

PIPE - REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS C-76 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C-443. STRENGTH CLASSIFICATIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING

HEIGHT OF COVER (FFFT): 0-2 2-3 3-6 6-15 15-25 25+ MINIMUM CONCRETE PIPE CLASSIFICATION: IV III II IV ENGINEER TO SPECIFY

HIGH DENSITY DUAL-WALL POLYETHYLENE N-12 CORRUGATED PIPE (HDPE) SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M-294 TYPE "S". OR POLYVINYL CHLORIDE (PVC) - CLASS PS46 MEETING AASHTO M278, AS NOTED. IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE STRAPPED TOGETHER.

INLETS/CATCH BASINS - INLETS/CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 25 OF THE "STANDARD SPECIFICATIONS" WITH A 1'-8" X 2'-6" MAXIMUM OPENING. FRAME & GRATE SHALL BE NEENAH R-1580 WITH TYPE G GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NEENAH R-3067, OR EOUAL. THE SUMP DEPTH (VERTICAL DISTANCE FROM THE BASE OF THE STRUCTURE TO OUTFALL INVERT OF THE PIPE) SHALL BE 18" MIN. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND

BACKFILL AND BEDDING - STORM SEWER SHALL BE CONSTRUCTED WITH GRAVEL BACKFILL AND CLASS "B" BEDDING IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE

GRAVEL BACKFILL, LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS". MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NEENAH R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROCKING OR EQUAL .

IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE

14. WATER MAIN SPECIFICATIONS-

WATER MAIN MATERIAL, INSTALLATION, BEDDING AND BACKFILL LOCATED WITHIN CITY OF FRANKLIN RIGHT-OF-WAY SHOULD FOLLOW CITY OF FRANKLIN DESIGN STANDARDS AND SPECIFICATIONS.

PIPE - WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 150, DR-18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS, VALVES AND VALVE BOXES - GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C-500 AND CHAPTER 8.27.0 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.

HYDRANTS - HYDRANTS SHALL CONFORM TO THE SPECIFICATIONS OF THE VILLAGE OF PLEASANT PRAIRIE AND IN ACCORDANCE WITH FILE NO. 38 OF THE "STANDARD SPECIFICATIONS." THE DISTANCE FROM THE GROUND LINE TO THE CENTERLINE OF THE LOWEST NOZZLE AND THE LOWEST CONNECTION OF THE FIRE DEPARTMENT SHALL BE NO LESS THAN 18-INCHES AND NO GREATER THAN 23-INCHES.

BEDDING AND COVER MATERIAL - PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 OF THE "STANDARD

BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".

#### 15. SANITARY SEWER SPECIFICATIONS -

SANITARY SEWER MATERIAL, INSTALLATION, BEDDING AND BACKFILL LOCATED WITHIN CITY OF FRANKLIN RIGHT-OF-WAY SHOULD FOLLOW CITY OF FRANKLIN DESIGN STANDARDS AND

PIPE - SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-35, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE

BEDDING AND COVER MATERIAL - BEDDING AND COVER MATERIAL SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE "STANDARD SPECIFICATION" WITH THE FOLLOWING MODIFICATION: "COVER MATERIAL SHALL BE THE SAME AS USED FOR BEDDING AND SHALL CONFORM TO SECTION 8.43.2 (A). BEDDING AND COVER MATERIAL SHALL BE PLACED IN A MINIMUM OF THREE SEPARATE LIFTS, OR AS REOUIRED TO INSURE ADEOUATE COMPACTING OF THESE MATERIALS. WITH ONE LIFT OF BEDDING MATERIAL ENDING AT OR NEAR THE SPRINGLINE OF THE PIPE. THE CONTRACTOR SHALL TAKE CARE TO COMPLETELY WORK BEDDING MATERIAL UNDER THE HAUNCH OF THE PIPE TO PROVIDE ADEQUATE SIDE

BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS." GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD

MANHOLES - MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NOS. 12, 13 AND 15 OF THE "STANDARD SPECIFICATIONS" AND ALL SPECIAL PROVISIONS OF THE CITY OF FRANKLIN. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.

MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NEENAH R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROCKING OR EQUAL

- 16. WATER MAIN AND SANITARY SEWER SHALL BE INSULATED WHEREVER THE DEPTH OF COVER IS LESS THAN 6 FEET, INSULATION AND PLACING OF INSULATION SHALL CONFORM TO CHAPTER 4.17.0 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).
- 17. TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES. THE TRACER WIRE FOR THE SANITARY SEWER LATERAL SHALL BE CONTINUOUS AND SHALL BE EXTENDED ABOVE GRADE VIA A 4-INCH PVC PIPE WITH SCREW-ON CAP ADJACENT TO THE PROPOSED TERMINATION POINT OF THE LATERAL FOR THE PROPOSED BUILDING.
- 18. SEE UTILITY PLANS AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

## **EROSION AND SEDIMENT CONTROL NOTES**

- .. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT ("WPDES" PERMIT NO. WI-S067831-6) FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
- MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- 4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
- PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.
- ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS . ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
- . EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:
- PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.

IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.

- BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
- DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
- AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
- 10. ALL WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS
- 11. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL
- 12. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IE TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR
- MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED. 13. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.
- 14. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
- 15. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
- 16. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR. SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES, ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
- 17. ALL DISTURBED SLOPES EXCEEDING 4:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND ALL CHANNELS SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EOUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- 18. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE.THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
- 19. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS. 20. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT

DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND

- EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH. OR MORE. PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
- 21. SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.
- 22. PRIOR TO REMOVAL OF EROSION CONTROL DEVICES, THE SITE SHALL HAVE 95% PERMANENT VEGETATION ESTABLISHED

**PINNACLE** ENGINEERING GROUP

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WEST OAKWOOD ROAD **DEVELOPMENT-WEST** FRANKLIN, WI

**GENERAL NOTES** 

1 ADDRESS CITY COMMENTS 01/06/22 ADDRESS CITY COMMENTS 02/21/2

**REVISIONS** 

Z:\PROJECTS\2021\2556.00-WI\CAD\SHEETS\2556.00 CONSTRUCTION DETAILS.DWG

#### 2.0 EROSION AND SEDIMENT CONTROL IMPLEMENTATION

THE FOLLOWING ARE DESCRIPTIONS OF THE EROSION AND SEDIMENT CONTROL PRACTICES THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION OF THIS PROJECT. IN ADDITION TO THESE MEASURES, CONTRACTOR SHALL DISTURB ONLY AREAS NECESSARY TO COMPLETE THE CONSTRUCTION PROJECT. ALL PRACTICES SHALL BE CONDUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP).

#### 2.1 CONSTRUCTION AND EROSION CONTROL SEQUENCING

CONSTRUCTION SEQUENCING WILL BE UTILIZED AS A MEANS OF CONTROLLING EROSION AND LIMITING SEDIMENT TRANSPORT. SEQUENCING AS LISTED BELOW IS GENERAL IN NATURE AND MAY VARY DEPENDING ON WEATHER CONDITIONS AND/OR PHASING OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED SITE SEQUENCING PLAN TO OWNER FOR APPROVAL AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 6 AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS

- INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CULVERT INLET LOCATIONS, AND PERIMETER SILT FENCING.
- 2. INSTALL SILT FENCING ALONG THE PERIMETER OF PROPOSED TOPSOIL STOCKPILE LOCATIONS. THE FIRST TOPSOIL DEPOSITED WITHIN THE STOCKPILE LIMITS SHALL BE PLACED TO CREATE TEMPORARY BERMING ALONG THE SILT FENCE TO PREVENT DIRECT STORMWATER RUNOFF AGAINST SILT FENCING. CONTRACTOR SHALL LIMIT LAND DISTURBING ACTIVITIES ASSOCIATED WITH TEMPORARY BERMING TO A MINIMUM.
- 3. STRIP TOPSOIL WITHIN THE LIMITS OF THE SEDIMENT TRAPS THAT WILL BE USED FOR TEMPORARY SEDIMENT CONTROL. STRIPPED TOPSOIL SHALL BE PLACED TO CONSTRUCT DIVERSION BERMING OR PLACED WITHIN THE STOCKPILE LIMITS.
- 4. STRIP TOPSOIL ALONG THE REMAINDER OF DIVERSION BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM SEDIMENT CONTROLS ARE IN PLACE.
- 5. CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE STABILIZED. DITCH CHECKS SHALL BE INSTALLED WITHIN DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR CULVERTS THAT WILL FUNCTION DURING CONSTRUCTION.
- 6. FINE GRADE SUB-GRADE SOILS WITHIN PAVEMENT AND BUILDING LIMITS. PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING
- 7. FINE GRADE REMAINING DISTURBED AREAS. PLACE SALVAGED TOPSOIL, EROSION BLANKETS/MATTING, AND SEED/MULCH AS SOON AS POSSIBLE FOLLOWING COMPLETION OF
- 8. EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SILT FENCE, TEMPORARY FENCING/PRETECTION, DITCH CHECKS, AND OTHER TEMPORARY CONTROLS, AND RESTORATION PRACTICES AS NECESSARY, TO THE SATISFACTION OF

#### 2.2 STABILIZATION PRACTICES

MEASURES ARE INITIATED, SHALL BE RECORDED ON THE STABILIZATION SCHEDULE FOR MAJOR GRADING ACTIVITIES. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.

THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION

NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED UNLESS: THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER. IN

CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOLIRTEEN (14) DAYS FROM WHEN ACTIVITIES CEASED (LE THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS). IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED. SEE THE SOIL PROTECTION CHART PRESENTED IN THE CONSTRUCTION DOCUMENTS FOR

STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES.

PERMANENT SEEDING; IN ACCORDANCE WITH APPROVED LANDSCAPING PLAN TEMPORARY SEEDING MAY CONSIST OF SPRING OATS (100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LBS/ACRE)

THAT EVENT, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.

HYDRO-MULCHING WITH A TACKIFIER GEOTEXTILE EROSION MATTING

#### 2.3 STRUCTURAL PRACTICES

THE FOLLOWING ARE DESCRIPTIONS OF STRUCTURAL PRACTICES TO BE IMPLEMENTED TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS, OR OTHERWISE LIMIT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE INCLUDING THE PROPOSED AND EXISTING WETLAND AREAS. SUCH

PRACTICES COULD INCLUDE SILT FENCE, PROTECTION FENCE, CONSTRUCTION ENTRANCE, DITCH CHECK, EROSION CONTROL MATTING, DIVERSION BERM/SWALE, SEDIMENT TRAP, LEVEL SPREADER, INLET PROTECTION, OUTLET PROTECTION, AND TEMPORARY OR PERMANENT SEDIMENT BASIN. THE FOLLOWING STRUCTURAL PRACTICES ARE TO BE UTILIZED DURING THIS

SILT FENCE SHALL BE PLACED DOWN SLOPE OF DISTURBED AREAS OF THE CONSTRUCTION SITE AND AROUND THE PERIMETER OF THE TOPSOIL STOCKPILE. THIS INCLUDES PROTECTION OF EXISTING WETLAND AREAS TO BE MAINTAINED. SILT FENCE MAY ALSO BE USED AS A TEMPORARY CONTROL DEVICE WHERE SEDIMENTATION RUNOFF IS

CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO REDUCE SOIL EROSION POLLUTANTS FROM LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES. IF THE CRUSHED STONE DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE TIRES, THEY SHALL BE HOSED OFF BEFORE ENTERING A PAVED ROADWAY. ANY SOIL DEPOSITED ON THE PUBLIC PAVED ROAD WAY SHALL BE REMOVED IMMEDIATELY.

<u>DITCH CHECK (STRAW BALES)</u> SHALL BE INSTALLED IN DRAINAGE CHANNELS AS NEEDED.

EROSION CONTROL MATTING SHALL BE PLACED ON AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, BEFORE VEGETATION IS ESTABLISHED.

DIVERSION BERM/SWALE SHALL BE CONSTRUCTED TO DIVERT RUNOFF AROUND THE SITE AND TO DIVERT RUNOFF FROM THE DISTURBED AREA TO A SEDIMENT TRAP OR OTHER BERMS/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING.

<u>SEDIMENT TRAPS/BASIN</u> SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERMS/SWALES.

INLET PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE INLETS TO REDUCE SEDIMENT WITHIN STORM SEWER CONVEYANCE FEATURES. **OUTLET SCOUR PROTECTION** SHALL BE INSTALLED AT STORMWATER DRAINAGE OUTLETS TO DIFFUSE FLOWS

## 3.0 ADDITIONAL PRACTICES

ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.

CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS.

<u>DUST CONTROL</u> SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:

COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL

ROUGHENING (EQUIPMENT TRACKING) THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT FREQUENT WATERING OF EXCAVATION AND FILL AREAS

PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.

## STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS

## 4.0 EROSION AND SEDIMENT STRUCTURAL PRACTICE MAINTENANCE

THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.

<u>SILT FENCE</u> - REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

CONSTRUCTION ENTRANCE - AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.

DITCH CHECK (STRAW BALES) - RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE.

<u>EROSION CONTROL MATTING</u> - REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.

<u>DIVERSION BERM/SWALE</u> - REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.

SEDIMENT TRAP - REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT WHEN IT HAS REACHED THE SEDIMENT STORAGE ELEVATION

INLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE ONE-HALF FULL OF SEDIMENT.

OUTLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC, TURF REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS ONE-HALF FULL OF SEDIMENT SEDIMENT BASIN - AT THE END OF CONSTRUCTION, CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT AND RESTORE BASIN AREA TO INTENDED

INSPECTIONS SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS ONE-HALF INCH OR GREATER OR EQUIVALENT SNOWFALL. OR AT A MINIMUM ONCE EVERY SEVEN (7) CALENDAR DAYS, INSPECTIONS SHALL BE UNDERTAKEN BY QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR, AND SHALL INCLUDE: DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. A STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT SHALL BE COMPLETED AND ADDED TO THE SWPPP. RAINFALL BE RECORDED ON THE SWPPP RAINFALL LOG. CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED OR DEFICIENT CONTROL MEASURES OBSERVED DURING THE INSPECTION.

QUALIFIED PERSONNEL MEANS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL MEASURES. SUCH AS A LICENSED PROFESSIONAL ENGINEER, A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, A CERTIFIED EROSION SEDIMENT OR STORMWATER INSPECTOR, OR OTHER TRAINED INDIVIDUAL

## 6.0 SPILL PREVENTION

## 6.1 GENERAL MATERIAL MANAGEMENT PRACTICES

THE GOOD HOUSEKEEPING PRACTICES LISTED BELOW SHALL BE FOLLOWED THROUGHOUT THE CONSTRUCTION PROJECT.

- CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT ALL MATERIAL SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL
- MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. 4. MATERIALS REQUIRED TO HAVE A MATERIAL SAFETY DATA SHEET (MSDS) SHALL HAVE A COPY STORED IN THE PROJECT'S MSDS DATABASE

#### **6.2 SPILL CONTROL PRACTICES**

THE PRACTICES LISTED BELOW SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ONSITE . IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURERS' RECOMMENDED METHODS.
- 4. IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR.
- 3 PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE FOUIPMENT 5. NOTIFICATION AND REPORTING TO THE APPROPRIATE FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES SHALL BE MADE AS REQUIRED.

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (WISCONSIN POLLUTION DISCHARGE ELIMINATION SYSTEM "WPDES" PERMIT NO. WI-S067831-4) FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE WPDES FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED PLANS.

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

#### **KEEPING PLANS CURRENT:**

THE CONTRACTOR SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE NEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP

WPDES NOTICE OF TERMINATION GUIDANCE:

THE OWNER SHALL RETAIN COPIES OF THIS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

#### A NOTICE OF INTENT (NOI) APPLICATION MUST BE COMPLETED AND INCORPORATED INTO THE SWPPP.

WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION TO OWNER FOR EXECUTION PRIOR TO THEIR FINAL PAY APPLICATION REQUEST.

| CONTROL<br>MEASURE<br>GROUP | CONTROL MEASURE         | CONTROL MEASURE CHARACTERISTICS  |
|-----------------------------|-------------------------|--|
| VEGETATIVE                  | TEMPORARY SEEDING       | PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS INAPPROPRIATE.  |
| SOIL ·<br>COVER             | PERMANENT SEEDING       | PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION, FILTERS<br>SEDIMENT FROM WATER. MAY BE PART OF FINAL LANDSCAPE PLAN.                                     |
| NON<br>VEGETATIVE           | AGGREGATE COVER         | PROVIDES TEMPORARY COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE. |
| SOIL<br>COVER               | PAVING                  | PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.  |
| DIVERSIONS                  | DIVERSION BERM / SWALE  | DIVERTS RUNOFF TO A SEDIMENT TRAP OR OTHER CONTROL.  |
| ENCLOSED<br>DRAINAGE        | STORM SEWER             | CONVEYS SEDIMENT LADEN WATER TO A SEDIMENT BASIN.  |
| OUTLETS                     | APRON ENDWALL OR RIPRAP | PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.   |
| SEDIMENT<br>BASINS          | TEMPORARY SEDIMENT TRAP | CONSTRUCTED TO REMOVE SILTATION FROM RUNOFF FROM SITE DIVERSION BERMS/SWALES AND IN OVERLAND FLOOD ROUTE. CAN BE CONVERTED TO PERMANENT SEDIMENT BASIN.          |
|                             | SILT FENCE              | PLACED DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.  |
| SEDIMENT '                  | INLET PROTECTION        | INSTALLED IN OPEN GRATE STRUCTURES TO COLLECT SEDIMENT.  |
| TILILING (                  | DITCH CHECK             | PLACED IN DRAINAGE CHANNELS TO FILTER SEDIMENT FROM RUNOFF.  |
| MUD AND .                   | CONSTRUCTION ENTRANCE   | REDUCES SOIL EROSION POLLUTANTS BEING TRANSPORTED OFF-SITE.  |
| DUST                        | STREET SWEEPING         | REDUCES POLLUTANTS TRACKED FROM CONSTRUCTION SITE.   |
| CONTROL '                   | DUST CONTROL            | PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.  |

#### STABILIZATION EFFECTIVENESS (TIME OF YEAR)

| STABILIZATION TYPE | STABILIZATION UTILIZATION PERIODS |      |      |      |     |      |      |      |            |      |      |      |
|--------------------|-----------------------------------|------|------|------|-----|------|------|------|------------|------|------|------|
| STABILIZATION TIPE | JAN.                              | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT.      | OCT. | NOV. | DEC. |
| PERMANENT SEEDING  |                                   |      | Ą    | *    | *   | *    | *    | *    | * \        |      |      |      |
| FERMANENT SEEDING  |                                   |      | -    |      |     |      |      |      |            |      |      |      |
| DORMANT SEEDING    | В                                 |      |      |      |     |      |      |      |            |      | В    |      |
| DORIMANT SEEDING   | -                                 |      |      |      |     |      |      |      |            |      | 1    |      |
| TEMPORARY SEEDING  |                                   |      | Ç    | *    | *   | * \  | D *  | *    | <b>\</b> * |      |      |      |
| TEMPORART SEEDING  |                                   |      | 1    |      |     |      |      |      |            |      |      |      |
| SODDING            |                                   |      | Ē    | *    | *   | *    | *    | *    | * \        |      |      |      |
| SUDDING            |                                   |      | T    |      |     |      |      |      |            |      |      | i    |

A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE

1. GEOTEXTILE FABRIC SHALL MEET THE

IMMEDIATELY.

**REQUIREMENTS OF MATERIAL SPECIFICATION 592** 

GEOTEXTILE TABLE 1 OR 2, CLASS I, WITH AN EOS

PROTECTION, CARE SHALL BE TAKEN SO THAT THE

SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC

DOES NOT FALL INTO THE INLET. ANY MATERIAL

FALLING INTO THE INLET SHALL BE REMOVED

(1) FINISHED SIZE, INCLUDING FLAP POCKET WHERE

(2) FOR INLET PROTECTION, TYPE "C" (WITH CURB

MAINTENANCE OR REMOVAL.

ACCEPT WOOD 2x4.

REQUIRED, SHALL EXTEND A MINIMUM OF 10

BOX), AN ADDITIONAL 18 INCHES OF FABRIC IS

WRAPPED AROUND THE WOOD AND SECURED

ENTIRE HEIGHT OF THE CURB BOX OPENING.

(3) FLAP POCKETS SHALL BE LARGE ENOUGH TO

WITH STAPLES. THE WOOD SHALL NOT BLOCK THE

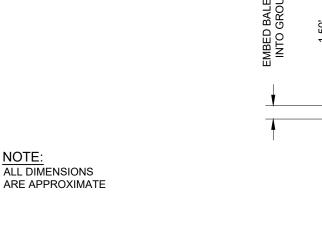
INCHES AROUND THE PERIMETER TO FACILITATE

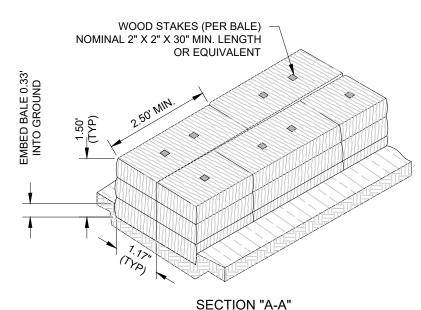
OF AT LEAST 30 FOR NONWOVEN AND 50 FOR

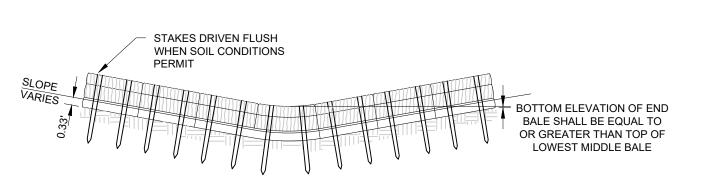
WHEN REMOVING OR MAINTAINING INLET

- B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.
- C. SPRING OATS 100 LBS/ACRE. D. WHEAT OR CEREAL RYE 150 LBS/ACRE.
- F. STRAW MULCH 2 TONS/ACRE.
- \* IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.

## CENTERED IN CHANNEL (EXTEND 1.0' MIN UP SIDE SLOPES) CHANNEL — FOR SCOUR PROTECTION USE **EROSION CONTROL MATTING FOR** CHANNEL LINING. LAP MAT UNDER UPSTREAM BALES AND SECURE FABRIC WITH WOOD STAKES AT 3 FOOT INTERVALS STAGGER JOINTS WITH A DOUBLE

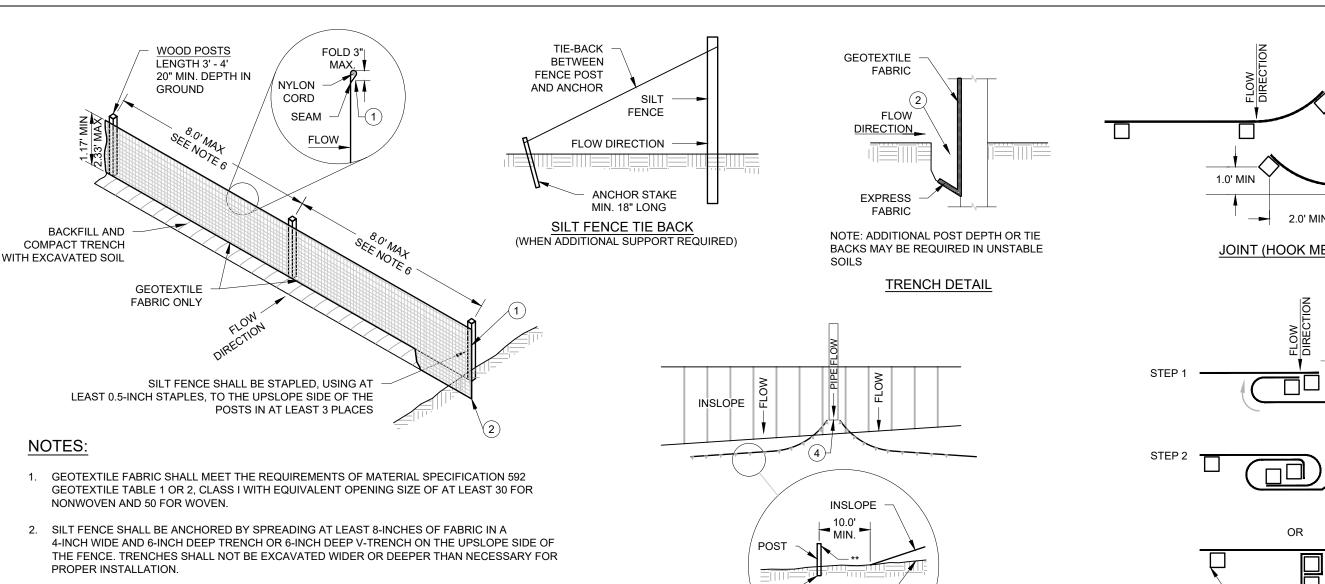






- 1. INSTALLED, THE MINIMUM HEIGHT OF DITCH CHECK SHALL BE 10-INCHES AND SHALL NOT EXCEED A MAXIMUM HEIGHT OF 16-INCHES FOR MANUFACTURED OR BIODEGRADABLE MATERIALS.
- 2. DITCH CHECK MUST BE INSTALLED WITH THE CENTER LOWER THAN THE SIDES FORMING A WEIR.
- 3. AT A MINIMUM, INSTALL ONE DITCH CHECK FOR EVERY TWO-FEET OF DROP IN THE CHANNEL.
- 4. DITCH CHECK SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24-HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5-INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
- 5. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH HALF OF THE HEIGHT OF THE LOWEST BALE.
- 6. DITCH CHECK SHALL BE UTILIZED DURING ROUGH GRADING AND SHALL BE REMOVED ONCE FINAL GRADING AND
- 7. EROSION CONTROL MATTING FOR CHANNELS SHALL BE NORTH AMERICAN GREEN C125BN OR EQUAL.

## DITCH CHECK WITH STRAW BALES



## SILT FENCE

#### WOOD 2"x4" STAKES AND CROSS BRACING WOOD 2"x4" STAKES GEOTEXTILE FABRIC, AND CROSS BRACING TYPE FF GEOTEXTILE FABRIC SHALL BE SECURED TO THE STAKES DIRECTION OF 4.0' 2.0' AND CROSS BRACING, FABRIC RUNOFF WATER SHALL COMPLETELY SURROUND INLET TO PREVENT SEDIMENT LADEN *tuuuuuuuut* RUNOFF FROM ENTERING INTO THE INLET UUUUUUUUUUUU**GRATED INLET** BURIED FABRIC MIN. 6" DEPTH IN TRENCH TO PREVENT **INLET PROTECTION - TYPE "A"** UNDERMINING OF THE

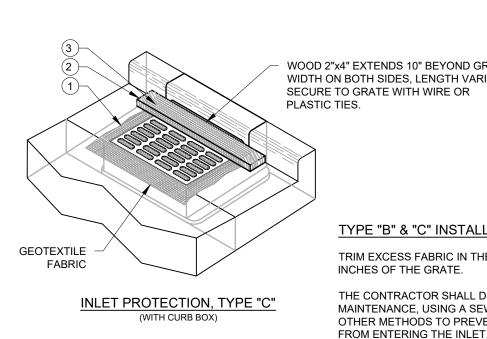
2' ABOVE GROUND INLET PROTECTION

3. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL

4. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR

6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN AND

5. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE, WHERE APPLICABLE.



GROUND LINE

TYPICAL SECTION

\*\*GEOTEXTILE

SILT FENCE ALONG SLOPES & OUTFALLS

WOOD 2"x4" EXTENDS 10" BEYOND GRATE WIDTH ON BOTH SIDES, LENGTH VARIES, SECURE TO GRATE WITH WIRE OR TYPE "B" & "C" INSTALLATION NOTES

**REVISIONS** 

FABRIC TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT

GEOTEXTILE

INLET PROTECTION - TYPE "B"

WOOD POST (TYP.)

ONL

FOR

GEOTEXTILE

GEOTEXTILE

WOOD POST (TYP.)

JOINT (TWIST METHOD)

FABRIC (TYP.)

FABRIC (TYP.)

FRANKLIN, WI

**CONSTRUCTION DETAILS** 

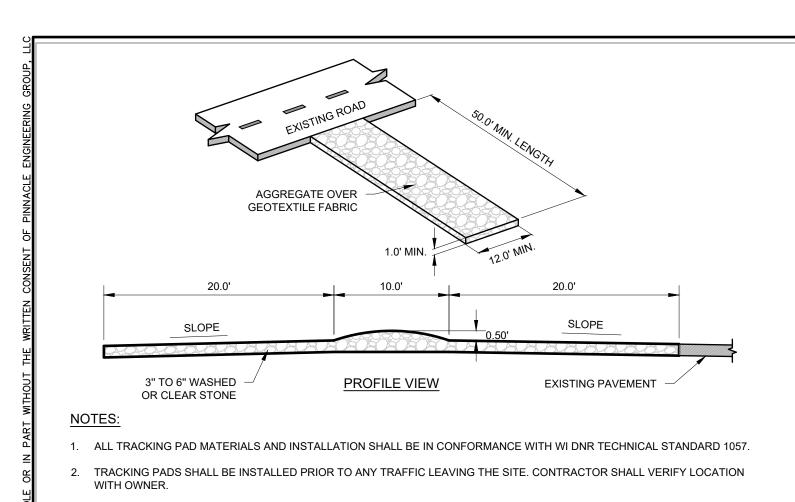
**INLET PROTECTION** 



PLAN I DESIGN I DELIVER

20725 WATERTOWN ROAD, SUITE 100

WEST OAKWOOD ROAD **DEVELOPMENT-WEST** 

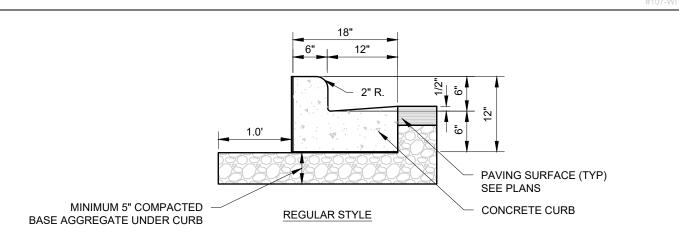


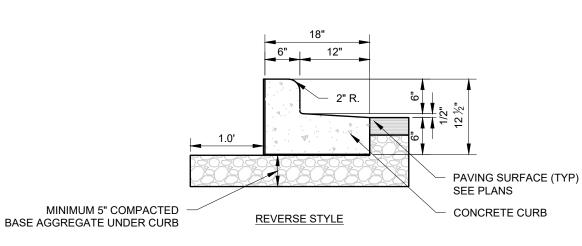
- 3. THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIALS TO BE RETAINED ON
- 4. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12-INCHES THICK. ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC WHICH MEETS MATERIAL

SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV, TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE

- 5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. MINIMUM WIDTH IS 12 FEET FOR ONE-WAY TRAFFIC AND 20 FEET FOR TWO-WAY TRAFFIC, WITH AN ADDITIONAL INCREASE OF 4 FEET FOR TRAILER TRAFFIC. THE TRACKING PAD
- 6. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT
- 7. TRACKING PADS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24-HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5-INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
- 8. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

## CONSTRUCTION ENTRANCE

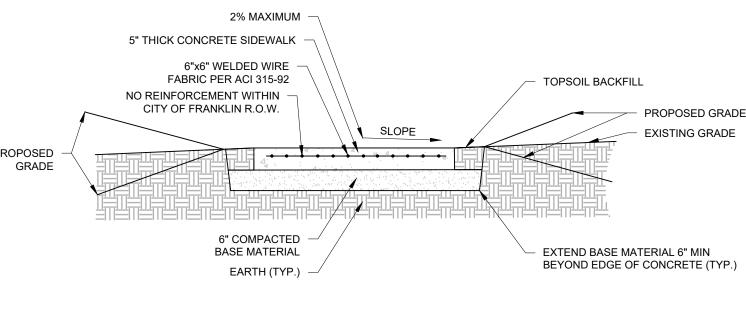


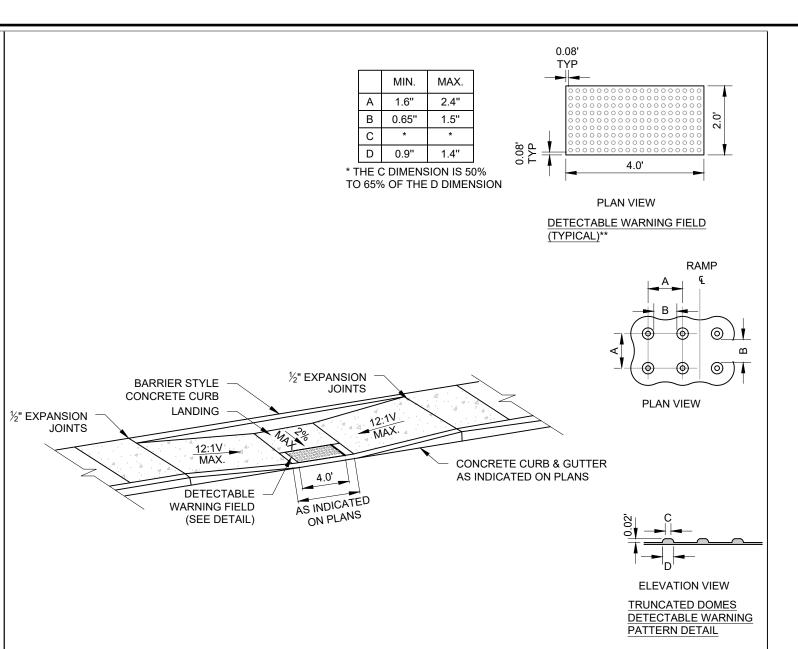


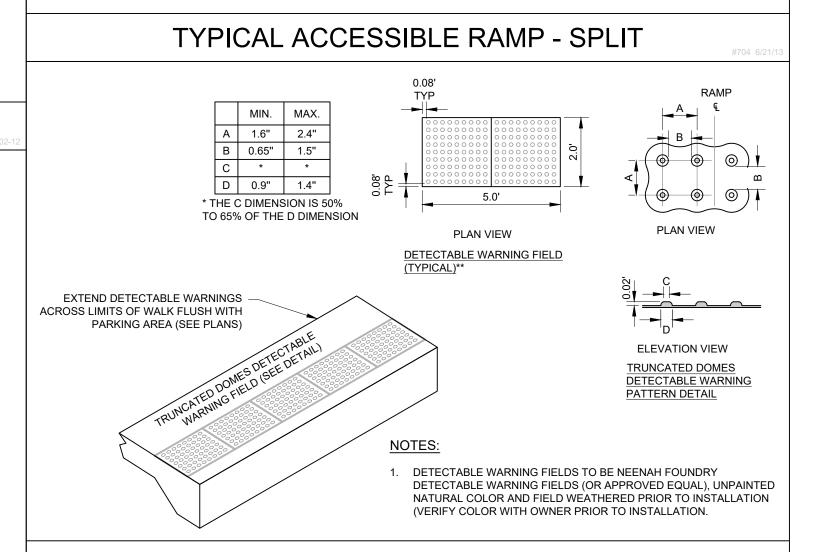
## NOTES:

- 1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3
- 2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
- 3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.
- 4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

## 18" VERTICAL FACE CURB







# DETECTABLE WARNING TRUNCATED DOMES SIGN TO INDICATE THE LOCATION — OF THE CONCRETE WASHOUT AREA ORANGE CONSTRUCTION FENCE AROUND WASHOUT STRUCTURE 20'x20' MINOR AS REQUIRED SIDE SLOPES TO CONTAIN CONCRETE WASTE **SECTION VIEW GROUND SURFACE** PLAN VIEW ORANGE CONSTRUCTION **FENCE** SILT FENCE

## CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT OF SITE.

- 2. VEHICLE TRACKING CONTROL IS REQUIRED AT CONCRETE WASHOUT ENTRANCE IF ACCESS TO CONCRETE WASHOUT AREA IS
- I. WASTE MATERIAL FROM CONCRETE WASHOUT OPERATIONS MUST BE REMOVED AND LEGALLY DISPOSED OF WHEN IT HAS ACCUMULATED TWO-THIRDS OF THE WET STORAGE CAPACITY OF THE STRUCTURE.

5. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT AN

- 6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE
  - CONCRETE WASHOUT AREA

# WDNR DITCH CHECK STANDARD 1062

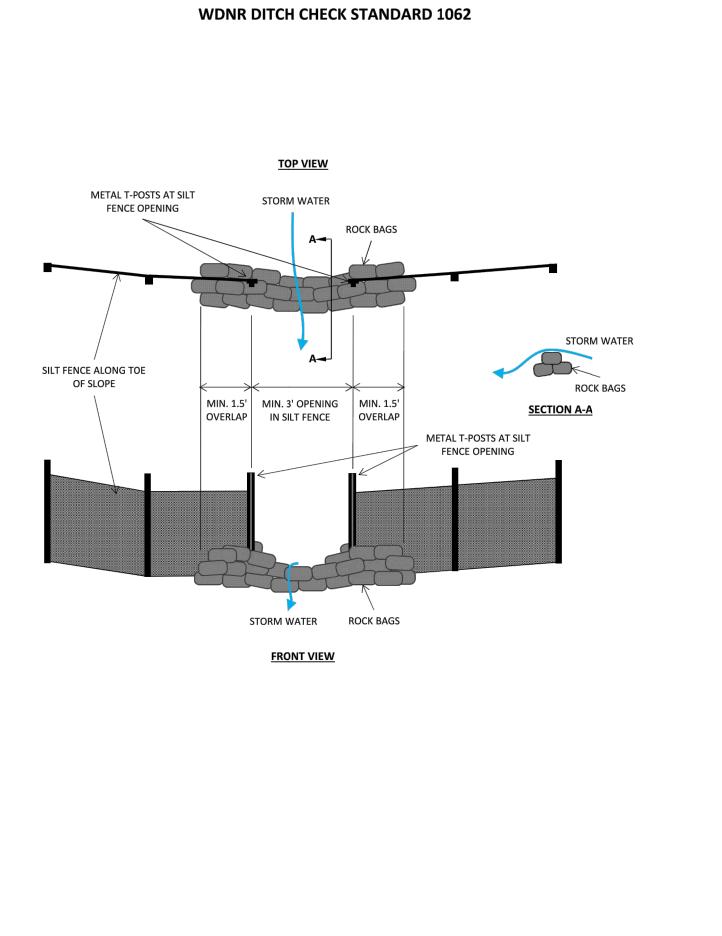


Figure 1 - Rock Bags Used for Silt Fence Relief

HANDICAP PARKING SIGN SHALL

CONFORM TO CITY STANDARDS

PROVIDE VAN-ACCESSIBLE SIGN AT VAN-ACCESS LOCATIONS

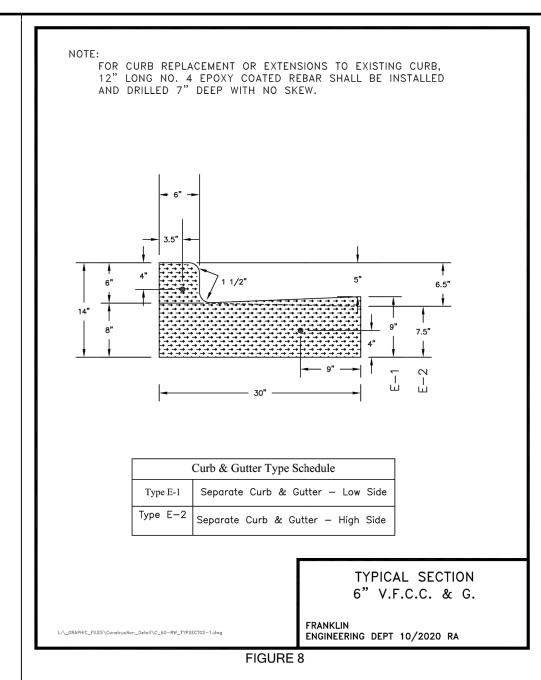
2" DIAMETER GALVANIZED

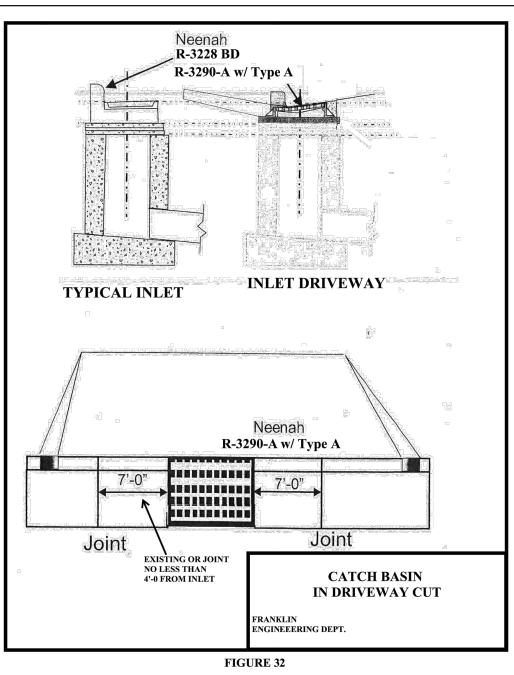
8" DIAMETER BY 3'-6" DEEP

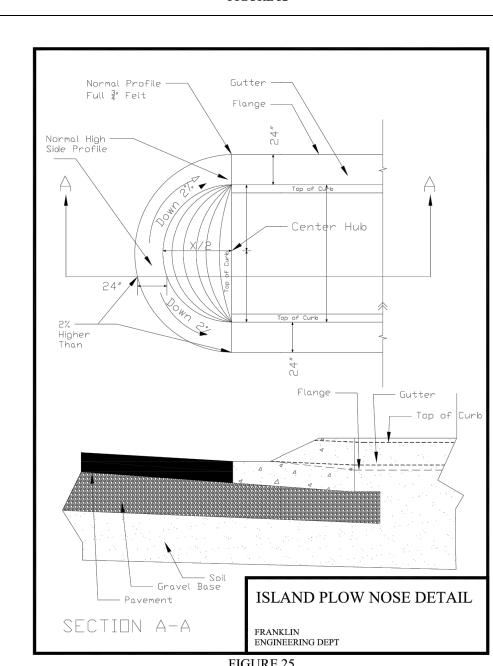
STEEL POST

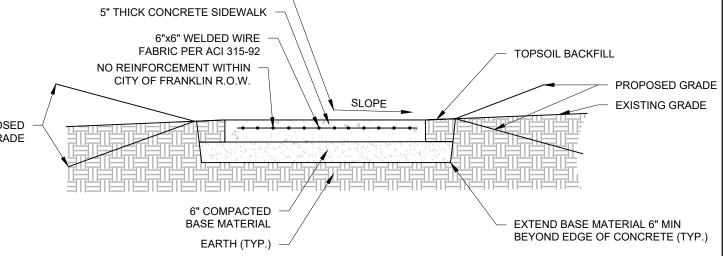
CONCRETE BASE

ADA SIGN









## **CONCRETE SIDEWALK**

# PLAN I DESIGN I DELIVER

**WEST OAKWOOD ROAD DEVELOPMENT-WEST** FRANKLIN, WI

**CONSTRUCTION DETAILS** 

**REVISIONS** 

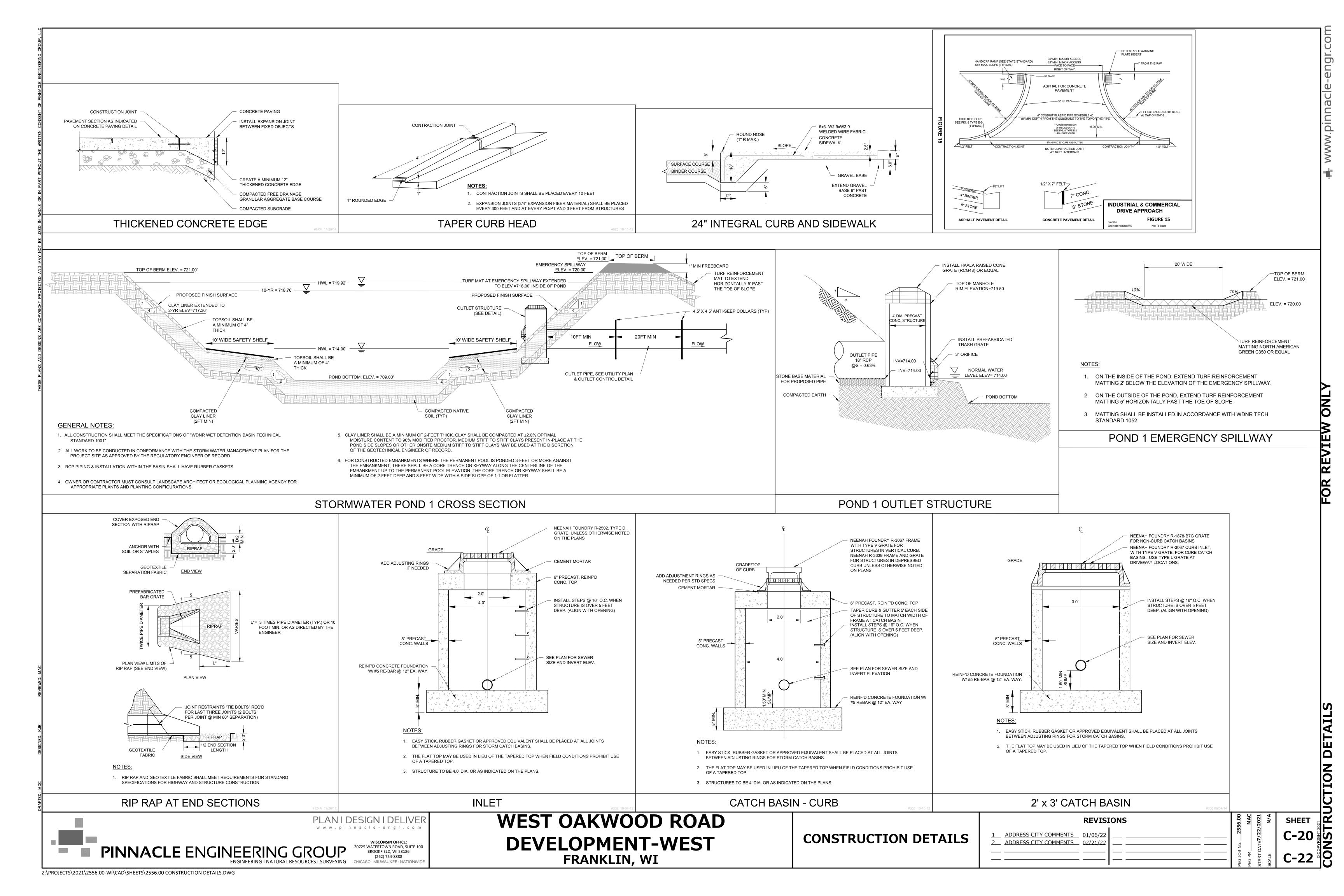
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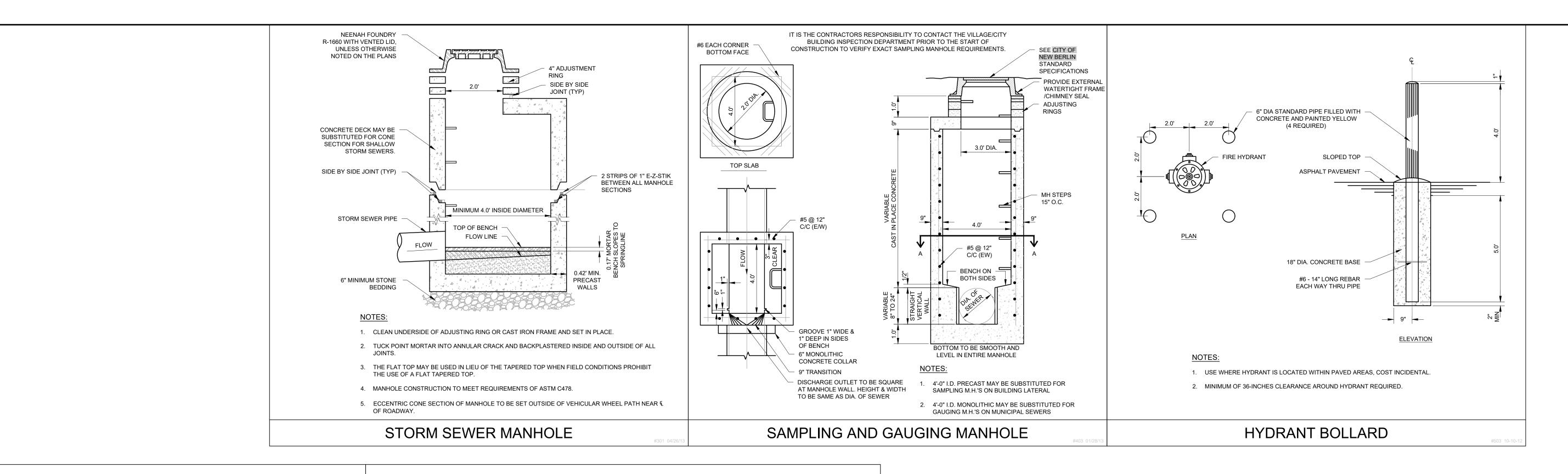
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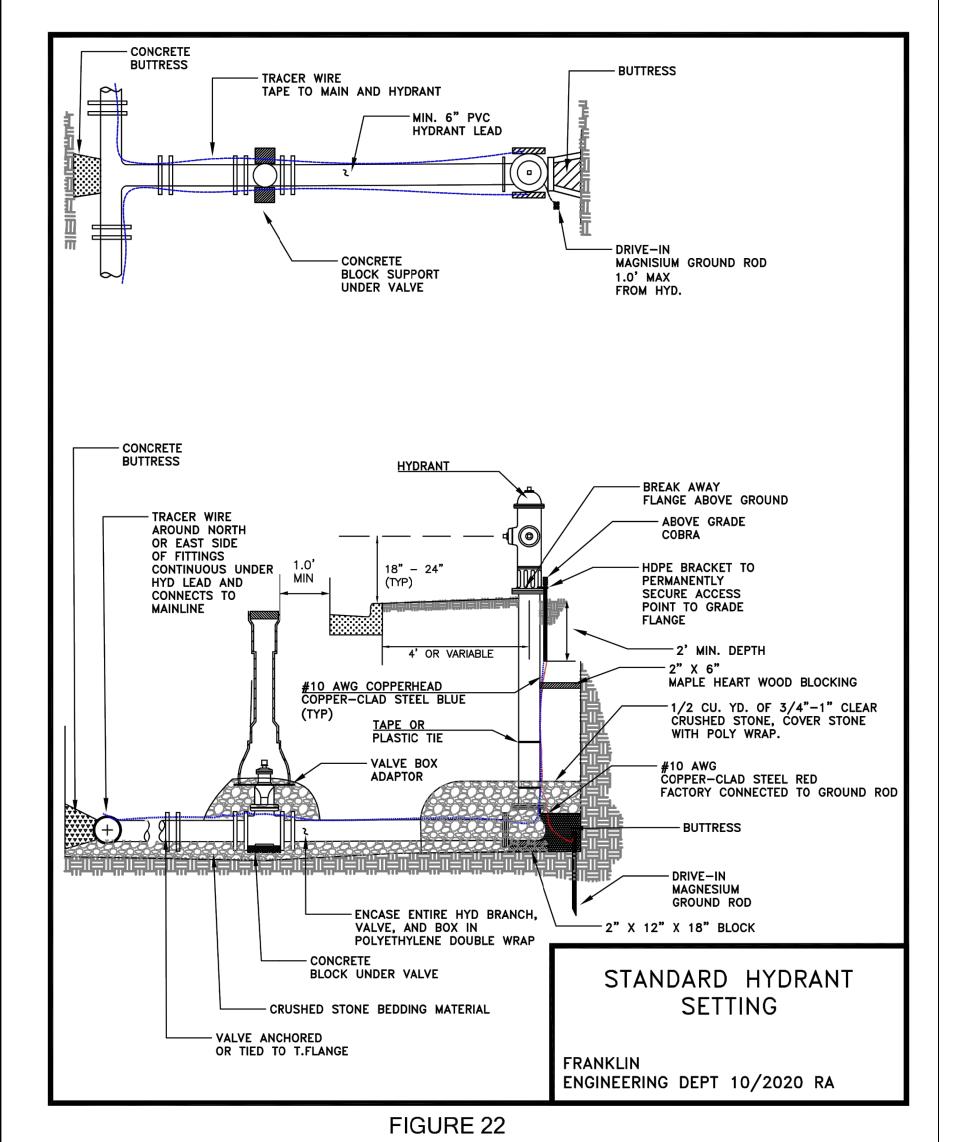
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**PINNACLE ENGINEERING GROUP** 

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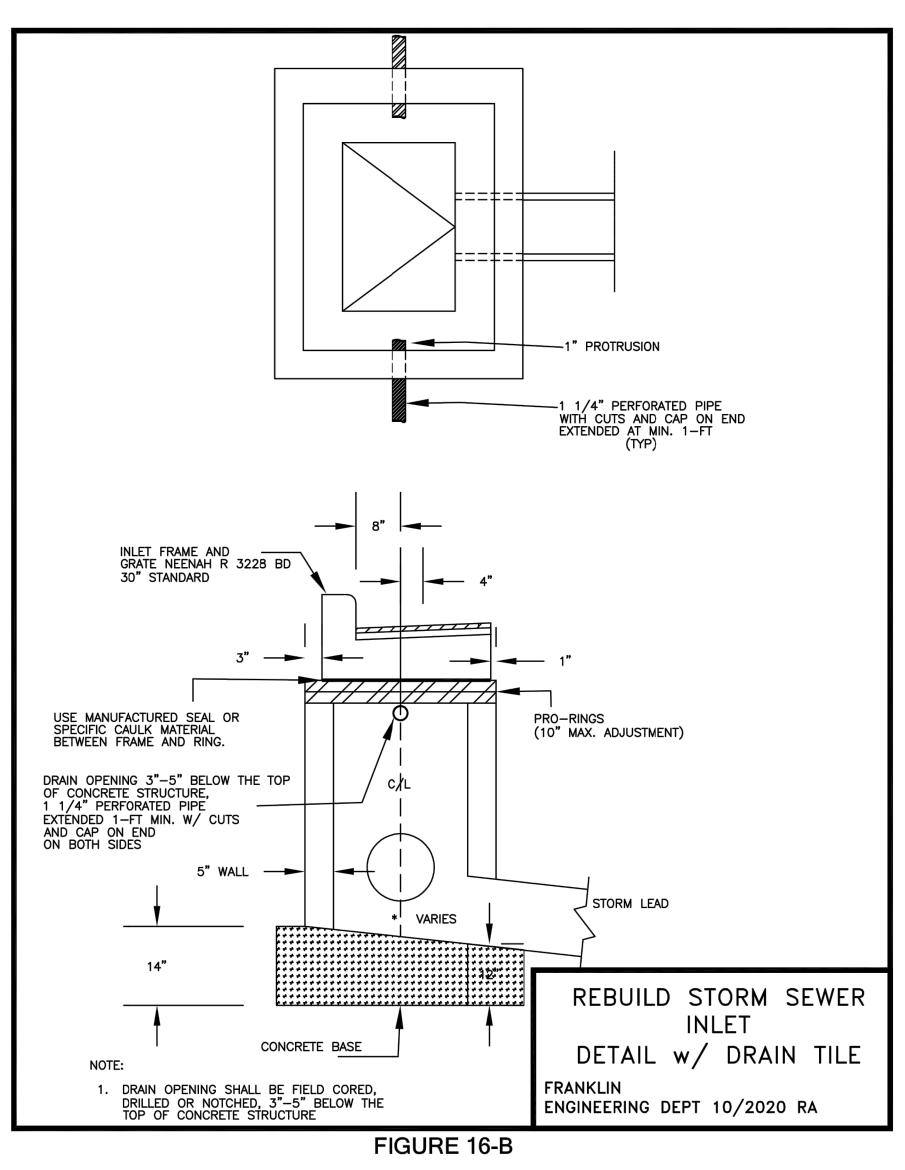


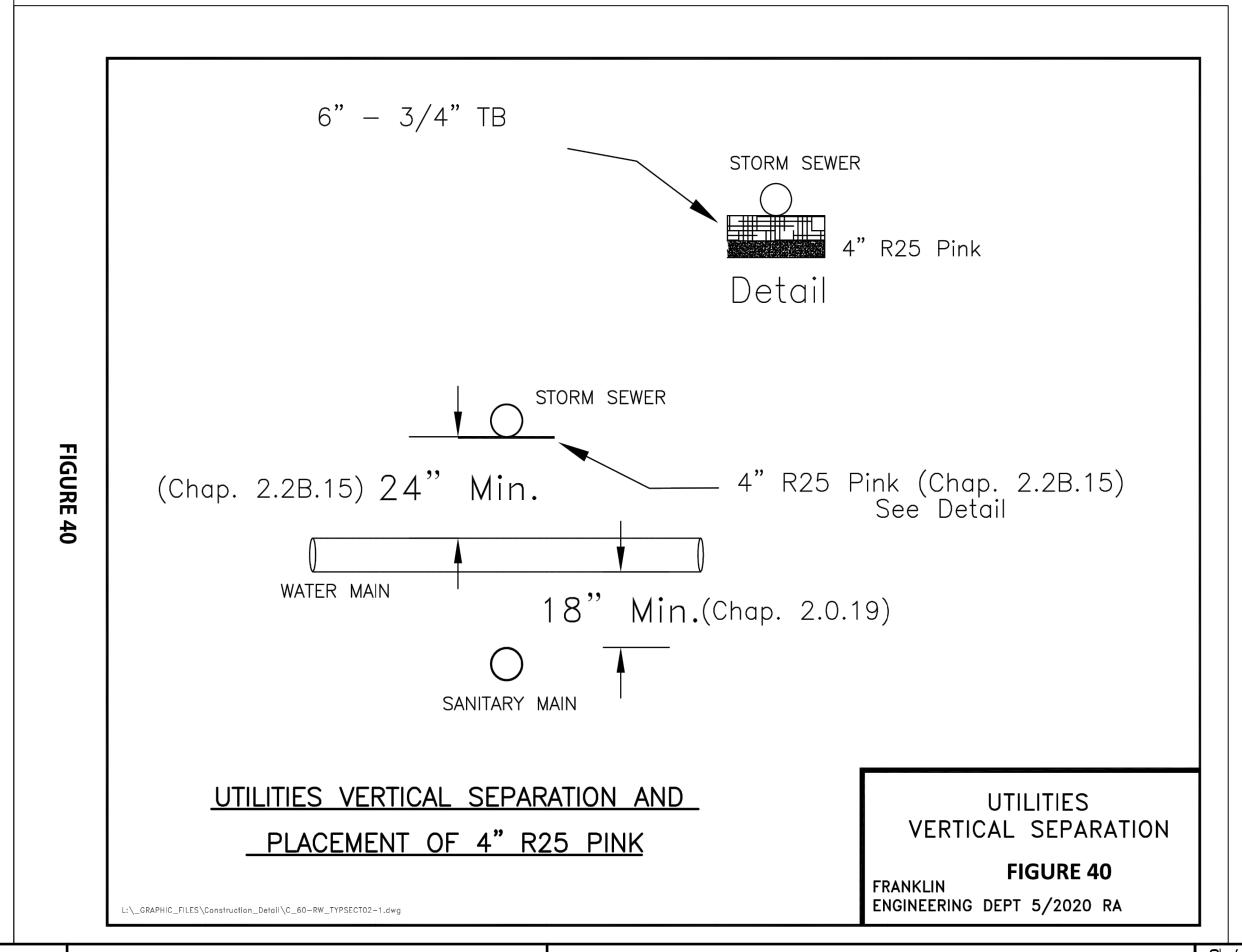


**PINNACLE** ENGINEERING GROUP

PLAN I DESIGN I DELIVER

20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186





WEST OAKWOOD ROAD
DEVELOPMENT-WEST
FRANKLIN, WI

CONSTRUCTION DETAILS

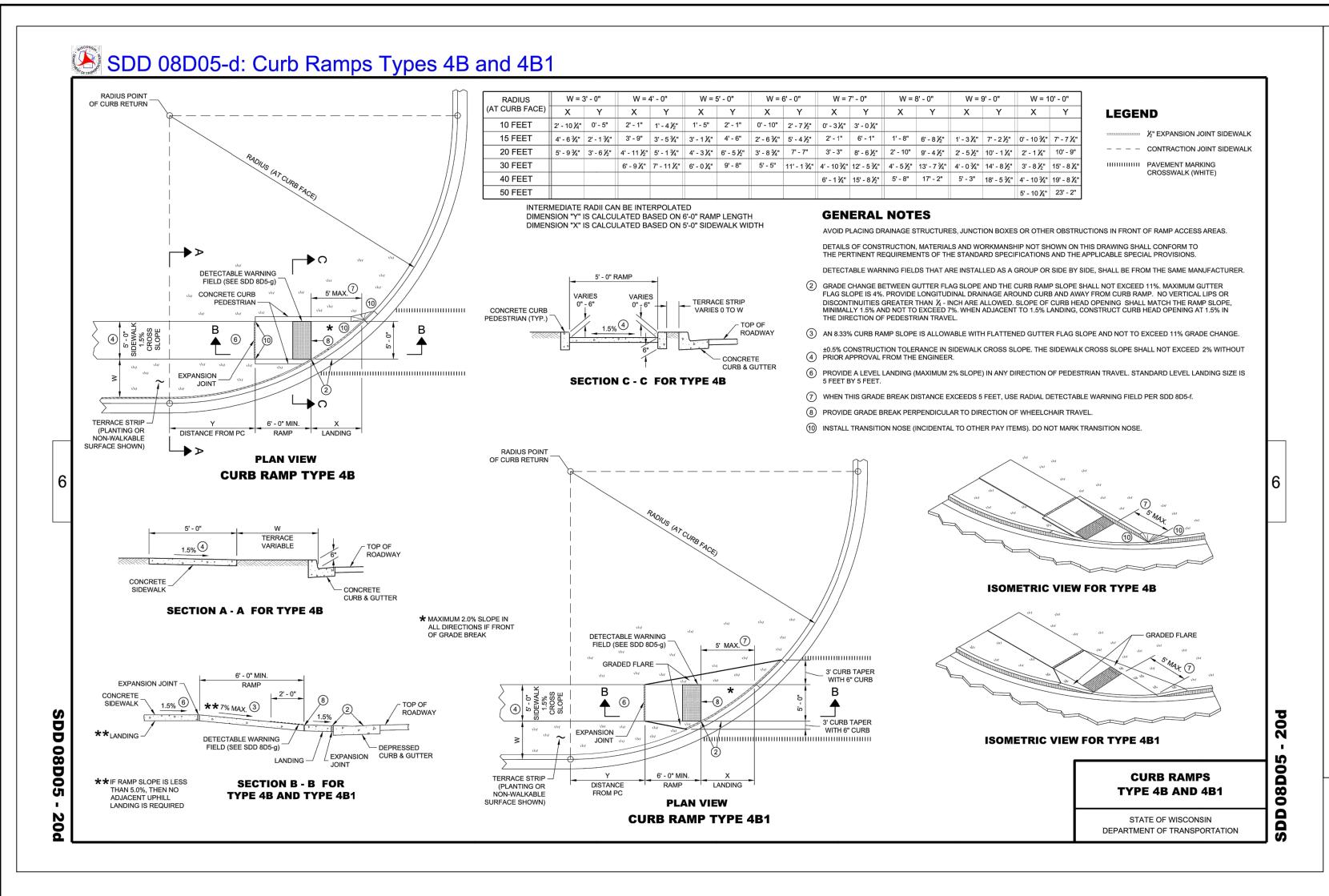
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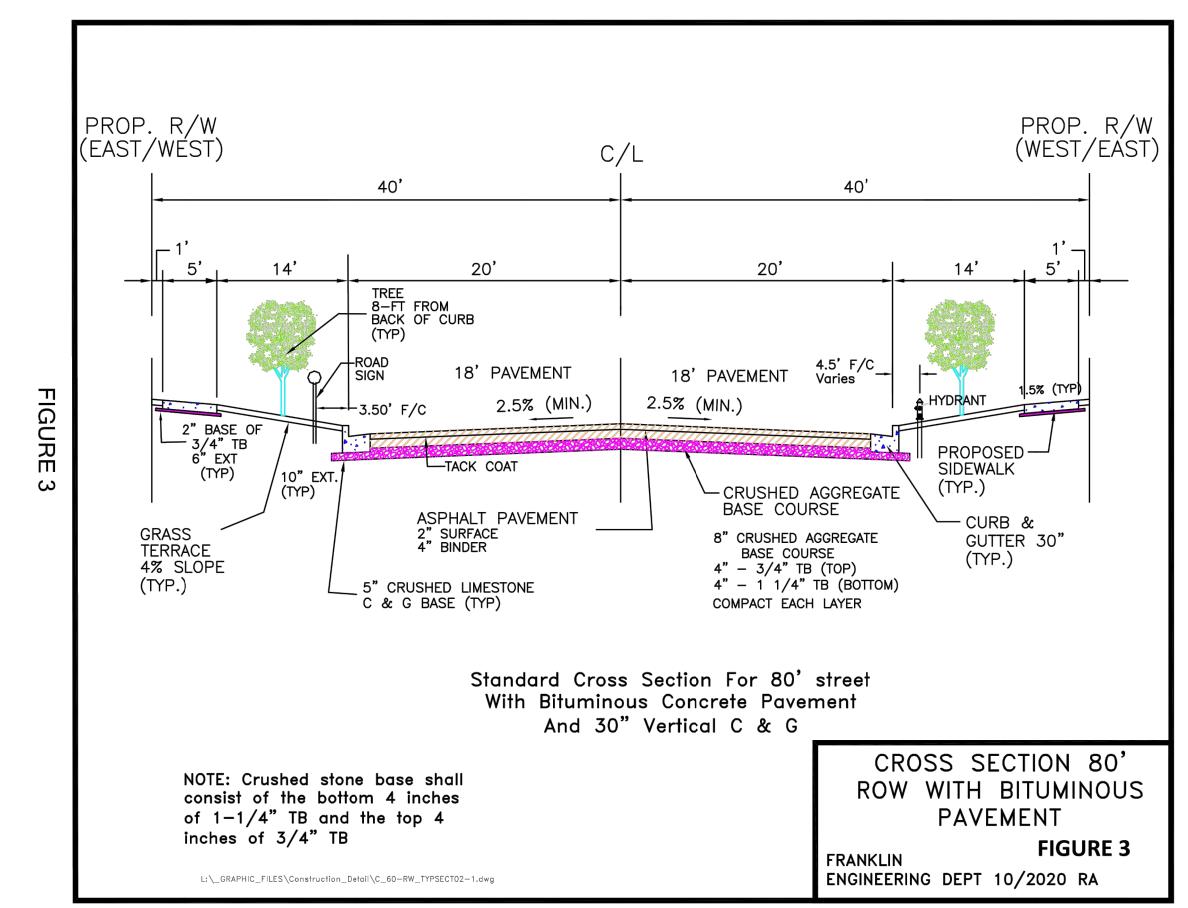
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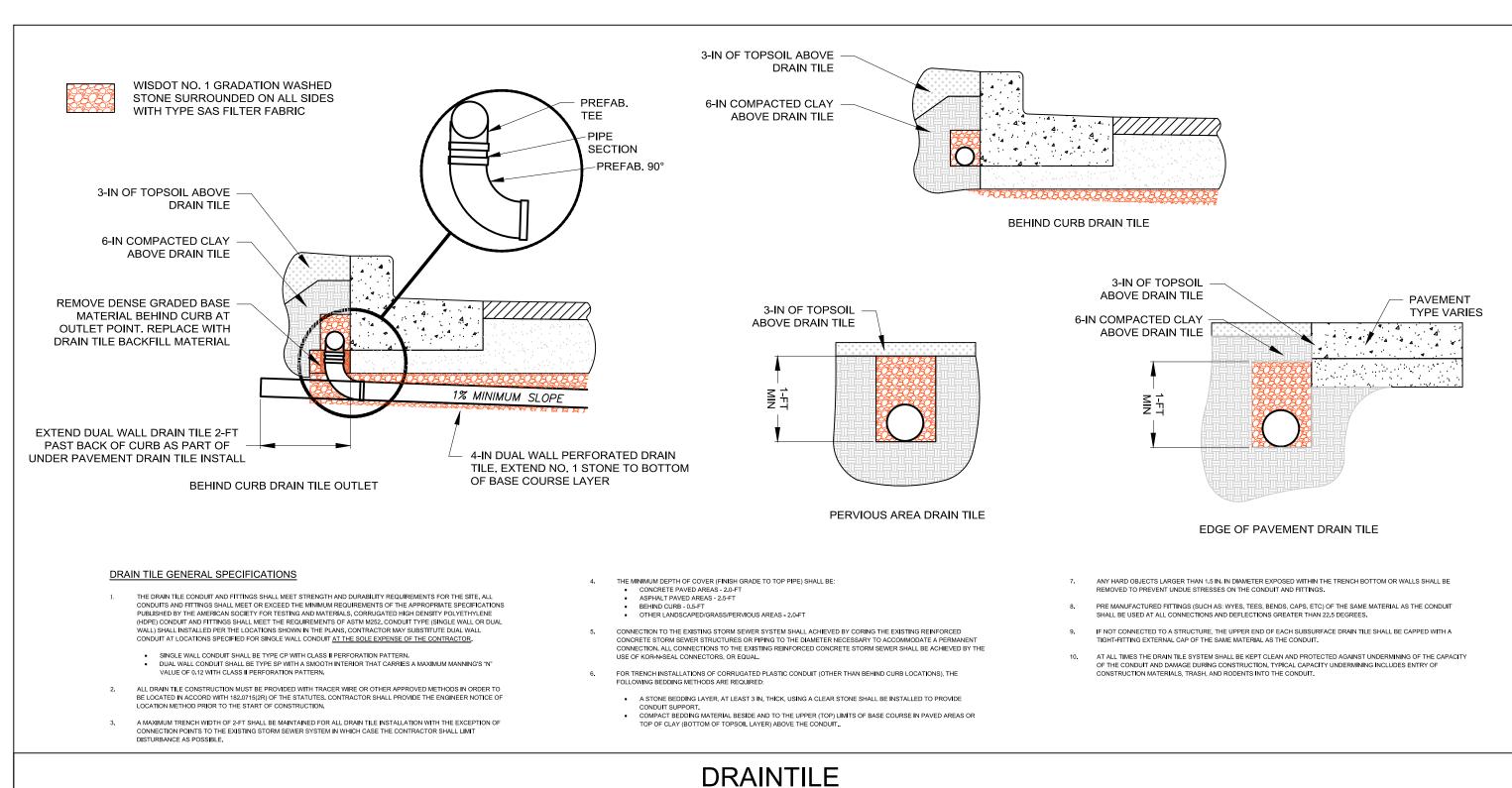
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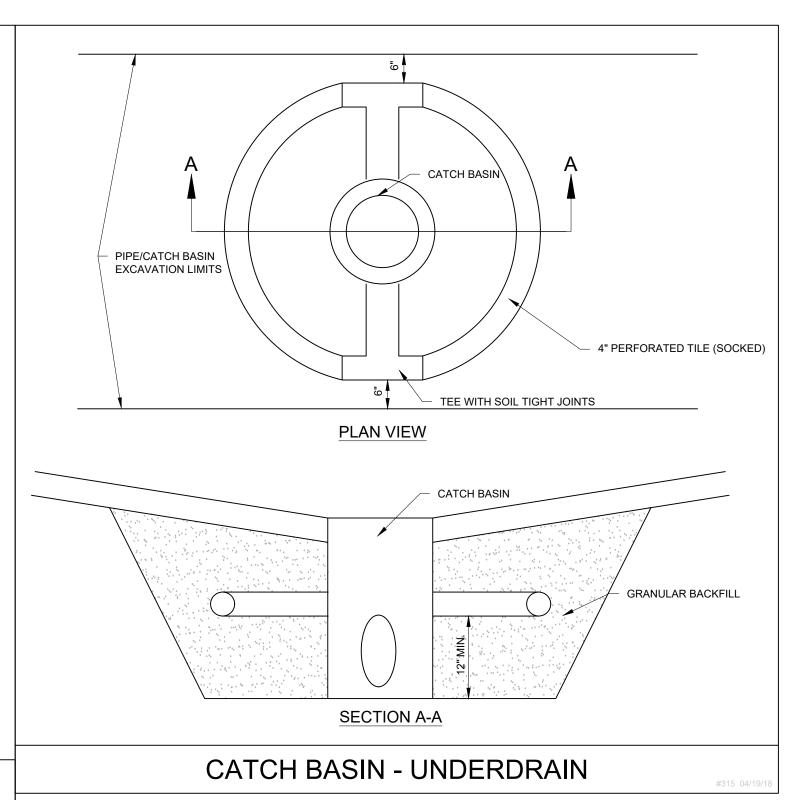
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WISCONSIN OFFICE:

20725 WATERTOWN ROAD, SUITE 100

BROOKFIELD, WI 53186
(262) 754-8888

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WEST OAKWOOD ROAD
DEVELOPMENT-WEST
FRANKLIN, WI

CONSTRUCTION DETAILS

REVISIONS

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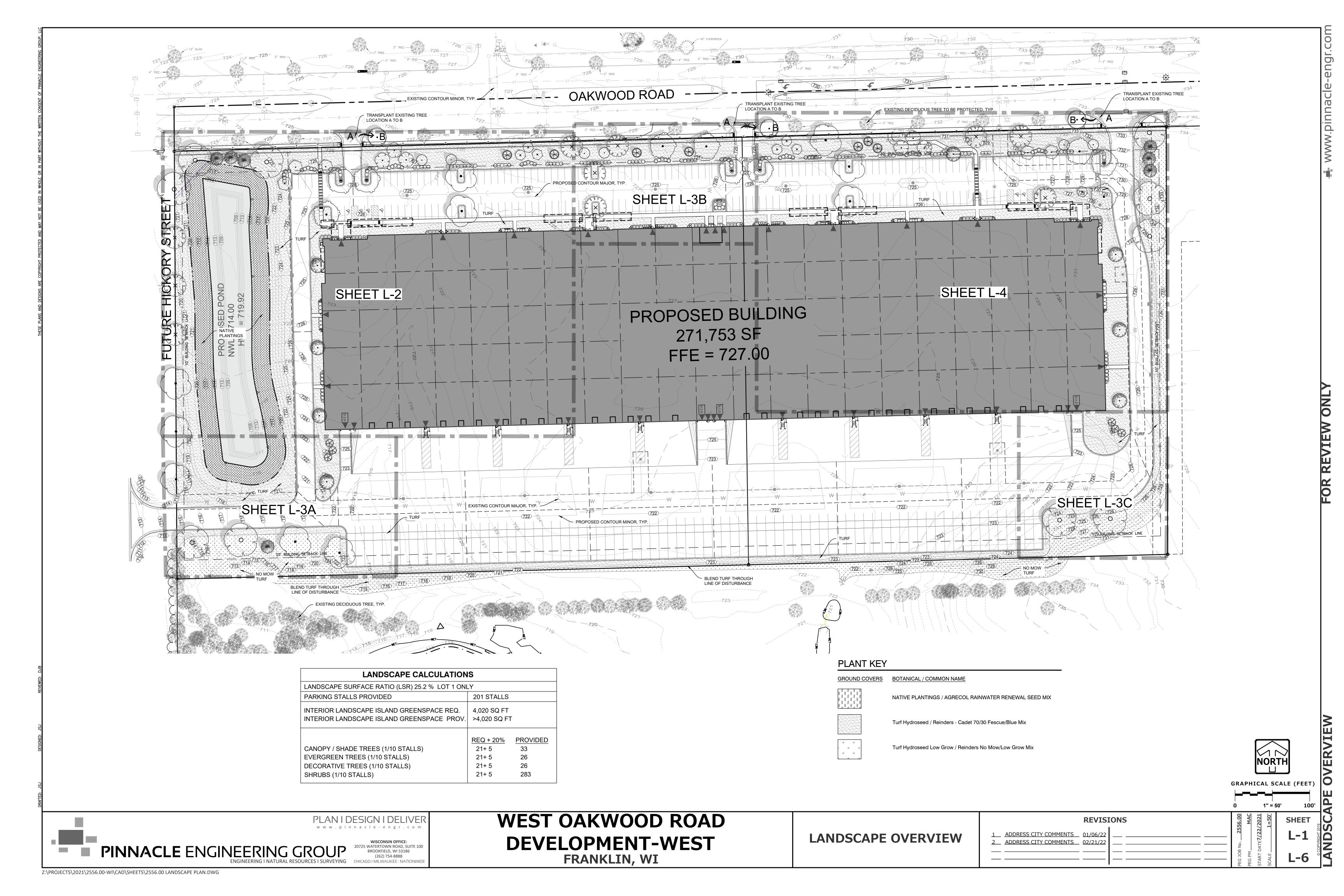
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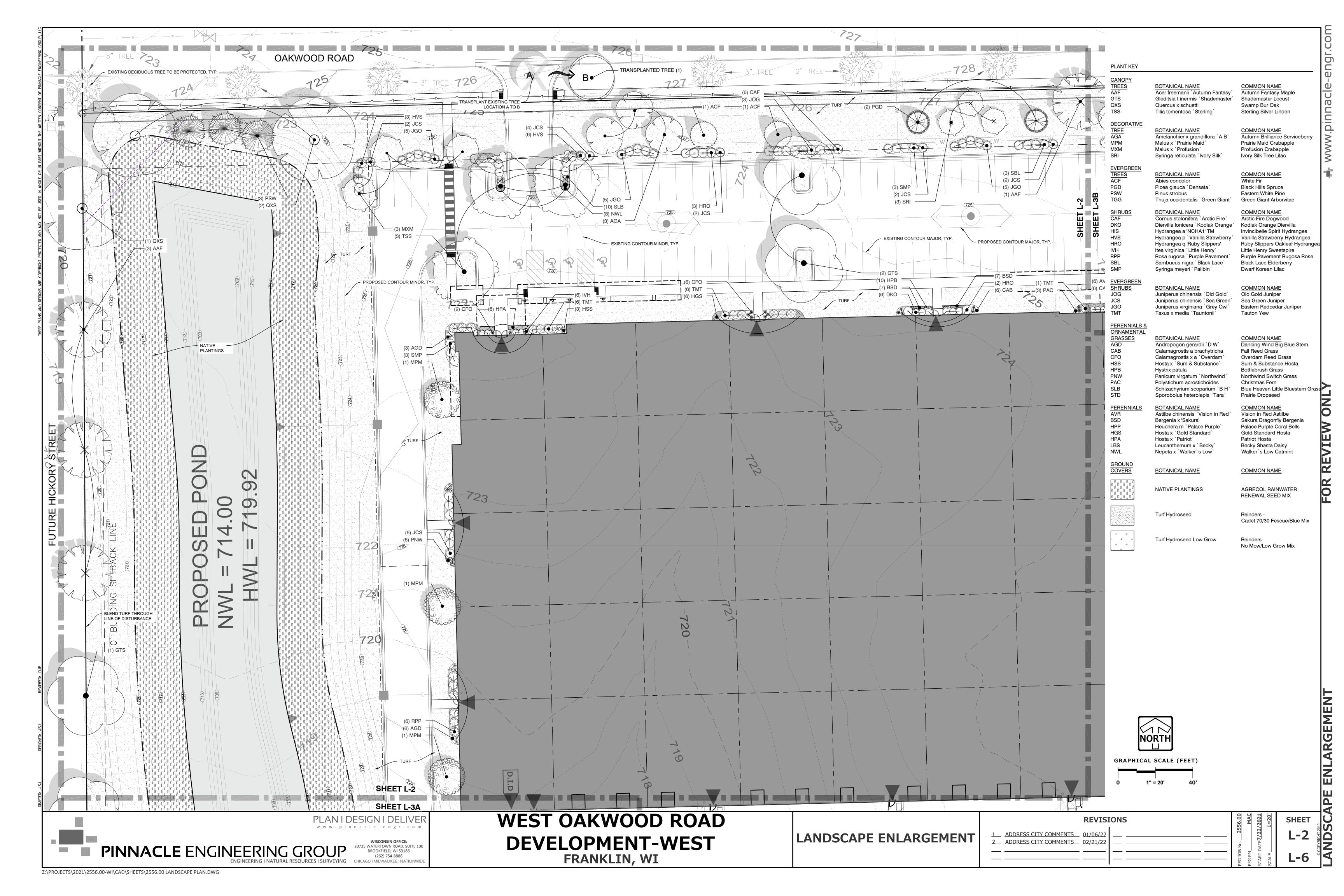
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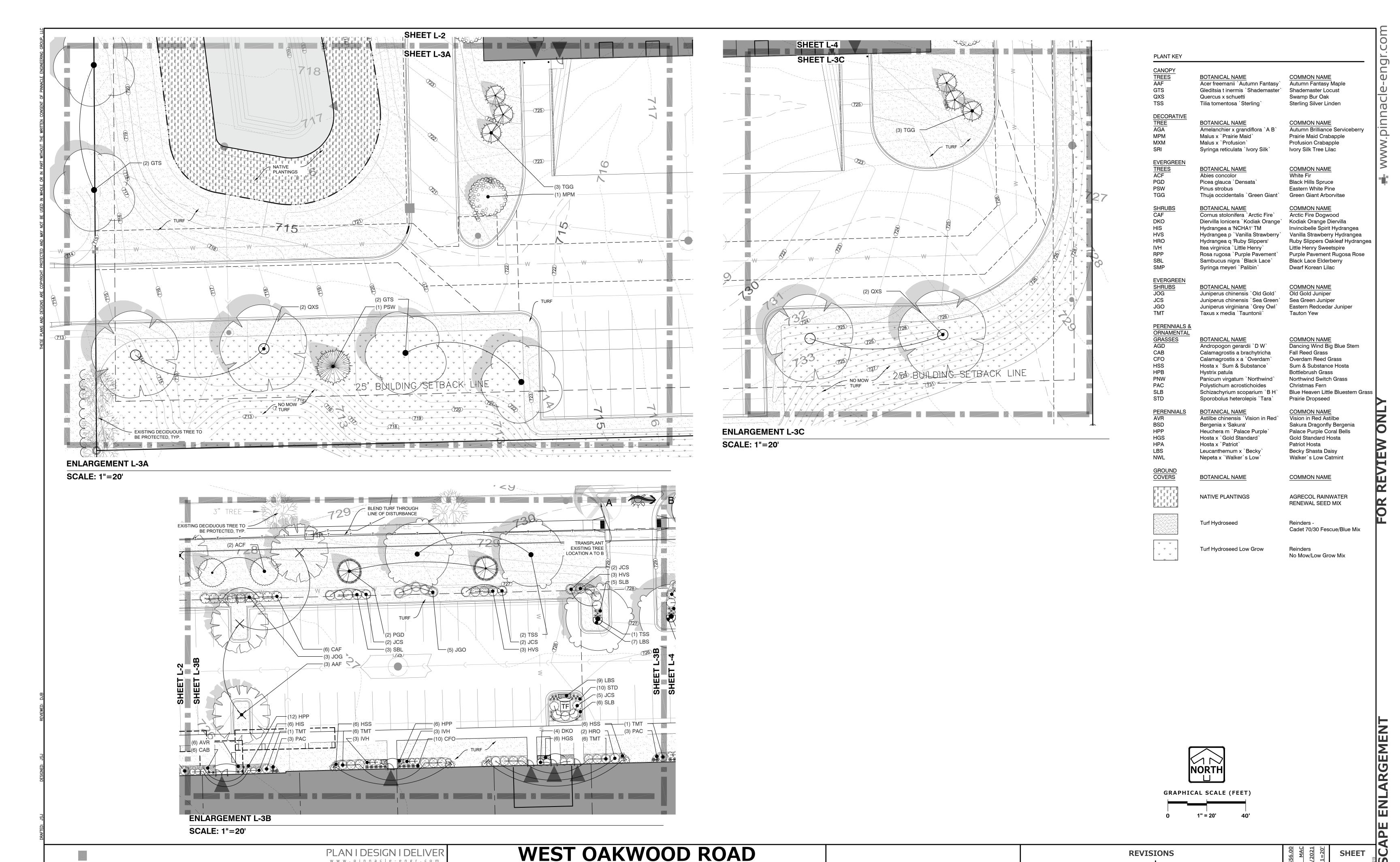
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**DEVELOPMENT-WEST** 

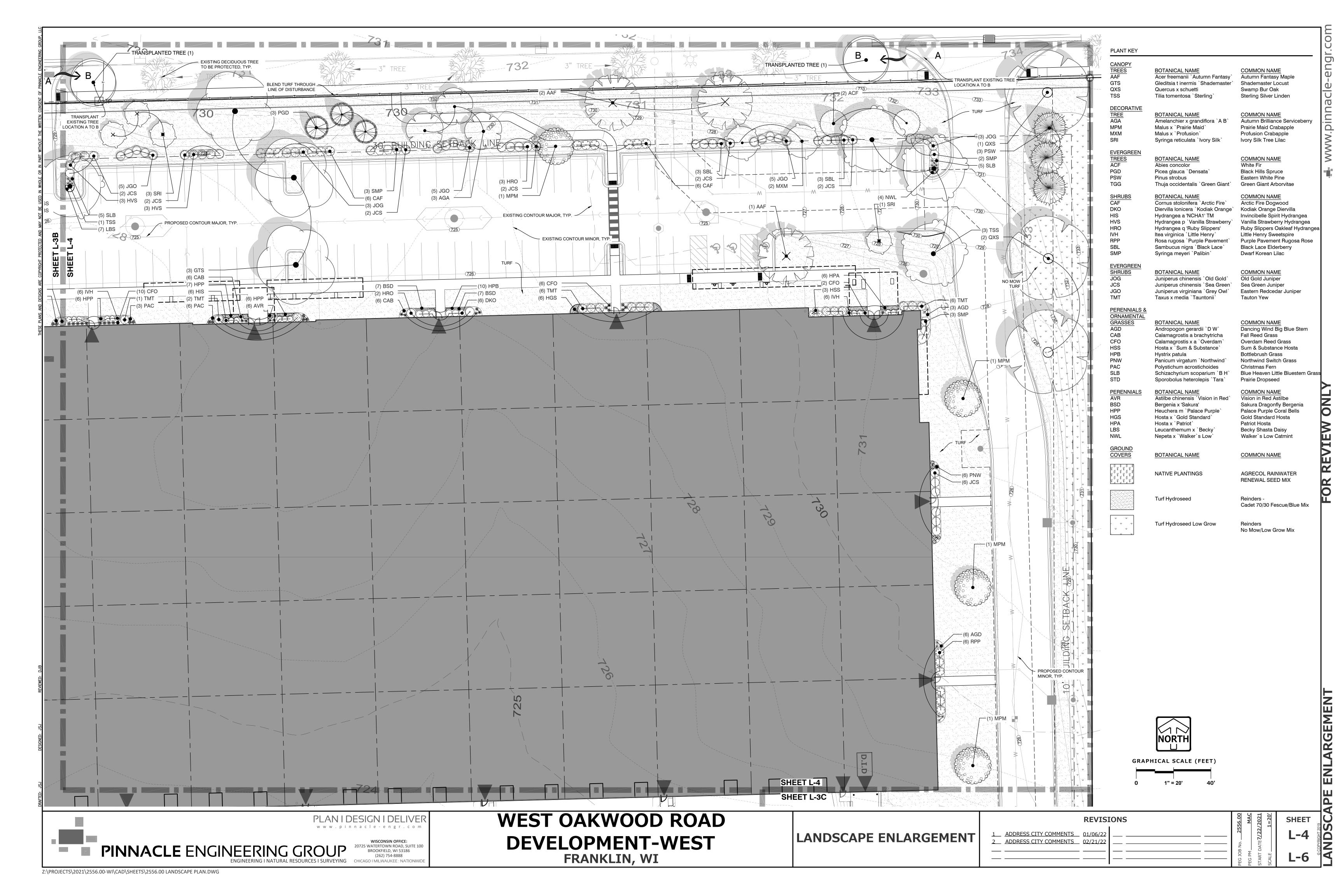
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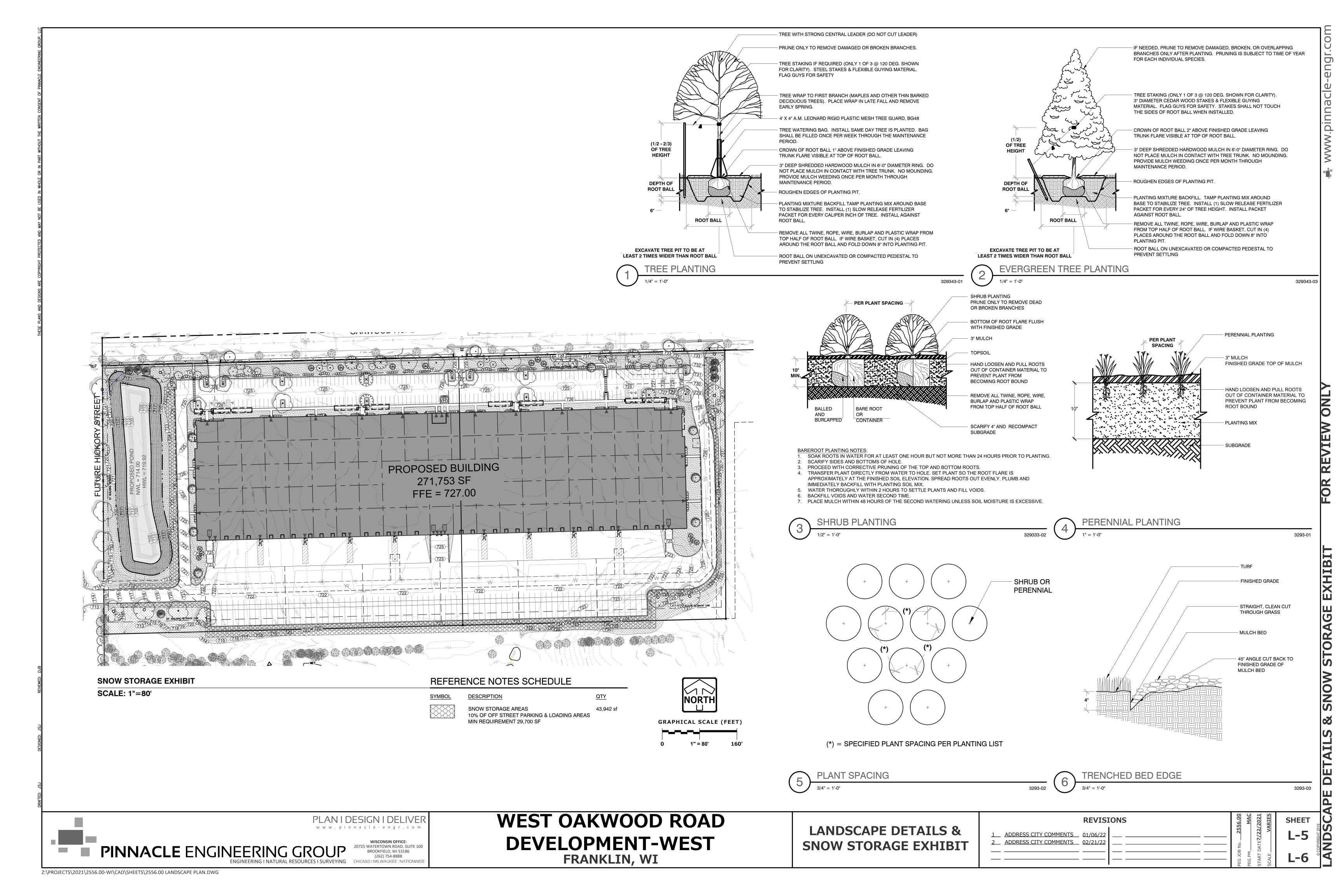
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LANDSCAPE ENLARGEMENT

Z:\PROJECTS\2021\2556.00-WI\CAD\SHEETS\2556.00 LANDSCAPE PLAN.DWG

**PINNACLE** ENGINEERING GROUP





- 2. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- 3. NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION
- 4. ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
- 5. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
- ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
- TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MUTLI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
- ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE. AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF **NURSERY STOCK ANSI Z60.1**
- BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
- ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
- 11. ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
- 12. TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
- 13. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- 14. ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
- 15. WHILE PLANTING TREES AND SHRUBS, BACKFILL OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- 16. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION
- 17. OAK TREES SHALL BE TREATED FOR TWO-LINE CHESTNUT BORER BOTH AT THE TIME OF INSTALLATION AND DURING THE SECOND GROWING SEASON.
- 18. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- 19. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- 20. ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
- 21. FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
- 22. THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN,
- 23. ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
- 24. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- 25. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 26. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
- 27. TREES SHALL BE INSTALLED NO CLOSER THAN:
  - -10 FEET FROM ANY FIRE HYDRANT
  - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, AND WATER SERVICE
- 28. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
- 29. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- 30. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- 31. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- 32. PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- 33. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

#### SOIL PLACEMENT NOTES

- LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT. AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
- 2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- 3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- 4. SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- 5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN. MUDDY. OR EXCESSIVELY WET
- 7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- 8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES
- 9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

#### NATIVE PLANTINGS AND PRAIRIE

SPECIFICATIONS FOR HAND BROADCASTING:

SEEDING SHALL BE CONDUCTED IN LATE FALL (SEPTEMBER 1- SOIL FREEZE) SO THAT SEEDS MAY LIE DORMANT DURING THE WINTER, ALLOWING FOR STRATIFICATION, OR SPRING (MARCH 1-JUNE 1) TO ALLOW A COMPLETE GROWING SEASON TO BECOME ESTABLISHED.

- A. PREPARATION OF SOIL PRIOR TO SEEDING
- 1. REFER TO CIVIL PLANS FOR SOIL MIX.
- ALL FOREIGN MATERIALS LARGER THAN 1-INCH SHALL BE REMOVED FROM THE SOIL PRIOR TO SEEDING OR PLANTING.
- 3. AREA SHOULD BE FREE FROM UNSIGHTLY VARIATIONS, RIDGES, AND DEPRESSIONS.
- 4. AVOID DRIVING OVER THE SPECIFIED AREA WITH MACHINERY.

#### B. COVER CROP

- 1. ANNUAL RYE SHALL BE SPREAD AT A DENSITY OF 20 POUNDS PER ACRE DURING THE PLANTING OR SEEDING OF THE NATIVE PLANT SPECIES TO STABILIZE THE SOIL AND REDUCE THE GROWTH OF UNWANTED VEGETATION. THIS ANNUAL GRASS GROWS RAPIDLY WITHOUT COMPETING WITH THE WILDFLOWERS AND GRASSES THAT ARE PLANTED IN THE
- 2. WINTER WHEAT OR PERENNIAL RYE SHALL NOT BE USED AS A COVER CROP. THESE GRASSES MAY OUT COMPETE PRAIRIE SEEDLINGS, LEADING TO A REDUCTION IN THE SUCCESS OF THE PLANTINGS

C. SEED MIX: MIX ALL PRAIRIE SEED WITH VERMICULITE ACCORDING TO AGRECOL RECOMMENDATIONS AND INSTALLATION GUIDELINES.

- 1. BROADCAST HALF THE SEED OVER THE ENTIRE SITE OR TARGET AREA.
- 2. BROADCAST THE OTHER HALF OF SEED PERPENDICULAR TO THE DIRECTION THAT THE FIRST HALF OF THE SEED WAS BROADCAST
- 3. COVER SEED WITH  $\frac{1}{4}$ -INCH TO  $\frac{1}{2}$ -INCH OF SOIL (USE ANY EXCESS SOIL FROM THE SITE) WITH RAKE OR DRAG.
- 4. ROLL SITE TO ENSURE FIRM SEED-TO-GROUND CONTACT. 5. KEEP SEED CONSTANTLY WET THROUGH GERMINATION PERIOD. GENERALLY 3 WEEKS

STAKED WITH AN EROSION CONTROL BLANKET TO PREVENT EROSION.

ALL SEEDING SHALL BE COVERED WITH 1-INCH OF CLEAN, NON-INVASIVE STRAW (NO MARSH HAY, OR REED CANARY GRASS) WITHOUT SEEDS. WITHIN SEVEN DAYS. WHEAT, RYE, OATS, OR BARLEY ARE ACCEPTABLE FORMS OF STRAW. THOSE AREAS OF SLOPES STEEPER THAN 8:1 (EIGHT FEET HORIZONTAL TO ONE FOOT VERTICAL) SHALL BE PLANTED NO LATER THAN OCTOBER 1 AND

## **NATIVE PLANTINGS:**

## **WEED SUPPRESSION MEASURES:**

1st YEAR - PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. THIS SHOULD OCCUR APPROXIMATELY EVERY MONTH OF THE GROWING SEASON AFTER NATIVE PLANTINGS HAVE BEEN ROUGH

2nd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 6" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. HAVE PROFESSIONAL ASSESS PLANTINGS. REPEAT MOWING NATIVE PLANTINGS AND SPOT-SPRAY IN EARLY JULY.

3rd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 8" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS.

4th YEAR - IN MAY PERFORM A PRESCRIBED BURN. IN JUNE HAVE A QUALIFIED PROFESSIONAL ASSESS PLANTINGS. IF A PRESCRIBED BURN CAN NOT BE UTILIZED, NATIVE PLANTINGS SHALL BE CUT TO THE GROUND AND ALL CUT MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF SITE.

## PLANT SCHEDULE

| CANOPY TREES AAF  | QTY<br>10        | BOTANICAL / COMMON NAME Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple                          | SIZE<br>2.5" Cal.        |                     |
|---|------------------|---|--------------------------|---------------------|
| GTS   | 10               | 50` T x 40` W Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust                          | 2.5" Cal.                |                     |
| QXS   | 10               | 60` T x 50` W<br>Quercus x schuetti / Swamp Bur Oak   | 2.5" Cal.                |                     |
| TSS   | 10               | 70` T x 65` W<br>Tilia tomentosa `Sterling` / Sterling Silver Linden<br>55` T x 40` W                   | 2.5" Cal.                |                     |
| DECORATIVE TREE<br>AGA  | QTY<br>6         | BOTANICAL / COMMON NAME  Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry | <u>SIZE</u><br>1.5" Cal. |                     |
| MPM   | 8                | 20` T x 20` W Malus x `Prairie Maid` / Prairie Maid Crabapple   | 1.5" Cal.                |                     |
| MXM   | 5                | 20` T x 25` W<br>Malus x `Profusion` / Profusion Crabapple  | 1.5" Cal.                |                     |
| SRI   | 7                | 30` T x 25` W Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac 25` T x 15` W                     | 1.5" Cal.                |                     |
| EVERGREEN TREES ACF   | QTY<br>6         | BOTANICAL / COMMON NAME Abies concolor / White Fir  | SIZE<br>4` Ht.           |                     |
| PGD   | 7                | 40` T x 23` W Picea glauca `Densata` / Black Hills Spruce   | 4` Ht.                   |                     |
| PSW   | 7                | 30` T x 15` W Pinus strobus / Eastern White Pine  | 4` Ht.                   |                     |
| TGG   | 6                | 65` T x 30` W<br>Thuja occidentalis `Green Giant` / Green Giant Arborvitae<br>50` T x 15` W             | 4` Ht.                   |                     |
| SHRUBS  | QTY              | BOTANICAL / COMMON NAME   | SIZE                     |                     |
| CAF   | 24               | Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood 3` T x 5` W                                      | 2` Ht.                   |                     |
| DKO   | 16               | Diervilla lonicera `Kodiak Orange` / Kodiak Orange Diervilla<br>4` T x 4` W                             | 1.5` Ht.                 |                     |
| HIS   | 12               | Hydrangea arborescens 'NCHA1' TM / Invincibelle Spirit Hydrangea 4' T x 3' W                            | 1.5` Ht.                 |                     |
| HVS   | 21               | Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea<br>6' T x 5' W                          | 2` Ht.                   |                     |
| HRO   | 12               | Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Oakleaf Hydrangea 4' T x 5' W                     | 2` Ht.                   |                     |
| IVH   | 24               | Itea virginica `Little Henry` / Little Henry Sweetspire 3` T x 3` W                                     | 1.5` Ht.                 |                     |
| RPP   | 12               | Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose   | 2` Ht.                   |                     |
| SBL   | 12               | 5`Tx5`W Sambucus nigra `Black Lace` / Black Lace Elderberry   | 2` Ht.                   |                     |
| SMP   | 14               | 6` T x 6` W<br>Syringa meyeri `Palibin` / Dwarf Korean Lilac<br>5' T x 6' W                             | 2` Ht.                   |                     |
| EVERGREEN SHRUBS<br>JOG   | QTY<br>12        | BOTANICAL / COMMON NAME Juniperus chinensis `Old Gold` / Old Gold Juniper                               | SIZE<br>2` Ht.           |                     |
| JCS   | 47               | 3`Tx5`W<br>Juniperus chinensis `Sea Green` / Sea Green Juniper  | 2` Ht.                   |                     |
| JGO   | 35               | 5`Tx5`W<br>Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper                                   | 2` Ht.                   |                     |
| ТМТ   | 42               | 3`Tx5`W Taxus x media `Tauntonii` / Tauton Yew 4`Tx5`W  | 2` Ht.                   |                     |
| PERENNIALS & ORNAMENTAL GRASSES AGD   | <u>QTY</u><br>18 | BOTANICAL / COMMON NAME Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem                 | SIZE<br>1 gal.           |                     |
| CAB   | 24               | 36" T x 30" W  Calamagrostis a brachytricha / Fall Reed Grass   | 1 gal.                   |                     |
| CFO   | 36               | 36" T x 24" W  Calamagrostis x a `Overdam` / Overdam Reed Grass   | _                        |                     |
| HSS   |                  | 24" T x 24" W Hosta x `Sum & Substance` / Sum & Substance Hosta   | 1 gal.                   |                     |
|   | 18               | 30" T x 60" W   | 1 gal.                   |                     |
| HPB   | 20               | Hystrix patula / Bottlebrush Grass 20" T x 12" W  | 1 gal.                   |                     |
| PNW   | 12               | Panicum virgatum `Northwind` / Northwind Switch Grass 42" T x 28" W                                     | 1 gal.                   |                     |
| PAC   | 18               | Polystichum acrostichoides / Christmas Fern<br>24" T x 24" W  | 1 gal.                   |                     |
| SLB   | 31               | Schizachyrium scoparium `Blue Heaven` / Blue Heaven Little Bluestem Grass 30" T x 28" W                 | 1 gal.                   |                     |
| STD   | 10               | Sporobolus heterolepis `Tara` / Prairie Dropseed<br>15" T x 20" W                                       | 1 gal.                   |                     |
| PERENNIALS<br>AVR   | QTY<br>12        | BOTANICAL / COMMON NAME Astilbe chinensis `Vision in Red` / Vision in Red Astilbe                       | SIZE<br>4.5" cont.       | SPACING<br>18" o.c. |
| BSD   | 28               | 15" T x 18" W Bergenia x 'Sakura' / Sakura Dragonfly Bergenia   | 4.5" cont.               | 15" o.c.            |
| HPP   | 37               | 10" T x 12" W Heuchera m `Palace Purple` / Palace Purple Coral Bells                                    | 4.5" Cont.               | 18" o.c.            |
| HGS   | 18               | 18" T x 18" W Hosta x `Gold Standard` / Gold Standard Hosta   | 4.5" cont.               | 28" o.c.            |
| HPA   | 12               | 20" T x 50" W Hosta x `Patriot` / Patriot Hosta   | 4.5" cont.               | 34" o.c.            |
| LBS   | 23               | 20" T x 38" W Leucanthemum x `Becky` / Becky Shasta Daisy   | 4.5" Cont.               | 15" o.c.            |
| NWL   | 12               | 15" T x 15" W Nepeta x `Walker`s Low` / Walker`s Low Catmint 20" T x 24" W                              | 4.5" Cont.               | 22" o.c.            |
| GROUND COVERS   | <u>QTY</u>       | BOTANICAL / COMMON NAME   |                          |                     |
|   | 22,827 sf        | NATIVE PLANTINGS / AGRECOL RAINWATER RENEWAL SEED MIX   |                          |                     |
|   | 115,967 sf       | Turf Hydroseed / Reinders - Cadet 70/30 Fescue/Blue Mix   |                          |                     |
| \( \psi \) | 43,727 sf        | Turf Hydroseed Low Grow / Reinders No Mow/Low Grow Mix  |                          |                     |

PLAN I DESIGN I DELIVER **PINNACLE** ENGINEERING GROUP

WEST OAKWOOD ROAD **DEVELOPMENT-WEST** FRANKLIN, WI

LANDSCAPE GENERAL **NOTES** 

**REVISIONS** 1 ADDRESS CITY COMMENTS 01/06/2

SHEET \_-6 L-6

Z:\PROJECTS\2021\2556.00-WI\CAD\SHEETS\2556.00 LANDSCAPE PLAN.DWG



# WEST OAKWOOD ROAD DEVELOPMENT

FUTURE SOUTH HICKORY STREET & WEST OAKWOOD ROAD, FRANKLIN, WI SITE AND BUILDING PLAN REVIEW



## PROJECT DATA

#### APPLICABLE CODES:

INTERNATIONAL BUILDING CODE - 2015 AS MODIFIED BY THE WISCONSIN ENROLLED COMMERCIAL BUILDING CODE IN CHAPTER SPS 362..

#### BUILDING CLASSIFICATION:

MIXED USE NON-SEPARATED, UNLIMITED AREA BUILDING

5-1 (MODERATE-HAZARD STORAGE) F-I (MODERATE-HAZARD FACTORY) B (BUSINESS)

#### CONSTRUCTION CLASSIFICATION:

TYPE 2B - UNPROTECTED WITH AUTOMATIC SPRINKLER SYSTEM

<u>BUILDING AREA:</u> 271,780 S.F.

## GENERAL NOTES

#### DO NOT SCALE DRAWINGS.

- . CONTRACTOR SHALL FIELD VERIFY AND BECOME THOROUGHLY FAMILIAR WITH ALL CONDITIONS AND DIMENSIONS.
- 3. EACH CONTRACTOR SHALL REVIEW COMPLETE PLANS FOR RELATED WORK.
- 4. ALL WORK SHALL BE IN COMPLINCE WITH STATE AND LOCAL CODES FOR RESPECTIVE TRADES.

## SHEET INDEX

- TITLE SHEET
- C-I COVER SHEET C-2 EXISTING CONDITIONS
- C-3 SITE DIMENSIONAL & PAVING PLAN C-4 GRADING PLAN
- C-5 UTILITY PLAN C-6 GENERAL NOTES
- C-1 CONSTRUCTION DETAILS C-8 CONSTRUCTION DETAILS
- C-9 CONSTRUCTION DETAILS

#### <u>LANDSCAPE</u> L-1 LANDSCAPE OVERVIEW

- L-2 LANDSCAPE PLAN L-3 LANDSCAPE PLAN
- L-4 LANDSCAPE PLAN L-5 NATIVE PLANTING NOTES

## SITE LIGHTING LAYOUT

L-6 GENERAL NOTES

## ALI OVERALL DEVELOPMENT SITE PLAN

- A1.2 WEST SITE PLAN
- A4.1 EXTERIOR ELEVATIONS

| ALT A/E AFF ALUM BD B/O CPT \$ CLG CJ | ALTERNATE ARCHITECT/ENGINEER ABOVE FINISH FLOOR ALUMINUM BOARD BOTTOM OF CARPET CENTER LINE CEILING CONTROL JOINT | GA<br>GALY<br>GYP BD<br>HDWR<br>HM<br>HT<br>INSUL<br>JT<br>MFR<br>MIN | GAUGE GALVANIZED GYPSUM BOA HARDWARE HOLLOW MET, HEIGHT INSULATION JOINT MANUFACTURI |
|---------------------------------------|---|---|--|
| CMU                                   | CONCRETE MASONRY UNIT   | MO  | MASONRY OF   |
| CONC<br>CONT                          | CONCRETE<br>CONTINUOUS  | MTL<br>NIC  | METAL<br>NOT IN CONT   |
| co                                    | CLEAN OUT   | NTS   | NOT TO SCAL  |

LOCATION MAP

FLOOR DRAIN

W 7 MILE RD.

STANDARD TO BE DETERMINED UNLESS NOTED OTHERWISE VINYL BASE VERIFY IN FIELD

WELDED WIRE FABRIC

OPPOSITE PLYWOOD

PLATE REQUIRED ROUGH OPENING

HSA FRANKLÍN ÍNDUSTRÍAL, LLC 100 S. WACKER DRIVE, SUITE 950 CHICAGO, ILLINOIS 60606 PHONE: 312.683.7242 ATTN: ERIC OGDEN

RIVERWOODS, ILLINOIS 60015 PHONE: 847.940.0300 ATTN: WERNER BRISSKE, AIA CHAD SILVESTER, AIA

2610 LAKE COOK ROAD, SUITE 280



**CIVIL & LANDSCAPE ENGINEER:** 

PINNACLE ENGINEERING GROUP 20125 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 PHONE: 262.754.8888 FAX: 262.754.8850 ATTN: ADAM ARTZ



SITE LIGHTING: ENTERPRISE LIGHTING & CONTROL 2001 PEWAUKEE ROAD WAUKESHA, WI 53188

PHONE: 414.737.0603

ATTN: JOE BOKELMAN

# FRANKLIN, WI W OAKWOOD RD. LOCATION W S COUNTRY LINE RD. 7 1/2 MILE RD.

# WEST OAKWOOD ROAD DEVELOPMENT

PROJECT NUMBER: 715.21.103

# SITE PLAN REVIEW

ISSUE DATE: 07.23.21 REVISION DATE: 02.15.22



715.21.103

DRAWN BY: CHECKED E

PROJECT DATA:

WEST SITE

CAR PARKING SPACES

ADA PARKING SPACES

WEST BUILDING BUILDING HEIGHT

STORIES

012622

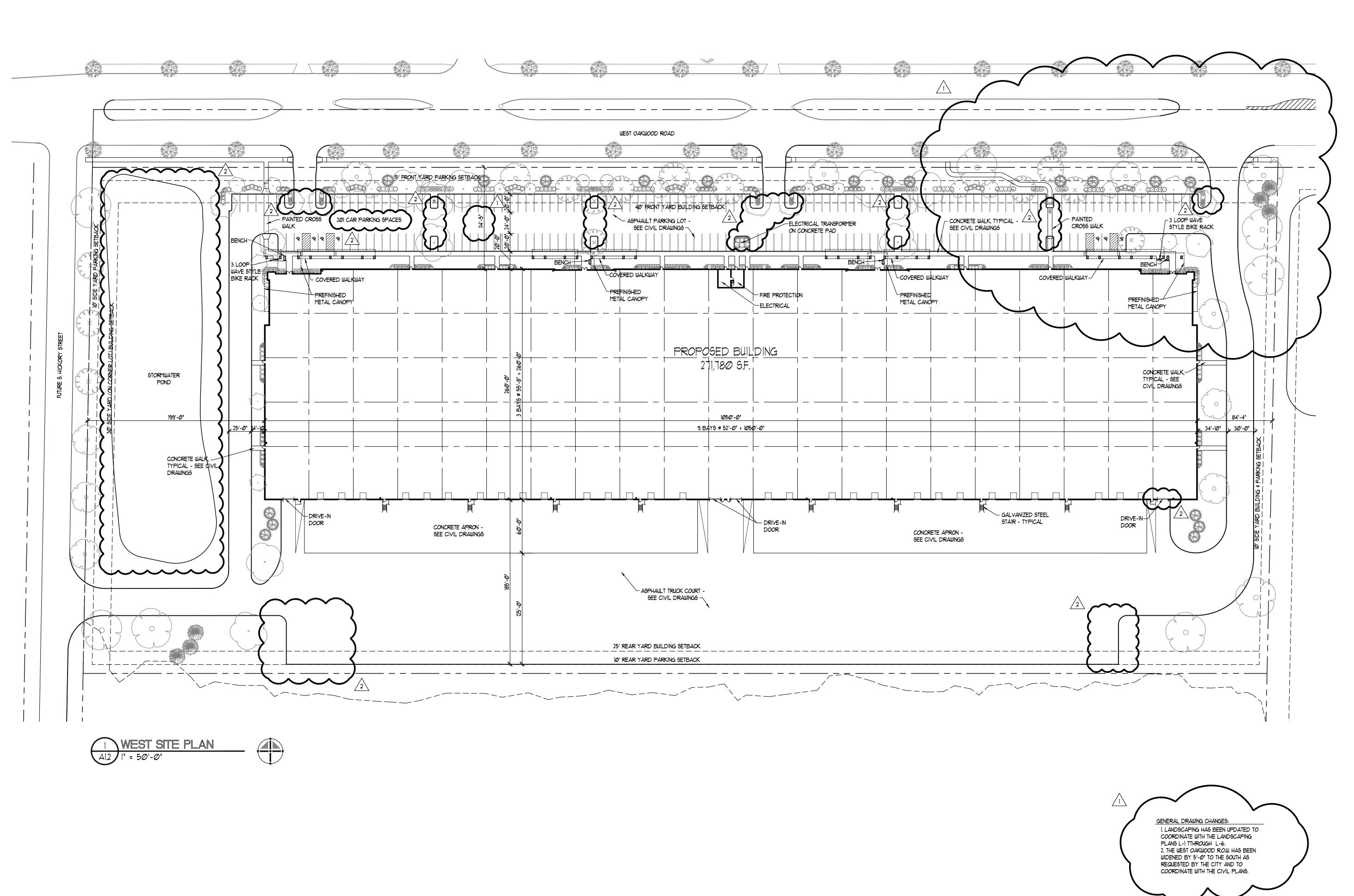
THE OWNER/DEVELOPER IS HSA COMMERCIAL.

# GENERAL NOTES:

I. NO PARKING WILL BE PERMITTED ON ANY STREET, DRIVEWAY, OR ANY PLACE IN THE DISTRICT OTHER THAN IN APPROVED PARKING SPACES, AND OVERNIGHT PARKING OF RECREATIONAL VEHICLES IN PROHIBITED. 2. LANDSCAPE SCREENING TO BE PROVIDED AT ALL SERVICE, UTILITY AND MECHANICAL LOCATIONS. 3. WAREHOUSE TENANTS TYPICALLY MANAGE THEIR WASTE INTERNALLY

WITHIN THE BUILDING OR WITHIN AN ENCLOSED TRASH COMPACTOR IN A DOCK POSITION. FUTURE TENANT BUILD-OUTS UNDER A SEPARATE PERMIT SUBMITTAL WILL PROVIDE THEIR PLAN FOR TRASH MANAGEMENT FOR REVIEW AND APPROVAL. TRASH ENCLOSURES WILL BE PROVIDED IF REQUIRED AT THAT POINT IN TIME.

Al.1 / 1" = 100'-0"



WEST OAKWOOD ROAD DEVELC West Oakwood Road WEST SITE PLAN

2610 Lake Cook Road
Suite 280
Riverwoods, 1L 60015

in Design Riverw

Partners
A R C H I

PROJECT NO.:

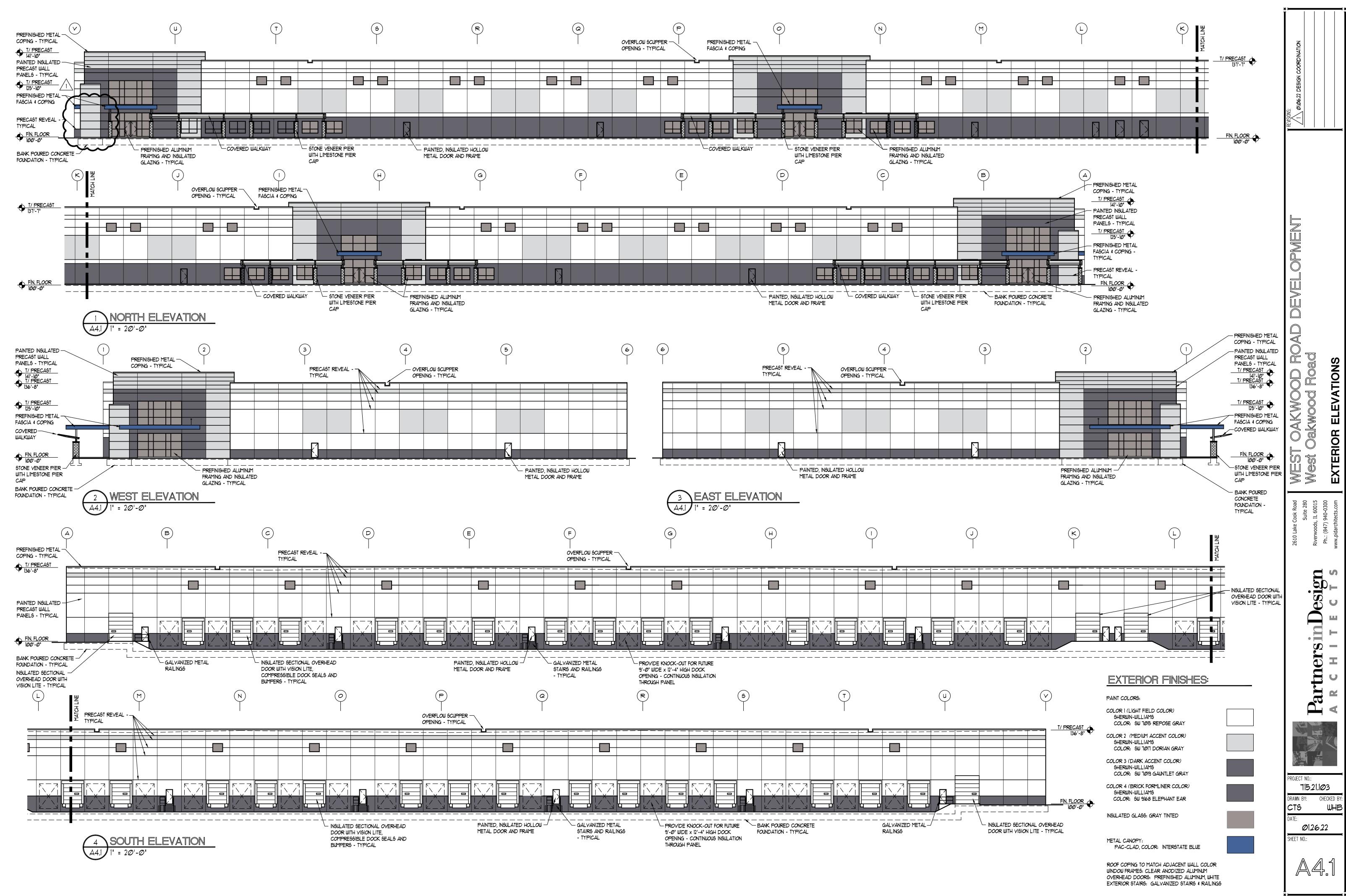
715.21.103

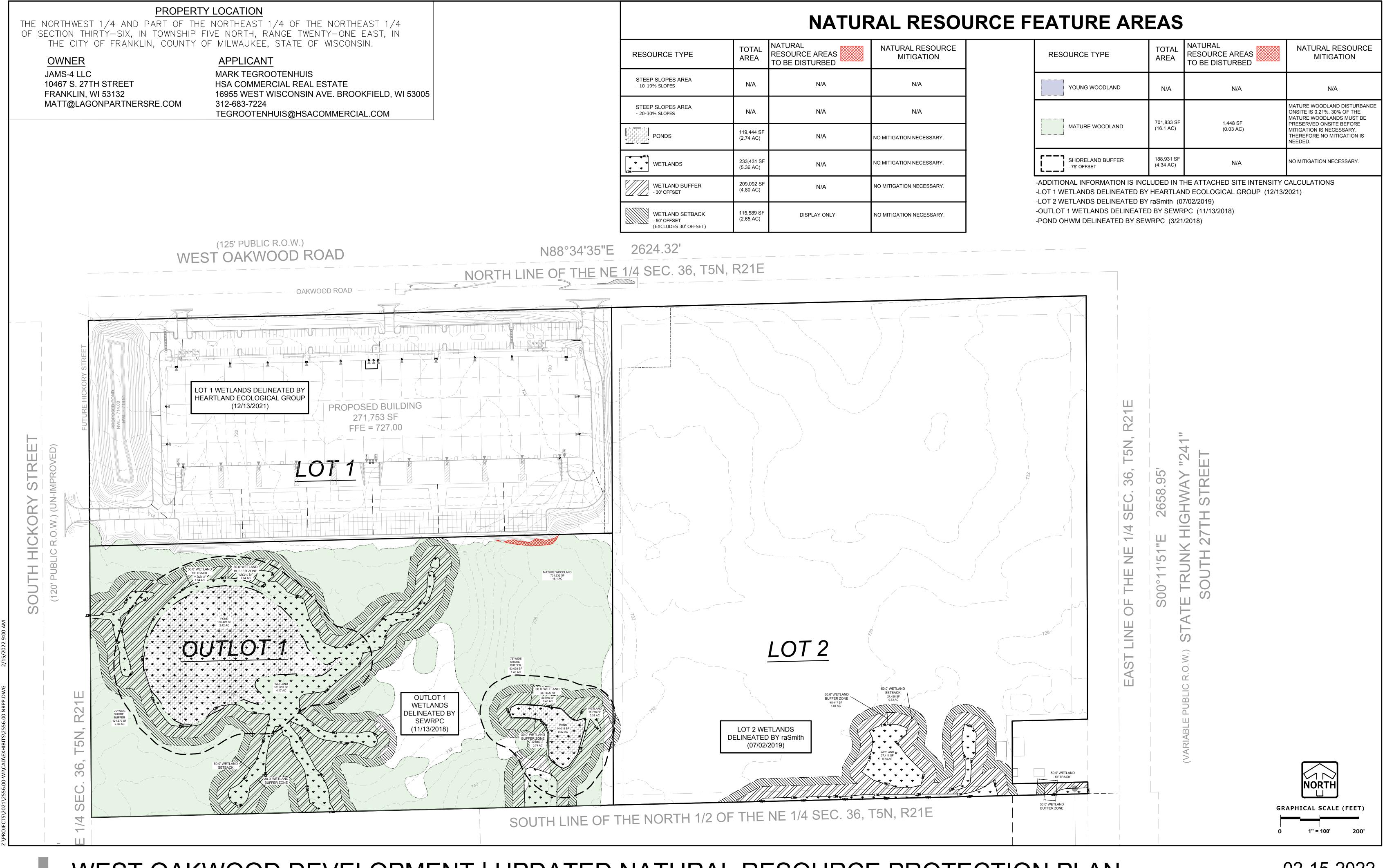
DRAWN BY: CHECKED

TS WH NE: Ø1.26.22

SHEET NO.:

A1.2







#### SECTION 15-3.0502 CALCULATION OF BASE SITE AREA

The *base site area* shall be calculated as indicated in Table 15-3.0502 for each parcel of land to be used or built upon in the City of Franklin as referenced in Section 15-3.0501 of this Ordinance.

#### Table 15-3.0502

## WORKSHEET FOR THE CALCULATION OF BASE SITE AREA FOR BOTH RESIDENTIAL AND NONRESIDENTIAL DEVELOPMENT

| STEP 1: | Indicate the total gross site area (in acres) as determined by an actual on-site boundary survey of the property.  |   | 72.99 | acres |
|---------|--|---|-------|-------|
| STEP 2: | Subtract ( - ) land which constitutes any existing dedicated public street rights-of-way, land located within the ultimate road rights-of-way of existing roads, the rights-of-way of major utilities, and any dedicated public park and/or school site area.  | _ | 0     | acres |
| STEP 3: | Subtract ( - ) land which, as a part of a previously approved development or land division, was reserved for open space.   | - | 0     | acres |
| STEP 4: | In the case of "Site Intensity and Capacity Calculations" for a proposed residential use, subtract (-) the land proposed for nonresidential uses;  or  In the case of "Site Intensity and Capacity Calculations" for a proposed nonresidential use, subtract (-) the land proposed for residential uses. | _ | 0     | acres |
| STEP 5: | Equals "Base Site Area"  | = | 72.99 | acres |

## SECTION 15-3.0503 CALCULATION OF THE AREA OF NATURAL RESOURCES TO BE PROTECTED

All land area with those natural resource features as described in Division 15-4.0100 of this Ordinance and as listed in Table 15-3.0503 and lying within the *base site area* (as defined in Section 15-3.0502), shall be measured relative to each natural resource feature present. The actual land area encompassed by each type of resource is then entered into the column of Table 15-3.0503 titled "Acres of Land in Resource Feature." The acreage of each natural resource feature shall be multiplied by its respective *natural resource protection standard* (to be selected from Table 15-4.0100 of this Ordinance for applicable agricultural, residential, or nonresidential zoning district) to determine the amount of resource protection land or area required to be kept in open space in order to protect the resource or feature. The sum total of all resource protection land on the site equals the *total resource protection land*. The *total resource protection land* shall be calculated as indicated in Table 15-3.0503.

Table 15-3.0503

WORKSHEET FOR THE CALCULATION OF RESOURCE PROTECTION LAND

| Natural Resource Feature                                | district in which the parcel is located) |                         |                                  |                  | Resource Feature |
|---|--|-------------------------|----------------------------------|------------------|------------------|
|   | Agricultural<br>District                 | Residential<br>District | Non-<br>Residential<br>District. |                  |                  |
| Steep Slopes:<br>10-19%                                 | 0.00                                     | 0.60                    | 0.40                             | x 0              | 0                |
| 20-30%  | 0.65                                     | 0.75                    | 0.70                             | x0               | 0                |
| + 30%   | 0.90                                     | 0.85                    | 0.80                             | =<br>X<br>=<br>0 | 0                |
| Woodlands & Forests:                                    |  |                         |                                  | x 9.40*          | 6.58             |
| Mature  | 0.70                                     | 0.70                    | 0.70                             | =<br>X           |                  |
| Young   | 0.50                                     | 0.50                    | 0.50                             | =                |                  |
| Lakes & Ponds   | 1  | 1                       | 1                                | X <u>2.74</u>    | 2.74             |
| Streams   | 1  | 1                       | 1                                | X                | 0                |
| Shore Buffer  | 1  | 1                       | 1                                | X4.34            | 4.34             |
| Floodplains   | 1  | 1                       | 1                                | X0               | 0                |
| Wetland Buffers   | 1  | 1                       | 1                                | X2.94*           | 2.94             |
| Wetlands & Shoreland<br>Wetlands                        | 1  | 1                       | 1                                | X 1.43*          | 1.43             |
| TOTAL RESOURCE PROTECT (Total of Acres of Land in Resou |  | rotected)               |                                  |                  | 18.03            |

\*AREAS SMALLER THAN SHOWN ON NRPP ARE DUE TO OVERLAP BETWEEN NATURAL RESOURCES Note: In conducting the calculations in Table 15-3.0503, if two or more natural resource features are present on the same area of land, only the most restrictive resource protection standard shall be used. For example, if floodplain and young woodlands occupy the same space on a parcel of land, the resource protection standard would be 1.0 which represents the higher of the two standards.

#### **Table 15-3.0505**

## WORKSHEET FOR THE CALCULATION OF SITE INTENSITY AND CAPACITY FOR NONRESIDENTIAL DEVELOPMENT

|         | CALCULATE MINIMUM REQUIRED LANDSCAPE SURFACE:   |                      |       |
|---------|---|----------------------|-------|
|         | Take Base Site Area (from Step 5 in Table 15-3.0502): 72.99   |                      |       |
| STEP 1: | Multiple by Minimum <i>Landscape Surface Ratio (LSR)</i> (see specific zoning district LSR standard): X   |                      |       |
|         | Equals MINIMUM REQUIRED ON-SITE LANDSCAPE SURFACE =   | 32.85 a              | icres |
|         | CALCULATE NET BUILDABLE SITE AREA:  |                      |       |
|         | Take Base Site Area (from Step 5 in Table 15-3.0502): 72.99   |                      |       |
| STEP 2: | Subtract <i>Total Resource Protection Land</i> from Table 15-3.0503) or <i>Minimum Required Landscape Surface</i> (from Step 1 above), whichever is greater:  - 32.85 |                      |       |
|         | Equals <b>NET BUILDABLE SITE AREA</b> =   | 40.14 a              | icres |
|         | CALCULATE MAXIMUM NET FLOOR AREA YIELD OF SITE:   |                      |       |
|         | Take <i>Net Buildable Site Area</i> (from Step 2 above): 40.14  |                      |       |
| STEP 3: | Multiple by Maximum <i>Net Floor Area Ratio (NFAR)</i> (see specific nonresidential zoning district NFAR standard): X_0.91  |                      |       |
|         | Equals MAXIMUM NET FLOOR AREA YIELD OF SITE =   | 36.53 a              | icres |
|         | CALCULATE MAXIMUM GROSS FLOOR AREA YIELD OF SITE:   |                      |       |
|         | Take <i>Base Site Area</i> (from Step 5 of Table 15-3.0502): <b>72.99</b>   |                      |       |
| STEP 4: | Multiple by Maximum <i>Gross Floor Area Ratio (GFAR)</i> (see specific nonresidential zoning district GFAR standard): X   |                      |       |
|         | Equals MAXIMUM GROSS FLOOR AREA YIELD OF SITE =   | 36.50 a              | icres |
|         | DETERMINE MAXIMUM PERMITTED FLOOR AREA OF SITE:   |                      |       |
| STEP 5: | Take the <i>lowest</i> of Maximum Net Floor Area Yield of Site (from Step 3 above) or Maximum Gross Floor Area Yield of Site (from Step 4 above):                     | 36.50 a              | icres |
|         | (Multiple results by 43,560 for maximum floor area in square feet):   | ( <b>1,589,940</b> s | s.f.) |



#### CITY OF FRANKLIN

#### REPORT TO THE PLAN COMMISSION

#### Meeting of March 3, 2022

#### **Site Plan Amendment**

**RECOMMENDATION:** City Development Staff recommends approval of the proposed Site Plan Amendment, subject to the conditions of approval in the attached draft resolution.

**Project Name:** Victory of the Lamb Church Site Plan Amendment

**Project Location:** 11120 West Loomis Road **Property Owner:** Victory of the Lamb, Inc.

**Applicant:** Victory of the Lamb Lutheran Church

**Agent:** James Vogel

**Current Zoning:** I-1 Institutional District

**2025 Comprehensive Plan:** Institutional and Areas of Natural Resource Features **Use of Surrounding Properties:** Agricultural use to the north, south and west and the

Animal Campus Vet Clinic to the east

**Applicant's Action Requested:** Approval of the proposed Site Plan Amendment

**Planner:** Marion Ecks, Associate Planner

#### **Introduction and Background:**

In December 2013 the Plan Commission 2013, the Plan Commission and Common Council approved applications for a Comprehensive Master Plan and Rezoning submitted by Victory of the Lamb church to allow for construction of a worship space which includes worship education. The church received site plan approval for development on December 4, 2014; that site plan included an all-abilities playground. The playground was subsequently relocated to Franklin Woods, and a revised site plan was approved on April 23, 2015.

On September 14, 2021 the applicant submitted an application for a Site Plan Amendment to expand the existing parking lot, due to demand at peak holidays.

#### **Project Description:**

The proposed site plan amendment is for an additional 62 parking spaces and related stormwater management pond. Facilities will be connected to the existing parking area along the west property line.

The Site Plan proposal meets all requirements of the Unified Development Ordinance (UDO). The applicant already provides adequate accessible parking spaces. The new addition will have appropriate snow storage, and proposed landscaping provides sufficient quantity and diversity of plantings. No new lighting or signage is proposed.

The original Site Plan approval included the stipulation that the applicant protect natural resources in a conservation easement. This is also a requirement of the UDO (§15-4.0103.B.1.d, §15-7.0201.H, RES 2014-015, etc.). The prior condition is incomplete; the applicant has provided a draft conservation easement with their Plan Commission materials. Staff recommends that the recording of this easement be a condition of the approval.

A natural resource protection plan (NRPP) was provided with a 2021 delineation for the wetland in the project area. This NRPP requires a technical correction which should also be a condition of approval.

The proposed parking area requires the addition of new stormwater facilities, which will be located to the north of the new parking area. A portion of the grading for the basin will encroach into the wetland setback. This area will be restored to the standards of §15-4.0102.I.1. Turf grasses are prohibited, and mowing is not permitted within the buffer. Staff recommends that temporary fencing be installed during construction, and permanent signage or boulders be installed once complete, to demarcate the wetland and prevent encroachments.

#### **Staff Recommendation:**

City Development Staff recommends approval of the proposed Site Plan Amendment for Victory of the Lamb Lutheran Church, subject to the conditions of approval in the attached draft resolution.

## CITY OF FRANKLIN PLAN COMMISSION

MILWAUKEE COUNTY
[Redraft 2-24-22]

RESOLUTION NO. 2022-\_\_\_

A RESOLUTION TO AMEND THE SITE PLAN FOR PROPERTY LOCATED AT 11120 WEST LOOMIS ROAD FOR EXPANSION OF THE EXISTING PARKING LOT AND TO BUILD A RELATED STORMWATER MANAGEMENT POND FOR VICTORY OF THE LAMB CHURCH (TAX KEY NO. 889-9989-000) (VICTORY OF THE LAMB, INC., APPLICANT)

WHEREAS, Victory of the Lamb, Inc. having applied for an amendment to the site plan for the property located at 11120 West Loomis Road, such Site Plan having been previously approved on December 4, 2014, by Resolution No. 2014-015 and amended thereafter on April 23, 2015; and

WHEREAS, such proposed amendment proposes expansion of the existing parking lot (62 additional spaces) and building a related stormwater management pond (facilities will be connected to the existing parking area along the west property line), and the Plan Commission having reviewed such proposal and having found same to be in compliance with and in furtherance of those express standards and purposes of a Site Plan review pursuant to Division 15-7.0100 of the Unified Development Ordinance.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the Site Plan for Victory of the Lamb, Inc., dated February 21, 2022, as submitted by Victory of the Lamb, Inc., as described above, be and the same is hereby approved, subject to the following conditions:

- 1. Victory of the Lamb, Inc., successors and assigns and any developer of the Victory of the Lamb, Inc. parking lot expansion and related stormwater management pond project shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the Victory of the Lamb, Inc. parking lot expansion and related stormwater management pond project, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
- 2. The approval granted hereunder is conditional upon Victory of the Lamb, Inc. and the Victory of the Lamb, Inc. parking lot expansion and related stormwater management pond project for the property located at 11120 West Loomis Road: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and

| VICTORY OF THE LAMB, INC SITE PLAN AMENDMENT |
|--|
| RESOLUTION NO. 2022-                         |
| Page 2                                       |

the like, required for and applicable to the project to be developed and as presented for this approval.

- 3. The Victory of the Lamb, Inc. parking lot expansion and related stormwater management pond project shall be developed in substantial compliance with the plans City file-stamped February 21, 2022.
- 4. The applicant shall make required corrections (UDO §15-4.0102 and §15-7.0200) to Natural Resource Protection Plans, subject to staff approval, prior to the commencement of any land disturbance.
- 5. The applicant must install temporary fencing along the wetland buffer during construction to protect the wetland buffer and wetland.
- 6. The applicant shall place boulders or other markers to demarcate the wetland setback on the property.
- 7. The applicant shall submit conservation easements to protect natural resources on the property, as required by UDO §15- 4.0103.B.1.d, §15-7.0201.H, and RES 2014-015.

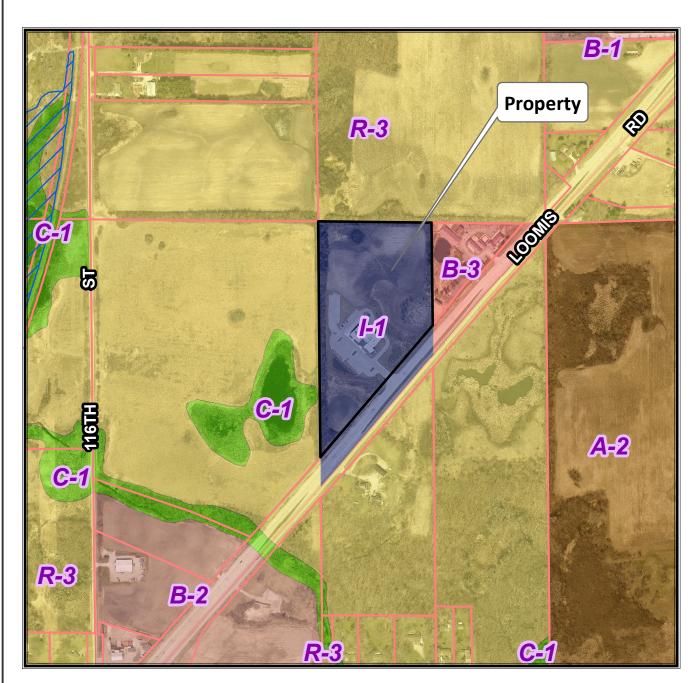
BE IT FURTHER RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the Victory of the Lamb, Inc. parking lot expansion and related stormwater management pond as depicted upon the plans City file-stamped February 21, 2022, attached hereto and incorporated herein, shall be developed and constructed within one year from the date of adoption of this Resolution, or this Resolution and all rights and approvals granted hereunder shall be null and void, without any further action by the City of Franklin; and the Site Plan for the property located at 11120 West Loomis Road, as previously approved, is amended accordingly.

| Introduced at a regular meeting day of               | of the Plan Commission of the City of Franklin this, 2022. |
|--|--|
| Passed and adopted at a regular Franklin this day of | ar meeting of the Plan Commission of the City of, 2022.    |
|  | APPROVED:  |
|  | Stephen R. Olson, Chairman                                 |

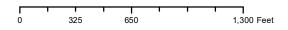
|             | OF THE LAM<br>ION NO. 2022 | *         | LAN AMENDMENT |
|-------------|----------------------------|-----------|---------------|
| ATTEST:     |                            |           |               |
|             |                            |           |               |
| Sandra L. V | Vesolowski, Ci             | ity Clerk |               |
| AYES        | NOES                       | ABSENT    |               |



11120 W. Loomis Road TKN: 889 9989 000



Planning Department (414) 425-4024

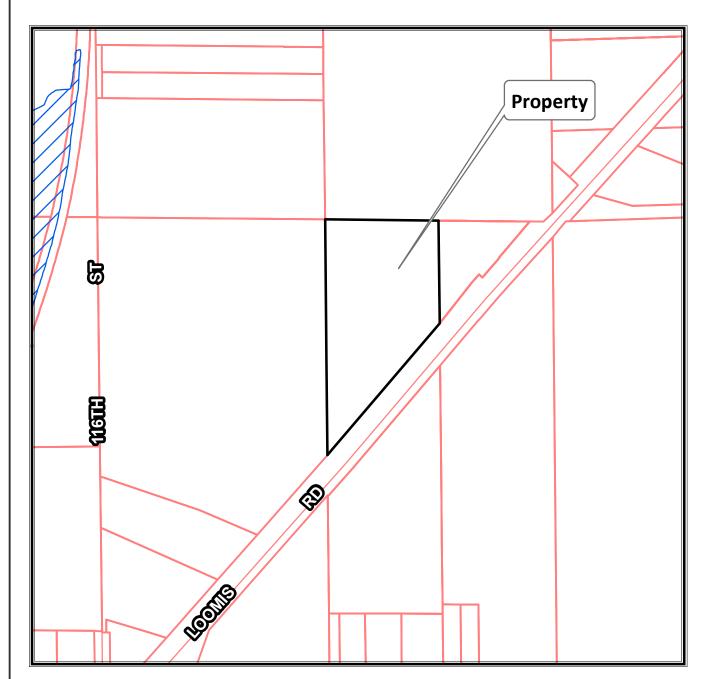


NORTH 2021 Aerial Photo

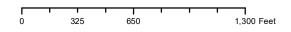
This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.







Planning Department (414) 425-4024



NORTH 2021 Aerial Photo

This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.

# **City of Franklin Department of City Development**

Date: February 3, 2022
To: Victory of the Lamb
From: City Development Staff

RE: Site Plan Amendment – 11120 W Loomis Road – Victory of the Lamb

Please be advised that City Staff has reviewed the above application. Department comments are as follows for the Site Plan applications submitted by Victory of the Lamb and date stamped by the City of Franklin on September 14, 2021.

Please see response comments in Red.

#### **Department of City Development**

#### **Unified Development Ordinance (UDO) Requirements**

This property is located in I-1 - Institutional District and subject to the requirements of Section §15-3.0312. Site Plan applications are subject to the standard of Division 15-7.0100

1) The proposed parking expansion and related facilities meet the setback requirements of the district. (§15-7.0102.B)

#### Site Plan

Please provide the following required information on the site plan (§15-7.0103), and respond to any questions.

- 2) Materials provided (including the NRPP) must be to scale. The scale bar measures slightly less than one inch on printed materials (§15-7.0103.A, §15-7.0103. E). The plans need to be printed to scale. We have provided to scale copies.
- 3) The Owner's Name and Address (§15-7.0103.B). Jim Vogel 8910 S. 102<sup>nd</sup> Street has been added to the site plan.
- 4) Is any signage proposed? If so, indicate the type, location, and dimension of proposed signage (§15-7.0103.H). Note that signage is also subject to the requirements of Chapter 210, Signs and Billboards. No signage proposed.
- 5) Height of all building(s), including both principal and accessory, expressed in both feet and stories. (§15-7.0103.J). Existing building one story 22 feet high. Note has been added to site plan.
- 6) Show any shoreline setbacks/buffers, and wetland setback or buffer. The shoreline buffer is 75' from the ordinary high water mark (§15-7.0103.M). Setback/buffers were shown for the wetlands.
  - a) Label the wetland setback "no build" and the buffer "no touch." This labeling should also be used when indicating wetland areas on any future Site Plan or landscape plan. Labels have been added.

- 7) Note that §15-7.0103.P requires approval of stormwater plans as a condition of approval for any Site Plan. Please verify that stormwater requirements for the site have been met. SWMA has been sent to the city and we have addressed all stormwater requirements
- 8) A Natural Resource Protection Plan has been provided as required by §15-7.0103.Q. Comments on the NRPP are provided in that section of the memo.
- 9) Show pedestrian facilities (§15-7.0103.T). Are any paths or markings proposed for people walking to the church? No additional paths proposed.
- 10) Are changes to lighting proposed (§15-7.0103.W)? If so, please provide a "Lighting Plan" which meets the lighting regulations set forth in Division 15-5.0400. No lighting proposed.
- 11) Show the location of all easements on the site plan (15-7.0103.X), including required conservation easements. The easements have been added to the site plan.
- 12) Parking spaces must be a minimum of 180 square feet in size (§15- 5.0202.B.) Please verify that the spaces provided meet this requirement spaces are shown to be 9 feet by 20 feet but because the scale is not accurate this dimension cannot be measured. Scaled copies provided.
- 13) As required by §15-7.0103.H. please include the number of parking spaces provided, *and* the number of ADA parking spaces provided. A minimum of 3 ADA spaces are required for this addition (§15-5.0202.I.1). Please verify that the site provides adequate ADA spaces for overall parking. Currently the existing parking lot has a total of 10 ADA spaces, 6 van accessible at the side entrance and 4 standard at the front entrance. This satisfies the requirement.
- 14) Please indicate snow storage areas on the site plan, in accordance with §15-5.0210 The snow storage was moved from the landscape plan and now has been added to the site plan and modified to be in compliance with the code.
- 15) Note that off-street parking stalls must be marked by painted lines or other approved material and shall be maintained so as to be legible at all times (§15-5.0202.F). A note has been added to the construction notes.
- Note that additional data may be required by Plan Commission, Zoning Administrator, City Planner, or the City Engineer (15-7.0103.DD). A note has been added to the construction notes.

#### **Natural Resource Protection**

17) Please submit conservation easements for areas of natural resources to be preserved (§15-4.0103.B.1.d, §15-7.0201.H, RES 2014-015, etc.). The template for the easement will be provided as an attachment with these comments. We have updated the plan and have included with the submittal.

Please provide the following required information on the Natural Resource Protection Plan (NRPP) (§15-7.0201), and respond to any questions.

- 18) Address of the property (§15-7.0201.B) Added.
- 19) Complete contact information for the owner (§15-7.0201.C) Added.
- 20) Location of any easements, including the location of any easements on (immediately adjacent to) the property line (\$15-7.0201.F and \$15-7.0201.H). Added
- 21) A table on the NRPP with information about the total area of each natural resource (§15-7.0201.I), and the amount of disturbance to resources (§15-7.0201.J), if any. If a category of protected resource is not present, list it in the table with a zero for the quantity. Added.
- 22) Indicate proposed conservation easements on the NRPP (§15-7.0201.K). Added

#### Landscape Plan

All public off-street parking areas which serve five vehicles or more and are created or redesigned and rebuilt subsequent to the adoption of this Ordinance shall be provided with accessory landscape areas meeting all applicable requirements of Division 15-5.0300 of this Ordinance.

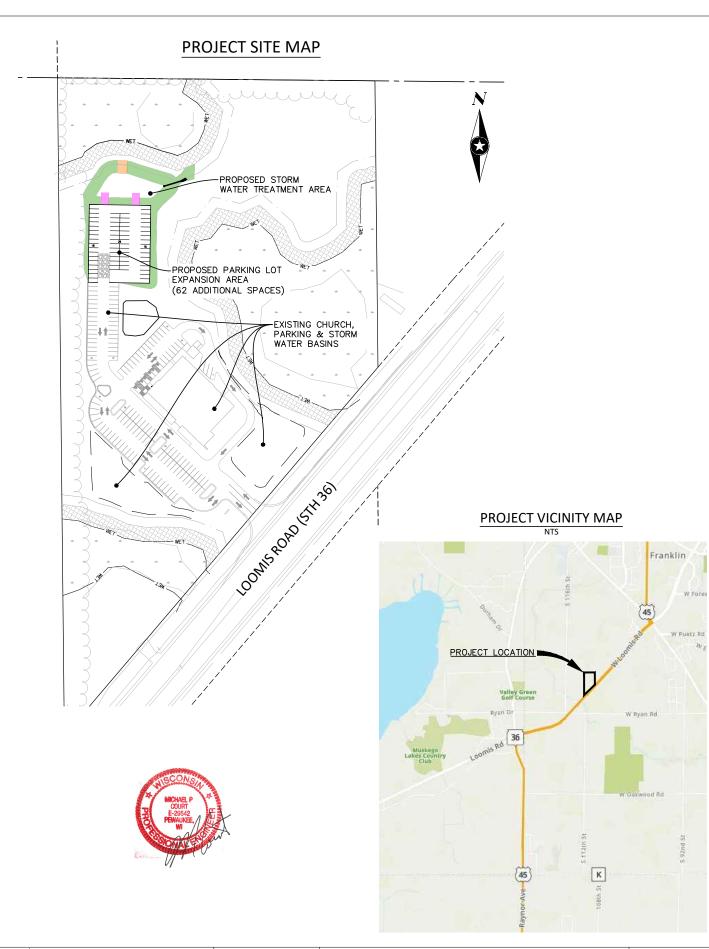
- 23) The applicant has provided an appropriate quantity and diversity of plantings.
- 24) Landscape plans may include credit for existing trees (§15-5.0302.D).
- Please note that Cottonwood trees are prohibited (§240-7) and should be replaced in the proposed plant list. Note that, as this area of trees provides screening from the adjoining residential property, replacement trees must be a minimum of six feet in height at the time of installation (§15-5.0202.C.3). Existing cottonwood trees are no longer accounted for in credit, and more trees have been added.
- The portion of the wetland setback disturbed for grading must be restored to the standards of §15-4.0102.I.1. Proposed Agrecol Stormwater seed mix is an appropriate seed mix for this requirement. Note that turf grasses are prohibited, and mowing is not permitted within the setback. A note that turf grasses are prohibited, and mowing is not permitted within the setback has been added.
- 27) The applicant must install temporary fencing along the wetland buffer during construction to protect the wetland buffer and wetland. Silt fence has been shown and we request that it be allowed to be considered the temporary fencing.

#### Requirements of Prior Approvals

28) In addition to the requirements of the Unified Development Ordinance regarding the protection of natural resources, prior Site Plan Amendments included the requirement that natural resources including trees on the be protected via conservation easements. We believe that the submitted conservation easement addresses this comment.

#### **Other Department Comments**

Inspection Services, Engineering, Police and Fire did not have additional comments on the proposed site plan amendment.





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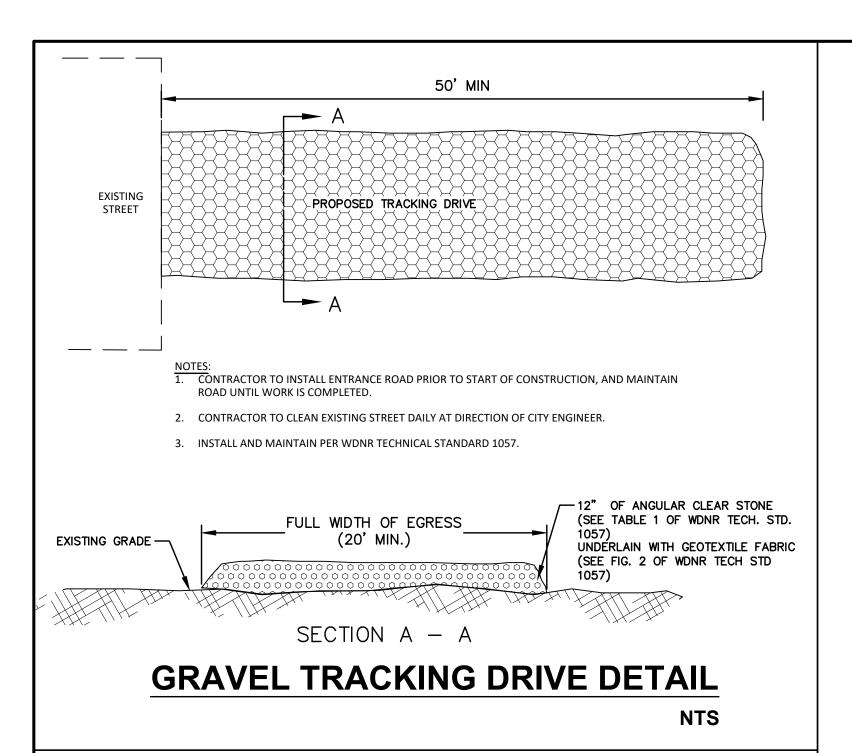
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DATE:

FEBRUARY 17, 2022

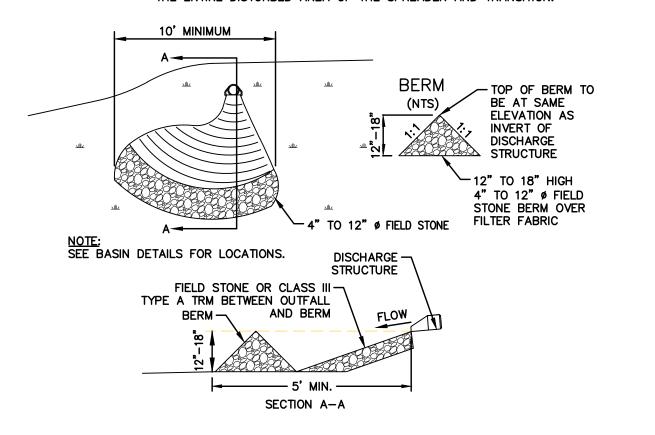
PROJECT LOCATION EXHIBIT VICTORY OF THE LAMB CHURCH PARKING LOT EXPANSION CITY OF FRANKLIN, WI

EXHIBIT NO. 1

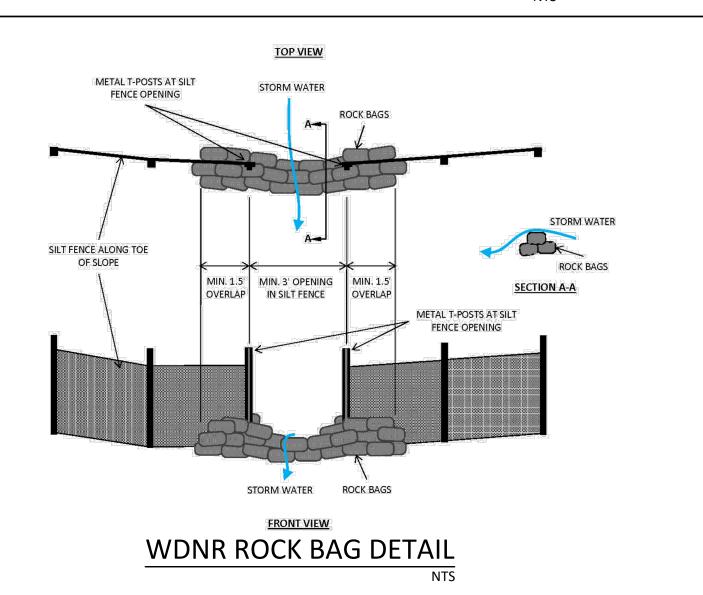


## LEVEL SPREADER CONSTRUCTION NOTES:

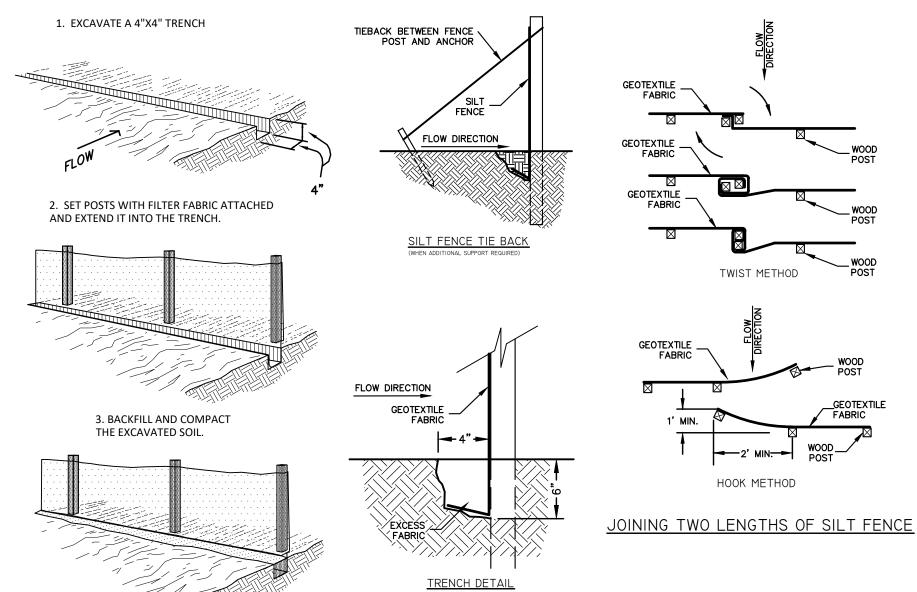
 ENSURE THAT THE SPREADER LIP IS LEVEL THROUGHOUT ITS LENGTH. CONSTRUCT THE LEVEL SPREADER ON DISTURBED SOIL (NOT ON FILL). IMMEDIATELY AFTER CONSTRUCTION, APPROPRIATELY SEED AND MULCH THE ENTIRE DISTURBED AREA OF THE SPREADER AND TRANSITION.



FIELD STONE LEVEL SPREADER DETAIL



06/18/202



- INSTALL AND MAINTAIN PER DNR TECHNICAL STANDARD 1056 TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO
- FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL. WOOD POST SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS
- NECESSARY, USE ONE OF THE THE FOLLOWING TWO METHODS: A) TWIST METHOD - - OVERLAP THE END POST AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, OR

HOOK METHOD - - HOOK THE END OF EACH SILT FENCE LENGTH.

## SILT FENCE DETAIL

# 3" ASPHALT SURFACE COURSE <sup>—</sup> 2 ⅓" ASPHALT BINDER COURSE 8" THICK CRUSHED AGGREGATE BASE

# ASPHALT CROSS SECTION

## **CONSTRUCTION SCHEDULE:**

## 1. INSTALL THE TEMPORARY TRACKING DRIVE.

- INSTALL PERIMETER SILT FENCING.
- STRIP AND STOCKPILE TOPSOIL FROM BASIN AREA. GRADE, CONSTRUCT, AND RESTORE BASIN AREA TO FINAL DESIGN. THE BASIN WET AREA IS TO BE USED AS A SEDIMENT CONTROL DEVICE DURING SITE CONSTRUCTION. CONTRACTOR TO ENSURE ALL SITE RUNOFF IS DIRECT TO BASIN WET AREA DURING SITE CONSTRUCTION ACTIVITES. NOTE: THIS MAY REQUIRE TEMPORARY DIVERSION SWALES AND OTHER TEMPORARY DIVERSION METHODS NOT NECESSARILY SHOWN ON THE PLANS TO ENSURE ALL SITE DRAINAGE IS DIRECTED TOWARD THE BASIN DURING SITE CONSTRUCTION.
- 4. STRIP AND STOCKPILE TOPSOIL FOR REMAINDER OF SITE.
- 5. GRADE PARKING AREA TO SUBGRADE.
- 6. INSTALL PARKING AREA SUBGRADE, ASPHALT, AND COMPLETE FINAL GRADING & RESTORATION OF DISTURBED TURF AREAS. NOTE: FINAL GRADING & RESTORATION MAY OCCUR CONCURRENTLY WITH PARKING AREA CONSTRUCTION.
- 7. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES ONCE SITE HAS ACHIEVED 95% VEGETATIVE COVER AND REMOVE ALL ACCUMULATED SEDIMENT FROM SEDIMENT TRAP AREAS WITHIN BASIN. ALL DAMAGE CAUSED TO SITE AND/OR BASIN DURING SAID REMOVALS SHALL BE RESTORED BY THE CONTRACTOR IN-KIND AND IS CONSIDERED INCIDENTAL TO RESTORATION ACTIVITIES. NOTE: CONTRACTOR TO ENSURE THAT BASIN CLAY LINER IS NOT DAMAGED WHILE REMOVING ANY ACCUMULATED SEDIMENT. CONTRACTOR TO REPAIR ANY DAMAGE TO SAID LINER CAUSED DURING RESTORATION ACTIVITIES AND IS CONSIDERED INCIDENTAL TO RESTORATION ACTIVITIES.

#### **EROSION CONTROL:**

- 1. CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE "WISCONSIN STORMWATER CONSTRUCTION AND POST-CONSTRUCTION TECHNICAL STANDARDS".
- 2. SEDIMENT CONTROL MEASURES MAY NEED TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION
- PROVIDE WEEKLY INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. SEDIMENT CONTROL MEASURES ARE TO BE IN WORKING CONDITION AT THE END OF EACH DAY.
- 4. INSPECT SEDIMENT CONTROL STRUCTURES FOR INTEGRITY AFTER ANY SIGNIFICANT RAINFALL OF 1/2" OR MORE. CORRECT ANY DAMAGED STRUCTURES IMMEDIATELY.
- 5. DO NOT REMOVE ANY SEDIMENT/EROSION CONTROL MEASURES UNTIL THE AREAS SERVED HAVE 95% OR MORE ESTABLISHED VEGETATIVE COVER AS DETERMINED BY THE
- 6. ALL TRACKED SOIL ON ADJACENT STREETS FROM THIS PROJECT MUST BE CLEANED ON A DAILY BASIS, MINIMUM. CONTRACTORS ARE REQUIRED TO USE THE TRACKING DRIVE SHOWN ON PLAN FOR ACCESS TO AND FROM THE SITE.
- 7. ALL SIDE SLOPES 4:1 OR STEEPER SHALL BE RESTORED WITH CLASS I TYPE 'A' EROSION MATTING, AND ALL AREAS OF CONCENTRATED FLOW SHALL BE RESTORED WITH CLASS II TYPE
- 'B' CHANNEL MATTING, UNLESS OTHERWISE NOTED. ALL SLOPES PROTECTED ONLY BY SILT FENCE MUST BE FULLY RESTORED WITHIN 30 DAYS OF DISTURBANCE.
- 9. PREVENT OVERLAND FLOW FROM LEAVING ANY PORTION OF THE WORK SITE BY INSTALLING SEDIMENT LOGS OR SILT FENCING PARALLEL TO THE SLOPE DOWNHILL FROM THE WORK
- 8. ALL DISTURBANCE TO WET PONDS SHALL BE SEEDED AND MATTED WITHIN 7 DAYS OF COMPLETION OF THE GRADING. GRASS MUST BE ESTABLISHED WITHIN 90 DAYS OF SEEDING.
- STABILIZE ALL NON-ACTIVE STOCKPILES WITH TEMPORARY SEED & MULCH WITHIN 7 DAYS OF INACTIVITY AND/OR WITHIN 30 DAYS OF LAYUP. INSTALL SILT FENCING AROUND ALL DOWN SLOPE AND SIDE SLOPES OF TOPSOIL STOCKPILES. STOCKPILES NOT SHOWING ADEQUATE VEGETATION BY NOV 1 SHOULD BE DORMANT SEEDED AND COVERED WITH A WisDOT PAL TYPE A SOIL STABILIZER (FOR SLOPES 3 FEET HORIZONTAL TO 1 FOOT VERTICAL OR FLATTER) OR EROSION CONTROL MAT.
- 10. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF INACTIVITY. THIS MAY BE DONE USING TEMPORARY AND/OR PREEMINENT RESTORATION TECHNIQUES, DEPENDING
- ON PROGRESS OF GRADING ACTIVITIES OF THE AREA(S). THIS INCLUDES AREAS OF SITE DEVELOPMENT **AND** UTILITY CONSTRUCTION.
- 11. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION A. PLACE EXCAVATED TRENCH MATERIAL ON HIGH SIDE OF THE TRENCH.
  - B. BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER UTILITY INSTALLATION.

- 1. DEWATERING IS NOT ANTICIPATED. HOWEVER, IF DEWATERING IS REQUIRED, SEE DEWATERING NOTES FOR DETAILS.
- 2. NO WETLAND DISTURBANCE IS ALLOWED.
- 3. ALL TEMPORARY SOIL STOCKPILES SHALL NOT BE LOCATED WITHIN 25 FEET OF A DRAINAGE WAY OR A WETLAND, SHALL BE PROTECTED WITH SILT FENCING AROUND THE DOWNSLOPE AND SIDESLOPES OF THE PILE, AND STABILIZED WITH TEMPORARY SEEDING IF LEFT INACTIVE FOR 7 DAYS OR MORE.
- 4. CUT AND FILL SLOPES WILL BE 3:1 MAX. OR FLATTER OUTSIDE THE ROAD RIGHT-OF-WAY, UNLESS OTHERWISE NOTED.
- 5. TEMPORARY SEEDING TO CONFORM WITH SECTION 630.2.1.5.1.2 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (ANNUAL OATS) NOTE: FALL PLANTINGS TO INCLUDE WINTER WHEAT OR RYE ADDED TO MIXTURE. SEE WINTER STABILIZATION NOTES FOR ADDITIONAL DETAILS.
- 6. TOPSOIL SHALL NOT BE USED AS FILL MATERIAL IN THE NON-STRUCTURAL AREAS UNTIL ALL SOURCES OF STRUCTURAL CUT AND TRENCH SPOILS HAVE BEEN EXHAUSTED, UNLESS OTHERWISE INDICATED OR INSTRUCTED BY OWNER OR PROJECT
- 7. RESTORATION SHALL BE 6" TOPSOIL (REASONABLY FREE OF STONES, STICKS, ROOTS, AND OTHER OBJECTIONABLE MATTER AND DEBRIS). ONCE TOPSOIL HAS BEEN SPREAD, THE AREA SHALL BE SEEDED WITH SEED MIXTURE NO. 40 IN SECTION 630 OF THE "STATE SPECIFICATIONS". UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL APPLY A FERTILIZER (20-0-0) OVER THE SEEDED AREA AT A RATE OF 7 POUNDS PER 1000 SQUARE FEET. THIS AREA SHALL BE MAINTAINED BY THE CONTRACTOR. STRAW MULCH SHALL BE PLACED IN ACCORDANCE WITH METHODS "B" OR "C", AS DESCRIBED IN SECTION 627 OF THE "STATE SPECIFICATIONS", EXCEPT THAT THE MULCH SHALL BE PLACED WITHIN ONE (1) DAY AFTER THE SEEDING
- 8. INSTALLATION OF ANCHORED HAY OR MULCH SHOULD NOT OCCUR OVER SNOW GREATER THAN 1 INCH IN DEPTH. MULCH APPLIED DURING WINTER SHOULD BE ANCHORED WITH NETTING OR AN APPROVED TACKIFIER FROM THE WisDOT PAL
- 9. OFF STREET PARKING STALLS MUST BE MARKED BY PAINTED LINES OR OTHER APPROVED MATERIAL AND SHALL BE MAINTAINED SO AS TO BE LEGIBLE AT ALL TIMES.
- 10. ADDITIONAL DATA MAY BE REQUIRED BY THE PLAN COMMISSION, ZONING ADMINISTRATOR, CITY PLANNER, OR THE CITY ENGINEER.

## LATE SEASON/WINTER STABILIZATION NOTES

VEGETATED CHANNELS (ROADSIDE SWALES AND OTHER STORMWATER CONVEYANCES): ALL PLANNED VEGETATED CHANNELS SHALL BE STABILIZED WITH BMPS (EROSION CONTROL MATTING, SOD, ETC.) BY NO LATER THAN NOVEMBER 15 IN ACCORDANCE WITH DNR TECHNICAL STANDARDS AND THE CRITERIA LISTED BELOW. DITCH CHECKS, SEDIMENT TRAPS AND OTHER SEDIMENT CONTROL BMPS ARE ONLY FOR USE DURING CHANNEL GRADING WORK, AND MUST BE REPLACED WITH FINAL SITE STABILIZATION BMPS PER THE APPROVED PLANS ASAP. NONE OF THESE ARE SUITABLE FOR CONTROLLING EROSION/SEDIMENTATION OF OPEN CHANNELS OVER WINTER.

TIMING DETERMINES REQUIREMENTS AND BMPS: THE STABILIZATION BMPS THAT MUST BE IMPLEMENTED DEPEND ON THE TIMING OF THE SEEDING (COOL SEASON GRASSES), AND ARE ORGANIZED IN THREE RISK CATEGORIES, AS LISTED BELOW. THE LATER THE TIMING, THE LOWER THE SUCCESS RATES ARE FOR TIMELY VEGETATIVE COVER — AND THEREFORE THE HIGHER THE RISKS OF EROSION AND OFF—SITE SEDIMENT DISCHARGES.

- RISK LEVEL 1: PERMANENT VEGETATION (BEFORE SEPTEMBER 15): TO ENSURE SUCCESSFUL FALL SEED GERMINATION, TOPSOIL, SEED AND FERTILIZE ALL DISTURBED AREAS BY SEPTEMBER 15 IN ACCORDANCE WITH THE
- SEEDING. PREPARE SEEDBED AND SOW SEEDS PER THE RATES AND MIXES OF WISCONSIN DEPARTMENT OF
- SEEDING. PREPARE SEEDBED AND SOW SEEDS PER THE RATES AND MIXES OF WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) ROADWAY STANDARD SECTION 630.

  EROSION CONTROL: IMMEDIATELY APPLY MULCH, EROSION CONTROL MATTING, OR OTHER PERMANENT STABILIZATION BMPS AS SPECIFIED IN THE APPROVED EROSION CONTROL PLANS. APPLICATION OF ALL EROSION CONTROL MEASURES SHALL FOLLOW DNR TECHNICAL STANDARDS.

  MAINTENANCE: INSPECT ALL SEEDED AREAS WEEKLY. ENSURE ADEQUATE WATER IS PROVIDED UNTIL FULL VEGETATIVE COVER IS OBTAINED, AND REPAIR ANY EROSION PROBLEMS, WASH OUTS, ETC.

  RISK LEVEL 2: TEMPORARY VEGETATION (BEFORE OCTOBER 15): DUE TO THE COOLER SOIL TEMPERATURES AND THE LIKELIHOOD OF OVERNIGHT FROST CONDITIONS, PERENNIAL COOL SEASON PLANT GROWTH IS SLOW AND SURVIVAL IS AT RISK FROM SEPTEMBER 15 OCTOBER 15. TO OFFER MORE PROTECTION FROM SOIL EROSION DURING THIS PERIOD, TOPSOIL, SEED AND FERTILIZE ALL DISTURBED AREAS BY OCTOBER 15 IN ACCORDANCE WITH THE FOLLOWING:
- SEEDING: THE ABOVE NOTED SEEDING MIX MUST INCLUDE A MINIMUM OF 2 LBS. PER 1,000 SQ. FT. OF A TEMPORARY COVER (I.E. WINTER WHEAT OR ANNUAL RYE GRASS FOR FALL PLANTINGS) PER .

  EROSION CONTROL: IMMEDIATELY APPLY MULCH, EROSION CONTROL MATTING, OR OTHER STABILIZATION BMPS AS SPECIFIED IN THE APPROVED PLAN, FOLLOWING DNR TECHNICAL STANDARDS. THE FOLLOWING ARE MINIMUM REQUIREMENTS FOR STABILIZING SITES DURING THIS PERIOD. APPROVED PLANS MAY BE MORE RESTRICTIVE DUE TO SITE CONDITIONS:
- CHANNEL FLOW (ROADSIDE SWALES, ETC.) AND BACKSLOPES: STAKE EROSION MATTING OVER ALL THE ENTIRE CHANNEL CROSS—SECTION AND ALL BACK SLOPES USING A MINIMUM WISDOT EROSION
- OTHER DISTURBED AREAS: APPLY TYPE B SOIL STABILIZER, MULCH AND TACKIFIER FROM THE PAL TO ALL DISTURBED AREAS THAT REMAIN EXPOSED.

CONTROL PRODUCT ACCEPTABILITY (PAL) CLASS 3 TYPE A MATTING, UNLESS OTHERWISE CALLED FOR IN

• INFALLS/OUTFALLS: INSTALL SOD PADS (2 ROLLS) AT ALL CULVERT OUTFALLS, AND OTHER HIGH-EROSION LOCATIONS IN ACCORDANCE WITH COUNTY STANDARDS.

MAINTENANCE: INSPECT ALL SEEDED AREAS WEEKLY. ENSURE ADEQUATE WATER IS PROVIDED UNTIL FULL

TEMPORARY COVER IS OBTAINED, AND REPAIR ANY EROSION PROBLEMS, WASH OUTS, ETC.

- RISK LEVEL 3: DORMANT SEEDING (BEFORE NOVEMBER 15): FOR AREAS NOT STABILIZED BY OCTOBER 15, EROSION RISKS ARE HIGH AND ADDITIONAL EROSION CONTROL MEASURES AND OVERSIGHT ARE REQUIRED, AS DESCRIBED BELOW. TEMPORARY SEEDING MUST STILL BE DONE, BUT FALL GERMINATION AND SURVIVAL MAY BE VERY LIMITED. FOR PERENNIAL PLANTS, DORMANT SEEDING SHOULD BE DONE BETWEEN OCTOBER 20 AND NOVEMBER 15. THIS MEANS SEED GERMINATION IS PLANNED FOR THE FOLLOWING SPRING. TO OFFER MORE PROTECTION FROM SOIL EROSION DURING THIS PERIOD, TOPSOIL, SEED AND FERTILIZE ALL DISTURBED AREAS BY NOVEMBER 15 IN ACCORDANCE WITH THE FOLLOWING:
- SEEDING RATE: SAME SEED MIX AS RISK LEVEL 2 (INCLUDING TEMPORARY COVER CROP) EXCEPT THE RATES FOR PERENNIAL SPECIES MUST APPLIED AT 1.5 X WISDOT SECTION 630 RATES (APPLY RATES OF 3-5 LBS./1000 SQ.FT.). RATES ARE INCREASED TO DORMANT SEEDING DUE TO FROZEN CONDITIONS. RATES ARE INCREASED TO ALLOW FOR POOR GERMINATION RATES ASSOCIATED WITH
- EROSION CONTROL: IN ADDITION TO APPLYING TOPSOIL, THE ABOVE NOTED SEED MIX AND STARTER FERTILIZER, THE FOLLOWING ARE MINIMUM REQUIREMENTS FOR STABILIZING SITES DURING THIS PERIOD. APPROVED EROSION CONTROL PLANS MAY BE MORE RESTRICTIVE:
- CHANNEL FLOW (ROADSIDE SWALES, ETC.) AND BACKSLOPES: APPLY TYPE A SOIL STABILIZER AND STAKED PAL CLASS 3 TYPE A EROSION MATTING OVER THE ENTIRE CHANNEL AND ALL BACKSLOPES.
   OTHER AREAS: APPLY TYPE A SOIL STABILIZER FROM THE PAL TO ALL OTHER DISTURBED AREAS THAT
- INFALLS/OUTFALLS: INSTALL SOD PADS (2 ROLLS) AT ALL CULVERT OUTFALLS, AND OTHER HIGH-EROSION LOCATIONS IN ACCORDANCE WITH COUNTY STANDARDS.
- MAINTENANCE: INSPECT ALL SEEDED AREAS WEEKLY. ENSURE ADEQUATE WATER IS PROVIDED UNTIL FULL TEMPORARY COVER IS OBTAINED, AND REPAIR ANY EROSION PROBLEMS, WASH OUTS, ETC.
- REPORTS: THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR EMAILING A REPORT TO THE LRD BY 4:30 PM EVERY WEDNESDAY AFTER OCTOBER 15, WHICH SHALL INCLUDE THE FOLLOWING INFORMATION:

   DETAILED STATUS OF ALL LAND DISTURBING AND STABILIZATION ACTIVITIES AS OF THE DAY OF THE
- REPORT.

  RESULTS OF EROSION CONTROL SITE INSPECTIONS SINCE OCTOBER 15 OR THE PREVIOUS REPORT, WHICHEVER IS SHORTER.

  ANY EROSION CONTROL FAILURES ENCOUNTERED AND ACTIONS TAKEN TO RECTIFY.

  PROJECTIONS FOR COMPLETION OF ALL STABILIZATION ACTIVITIES, INCLUDING A 10-DAY PLAN BASED ON THE LATEST WEATHER PREDICTIONS.

#### **DEWATERING NOTES:**

CONTRACTOR TO OBTAIN ALL NECESSARY PERMIT(S).

- 2. NOTIFY WDNR IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION, OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR MORE). DEWATER ONLY AFTER THE APPROPRIATE WDNR DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
- 3. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. LIMIT PUMPING RATES TO EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE, OR (B) THE BASIN DESIGN RELEASE RATE WITH THE CORRECTLY-FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061.
- 4. ALL DEWATERING DISCHARGE TO BE DIRECTED TO A 12'x10' (MIN) TYPE I DEWATERING FILTRATION BAG THEN DISCHARGE SHALL PASS THROUGH AN EXISTING VEGETATIVE BUFFER FILTER STRIP OR A PROTECTIVE LINER SHALL BE PLACED OVER DISTURBED GROUND. DISCHARGE SHALL NOT BE ALLOWED TO FLOW OVER UNPROTECTED GROUND.



VICTORY OF THE LAMB PARKING LOT EXPANSION FRANKLIN, WI

**CONSTRUCTION NOTES & DETAILS** 

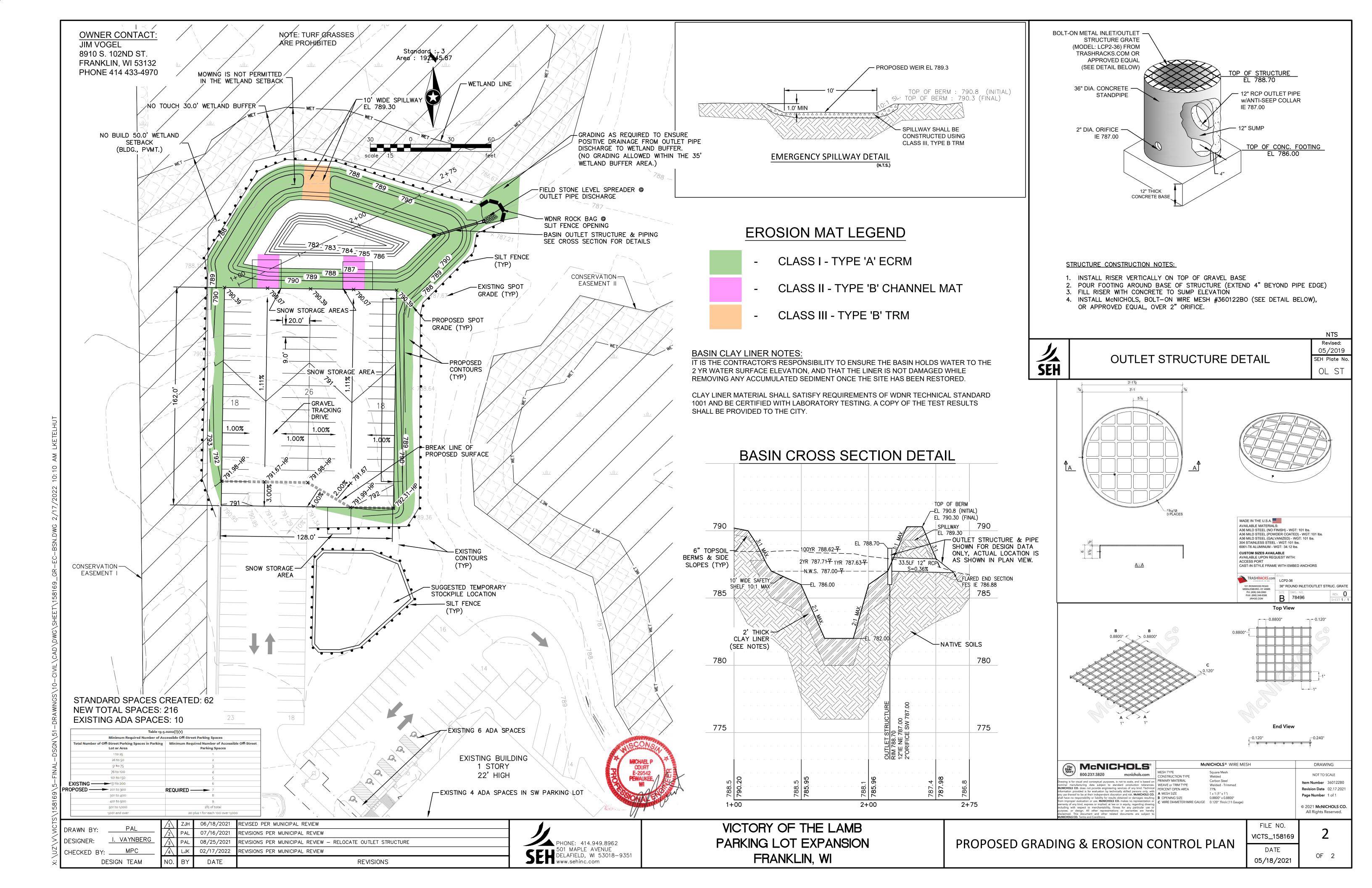
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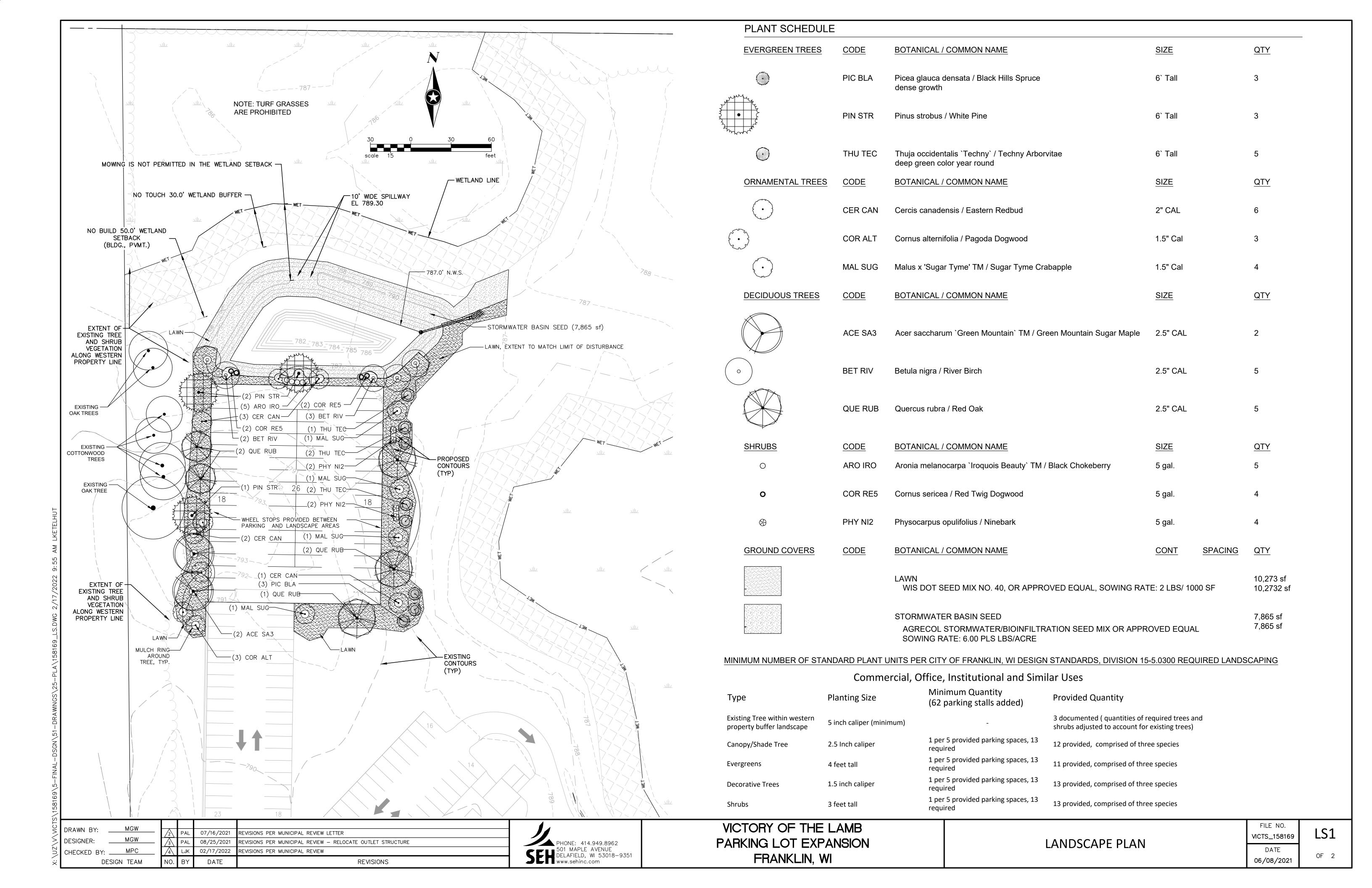
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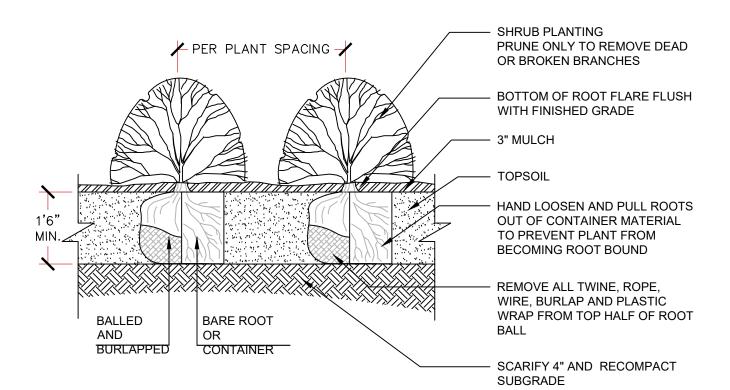
DRAWN BY: 07/16/202 REVISIONS PER MUNICPAL REVIEW I. VAYNBERG DESIGNER: 08/25/2021 REVISIONS PER MUNICIPAL REVIEW - RELOCATE OUTLET STRUCTURE 02/17/2022 REVISIONS PER MUNICIPAL REVIEW CHECKED BY: DESIGN TEAM DATE REVISIONS

REVISED PER MUNICIPAL REVIEW

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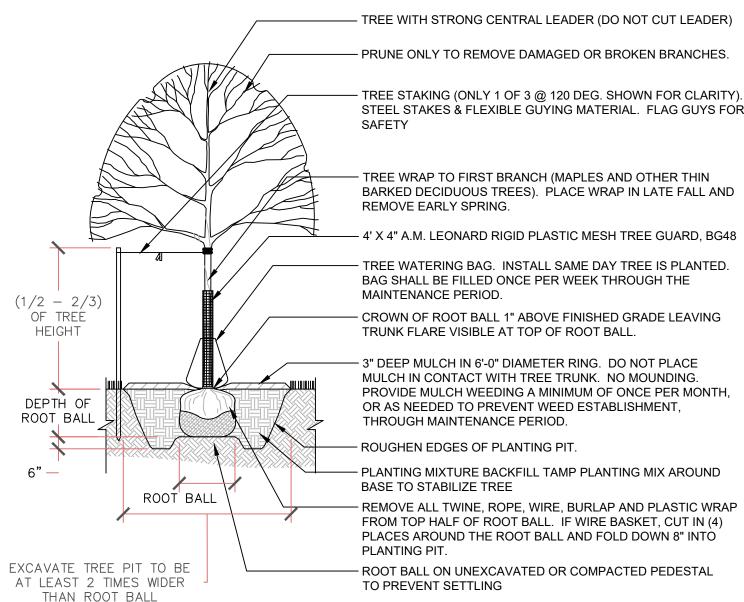




- SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING
- SCARIFY SIDES AND BOTTOMS OF HOLE. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS
- TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
- WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
- BACKFILL VOIDS AND WATER SECOND TIME. 7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE



SHRUB PLANTING 1/2" = 1'-0"



COMPACTED TOPSOIL SAUCER, DO NOT EXCEED ANGLE OF REPOSE SET ROOT COLLAR FLUSH WITH SLOPE GRADE - 3" DEEP SHREDDED HARDWOOD MULCH - PLANTING MIXTURE - ROOT BALL SEE PLANTING DETAIL 12" MIN. (TREES) 6" MIN. (SHRUB)

TREE PLANTING

1/4" = 1'-0"

329343-01

TREE PLANTING ON SLOPE

#### PLANTING NOTES

- 1. EXISTING TREES FOUND ON SITE SHALL BE PROTECTED AND SAVED UNLESS NOTED TO BE REMOVED OR ARE LOCATED IN AN AREA TO BE GRADED. QUESTIONS REGARDING EXISTING PLANT MATERIAL SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO REMOVAL.
- 2. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. THE OWNER WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE OWNER.
- 4. SALVAGE TOPSOIL FROM THE EARTHWORK AREAS AS APPROPRIATE AND/OR AS DIRECTED BY OWNER AND STOCKPILE FOR REUSE IN LOCATION APPROVED BY OWNER.
- 5. AREAS UNDER PLANTING BEDS SHALL NOT CONTAIN COMPACTED AGGREGATE TO ALLOW FOR PROPER DRAINAGE AND GROWTH OF PLANT MATERIAL. REMOVE AGGREGATE AND PERFORM SUBSOILING AS NECESSARY TO OBTAIN LOOSE, FREE DRAINING SUBGRADE BELOW PLANTING BEDS. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS.
- 6. CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS.
- 7. ALL SEED & SOD AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL.
- 8. ALL PLANTING BEDS SHALL RECEIVE 18" DEPTH OF PREPARED SOIL.
- 9. PAINT OR STAKE LIMITS OF SEEDING FOR REVIEW BY OWNER PRIOR TO SEEDING.
- 10. NEW SEEDED AREAS TO BE TREATED WITH HERBICIDE TO KILL ALL EXISTING GROUNDCOVER. THERE SHALL BE A MINIMUM OF TWO (2) APPLICATIONS SEPARATED BY 10 DAYS. IF ALL EXISTING GROUNDCOVER VEGETATION IS NOT KILLED WITHIN 10 DAYS OF 2<sup>nd</sup> APPLICATION, A 3<sup>rd</sup> APPLICATION IS REQUIRED.
- 11. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 12. ALL PLANTING BEDS SHALL HAVE A SHOVEL CUT EDGE, UNLESS OTHERWISE SPECIFIED.
- 13. ALL PLANTING BEDS AND PLANTED TREES SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH PER PLANTING DETAILS. MULCH SHALL BE CONSIDERED INCIDENTAL TO PLANT MATERIALS.
- 14. LAWN SEED SHALL BE ESTABLISHED BY THE CONTRACTOR TO A DENSE, GREEN CONSISTENT LAWN VOID OF ANY BARE OR PATCHY AREAS LARGER THAN 3" X 3".
- 15. SEED PRIOR TO OCT. 15. IF SEEDED AFTER OCT. 15, MAINTAIN AND ESTABLISH LAWN UNTIL SPRING REVIEW.
- 16. NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL BY THE OWNER. ALL PLANT MATERIAL AND SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION.
- 17. CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 18. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A PERMANENT, ON-SITE, IRRIGATION SYSTEM THAT PROVIDES COMPLETE COVERAGE TO ALL NEW LIVING LANDSCAPED AREAS. WATERING SYSTEMS SHALL BE DESIGNED TO WATER LANDSCAPED AREAS EFFICIENTLY AND AVOID IRRIGATION OF ADJACENT PARKING AREAS AND ACCESS DRIVES, SIDEWALKS, AND BUILDINGS. HOSE BIBS, IF USED, MUST BE LOCATED WITHIN 100 FEET OF ANY LANDSCAPED AREA.

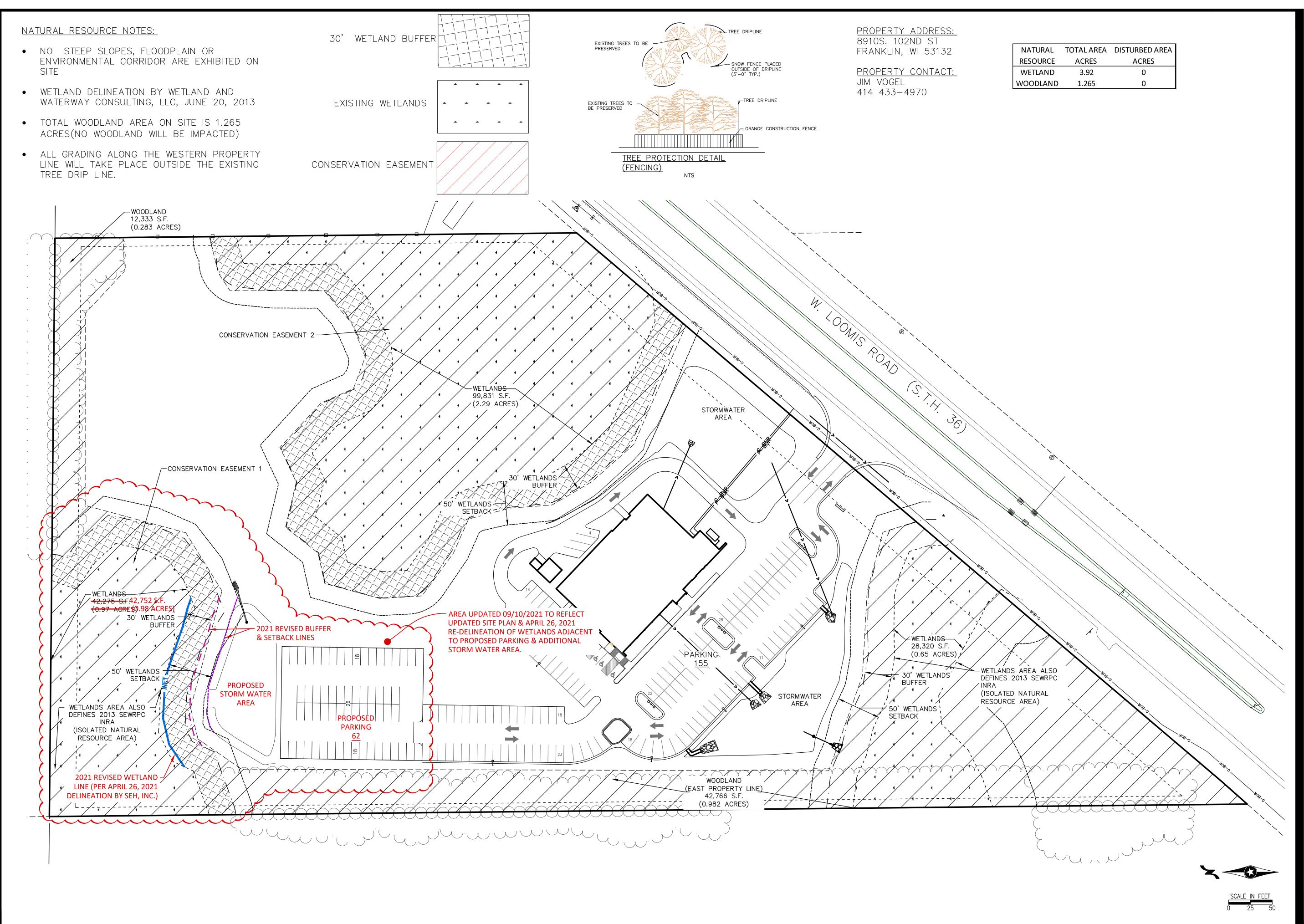
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| DESIGNER:   | MGW  | 3   | PAL  | 08/25/2021 | REVISIONS PER MUNICIPAL REVIEW — RELOCATE OUTLET STRUCTURE |
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VICTORY OF THE LAMB PARKING LOT EXPANSION FRANKLIN, WI

329343-02

| FILE NO.<br>ICTS_158169 | LS2  |
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CITY OF FRANKLIN, WISCONSIN

PROJECT
NUMBER 16147

DATE APRIL, 2015

DRAWN BY PAL

CHECKED BY

REVISION HISTORY

 REVISION HISTORY

 PER REVIEW
 06-02-2015

 PER CITY/DOT REV. 06-23-2015

 PER DOT REV.
 07-10-2015

 PER CITY REV.
 07-29-2015

PER CITY REV. 07–29–2015

SITE REVISIONS 09-10-2021

SHEET NUMBER

4.0

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