

PLAN COMMISSION
October 23, 2018
6:00 P.M.

Common Council Chambers 8040 S. 6<sup>TH</sup> Street Oak Creek, WI 53154 (414) 766-7000

Daniel Bukiewicz - Chair
Dawn Carrillo
Chaucey Chandler
Patrick Correll
Chris Guzikowski
Brian Johnston
Gregory Loreck
Fred Siepert
Christine Hanna
Edward Ciechanowski – ex-officio
Doug Seymour – ex-officio

#### The City's Vision

Oak Creek: A dynamic regional leader, connected to our community, driving the future of the south shore.

- 1. Call Meeting to Order
- 2. Roll Call
- 3. Approval of Minutes October 9, 2018
- 4. Significant Common Council Actions
- 5. New Business
  - a. SIGN PLAN REVIEW Review a proposed master sign plan submitted by I-Kenosha, LLC, c/o ICAP Development, for the multitenant commercial building at 500 W. Drexel Ave. (Tax Key No. TBD). Follow this item on Twitter @OakCreekPC#OCPCIKenosha.
  - PLAN REVIEW Review site, building, landscaping, and related plans submitted by Philip Annis, TH – Oak Creek, WI-1-UT, LLC, for community hospital building on a portion of the property at 7869 S. 13<sup>th</sup> St. (Tax Key No. 784-9993-001). Follow this item on Twitter @OakCreekPC#OCPCHospital.
  - c. CERTIFIED SURVEY MAP Review a certified survey map submitted by Hume An, MVAH Partners, combining the properties at 7266 and 7328 S. Howell Ave. (Tax Key Nos. 766-0014-000 and 766-0015-000). Follow this item on Twitter @OakCreekPC#OCPCmvahCSM.

Adjournment.
Dated this 19 day of October, 2018
Posted 10/19/2018

#### **Public Notice**

Upon reasonable notice, a good faith effort will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aid at no cost to the individual to participate in public meetings. Due to the difficulty in finding interpreters, requests should be made as far in advance as possible preferably a minimum of 48 hours. For additional information or to request this service, contact the Oak Creek City Clerk at 766-7000, by fax at 766-7976, or by writing to the ADA Coordinator at the Oak Creek Health Department, 8040 S. 6<sup>th</sup> Street, Oak Creek, Wisconsin 53154.

It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above-stated meeting to gather information; no action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice

# DRAFT MINUTES OF THE OAK CREEK PLAN COMMISSION MEETING TUESDAY, OCTOBER 9, 2018

Mayor Bukiewicz called the meeting to order at 6:00 p.m. The following Commissioners were present at roll call: Commissioner Hanna, Commissioner Carrillo, Alderman Guzikowski, Commissioner Siepert and Commissioner Chandler. Commissioner Johnston, Commissioner Loreck, and Commissioner Correll were excused. Also present: Kari Papelbon, Planner; Zoning Administrator/Planner Wagner; Director of Community Development Douglas Seymour.

#### Minutes of the September 25, 2018 meeting

Commissioner Siepert moved to approve the minutes of the September 25, 2018 meeting. Commissioner Chandler seconded. On roll call: all voted aye. Motion carried.

PUBLIC HEARING SIGN APPEAL KELVIN SCHROEDER JEWELERS 8645 S. HOWELL AVE. TAX KEY NO. 828-9001-000

Zoning Administrator/Planner Wagner read the public hearing notice into the record.

Mayor Bukiewicz made three calls for public comment. Seeing none, the public hearing was declared closed.

SIGN APPEAL KELVIN SCHROEDER JEWELERS 8645 S. HOWELL AVE. TAX KEY NO. 828-9001-000

Commissioner Siepert asked if the applicant would be occupying both tenant spaces. Kelvin Matthew Schroeder, owner of Kevin Schroeder Jewelers, stated yes, they will occupy a double unit.

Commissioner Chandler asked if this is the same size sign as the one next to it. Zoning Administrator/Planner Wagner responded that what makes this different than the typical sign plan is that when Mattress Firm and Papa John's was there, it was a two tenant building. When there is a two-tenant building, the same rules do not apply as with a three or more tenant building. They met the rule of no more than 20% of the wall façade with the cap of 100 square feet. When Mattress Firm left, they split up the tenant space and made them smaller. When they came back with the master sign plan, they proposed a plan which was approved by the Plan Commission to allow Papa John's to have that one larger of two signs on that corner tenant space. The rest of the master plan states it is based on the linear frontage. The remaining tenant spaces were broken out 19 feet for each one. This sign appeal is being requested because they have both tenant spaces B and C and they are using that same façade area that Mattress Firm used to allow them to have a similar size sign that Mattress Firm had. The variance motion was worded that the condition will approve this larger sign only if the tenant of the multi-tenant space occupies both B and C.

Zoning Administrator/Planner Wagner added that the design and the number of signs that they are asking for conform to Code.

Alderman Guzikowski stated that he concurs with staff's recommendations.

Mayor Bukiewicz stated that it is a definite improvement for that building.

Commissioner Siepert moved that the Plan Commission allow a wall sign of up to 60 square feet if the tenant occupies both spaces B and C. Commissioner Hanna seconded. On roll call: all voted aye. Motion carried.

PLAN COMMISSION CONSULTATION DISCUSSION OF A PROPOSED MULTIFAMILY RESIDENTIAL DEVELOPMENT 8100 AND 8146 S.  $27^{TH}$  ST. AND 8100 S ORCHARD WAY TAX KEY NOS. 810-9012-001, 810-9005-000 AND 810-9013-001

Mayor Bukiewicz announced that this item has been held at the request of the applicant.

PLAN COMMISSION CONSULTATION
DISCUSSION OF A PROPOSED MULTIFAMILY RESIDENTIAL DEVELOPMENT
441 W. RYAN RD.
TAX KEY NO. 906-9028-001

Mayor Bukiewicz announced that this item has been held at the request of the applicant.

CERTIFIED SURVEY MAP HIGHGATE, LLC 7869 S. 13<sup>TH</sup> ST. TAX KEY NO. 784-9993-001

Planner Papelbon provided an overview of this certified survey map request. (See staff report for details.)

Commissioner Hanna asked how the wetland will be avoided and not impacted. Planner Papelbon responded that the wetland is delineated on the CSM. It will be on Lot 1. Whenever Lot 1 is developed, they will have to incorporate that into their overall development plans. As long as it is reflected on the CSM, the wetland has no other impact to this proposal. Planner Papelbon stated that it is a condition of approval that the wetlands are shown on all three pages.

Commissioner Siepert asked if there is only going to be one entrance onto the property off of 13<sup>th</sup> Street. Planner Papelbon responded that they are showing one entry off of 13<sup>th</sup> Street, and that is by the proposed easement just south of the little notch-out for the one remaining residential property. Director Seymour stated that as Lot 1 develops and the planning progresses for Lot 1, which will be some type of Planned Unit Development; it is likely that the major access for the entire development will be further north at the north end of Lot 1, adjacent to the wetlands.

Commissioner Chandler asked for more information on why it is being divided into three lots. Planner Papelbon responded that Lot 2 (which was previously divided) was for a specific user. The applicant is proposing two additional lots that are for potential users of those two lots. Lot 1, as part of a master development plan, would come back if it needed to be redivided.

Mayor Bukiewicz asked members of the audience if they wished to speak on this item. There were none.

Alderman Guzikowski moved that the Plan Commission recommend to the Common Council that the Certified Survey Map submitted by John Thomsen, Highgate, LLC, for the property at 7869 S. 13<sup>th</sup> St. be approved with the following conditions:

- 1. That the CSM approved by the Common Council December 19, 2017 and the CSM approved by the Common Council on July 17, 2018 are submitted for recording prior to or concurrently with submission of this CSM for recording.
- 2. That the CSM is revised to incorporate all wetland areas on all sheets.
- 3. That easements (access, utilities, etc.) are depicted on the map prior to recording.
- 4. That all technical corrections, including, but not limited to spelling errors, minor coordinate geometry corrections (as provided), and corrections required for compliance with the Municipal Code and Wisconsin Statutes, are made prior to recording.

Commissioner Siepert seconded. On roll call: all voted aye. Motion carried.

PLAN REVIEW
CAMP BOW WOW
8411 S. LIBERTY LN.
TAX KEY NO. 828-0001-000

Planner Papelbon provided an overview of the plan review request. (See staff report for details.)

Todd Abrahms, 2675 Bradham Avenue, Hoffman Estates, IL, stated that they are removing or replacing almost all of the site features that exist on the site. They will be pulling all of the existing asphalt, curbing and wheel-stops out, repaving, restriping, and adding new sidewalks. They will be making sure that the parking lot will be well-lit and provide new foundation landscaping, 11 new trees and plantings that exist on Liberty Lane, and enhance the existing building's north elevation.

Commissioner Chandler asked for more information. Leah Bouchart, 8411 S. Liberty Lane, current camp director at the Waukesha location, stated that the current building is a little small for what they are looking to do. They are the premier provider of dog daycare and boarding in the area. The addition is going to add the boarding cabins, which is where dogs will stay overnight. It provides them their own individual space for meal times. The play yards are where they get to go out and play all day and interact with the other dogs.

Commissioner Siepert asked for a description of the fenced-in area. Mr. Bouchart responded that it is behind the buildings off behind the street so it cannot be seen directly from the street. It is 8' vinyl fencing. There will be five individual play yards outside that lead directly to the inside, so the dogs will get to choose whether they are inside or outside.

Alderman Guzikowski stated that this looks good and he looks forward to the rest of the addition being complete.

Commissioner Hanna asked about the drainage as it relates to adding impervious surface to the property. Mr. Abrahms responded that there is a small increase in impervious area. The building addition is taking up a portion of the existing paved area that is out there today. There is an existing detention pond to the south, so right now they are directing water to the north because at the time of design, they did not know this was an existing detention pond. Mr. Abrahms stated that with some slight modifications, they can revise that grading and make sure that area is draining to the southerly detention pond, as originally proposed.

Commissioner Hanna asked if there would be enough natural light going into the building with the amount of windows that are proposed. Ms. Bouchart stated that there are doors that lead from outside to inside and those doors are opened. They have tinted weather flaps, so they provide quite a bit of natural sunlight into the building.

Mayor Bukiewicz asked what the pet relief surface area would consist of. Ms. Bouchart stated that that area would be surfaced with a product called Canine Turf. It will have a concrete base. The turf pods sit on a spiked platform and the turf is on top of there. So it does have a good drainage system and that is hosed down regularly and the waste is picked up as soon as it is created and put into the trash cans in each play yard. That trash gets emptied a minimum of twice per day.

Mayor Bukiewicz invited Asst. Fire Chief Kressuk to speak on the fire suppression needs of the building. Asst. Fire Chief Kressuk stated that this is an addition to the existing structure. The existing structure is not sprinklered. It will have to be determined, per code, if a sprinkler system is required in the addition. If it does not meet the square footage or occupancy types for the inclusion of sprinkler systems, they highly recommend the inclusion of sprinkler systems into any type of structure.

Asst. Fire Chief Kressuk stated that there will be the potential for boarding overnight in addition to a high volume of pets. The NFPA does issue code guidance for boarding veterinary type facilities. On a smaller scale, it may be an emergency evacuation plan. The Fire Department will be working with the owner/occupant to develop that plan.

Alderman Guzikowski moved that the Plan Commission approves the site plans submitted by Brett Ippolite, Camp Bow Wow, for the property at 8411 S. Liberty Lane with the following conditions:

- 1. That all relevant Code requirements remain in effect.
- 2. That all parking areas meet the minimum required setbacks to the Liberty Lane right-of-way.
- 3. That landscape plans are revised to incorporate details for height of plants at installation and maturity.
- 4. That plans are revised to include details and elevations for the proposed dumpster enclosure.
- 5. That all revised plans (site, building, landscaping, etc.) are submitted in digital format for review and approval by the Department of Community Development prior to the submission of building permit applications.

Commissioner Siepert seconded. On roll call: all voted aye. Motion carried.

ZONING TEXT AMENDMENT

PARKING SETBACKS

SECTION 17.03170(i)(1)

Zoning Administrator/Planner Wagner provided a review of the zoning text amendment on parking setbacks. (See staff report for details.)

Commissioner Chandler asked why the change is such a huge difference in footage. Zoning Administrator/Planner Wagner responded that this particular setback will mirror what is in Drexel Town Square.

Mayor Bukiewicz clarified that this is a city-wide change, and does not only apply to Zund America or Drexel Town Square.

Commissioner Siepert moved that the Plan Commission recommends to the Common Council that Section 17.03170(i)(1) of the Municipal Code be amended as presented, requiring a 10-foot parking lot setback from the public right-of-way, after a public hearing.

Commissioner Chandler seconded. On roll call: all voted aye. Motion carried.

REZONE
CITY OF OAK CREEK
2600 W. SOUTHBRAND BLVD. AND 9810 S. 27<sup>TH</sup> ST.
M-1 (PUD) MANUFACTURING AND OO, MIXED USE OFFICE OVERLAY TO
M-1 (PUD), MANUFACTURING

Planner Papelbon provided an overview of the rezoning request. (See staff report for details.)

Commissioner Hanna asked how this is impacting the remaining offices in the area. Planner Papelbon responded that it does not. This area is the limits of the Southbranch Industrial Park, so south of these parcels is still available for office.

Commissioner Hanna stated that this is the face or entrance to Oak Creek. She asked how the City ensures that the manufacturing uses are not going to destroy the appearance of the 27<sup>th</sup> Street Corridor. Planner Papelbon responded that these are properties that have been part of Southbranch Industrial Park. They have always been manufacturing. This is just allowing them to maintain that manufacturing use. They are also in that PUD, dating from the mid-1960s. It is not actually changing anything here if they wanted to redevelop it with office use, the City would be in support of that potentially. It also means that their existing uses can be maintained and remain part of the PUD.

Alderman Guzikowski stated his only concern is that it starts looking like a warehouse area. Planner Papelbon responded that there are code requirements for maintaining the properties. Part of the PUD has conditions and restrictions already part of it. The unfortunate part of the PUD is that it is so old. The 1965 or 1968 PUD rules have changed since then. So the nomenclature or wording in the PUD is a little bit antiquated. Also, some of those restrictions do not comply with the current code. They City still has the ability, if there is a redevelopment or potential expansion of these property uses, to require a conditional use per the M-1.

Arden Degner, 8540 S. Pennsylvania Avenue, questioned how this area is going to be kept manufacturing because of the mixed mini-storage partnership. Planner Papelbon responded that the existing use is a self-storage facility, and that was approved in the mid-1990s and these are existing buildings.

Alderman Guzikowski moved that the Plan Commission recommends to the Common Council that the properties at 2600 W. Southbranch Blvd. and 9810 S. 27<sup>th</sup> St. be rezoned from M-1 (PUD), Manufacturing and OO, Mixed Use Office Overlay district to M-1 (PUD), Manufacturing after a public hearing. Commissioner Siepert seconded. On roll call: all voted aye. Motion carried.

Commissioner Carrillo moved to adjourn the meeting. Commissioner Siepert seconded. On roll call: all voted aye. Motion carried. The meeting was adjourned at 6:53 p.m.

ATTEST:	
Davida Carray Plan Carrainian Carrata	October 10, 2018
Douglas Seymour, Plan Commission Secretary	Date



## Significant Common Council Actions

ITEM:

DATE: October 23, 2018

4

#### Summary of Significant Common Council Actions

October 16, 2018

- 1. **APPROVED** Resolution No. 11994-101618, approving a Certified Survey Map for John Thomsen, Highgate, LLC, for the property at 7869 S. 13th St. (2nd District).
- 2. **APPROVED** Ordinance No. 2915, an Ordinance adopting an amendment to the Comprehensive Plan for the properties at 7266 and 7328 S. Howell Ave.

Kari Papelbon, CFM, AICP

Planner



Meeting Date: October 23, 2018

Item No. 5a

#### PLAN COMMISSION REPORT

Proposal:	Sign Plan Review			
Description:	Review a proposed master sign plan for the multitenant commercial space at 500 W. Drexel Ave which includes wall signs and ground signs.			
Applicant(s):	I-Kenosha, LLC			
Address(es):	500 W. Drexel Ave.			
Suggested Motion:	That the Plan Commission approve the master sign plan for 500 W. Drexel Ave. a proposed.			
Owner(s):	EVCAP Oak Creek, LLC			
Tax Key(s):	782-9014-000			
Lot Size(s):	3.6082 acres			
Current Zoning District(s):	B-4, Highway Business			
Overlay District(s):	N/A			
Wetlands:	☐ Yes ☐ No Floodplain: ☐ Yes ☐ No			
Comprehensive Plan:	Planned Industrial			

**Background:** The applicant is proposing a master sign plan for a three-tenant building located 500 W. Drexel Avenue. Any building or development with three (3) or more tenants are required to establish a planned sign program prior to the issuance of any sign permits. All planned sign programs shall be reviewed and approved by the Plan Commission.

The proposed sign plan complies with the City's sign code regulations. Details of the sign plan are included with this report. The plan outlines wall sign specifications such as quantity, location, design and size. End cap tenants will be allowed to have two wall signs with the caveat that no wall sign be installed on the north elevation of the building. The proposed plan regulates window signs in compliance with city code and includes a more restrictive regulation for window signs by limiting illuminated window signs to only "open"

signs. All other types of illuminated window signs will be prohibited. Unilluminated windows signs will comply with existing city regulations.

Two monument signs are being proposed for the site. These signs comply with city code. Each monument will have a sign panel for Aldi foods and include a three-panel section that will be 30 square feet in area. Approximately 10 square feet will be allowed for each tenant sign.

The proposed sign plan complies with sign regulations outlined in Chapter 17 of the Municipal Code. If approved as proposed, future tenants will need to comply with sign criteria 1 through 11 as outlined in the master sign plan for the development.

Options/Alternatives: If not approved, no signs can be displayed as part of the proposed development.

Respectfully submitted:

Douglas Seymour, AICP

Director of Community Development

Prepared:

Peter Wagner, AICP

Zoning Administrator/Planner

Peter Ubegner

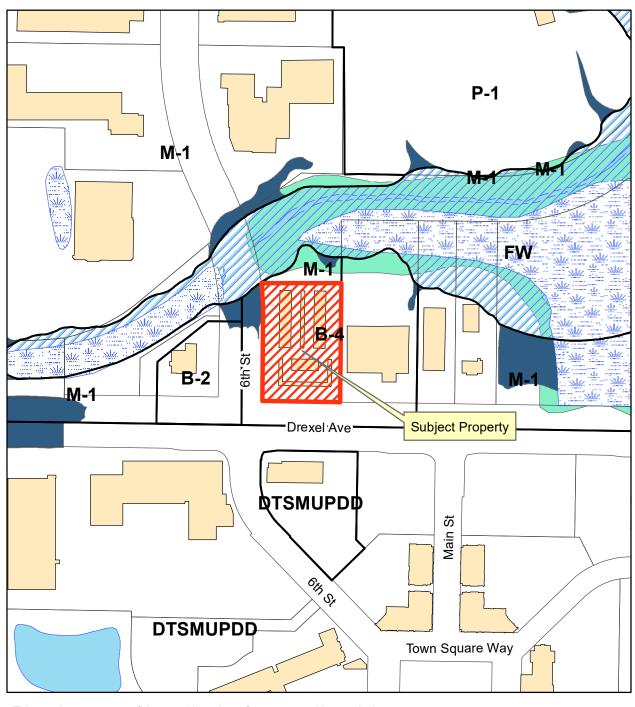
Attachments:

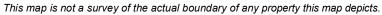
Location Map

Sign Graphics

Master Sign Plan

## Location Map: 500 W. Drexel Ave.







## Master Sign Program for 500 West Drexel Ave., Oak Creek, WI (the "Property")

#### A. General

This Master Sign Program applies to all users and occupants of the building located at 500 West Drexel Avenue in Oak Creek, WI.

This Master Sign Program is intended to give a uniform theme to signs and business identification within the Property by controlling size, color, location, and sign characteristics. Each sign covered by the Master Sign Program must be permitted separately and meet the provisions of the City of Oak Creek Sign Code, as it may be amended from time to time.

The sign criteria contained herein shall apply to all new signs installed on the Property after the Effective Date defined below.

#### **B. GENERAL WALL SIGN CRITERIA**

Tenants shall install building signage on the South façade of the building. All south façade signage shall be centered within the architectural elements on the building, as graphically shown on Exhibit A. The total amount of signage permitted on the South façade for each tenant, shall be determined by multiplying the lineal front footage of the tenant space by one (1). The allowed sign ratio is one (1) square foot of signage to one (1) foot of lineal footage of tenant space. Additionally, exterior wall signs are subject to the following:

**LENGTH** – The overall length of the signage shall not exceed 75% of the lineal frontage of that tenant space.

**HEIGHT** – Overall individual letter height within any sign shall not exceed three (3) feet.

Each end-cap tenant (with frontage facing East or West and South) shall be permitted a second wall sign, subject to approval by the City of Oak Creek. The second wall sign shall be installed on the East or West façade in a location approved by owner and shall be no larger than that tenant's signage area on the South façade.

No tenant signs shall be installed on the North façade of the building, except vinyl or painted signs on rear doors, which shall be limited to 2 sq. ft. per door.

#### C. WALL SIGN DESIGN CRITERIA

- 1. Exterior wall signs shall be limited to the business name only, but the use of corporate shields, logos, or insignia will be permitted and the area shall be included in the maximum allowable sign area.
- 2. All lines of lettering shall run horizontally. All letters shall be upper case or lower case block style letters or combination thereof. Any deviation would require special approval.
- 3. All building signs shall contain individual letters. Box signs shall not be used.
- 4. All building signs shall be mounted to raceway. Raceway colors shall match the color of the façade on which it is mounted.
- 5. All signs must be lighted. All light sources shall be UL listed, NEC compliant and completely concealed from view to the general public.
- 6. Maximum brightness allowed for signs will be one hundred (100) foot Lamberts taken at the letter face.
- 7. The front face of the signage shall not exceed twelve (12) inches from the fascia wall.
- 8. Names, stamps, or decals of the sign manufacturer or installer, placed on the exposed faces of the signage, is not permitted.
- 9. All signage shall be constructed and mounted in compliance with applicable codes. All fasteners, hangers, brackets and wires shall be concealed from the general public.
- 10. Penetrations through the roof are not permitted.
- 11. Letter and logo colors are limited to tenant's corporate colors or white.

#### **D. ADDITIONAL SIGNS**

Additional signage including awnings, permanent interior signs or exterior windows signs require specific City of Oak Creek approval and approval by owner. The square footage of these signs are included in the overall maximum sign area allowable. Temporary signs area allowed, subject to City of Oak Creek ordinances.

#### **E. ILLUMINATED ELEMENTS & GRAPHICS**

Illuminated elements and graphics located behind window areas for the purpose of being viewed from the outside of the building or other exterior illuminated displays, other than "open" signs are not permitted. Illuminated awnings are not permitted. Window graphics are permitted provided such graphics do not cover more than twenty five

percent (25%) of the contiguous storefront window area on which they are placed.

#### F. MONUMENT SIGNS

Each tenant shall be permitted to install a double-sided panel on each of the two (2) monument signs described in Exhibit B. The total area available to tenants of the Property is 30 sq ft in the area shown on Exhibit B as "Tenant Area". The Tenant Area shall be equally divided between all tenants of the Property. Monument sign panels shall be limited to tenant's name and logo in tenant's corporate colors on a white panel.

#### G. SIGN APPROVAL

Prior to fabrication and installation of signage, the tenant shall submit drawings and specifications to the Landlord for approval and to the City of Oak Creek for approval and permits. All drawings shall clearly show the location and dimension of the signage, and indicate graphics color, materials, construction, and attachment details.

Tenant shall be responsible for complying with the regulations as set forth in the Master Sign Program as outlined, and with the regulations and ordinances as set forth by the City of Oak Creek. If there is any discrepancy between the regulations of this Master Sign Program and the regulations of the City of Oak Creek, the most stringent regulations shall apply. Application for necessary permits and payment of fees shall be directed by the tenant to the City of Oak Creek. Landlord approval must be submitted with the application for permits. Local permits to erect and connect any signage must be issued by the City of Oak Creek, prior to sign installation.

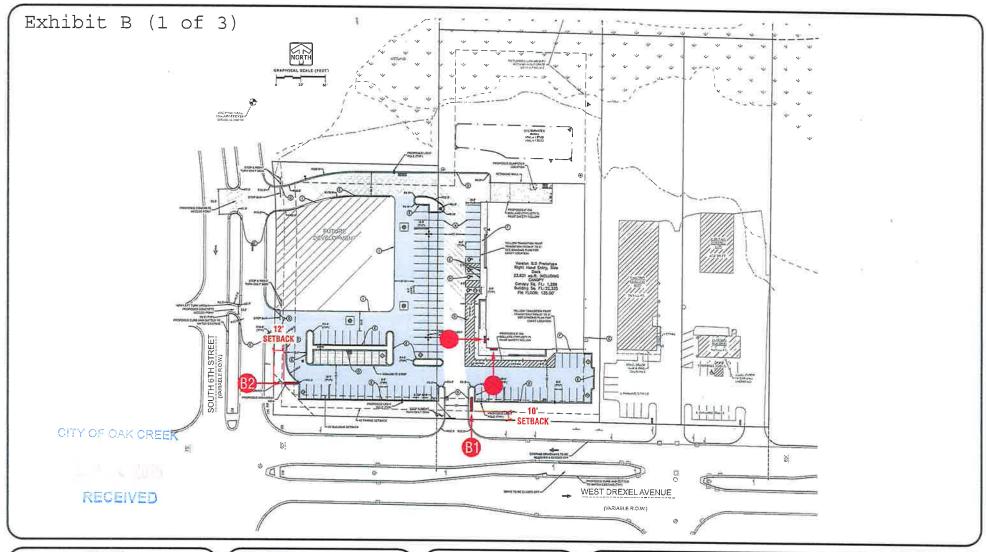
Signs not meeting the Master Sign Program criteria or signs not meeting the approval of the City of Oak Creek shall be ordered removed at tenants' cost and re-built to conform with the sign criteria herein set forth.

Landlord reserves the right to alter the Master Sign Program, subject to City of Oak Creek approval.

Property Owner/Landlord:
I-Kenosha LLC
Name
Signature
 Its
its
Date ("Effective Date")

### Exhibit A





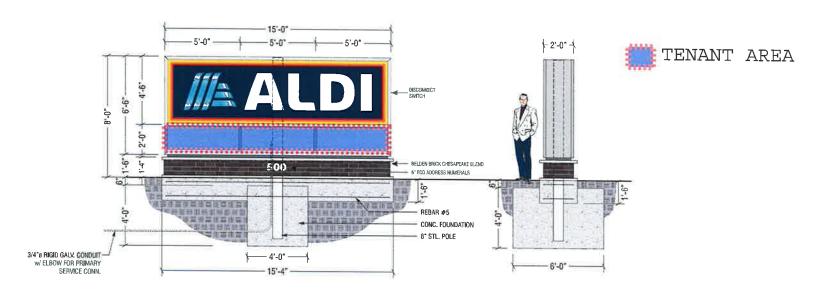


DATE	REVISION
1.19,18	REVISED SITE PLAN
1.29,18	LPDATED BRICK FOR MUNUMENT
5,6,18	REASED LIGHTLANGER & ANGEO ALT, WALL SKINICHAMMEL LITES!
7.25.18	UPDATED ADDRESS NUMERALS TO '500'
7.27.18	UPDATED ADDRESS NUMERALS TO "410" FOR SIGN "81"

CUSTOMER APPROVAL	DATE
DOYLE SIGNS, INC, and may not be	ublished work of reproductd, copied a expressed written of The Company,

ADDRESS	500 & 410 W. DREX	EL AVE.				
СПУ	DAK CREEK	STATE	W	DESIGNER KM	SALESPERSON	TD
DRWG. NO.	16500	SCALE:	NOTED	DATE: 03.16.2018	SHEET NO.	1

### Exhibit B (3 of 3)





#### ONE(1) NEW D/F INTERNALLY ILLUMINATED MONUMENT DISPLAYS

SCALE: 1/4"=1'

#### DESCRIPTION:

- . FLEX FACE GRAPHICS: -COPY, WHITE ON A PMS #281 BLUE BKGD. -LOGO, PRINTED GRADIENT -OUTER BORDER, PMS #7548 YELLOW -CENTER BORDER, PMS #3564 ORANGE -INNER BORDER, PMS #2035 RED
- . ALUMINUM CABINET & MOULDING. "SLATE GRAY" ENAMEL FIN.
- . MASONRY TO BE BELDEN BRICK CHESAPEAKE BLEND

#### **PANTONE COLORS**

Pantone® 7548 C Yellow 🌌 Pantone® 3564 € Orange Pantone® 2035 C Red

■ Pantone® 281 C Dark Blue

CITY OF OAK GREEK

Ser . V. 20 "

RECEIVED



DATE	REVISION
1,19,16	REVISED SITE PLAN
3.23,15	UPDATED BRICK FOR MONUMENT
5.8.18	REVISED MONUMENT & ADDED ALT WALL SIGNEDHANNEL (TRS)
7.26,18	LIPDATED ADDRESS NUMERALS TO "500"
7.27.15	UPDATED ADDRESS HUMERALS TO "410" FOR SIGN '81"

USTOMER APPROVAL	DATE
This design is the original and unjude DOYLE SIGNS, INC. and may not be rep or exhibited in any fashion without the e consent from an authorized officer of The rights to this dealor may be in	roduced, copied xpressed written The Company,

CLIENT	ALDI					
ADDRESS	500 & 410 W, DREXE	L AVE.				
CITY	OAK CREEK	STATE	WI	DESIGNER KM	SALESPERSON	TD
DRWG. NO.	16500	SCALE:	NOTED	DATE: 03.16.2018	SHEET NO.	4



Meeting Date: October 23, 2018

#### PLAN COMMISSION REPORT

Item No. 5b

Proposal: Plan Review - Hospital

Description: Site, building, landscaping, and related review for a proposed new neighborhood

hospital facility.

Applicant(s): Philip Annis, TH - Oak Creek, WI - 1 - UT, LLC

Address(es): 7869 S. 13<sup>th</sup> St. (Lot 2 of CSM approved to be recorded)

Suggested Motion:

That the Plan Commission approves the site and building plans submitted by Philip Annis, TH – Oak Creek, WI – 1 – UT, LLC, for a portion of the property at 7869 S. 13<sup>th</sup> St., with the following conditions:

- 1. That all relevant Code requirements are in effect.
- 2. That the CSMs approved by the Common Council on December 19, 2017; July 17, 2018; and October 16, 2018 are recorded prior to the submission of building permit applications.
- 3. That copies of all access approvals and agreements shall be provided to the City prior to the submission of building permit applications.
- That the exterior brick veneer meets the minimum 4-inch thick requirement per Code.
- 5. That plans are revised to meet Code requirements for exterior building materials.
- 6. That all mechanical equipment, transformers, and utility boxes (ground, building, and rooftop) are screened from view.
- 7. That all required easements are included on the plans prior to the submission of building permit applications.
- 8. That all revised plans (site, building, landscaping, etc.) are submitted in digital format for review and approval by the Department of Community Development prior to the submission of building permit applications.

Owner(s): Highgate, LLC

Tax Key(s): Portion of 784-9993-002

Lot Size(s): 2.1365 ac

Current Zoning District(s):

I-1, Institutional

Meeting Date: October 23, 2018 Item No.: 5b

Overlay District(s):	N/A		N/A		
Wetlands:	☐ Yes	⊠ No	Floodplain:	☐ Yes	⊠ No
Comprehensive Plan:	Planned Mixed Use				

#### Background:

The Applicant is requesting site, building, landscaping, and lighting plan approval for a proposed single-story, 18,223 square-foot neighborhood hospital facility on a portion of the property at 7869 S. 13<sup>th</sup> St. Plan Commissioners will recall that there were several CSMs approved for this property since 2017, three (3) of which have yet to be recorded. A copy of the CSM approved by the Common Council on July 17, 2018 (to be recorded) are included with this report for Commissioner reference.

Included in the narrative provided by the Applicant, this concept will provide 24/7 acute-care services (e.g., lab, radiology, pharmacy) with a 7-bed emergency room and 8-in-patient beds. Patients requiring higher-level care or surgery will be transferred to another hospital facility. An estimated 15-25 patients per day, and 1-2 ambulance transports per week are anticipated. One (1) doctor will be onsite at all times, 10 employees are estimated at peak shift, with a total of 40-50 clinical and non-clinical employees employed at the facility.

Access to the property is restricted to a proposed shared easement to the north of the parcel. No access is allowed directly to the parcel from S. 13<sup>th</sup> St. or W. Drexel Ave.; however, as the shared access through the easement will require a direct access from S. 13<sup>th</sup> St., approval from Milwaukee County will be required. Copies of all access approvals are required to be provided to the City prior to submission of building permit applications per the suggested conditions of approval above.

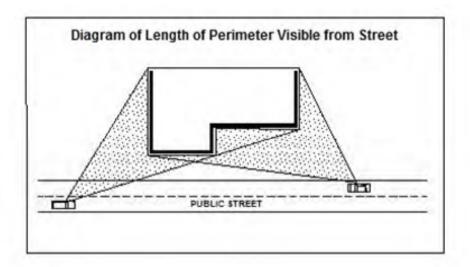
Minimum parking requirements are calculated at two (2) stalls for every three (3) patient beds, plus one (1) space per staff doctor, plus one (1) stall for each employee onsite during the largest shift. The total number of doctors is forthcoming; however, as previously mentioned, ten (10) employees are anticipated at peak shift and fifteen (15) patient beds will be provided. Plans show a total of 35 parking stalls on the east and west sides of the building. With the above information, a minimum of 21 parking stalls would be required (excluding the total number of doctors). Therefore, the minimum number of parking stalls in the proposed plans appears to be exceeded.

The building is proposed to be constructed with 2 types of face brick (must meet minimum 4-inch requirement per Code), EIFS, architectural metal panels, and glass (spandrel and translucent windows and a curtain wall) as the primary exterior building materials on all elevations. Decorative metal screens (flat rib panels in gray) for rooftop mechanical units and aluminum canopies over entrances are also proposed. A

Meeting Date: October 23, 2018 Item No.: 5b

generator enclosure is proposed on the northwest side of the building to be constructed with materials to match the building (face brick on CMU) with ribbed metal gates. All ground, building, and rooftop mechanical units, utility boxes, and transformers must be screened per Code. This has been included in the recommended conditions of approval above.

It is difficult to determine which windows are included in the spandrel label on the submitted plans. Spandrel windows must be clearly labeled on the plans. Architectural metal panels are not listed as approved primary building materials in the Municipal Code. This will require a ¾ majority approval of the Plan Commission. EIFS is also not allowed as an exterior building material unless used as an accent comprising no more than 25% of the visible perimeter. Additionally, Section 17.1009(a)(2)(ii) states: "The façade of a manufacturing, commercial, office, institutional, or park building shall be finished with an aesthetically pleasing material. A minimum of seventy-five (75) percent of the visible perimeter (see diagram) shall be finished with an acceptable glass, brick or decorative masonry material."



Exterior building materials calculations per elevation are forthcoming. Staff has also requested clarification on the proposed ceramic wall included in the materials board but not reflected on the building elevations.

One (1) trash receptacle enclosure has been identified on the northeast side of the building, to be constructed with the same face brick to match the building and ribbed metal gates. Per Code, trash enclosures must be located outside of street and front yards. Staff is currently working with the Applicant's consultant on proper siting of the enclosure, which may require only slight modification.

In addition to the comments above, the Engineering Department has stated that the stormwater pond on the adjacent lot must include an easement, and access easements will also be required. Easements for water and sanitary sewer may also required for the development.

Meeting Date: October 23, 2018 Item No.: 5b

Landscape plans have been provided for the site; however, modifications may be required based on potential minor site modifications. Staff will work with the Applicant's consultant to address any issues. Final approval of landscape plans are to be approved by the Director of Community Development as recommended in the conditions of approval above.

With the above in mind, and recognizing that City staff will continue to work with the Applicant's consultants on outstanding issues, staff has provided a suggested motion for approval with conditions above for Plan Commission consideration.

Options/Alternatives: The Plan Commission has the discretion to approve the plans as presented, approve with specified conditions, or disapprove the proposal. Should the request not be approved, Plan Commissioners must provide the Code Sections upon which the denial is based so that the Applicant may revise and resubmit (if necessary). However, disapproval would likely result in the existing vacant condition of the property to remain.

Respectfully submitted:

Douglas Seymour, AICP

Director of Community Development

Prepared:

Kari Papelbon, CFM, AICP

Planner

#### Attachments:

Location Map

CSM (approved by Council 7-17-18, to be recorded)

Narrative (5 pages)

Plans

C100 - C500 (8 pages)

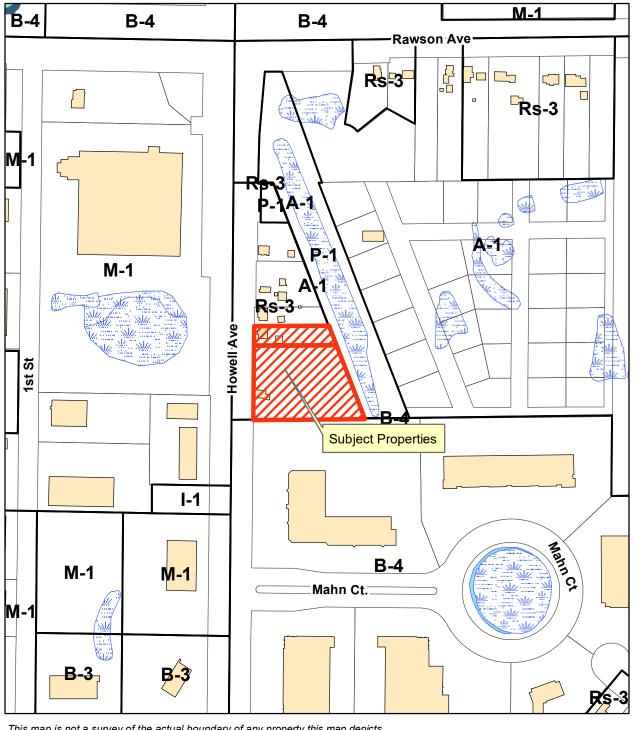
L100 (1 page)

C1000 - C7000 (14 pages)

Lighting Plan & cut sheets (11 pages)

Renderings, Elevations, Floor Plan, Materials (9 pages)

## **Location Map** 7266 & 7328 S Howell Ave



This map is not a survey of the actual boundary of any property this map depicts.





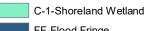
---- Officially Mapped Streets

Subject Properties

DNR Wetlands Inventory Floodplain 2008

Waterbodies

#### **Zoning Overlays**



FF-Flood Fringe

Lakefront Overlay

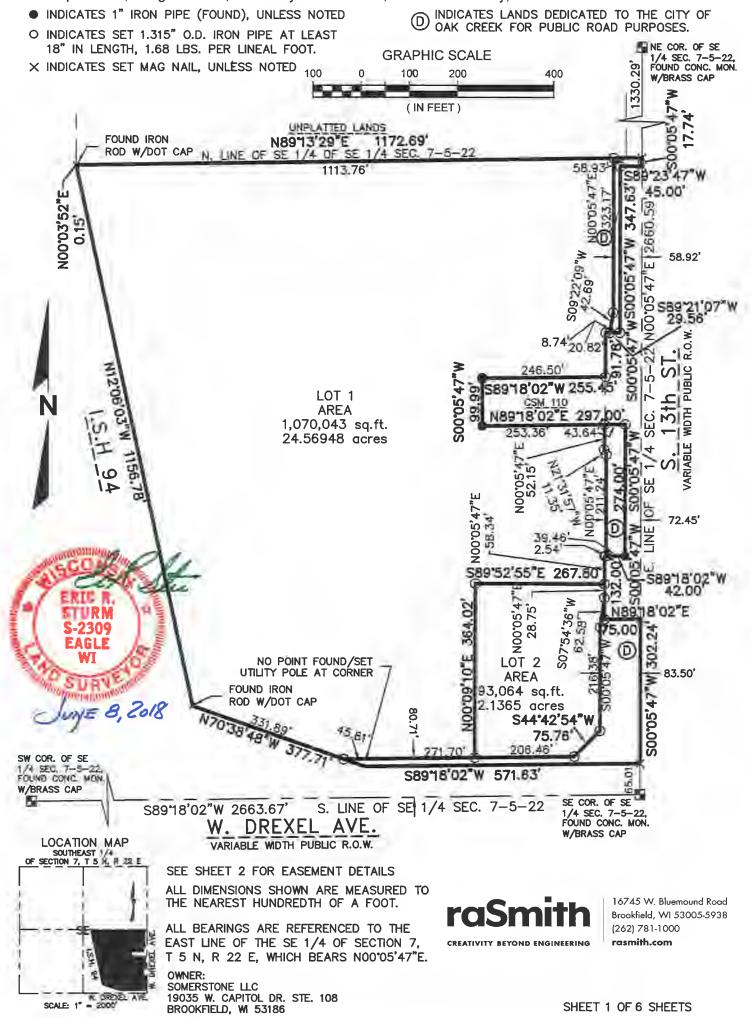
NO-Mixed Use Neighborhood

OO-Mixed Use Office RR-Regional Retail

**Department of Community Development** 

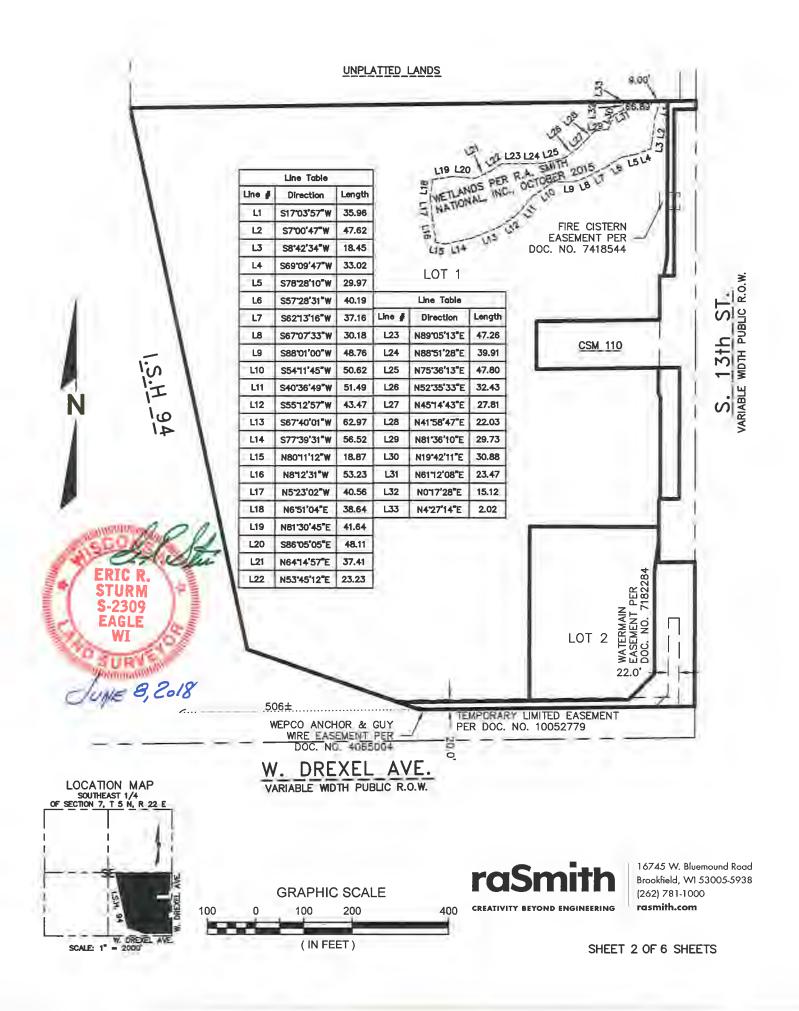
## CERTIFIED SURVEY MAP NO.

A division of Lot 1 of Certified Survey Map No. 271, Lot 1 of Certified Survey Map No. 130, Lots 1 and 2 of Certified Survey Map No. 7578, and lands, being part of the Southeast 1/4 of the Southeast 1/4 of Section 7, Township 5 North, Range 22 East, in the City of Oak Creek, Milwaukee County, Wisconsin.



CERTIFIED SURVEY MAP NO.	<b>CERTIFIED</b>	<b>SURVEY</b>	MAP NO.	
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A division of Lot 1 of Certified Survey Map No. 271, Lot 1 of Certified Survey Map No. 130, Lots 1 and 2 of Certified Survey Map No. 7578, and lands, being part of the Southeast 1/4 of the Southeast 1/4 of Section 7, Township 5 North, Range 22 East, in the City of Oak Creek, Milwaukee County, Wisconsin.



# Froedtert & the Medical College of Wisconsin Neighborhood Hospital – Oak Creek

#### **Executive Summary**

In keeping with its commitment to innovation and quality patient care, the Froedtert & the Medical College of Wisconsin Neighborhood Hospital – Oak Creek will meet the needs of today's patient, who expects high quality care in a convenient setting with an exceptional experience. The neighborhood hospital's state of the art, compact, yet streamlined design (18,000+ square feet) fits easily into suburban neighborhoods and offers closer, faster access to emergency and inpatient care to residents where they live and work, bringing care to the patient when and where they need it.

The Oak Creek neighborhood hospital will be a licensed, accredited acute-care hospital, open 24 hours a day, seven days a week, 365 days a year, and staffed with board-certified physicians and registered nurses. This hospital will fill an immediate need for a level of care not currently available in the community.

In addition to a seven-bed emergency room, the hospital will be equipped with eight inpatient beds for patients requiring additional care, observation and testing. Additional services include lab, radiology and a dedicated pharmacy for patients. Transfer agreements will be in place with local hospitals to send them patients requiring surgery or higher levels of care.

In keeping with the high quality, compassionate care for which the Froedtert & MCW health network is known, the neighborhood hospital will focus on providing an exceptional patient experience from beginning to end, including low wait times, quick turn-around times on test results, free parking, open visiting hours for family and friends, a family lounge with complimentary refreshments, flat-screen TVs, free Wi-Fi and soothing, welcoming interiors for maximum comfort and a stress-free visit.

With approval by Oak Creek planning officials, plans call for the hospital to open in spring 2020 on the northwest corner of S. 13th Street. and W. Drexel Avenue., about a half-mile west of the Froedtert & MCW Drexel Town Square Health Center.

#### **Complimentary Services**

After exploring possible sites for the Oak Creek neighborhood hospital, the selected location, is about a half-mile west of the Froedtert & MCW Drexel Town Square Health Center.

The neighborhood hospital will complement many of the health center's services, such as primary care, urgent care, orthopedics, spine care and more.

1-2-2-2

For example, if a patient at the Froedtert & MCW Drexel Town Square Health Center is found to need intravenous fluids, the person can quickly be treated at the neighborhood hospital down the street. Someone with chest pain can be quickly evaluated and treated in an emergency setting, and, if needed, admitted to the hospital for an overnight stay.

Adding a neighborhood hospital to the Froedtert & MCW health network is part of a broader plan to deliver the right care in the right place by expanding access points and care options, and to address capacity constraints at network hospitals, particularly Froedtert Hospital. The neighborhood hospital enables us to increase our bed capacity for less cost and simplify access for patients. Hospitals in our health network consistently experience high demand, particularly at Froedtert Hospital on the academic medical center campus in Wauwatosa. Over the past five years, an average of 80 Oak Creek area residents per day travel to Froedtert Hospital for emergency or hospital care. The neighborhood hospital will give area residents another option for care.

Additionally, this approach responds to consumer preferences for quality care that is readily available, nearby and simple to access. The smaller footprint of the neighborhood hospital simplifies access and the availability of inpatient beds assures appropriate, local care.

"We see the neighborhood hospital as a way to keep care close to home and free up beds, particularly at Froedtert Hospital," stated Cathy Jacobson, president and chief executive officer of Froedtert Health. "We want to lead the innovation of the hospital model, by expanding access points and offering care options that meet people where they are."

#### The Facility

The Oak Creek neighborhood hospital should not be confused with an urgent care facility or free-standing emergency department (FSED). This is a 18,000-sq. ft. general acute care hospital, CMS (Medicare) accredited, that treats high-acuity patients in the emergency department (ED). Patients who experience the neighborhood hospitals understand that serious medicine takes place at the facility, resulting in a very low percentage of use by patients who might have otherwise gone to an urgent care center.

With eight inpatient beds and seven ED beds, this innovative hospital model is designed around the patient to offer:

- Quality emergency care that is quickly available, close to home and simple to access
- Streamlined-processes and state of the art diagnostic equipment
- Reduced wait times and faster door to discharge time with high quality health care

We estimate that we will see between 15 and 25 patients per day.



#### **Inpatient Services**

With eight state-of-the-art inpatient beds, the neighborhood hospital has a high. nurse-to-patient ratio of approximately 1:3 and follows the exact admitting physician's protocol. Specialized and personalized meals based on the patient's condition and dietary preferences are provided, as well.

The hospital will provide seamless direct admissions and transfers-in via ambulance or personal transportation, if necessary. Through a quick intake process, admissions are coordinated quickly and efficiently over the phone. Upon arrival, the patient will be greeted immediately by a member of the medical team and taken to their prepared room.

The dedicated in-house lab, radiology unit and hospital pharmacy result in little to no wait time for highly anticipated diagnostic answers and medications.

Telemedicine capabilities allow patients and clinical staff access to board-certified internal medicine physicians and an array of board-certified specialist physicians around the clock.

The scope of inpatient services includes everything except: intensive care and surgery, high-acuity psychiatric cases and some same-day high-acuity specialty cases. Should these cases present themselves at the neighborhood hospital, the patient will be stabilized and then transferred to the appropriate facility.

#### **Emergency Care**

Emergency department offerings include, but are not limited to:

- Seven emergency department beds
- 24/7 board-certified emergency physicians onsite
- Registered nurses on site 24/7/365
- Radiology including CT, X-ray and ultrasound
- Expanded STAT LAB and reference lab
- In-house pharmacy
- Systems which are fully integrated into community services for disaster preparedness and response
- STAT transfer protocols for acute .heart attack (STEMI) and stroke to tertiary care centers

Common diagnoses seen in the emergency department include chest pain, stroke symptoms, back pain, concussions, severe asthma attacks and minor trauma.

The neighborhood hospital will accept ambulance traffic and is well-connected with local EMS professionals. We estimate low ambulance traffic, with expectations of just 1-2 transports per week; most people drive themselves or are driven by family/friends. The Oak Creek Fire

Department is respectful of the surrounding community; thus, their ambulance lights will remain on, but the sirens will be turned off as it approaches the hospital.

#### **Staffing**

As at our other facilities, board-certified Medical College of Wisconsin emergency medicine physicians and experienced registered emergency and inpatient nurses will staff the hospital. With a mix of clinical and non-clinical employees, the hospital will typically employ 40-50 people.

The hospital will have a medical director who provides leadership and management for the emergency department. This individual serves as a liaison between the neighborhood hospital and heads of diagnostic and therapeutic departments to ensure availability, quality, and effective use of services. This key staff member will also review processes, address complaints and build relationships with the community, first responders and civic/government leaders.

The hospitalist (a dedicated in-patient physician who works exclusively in a hospital) is responsible for deciding if all admissions are appropriate for the neighborhood hospital or if the patient needs to be transferred to a higher level of care.

Other team members include, but are not limited to:

- Inpatient board-certified telemedicine hospitalist physicians
- Inpatient board-certified telemedicine specialist physicians (cardiology, neurology, infectious disease)
- Inpatient advanced practice providers
- Licensed radiological technologists
- Pharmacists
- Dieticians
- Paramedics
- Patient Access Coordinators

#### Better, faster access to inpatient and emergency care

As previously stated, the Oak Creek neighborhood hospital is strategically located on the northwest corner of S. 13th Street and W. Drexel Avenue in Oak Creek, and it is about a half-mile west of the Froedtert & MCW Drexel Town Square Health Center. The location was chosen to provide the most convenient, fastest access to inpatient and emergency care where patients live and work. Wait times to see a board-certified emergency medicine physician average less than 10 minutes and patient satisfaction scores for this hospital model are among the highest of any hospital anywhere in the US. This hospital will be state-of-the-art with the latest innovations in workflow, radiology, lab, technology and telemedicine capabilities.

For physicians looking to admit patients quickly and seamlessly into a safe, high quality, attractive environment near where patients live, the Oak Creek neighborhood hospital inpatient capabilities are ideal.

Changing the hospital model is part of the necessary process of creating the health care delivery system of the future. Creating an integrated, flexible, nimble care network includes making the best use of resources to meet patients' needs and providing care in the consumer-friendly ways they expect. We want to be leaders in that effort.

#### **Patient Experience**

Neighborhood hospitals are designed with a focus on providing an exceptional patient experience in a calming, caring and healing environment.

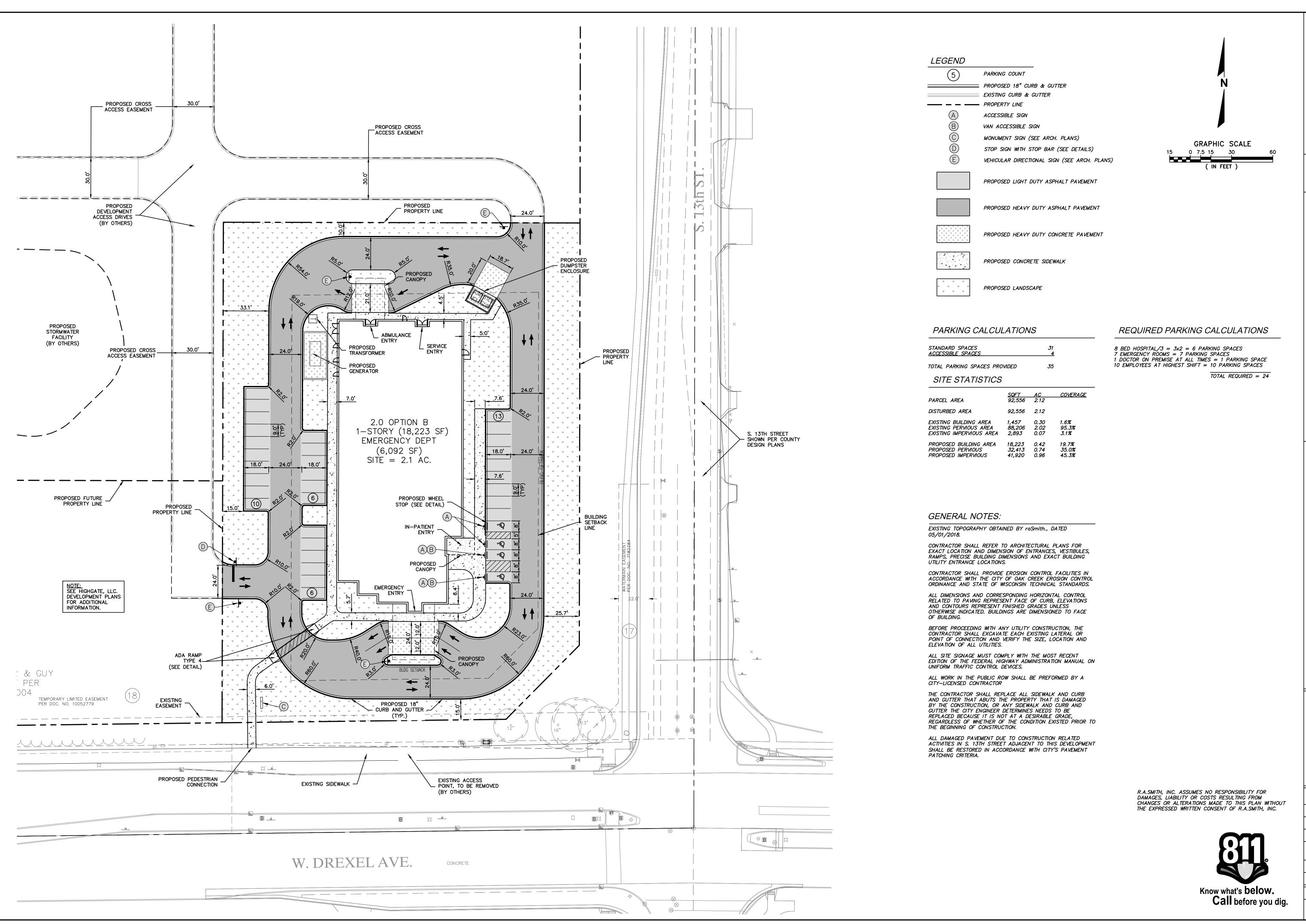
The goal is for the patient to be seen by the physician in less than 10 minutes, with an average length of stay in the emergency department of less than two hours.

The Oak Creek neighborhood hospital will be part of the Froedtert & MCW health network, following its care and quality protocols.

Care at the neighborhood hospital will be billed at hospital rates. Patients will receive a single statement for all services provided at the neighborhood hospital. What a patient pays will depend on his or her insurance plan.

The hospital will accept all presenting patients, including those covered by Medicaid, Medicare, and commercial insurance, as well as those who are uninsured. Oak Creek neighborhood hospital will offer the same charity care, financial assistance and payment plan support as other hospitals in the Froedtert & MCW health network. EMTALA regulations also apply to the neighborhood hospital.





HOSPITAL OAK CREEK

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DATE: 09/25/18 SCALE: 1" = 30'

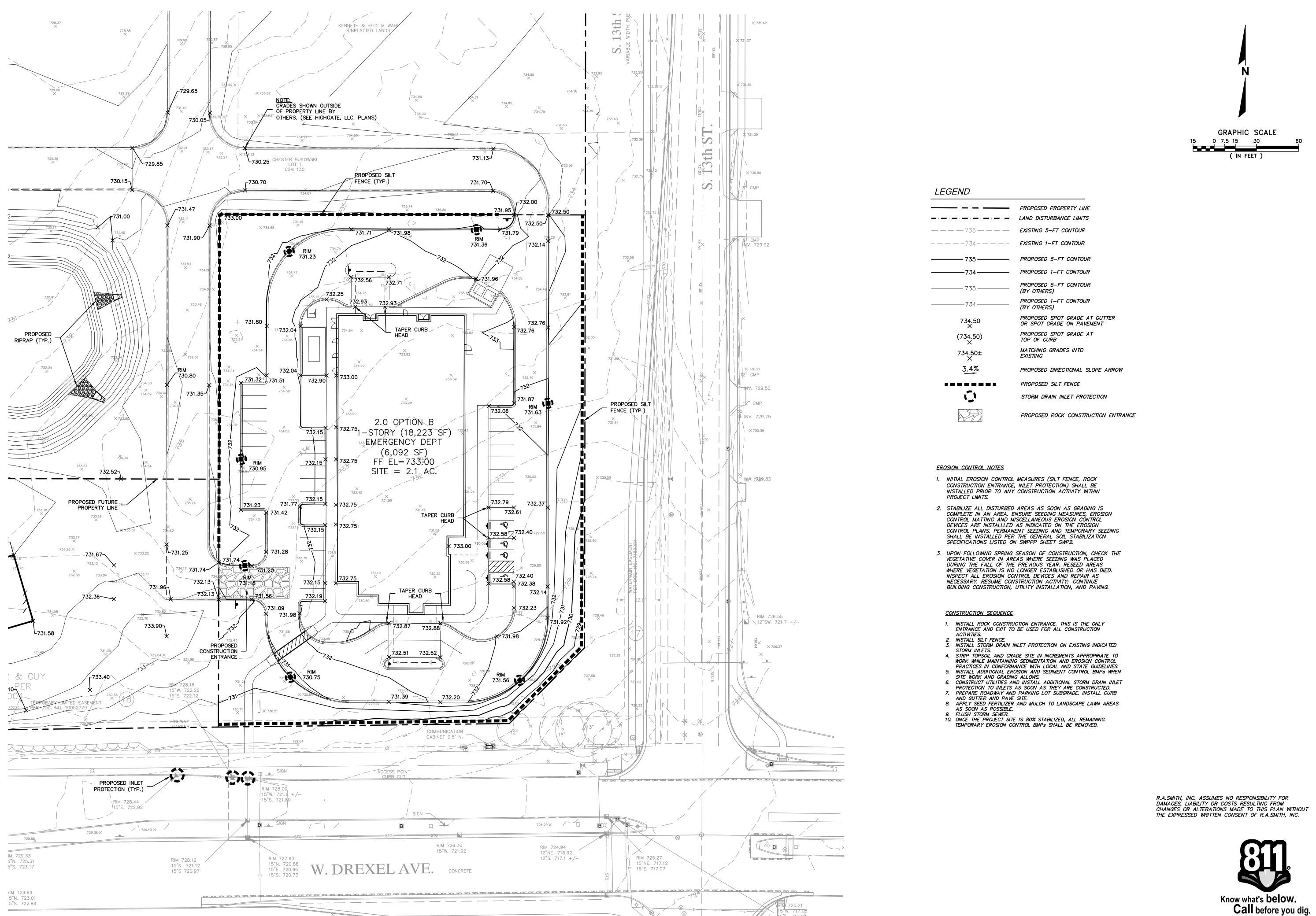
JOB NO. **3170292** 

PROJECT MANAGER: ROBERT J. HARLEY, P.E.

DESIGNED BY: JAH

CHECKED BY: RJH SHEET NUMBER

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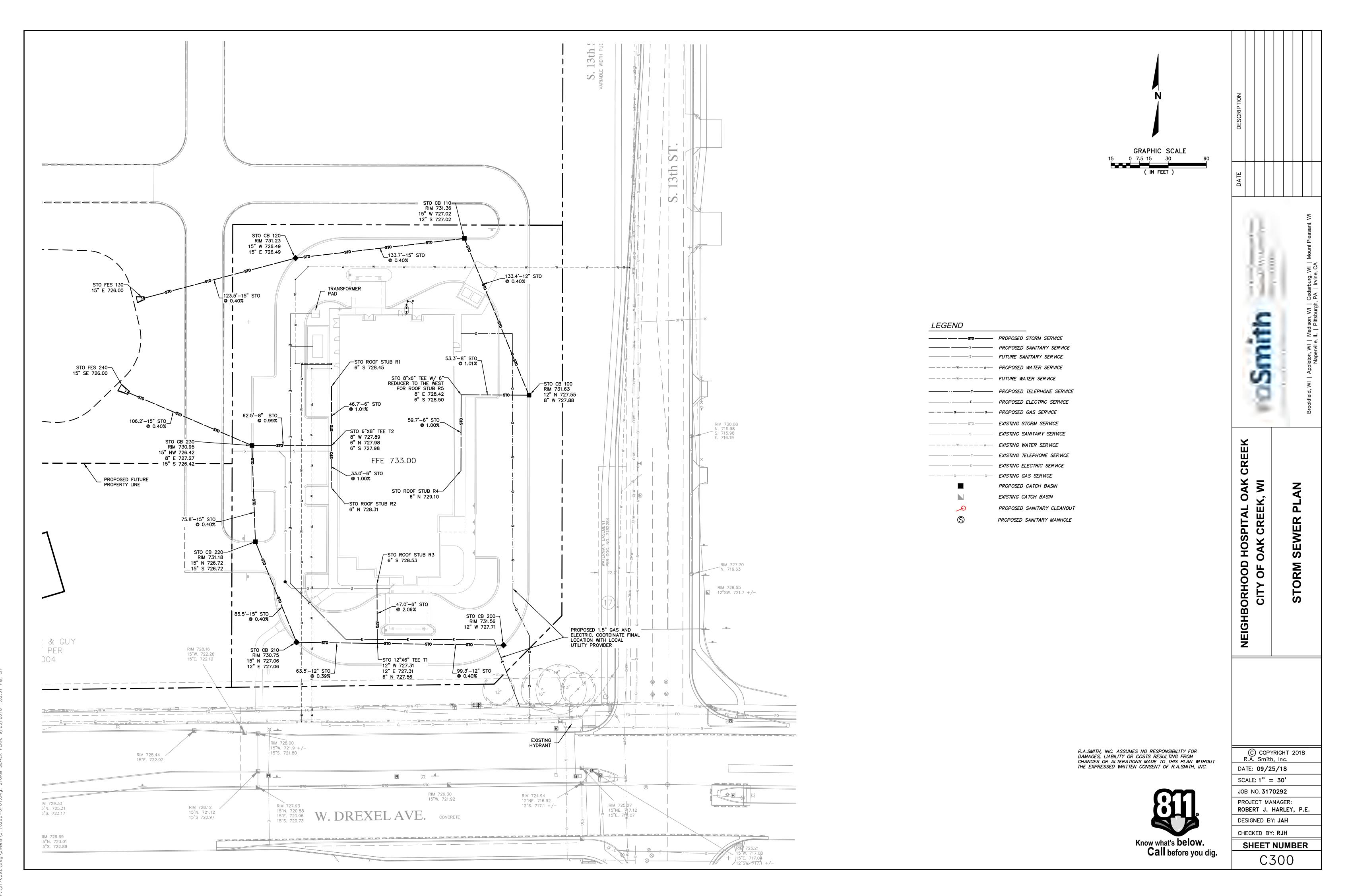
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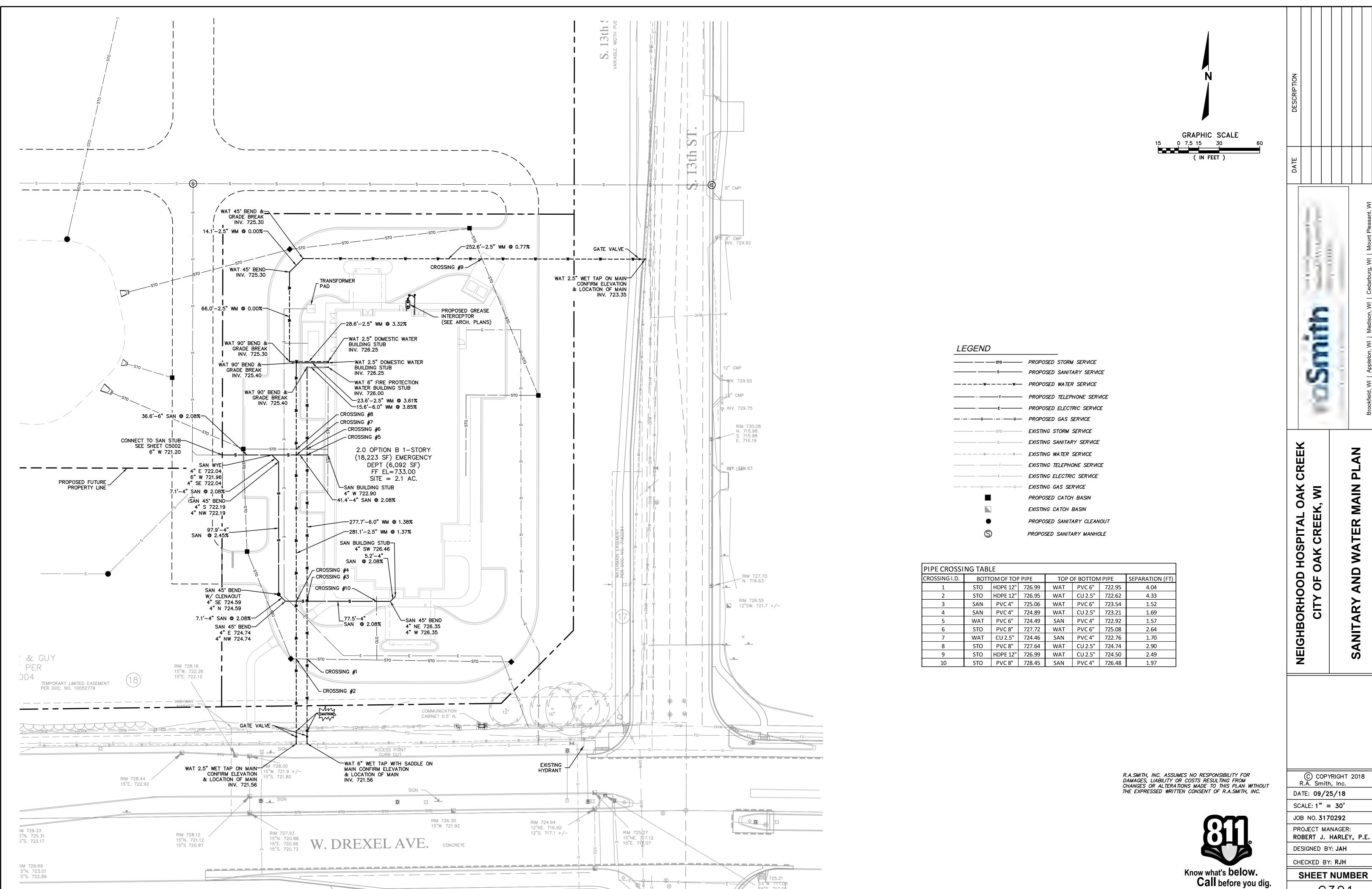
JOB NO. **3170292** PROJECT MANAGER:

ROBERT J. HARLEY, P.E. DESIGNED BY: JAH

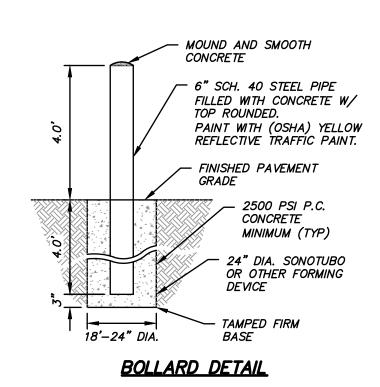
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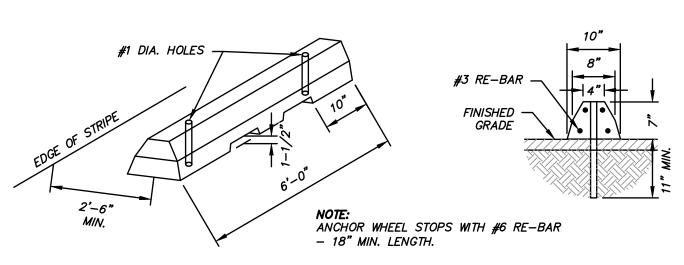
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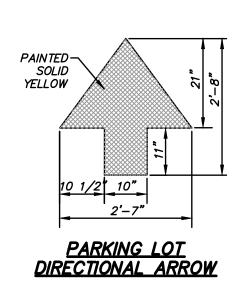
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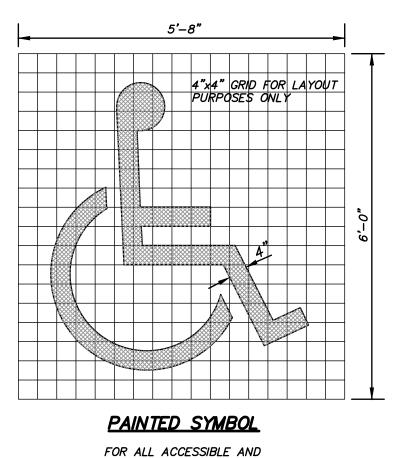




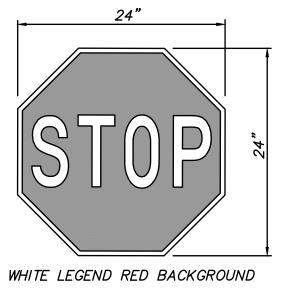






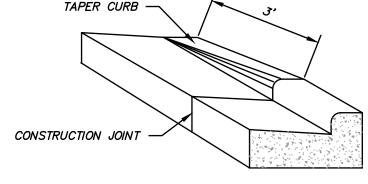


VAN ACCESSIBLE SPACES



"STOP" SIGN

TAPER CURB -CONSTRUCTION JOINT



ACCESSIBLE PARKING SIGN AND POST INSTALLATION

TYPE 1

ACCESSIBLE PARKING SIGN

(12" x 18")

PENALTY

2LB/FOOT MIN

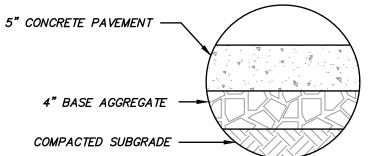
— SLOPE CONCRETE

PAVEMENT OR ASPHALT

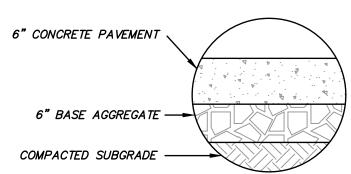
— 2" I.D. SCHEDULE 40 GALVANIZED STEEL PIPE

OR GREEN 'U CHANNEL' POST,

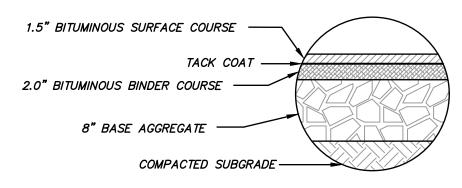
DETAIL OF CURB & GUTTER TERMINI



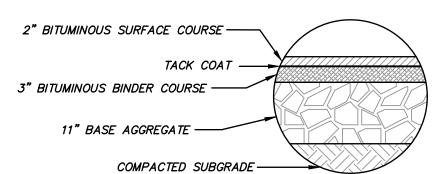
## STANDARD CONCRETE SIDEWALK



## HEAVY DUTY CONCRETE SECTION

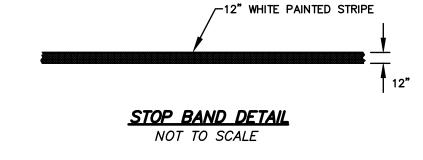


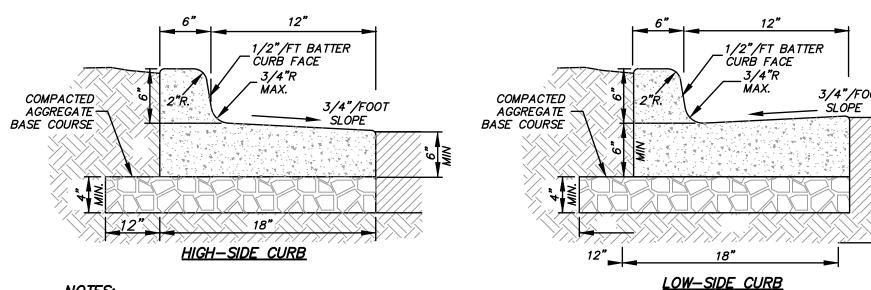
## STANDARD DUTY ASPHALT PAVEMENT SECTION



HEAVY DUTY ASPHALT PAVEMENT SECTION NOTE: SEE GEOTECHNICAL REPORT BY PSI DATED DECEMBER 18, 2017

> DIRECT ALL BIDDING QUESTIONS AND/OR SUBMITTALS FOR PAVEMENT TO GEOTECHNICAL ENGINEER OR CITY OF OAK CREEK AS APPLICABLE.





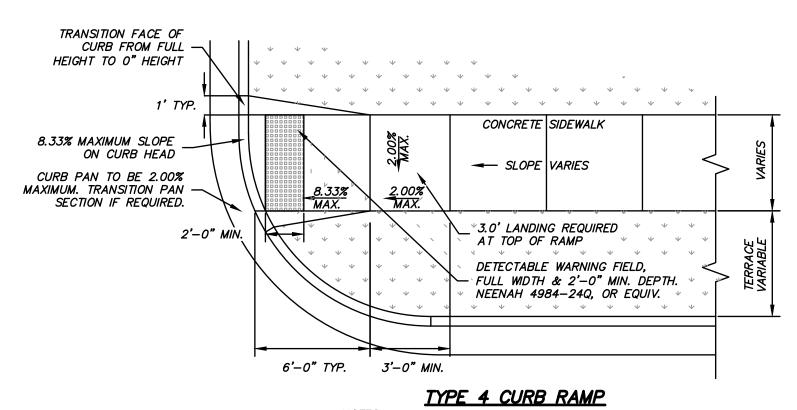
A) 3500 PSI CONCRETE SHALL BE USED IN CONSTRUCTION OF THE CURB & GUTTER.

B) THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SLOPE OF THE GUTTER PAN. C) FOR DEPRESSED CURB HEAD SLOPE, USE THE SAME SLOPE AS ADJACENT SIDEWALK.

D) THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDE MINIMUM 6" GUTTER THICKNESS MAINTAINED. TRANSVERSE CONTRACTION JOINTS SHALL BE CUT OR SAWED AT MAXIMUM 20 FOOT INTERVALS.

E) 1/2" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED TRANSVERSELY IN THE CURB ABUTTING EXISTING CURB AND SIDEWALK, WALLS OR BUILDINGS, AND AT INTERVALS NOT TO EXCEED 300 FEET, WITH PREFERRED LOCATIONS BEING AT RADIUS POINTS OR ANGLE POINTS.

18" CONCRETE CURB & GUTTER DETAIL



1. SURFACE OF CURB RAMP SHALL HAVE A BROOM FINISH OR SIMILAR SLIP RESISTANT SURFACE.

VEHICLES WITH VET OR DIS PLATES OR STATE DISABLED CARD

**—** 

PENALTY SIGN WITH WORDING

AS REQUIRED BY STATE OR LOCAL LAW

STATE OF WISCONSIN

ACCESSIBLE PARKING SIGNS

THIS STALL

R7-8 12" x 18"

VAN **ACCESSIBLE** 

R7-8b 12" x 6"

HOSPITAL OAK CREEK NEIGHBORHOOD

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© COPYRIGHT 2018 R.A. Smith, Inc. DATE: 09/25/18

SCALE: N.T.S. JOB NO. **3170292** 

PROJECT MANAGER: ROBERT J. HARLEY, P.E. DESIGNED BY: JAH

CHECKED BY: RJH

SHEET NUMBER C400

FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL. 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 OPENING. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INLET PROTECTION DEVICES SHALL CONFORM TO WONR CONSERVATION PRACTICE STANDARD 1060 AND BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE WISDOT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED IF ALLOWED BY

TYPE A IS TO BE USED PRIOR TO PAVING AND TYPED B, C, AND D ARE TO USED TYPE A SHALL BE USED AROUND INLETS AND UNPAVED AREAS UNTIL PERMANENT STABILIZATION METHODS HAVE BEEN ESTABLISHED.

TYPE B SHALL BE USED AFTER THE CASTING AND GRATE ARE IN PLACE.

TYPE C SHALL BE USED ON STREET INLETS WITH CURB HEADS.

TYPE D SHALL BE USED IN AREAS WHERE OTHER TYPES OF INLET PROTECTION ARE INCOMPATIBLE WITH ROADWAY AND TRAFFIC CONDITIONS (I.E. POSSIBLE SAFETY HAZARD IF PONDING OCCURS.)

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.

STORM DRAIN INLET PROTECTION DETAILS

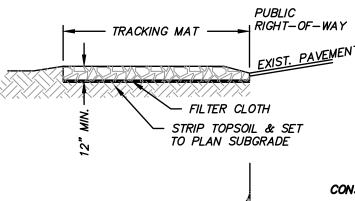
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

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 PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

REMOVE INLET PROTECTION DEVICES ONCE THE CONTRIBUTING DRAINAGE AREA IS STABILIZED WITH APPROPRIATE VEGETATION OR IMPERVIOUS AREA. INLET PROTECTION SHALL BE, AT A MINIMUM, INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF

SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED RETWEEN 1/3 TO 1/2 THE DESIGN DEPTH OF THE DEVICE, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING AS DESIGNED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLET AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.



#### CONSIDERATIONS:

- 1. VEHICLES TRAVELING ACROSS THE TRACKING PAD SHOULD MAINTAIN A SLOW CONSTANT SPEED.
- 2. THE BEST APPROACH TO PREVENTING OFF-SITE TRACKING IS TO RESTRICT VEHICLES TO STABILIZED AREAS.
- 3. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.

#### A. TRACKING PAD:

- 1. TRACKING PAD TO CONFORM TO WDNR CONSERVATION PRACTICE STANDARD 1057.
- 2. THE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
- 3. THE AGGREGATE FOR TRACKING PADS SHALL BE 3"- 6" CLEAR OR WASHED STONE. ALL MATERIAL SHALL BE RETAINED ON A 3-INCH SIEVE.
- 4. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PRACTICE, STONE TRACKING PADS SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOIL INTO THE STONE.
- 5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE A MINIMUM OF 50 FEET LONG.
- 6. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY FROM TRACKING PADS OR CONVEYED UNDER AND AROUND THEM BY USING A VARIETY OF PRACTICES, SUCH AS CULVERTS, WATER BARS, OR OTHER SIMILAR

#### B. MAINTENANCE

- 1. ROCKS LODGED BETWEEN THE TIRES IF DUAL WHEEL VEHICLES SHALL BE REMOVED PRIOR TO LEAVING THE CONSTRUCTION SITE.
- 2. TRACKING PADS AND TIRE WASHING STATIONS SHALL, AT AT MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF
- 3. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
- 4. A MINIMUM 12-INCH THICK PAD SHALL BE MAINTAINED.

STONE TRACKING PAD DETAIL

# 2"x2" WOODEN STAKE ----FILTER FABRIC FILL MATERIAL-

1. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY AND/OR WITHIN 24 HOURS OF CONSTRUCTING DITCHES, DIVERSIONS, OR OTHER CHANNELS. 2. SILT FENCE FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:

- A. GRAB STRENGTH: 100 LBS. (ASTM D-1682) MULLEN BURST: 200 PSI MIN. (ASTM D-3786)
- EQUIVALENT OPENING SIZE: BETWEEN 50 AND 140 FOR SOILS WITH MORE THAN 15 PERCENT BY WEIGHT PASSING A NO. 200 SIEVE. BETWEEN 20 AND 50 FOR SOILS WITH LESS THAN 15 PERCENT BY WEIGHT PASSING A NO. 200 SIEVE.

D. WATER FLOW RATE OF 10 GAL/MIN/SQ. FT. AT 50 MM

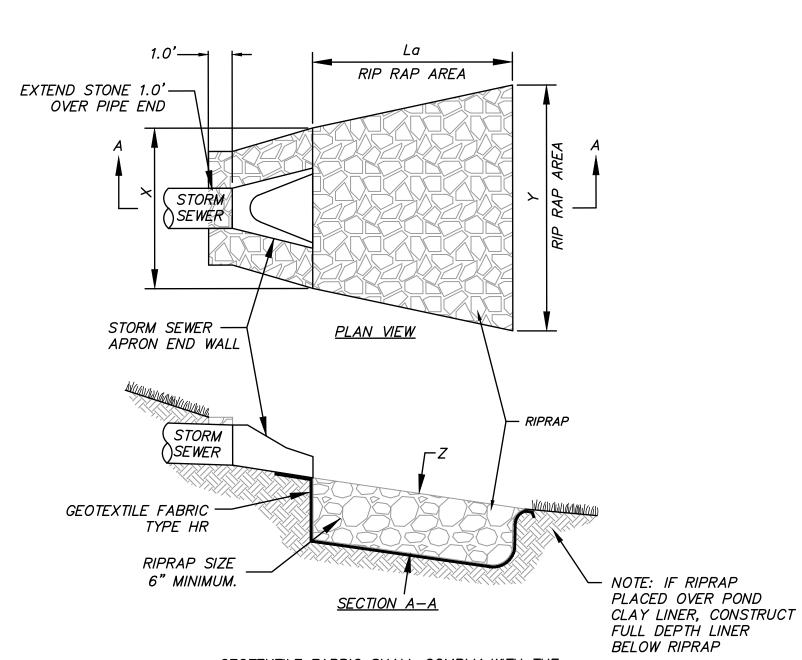
- CONSTANT HEAD (ASTM D-4491) ULTRA VIOLET RADIATION STABILITY OF 90% IF SUPPORT NETTING IS REQUIRED, NETTING SHALL BE
- AN INDUSTRIAL POLYPROPYLENE WITH A 3/4 INCH SPACING OR EQUIVALENT. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED. 3. INSTALLATION PROCEDURE AS FOLLOWS:
- A. EXCAVATE A U-TRENCH UPSLOPE FROM THE LINE OF INSTALL SILT FENCE IN TRENCH. CARE SHOULD BE TAKEN TO AVOID TEARING FABRIC. TORN FABRIC SHALL BE REMOVED AND A NEW SEGMENT OF SILT
- A MINIMUM OF 12" DEEP. SILT FENCE SHALL BE A MINIMUM OF 18" AND A MAXIMUM OF 36" IN HEIGHT. C. FIT LOWER 8" OF FILTER FABRIC INTO U-TRENCH. BACKFILL AND COMPACT U-TRENCH. SILT FENCE SHALL BE INSPECTED WITHIN 24 HOURS AFTER

FENCE SHALL BE PLACED. STAKES SHALL BE DRIVEN

- EACH RAINFALL OR DAILY DURING PERIODS OF PROLONGED RAIN. REPAIR OR REPLACEMENT SHALL BE MADE IMMEDIATELY. 5. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT OR WHEN DEPOSITS REACH ONE HALF THE
- 6. SILT FENCE SHALL BE REMOVED ONLY WHEN THE THREAT OF EROSION HAS PASSED AND PERMANENT VEGETATION HAS BEEN ESTABLISHED.

HEIGHT OF THE BARRIER.

SILT FENCE DETAIL



GEOTEXTILE FABRIC SHALL COMPLY WITH THE SECTION 606 OF THE STATE OF WISCONSIN STANDARD FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

RIPRAP OUTFALL DETAIL

## MAINTENANCE, INSPECTIONS AND REPORTING

- 1. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED BEFORE CONSTRUCTION ACTIVITIES BEGIN IN EACH RESPECTIVE PROJECT PHASE. PRACTICES SHALL BE CHECKED FOR EFFECTIVENESS WEEKLY AND FOLLOWING RAINFALL EVENTS ONE HALF INCH OR GREATER. ANY DEVICES NEEDING REPAIR SHALL BE ADDRESSED IMMEDIATELY.
- 2. SEDIMENT BASINS SHALL BE CLEANED OUT WHEN THE SEDIMENT LEVELS HAVE REACHED THREE AND ONE HALF FEET FROM THE PERMANENT STORAGE DESIGN ELEVATION. IF THE OUTLET BECOMES CLOGGED IT SHALL BE CLEANED TO RESTORE FLOW CAPACITY.
- 3. STORM DRAIN INLET PROTECTION SCREENS SHALL BE REPLACED WHEN SEDIMENT COLLECTED IN THE DEVICE HAS REDUCED THE CAPACITY BY HALF. ACCUMULATED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
- 4. SILT FENCES SHALL BE REPAIRED WHEN SEDIMENT HAS REACHED HALF THE HEIGHT OF THE FENCE. SILT FENCES HAVE A LIFE SPAN OF ONE YEAR, AND SHALL BE REPLACED WHEN WORN OUT. DAMAGED OR DECOMPOSED FENCES, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.
- 5. SEEDED AREAS SHALL BE FERTILIZED, RESEEDED AND MULCHED AS NECESSARY. INSPECT SEEDED AREAS WEEKLY AFTER PLANTING TO ENSURE THAT VEGETATION IS ADEQUATELY ESTABLISHED. LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED.
- 6. MULCH THAT IS DISPLACED SHALL BE REAPPLIED AND PROPERLY ANCHORED. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS.
- 7. TEMPORARY DIVERSIONS SHALL BE SEEDED AND MULCHED OR COVERED WITH EROSION MAT IMMEDIATELY FOLLOWING CONSTRUCTION. STABILIZATION OF DIVERSIONS SHALL BE INSPECTED AND REPAIRS MADE AS NECESSARY.
- 8. EROSION MATTING, STRAW WATTLES, TEMPORARY DITCH CHECKS, STONE OUTLET PROTECTION SHALL BE REPLACED AS NECESSARY.
- 9. STONE TRACKING PAD SHALL BE SCRAPED OR TOP DRESSED WHEN EXISTING STONE BECOMES BURIED OR IF SEDIMENT IS NOT BEING REMOVED EFFECTIVELY FROM TIRES. SEDIMENT THAT IS TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. A MINIMUM 12—INCH THICK PAD SHALL BE MAINTAINED.

THE FOLLOWING CONSTRUCTION SITE INSPECTIONS SHALL BE PERFORMED BY THE CONTRACTOR, AND ARE REQUIRED PER THE NR 216 GENERAL PERMIT:

- 1. CONDUCT WEEKLY INSPECTIONS OF IMPLEMENTED EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES, AND REPORTING.
- 2. INSPECTIONS OF EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS AFTER A PRECIPITATION EVENT OF 0.5 INCHES OR GREATER, AND REPORTING.
- 3. REPAIR OR REPLACE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES AS NECESSARY WITHIN 24 HOURS OF AN INSPECTION OR DEPARTMENT NOTIFICATION THAT A REPAIR OR REPLACEMENT IS NEEDED.
- 4. MAINTAIN WEEKLY WRITTEN REPORTS OF ALL INSPECTIONS CONDUCTED AT THE CONSTRUCTION SITE. WEEKLY INSPECTION REPORTS SHALL INCLUDE ALL OF THE FOLLOWING: A. DATE, TIME AND LOCATION OF THE CONSTRUCTION SITE INSPECTION.
- B. NAME OF THE INDIVIDUAL WHO PERFORMED THE INSPECTION. C. ASSESSMENT OF THE CONDITION OF EROSION AND SEDIMENT CONTROLS.
- D. DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE IMPLEMENTATION AND MAINTENANCE PERFORMED.
- E. DESCRIPTION OF THE PRESENT PHASE OF LAND DISTURBING ACTIVITY AT THE CONSTRUCTION

## **GENERAL EROSION NOTES**

- ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE STATE OF WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (WPDES PERMIT) AND CITY OF OAK CREEK EROSION CONTROL PERMIT AND BECOME FAMILIAR WITH THE CONTENTS. CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
- 2. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- 3. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DISCHARGED TO A TEMPORARY SEDIMENT BASIN.
- 4. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 5. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- 6. ALL EROSION CONTROL MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
- 7. ANY DISTURBED SITE THAT REMAINS INACTIVE FOR GREATER THAN 7 DAYS SHALL BE STABILIZED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING OR MULCHING. FROZEN SOILS DO NOT EXCLUDE THE SITE FROM THIS REQUIREMENT.
- 8. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED. PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE STORM SEWER DRAINAGE SYSTEMS DEPOSITED PRIOR TO STABILIZATION OF THE SITE..
- 10. SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES.
- 11. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- 12. BMP'S SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCE'S (WDNRs) TECHNICAL STANDARDS. REFER TO THE WDNRs WEBSITE FOR ADDITIONAL DEFINITIONS, CRITERIA AND APPLICATION OF STORMWATER AND EROSION CONTROL DEVICES AT:
  - http://dnr.wi.gov/topic/stormwater/standards/const\_standards.html



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SCALE: N.T.S. JOB NO. **3170292** 

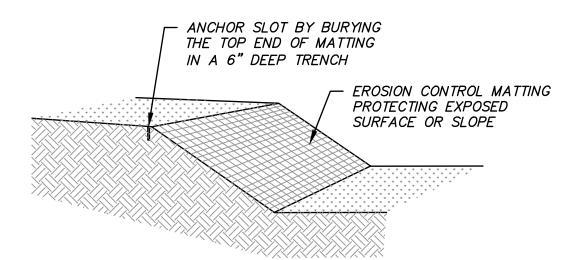
DESIGNED BY: JAH

PROJECT MANAGER: ROBERT J. HARLEY, P.E.

CHECKED BY: RJH

SHEET NUMBER

C401



NOTES:

1. PRIOR TO THE INSTALLATION OF ANY EROSION CONTROL MATTING, ALL ROCKS, DIRT CLODS, STUMPS, ROOTS, TRASH AND ANY OTHER OBSTRUCTIONS WHICH WOULD PREVENT THE MAT FROM LAYING IN DIRECT CONTACT WITH THE SOIL SHALL BE REMOVED.

2. EROSION CONTROL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 628 OF THE WISCONSIN DOT STANDARD SPECIFICATIONS, DNR TECHNICAL STANDARD 1052 (NON CHANNEL APPLICATIONS), DNR TECHNICAL STANDARD 1053 (CHANNEL APPLICATIONS), AND LATEST MANUFACTURER SPECIFICATIONS, ESPECIALLY NOTING REQUIRED STAPLE PATTERNS AND ANCHOR TRENCH

3. INSTALLATION PROCEDURES MUST INSURE THAT THE MAT WILL REMAIN IN CONTACT WITH THE SOIL.
4. THE MATTING SHALL BE ANCHORED PER MANUFACTURER REQUIREMENTS

5. THE MATTING SHALL BE ANCHORED TO THE GROUND PER MANUFACTURER REQUIREMENTS
6. TEMPORARY EROSION CONTROL MATTING SHALL BE WISDOT PAL CLASS I, TYPE B AND PERMANENT EROSION CONTROL MATTING SHALL BE WISDOT PAL CLASS III, TYPE A 7. MATTED AREAS MUST BE INSPECTED ON A WEEKLY BASIS, AND AFTER EACH SIGNIFICANT RAINFALL. BARE SPOTS, MISSING OR LOOSENED MATTING MUST BE IMMEDIATELY REPLACED AND/OR RE—ANCHORED.
8. FOR CHANNEL APPLICATIONS, EXTEND MAT UPSLOPE ONE—FOOT MINIMUM VERTICALLY FROM DITCH BOTTOM OR SIX—INCHES HIGHER THAN DESIGN FLOW, WHICHEVER IS

GREATER.

EROSION CONTROL MATTING DETAIL

#### C. Geotextile Bags

 Geotextile bags shall meet the criteria listed in Table 1.

#### Table 1: Properties for Geotextile Bags

Property	Test Method	Type I Value	Type II Value
Maximum Apparent	ASTM D-4751	0.212 mm	0.212 mm
Opening Sizes			
Grab Tensile	ASTM D-4632	200 lbs.	300 lbs.
Strength			
Mullen Burst	ASTM D-3786	350 psi	580 psi
Permeability	ASTM D-4491	0.28 cm/sec	0.2 cm/sec
Fabric	Nominal Representative Weight	8 oz	12 oz

- Geotextile bags shall be sized according to the particle size being trapped, expected flow or pumping rate (gallons per minute) per square foot of fabric and a 50% clogging factor. The footprint of the bag shall be no smaller than 100 square feet.
- Geotextile bags shall be securely attached to the discharge pipe.
- 4. Polymers can be used to enhance the efficiency of geotextile bags. If polymer is used, the polymer shall be approved by the WDNR and meet the criteria stipulated in WDNR Conservation Practice Standard 1051, Sediment Control Water Application of Polymers. The polymer supplier or applicator shall provide certifications showing that products have met the performance requirements of Standard 1051. If the manufacturer has not completed the required testing, the project may be used to gain that certification provided it meets the site requirements of Standard 1051. Any such testing will be monitored by DNR or WisDOT, with testing done by a qualified third party.
- 1. INSTALL GEOTEXTILE BAGS IN LOCATION SHOWN, PLACED ON UNDISTURBED, VEGETATED SOIL. ALL WATER PUMPED SHALL BE DISCHARGED THROUGH GEOTEXTILE BAGS.
- 2. CONTRACTOR SHALL PROVIDE ENGINEER WITH SIZING CALCULATIONS
  PER WDNR TECHNICAL STANDARD 1061 (SEE ABOVE) PRIOR TO ANY
  PUMPING/DISCHARGE.
- 3. WATER DISCHARGED FROM GEOTEXTILE BAGS SHALL BE IMMEDIATELY ROUTED THROUGH STONE DITCH CHECK FOR ENERGY DISSIPATION PRIOR TO RELEASING INTO STABILIZED TEMPORARY DIVERSION DIKE/BERM.
- 4. REMOVE ACCUMULATED SEDIMENT FROM GEOTEXTILE BAGS AND STONE DITCH CHECK TO MAINTAIN EFFECTIVENESS. ALL SEDIMENT COLLECTED SHALL BE PROPERLY DISPOSED OF TO PREVENT DISCHARGE TO WATERS OF THE STATE.
- 5. THE CONTRACTOR SHALL PROCURE A PERMIT FROM WDNR PRIVATE WATER SUPPLY SECTION FOR ANY DEWATERING OPERATIONS HAVING AN AGGREGATE CAPACITY EXCEEDING 70 GALLONS PER MINUTE.

GEOTEXTILE BAGS

DATE DESCRIPTION



NEIGHBORHOOD HOSPITAL OAK CREEK
CITY OF OAK CREEK, WI

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DATE: 09/25/18

SCALE: N.T.S.

JOB NO. 3170292

PROJECT MANAGER:
ROBERT J. HARLEY, P.E.
DESIGNED BY: JAH

CHECKED BY: RJH

SHEET NUMBER C402

# **SPECIFICATIONS**

# A. GENERAL

- 1. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY— EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- 3. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE BIDDER WILL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES AND SHALL STATE SUCH QUANTITIES IN THEIR PROPOSAL. THE CONTRACTOR SHALL BASE THEIR BID ON THEIR OWN ESTIMATE OF THE WORK REQUIRED AND SHALL NOT RELY ON THE ENGINEER'S ESTIMATE.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A
  GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE
  GEOTECHNICAL ENGINEER.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS.
- 7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT THEIR WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF THEIR INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- 9. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES.
- 10. ANY ADJACENT PROPERTIES OR ROAD RIGHT—OF—WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF THE RESTORATION IS CONSIDERED INCIDENTAL, AND SHOULD BE INCLUDED IN THE BID PRICES.

### 11. SUBMITTALS:

- A. SHOP DRAWINGS AND/OR MANUFACTURER'S PRODUCT DATA SUBMITTALS ARE REQUIRED ONLY IF THE PRODUCT OR METHOD OF CONSTRUCTION
  - a. IS DIFFERENT FROM THAT SPECIFIED OR b. IS PART OF THE WORK THAT WILL BE DEDICATED AS A PUBLIC UTILITY OR ROADWAY AT THE END OF THE PROJECT
  - OR
- c. IF REQUIRED BY THE MUNICIPAL ENGINEER.
  B. FOR UTILITY OR ROAD WORK THAT WILL BE DEDICATED TO A MUNICIPALITY, CONTRACTOR MUST MAKE SUBMITTALS TO THE MUNICIPALITY AS WELL AS ENGINEER.
- C. ALL DOCUMENTS SUBMITTED FOR REVIEW SHALL HAVE THE SPECIFIC MATERIAL, PART, SIZE, ETC. RELATED TO THE DESIGN HIGHLIGHTED IN SOME FASHION. EXAMPLE: A FITTING CUT SHEET HAS MULTIPLE PRESSURE RATING FOR DIFFERENT SIZE BENDS. HIGHLIGHT THE PRESSURE CLASS & SIZE TO BE USED ON THE PROJECT. ALL SUBMITTALS NOT PROPERLY IDENTIFYING THE SPECIFIC MATERIAL BEING USED WILL BE REJECTED.
- D. ALL DOCUMENTS SUBMITTED FOR REVIEW MUST INDICATE WHAT PART OF THE DESIGN THEY RELATE TO.
- E. CONTRACTOR SHALL ALLOW A MINIMUM OF 10 WORKING DAYS FOR SUBMITTAL REVIEW. F. SUBSTITUTION REQUESTS
  - a. IF A SUBSTITUTION IS REQUESTED, CONTRACTOR SHALL SUBMIT A SHOP DRAWING AND/OR MANUFACTURER'S DATA AND AN EXPLANATION AS TO EXACTLY HOW THE PROPOSED SUBSTITUTION MEETS THE PROPOSED DESIGN TO THE OWNER'S REPRESENTATIVE OR ENGINEER FOR REVIEW AND APPROVAL. PRODUCT SPECIFICATION SHEETS WITHOUT
  - EXPLANATION WILL NOT BE ACCEPTED.

    b. THE CONTRACTOR SHALL ALSO INDICATE WITH THE SUBSTITUTION REQUEST THE AMOUNT THAT WILL BE CREDITED
  - FROM THE CONTRACT AMOUNT TO THE OWNER IF THE SUBSTITUTION IS APPROVED.

    c. THE CONTRACTOR SHALL NOT PROCEED UNTIL THE OWNER'S APPROVAL IS GIVEN.

# B. EROSION CONTROL

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS, INCLUDING WPDES DISCHARGE PERMITS (IF APPLICABLE), AND THE (LOCAL MUNICIPALITY) EROSION CONTROL PERMIT. CONTRACTOR IS RESPONSIBLE FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
- 2. ALL INSTALLATION AND MAINTENANCE OF EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARD.
- 3. ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH THE DNR WPDES GENERAL PERMIT.
- 4. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL 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. NEEDED REPAIRS WILL BE MADE IMMEDIATELY.
- 5. ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN DAYS OR MORE SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH IN ACCORDANCE WITH THE WDNR TECHNICAL STANDARDS 1059 AND 1058.
- 6. TEMPORARY SEED MIXTURE SHALL CONFORM TO 630.2.1.5.1.4 OF THE WISDOT STANDARD SPECIFICATIONS. USE WINTER WHEAT OR RYE FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 1.
- 7. DISTURBED AREAS THAT CANNOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION BY SEEDING AND MULCHING DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION, SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM) IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050.
- 8. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASINS TO MAINTAIN A THREE FOOT DEPTH OF TREATMENT, MEASURED BELOW THE NORMAL WATER ELEVATION. SEDIMENT WILL BE REMOVED FROM THE DIVERSION DITCHES WHEN IT REACHES HALF THE OF THE DITCH. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE AND DITCH CHECKS WHEN IT REACHES HALF THE HEIGHT OF THE FENCE/BALE. THE SILT FENCE AND DITCH CHECKS SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
- 9. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 PRIOR TO DISCHARGE TO WATERS OF THE STATE, WETLANDS, OR OFFSITE. CONTRACTOR RESPONSIBLE FOR REVISING THE PERMIT, IF NECESSARY.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING ON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL TEMPORARY SEDIMENT TRAPS IN VARIOUS LOCATIONS THROUGHOUT THE PROJECT. TEMPORARY SEDIMENT TRAPS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH WONR TECHNICAL STANDARD 1063.
- 11. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.
- 12. DUST CONTROL SHALL BE PROVIDED AS NECESSARY IN ACCORDANCE WITH WONR TECHNICAL STANDARD 1068.

13. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.

14. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE APPROVED LANDSCAPE PLAN TO MAINTAIN A VIGOROUS DENSE VEGETATIVE COVER.

# C. GRADING

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE GEOTECHNICAL REPORT AND THE LOCAL ORDINANCES AND SPECIFICATIONS
- 2. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING.
- 3. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- 4. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.
- 5. GRADING SHALL CONSIST OF CLEARING AND GRUBBING EXISTING VEGETATION, STRIPPING TOPSOIL, REMOVAL OF EXISTING PAVEMENT OR FOUNDATIONS, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE AN ON—SITE EARTHWORK BALANCE, GRADING THE PROPOSED BUILDING PADS AND PAVEMENT AREAS, SCARIFYING AND FINAL COMPACTION OF THE PAVEMENT SUBGRADE, AND PLACEMENT OF TOPSOIL.
- 6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF—ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- 7. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 8. TOPSOIL IN PARKING ISLANDS: ALL PARKING LOT ISLANDS TO BE BACKFILLED WITH TOPSOIL TO A MINIMUM DEPTH OF 18" BY GRADING CONTRACTOR TO INSURE LONG TERM PLANT HEALTH. CROWN ALL PLANTING ISLANDS A MINIMUM OF 6" TO PROVIDE PROPER DRAINAGE, UNLESS OTHERWISE SPECIFIED.

# D. PAVING

SHALL BE 0.050-0.070 GAL/SY.

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- 2. PAVING SHALL CONSIST OF FINE GRADING PAVEMENT AREAS, INSTALLATION OF CRUSHED STONE BASE, CONCRETE AND/OR BITUMINOUS PAVEMENT, PAVEMENT MARKING, AND CLEANUP. ALL MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR.
- 3. AGGREGATES USED IN THE CRUSHED AGGREGATE BASE SHALL BE (\*-INCH) DENSE GRADED BASE IN ACCORDANCE WITH SUBSECTION 305.2.2 OF THE STANDARD SPECIFICATIONS.
- 4. HOT MIX ASPHALT PAVEMENT (HMA) SHALL BE CLASSIFIED AS (\*\*) IN ACCORDANCE WITH SECTION 460 AND TABLE 460-2 OF THE STANDARD SPECIFICATIONS.
- 5. ASPHALTIC MATERIALS SHALL BE PERFORMANCE GRADED (PG) BINDERS IN ACCORDANCE WITH SECTION 455 OF THE STANDARD
- SPECIFICATIONS. UPPER LAYERS SHALL BE (\*\*\*), AND LOWER LAYERS SHALL BE (\*\*\*).

  6. AGGREGATES USED IN THE HMA SHALL BE IN ACCORDANCE WITH SUBSECTION 460.2.2.3 OF THE STANDARD SPECIFICATIONS. THE NOMINAL AGGREGATE SIZE FOR THE UPPER LAYER PAVEMENT SHALL BE (\*\*\*\*), AND THE LOWER LAYER PAVEMENT SHALL BE
- (\*\*\*\*).

  7. TACK COAT SHALL BE IN ACCORDANCE WITH SUBSECTION 455.2.5 OF THE STANDARD SPECIFICATIONS. THE RATE OF APPLICATION
- 8. CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL BE GRADE A (OR GRADE A2 IF PLACING BY SLIP-FORMED PROCESS) AIR ENTRAINED IN ACCORDANCE WITH SECTION 501 FOR THE STANDARD SPECIFICATIONS, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI.
- 9. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF THE STANDARD SPECIFICATIONS: SECTION 415 FOR CONCRETE PAVEMENT, SECTION 601 FOR CONCRETE CURB AND GUTTER, AND SECTION 602 FOR CONCRETE SIDEWALKS.
- 10. ALL FINISHED CONCRETE SHALL BE COVERED WITH A LIQUID CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE 2, IN ACCORDANCE WITH SECTION 415 OF THE STANDARD SPECIFICATIONS.
- 11. PAVEMENT MARKINGS SHALL BE PAINT IN ACCORDANCE WITH SECTION 646 OF THE STANDARD SPECIFICATIONS. (COLOR SHALL BE AS INDICATED ON THE PLANS.) THE FOLLOWING ITEMS SHALL BE PAINTED WITH COLORS NOTED BELOW:

PARKING STALLS: WHITE
PEDESTRIAN CROSSWALKS: WHITE
LANE STRIPING WHERE SEPARATING TRAFFIC IS MOVING IN OPPOSITE DIRECTIONS: YELLOW
LANE STRIPING WHERE SEPARATING TRAFFIC IS MOVING IN SAME DIRECTIONS: WHITE
ADA SYMBOLS: BLUE OR PER LOCAL CODE
FIRE LANES: PER LOCAL CODE

EXTERIOR SIDEWALK CURBED, LIGHTPOLE BASES, AND GUARD POSTS: YELLOW

# E. PRIVATE UTILITIES

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO WISCONSIN ADMINISTRATIVE CODE, SECTION SPS 382—384, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- 2. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- 3. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS.
- 4. PROPOSED SANITARY SEWER, WATER MAIN, AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. STORM SEWER CONNECTING TO EXTERIOR DOWN SPOUTS SHALL BE PER DETAILS ON THE ARCHITECTURAL PLANS. THE EXACT LOCATION OF ALL DOWN SPOUTS SHALL BE PER THE ARCHITECTURAL PLANS.
- 5. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS:

STORM SEWER PIPE 30" OR LARGER SHALL BE REINFORCED CONCRETE, ASTM C-76, CLASS III OR GREATER, WITH ELASTOMERIC SEALS CONFORMING TO ASTM C-443.

STORM SEWER PIPE 24" OR LESS SHALL BE EITHER:

- A) HIGH DENSITY POLYETHYLENE (HDPE) WITH A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS, SUCH AS ADS N-12 WT. HDPE PIPE SHALL CONFORM TO ASTM F2648 AND F2306. JOINTS SHALL BE WATER TIGHT CONFORMING TO ASTM D3212 WITH ELASTOMERIC SEALS (GASKETS) CONFORMING TO ASTM F477.
- B) POLYVINYL CHLORIDE (PVC) PIPE, ASTM D-3034, SDR 35, WITH ELASTOMERIC PUSH-ON JOINTS CONFORMING TO
- C) REINFORCED CONCRETE, ASTM C-76, CLASS III OR GREATER, WITH ELASTOMERIC SEALS CONFORMING TO ASTM C-443.

INLETS SHALL BE SOLID CONCRETE BLOCK OR PRE CAST REINFORCED CONCRETE, ASTM C-478.

TRENCH SECTION SHALL BE CLASS "C" FOR CONCRETE AND CLASS "B" FOR ALL OTHER MATERIALS.

6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS:

SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212.

TRENCH SECTION SHALL BE CLASS "B" BEDDING. CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL.

PREFABRICATED WYE CONNECTIONS ARE REQUIRED FOR SANITARY LATERALS

7. MATERIALS FOR WATER SERVICE SHALL BE AS FOLLOWS:

WATER SERVICE SHALL BE PVC, SDR-18, CLASS 235, AWWA C-900, WITH ELASTOMERIC JOINTS (ASTM D-3139), WITH A VALVE AT THE SUPPLY MAIN.

WATER SERVICE SHALL BE DUCTILE IRON (DI), ASTM A-377, WITH ELASTOMERIC JOINTS (AWWA C-111), WITH A VALVE AT THE SUPPLY MAIN.

WATER SERVICE SHALL BE COPPER, TYPE "K", WITH A VALVE AT THE SUPPLY MAIN.

ALL FITTINGS SHALL BE MECHANICAL JOINT, DUCTILE IRON CONFORMING TO AWWA C-111.

HYDRANTS SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY'S STANDARD SPECIFICATIONS.

GATE VALVES SHALL BE RESILIENT WEDGE TYPE, AWWA C-509, AND SHALL BE INSTALLED WITH AN ADJUSTABLE VALVE BOX AND COVER MARKED "WATER".

TRENCH SECTION SHALL CONFORM TO SECTION 4.3.C, FILE NO. 38 OF THE STANDARD SPECIFICATIONS. SAND OR STONE CHIP BEDDING MATERIAL IS REQUIRED.

- 8. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY.
- 9. UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED—UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
- 11. TRACER WIRE SHALL BE INSTALLED ON ALL BURIED NON-METALLIC SANITARY SEWERS, PRIVATE SANITARY INTERCEPTOR MAIN SEWERS, STORM BUILDING SEWERS, AND PRIVATE STORM INTERCEPTOR MAIN SEWERS THAT DISCHARGE TO MUNICIPAL MAINS. TRACER WIRE SHALL ALSO BE INSTALLED ON ALL BURIED NON-METALLIC WATER SERVICES AND PRIVATE WATER MAINS CONNECTED TO MUNICIPAL SUPPLY SYSTEMS. TRACER WIRE SHALL BE IN ACCORDANCE WITH COMM 82.30(11)(h)(1). TRACER WIRE SHALL BE A MINIMUM OF 18-GAUGE, INSULATED, SINGLE-CONDUCTOR COPPER WIRE OR EQUIVALENT. TRACER WIRE COLOR SHALL BE BLUE FOR POTABLE WATER, GREEN FOR SANITARY SEWER, AND BROWN FOR STORM SEWER.



CITY OF OAK CREEK, WI

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SCALE: **N.T.S.**JOB NO. **3170292** 

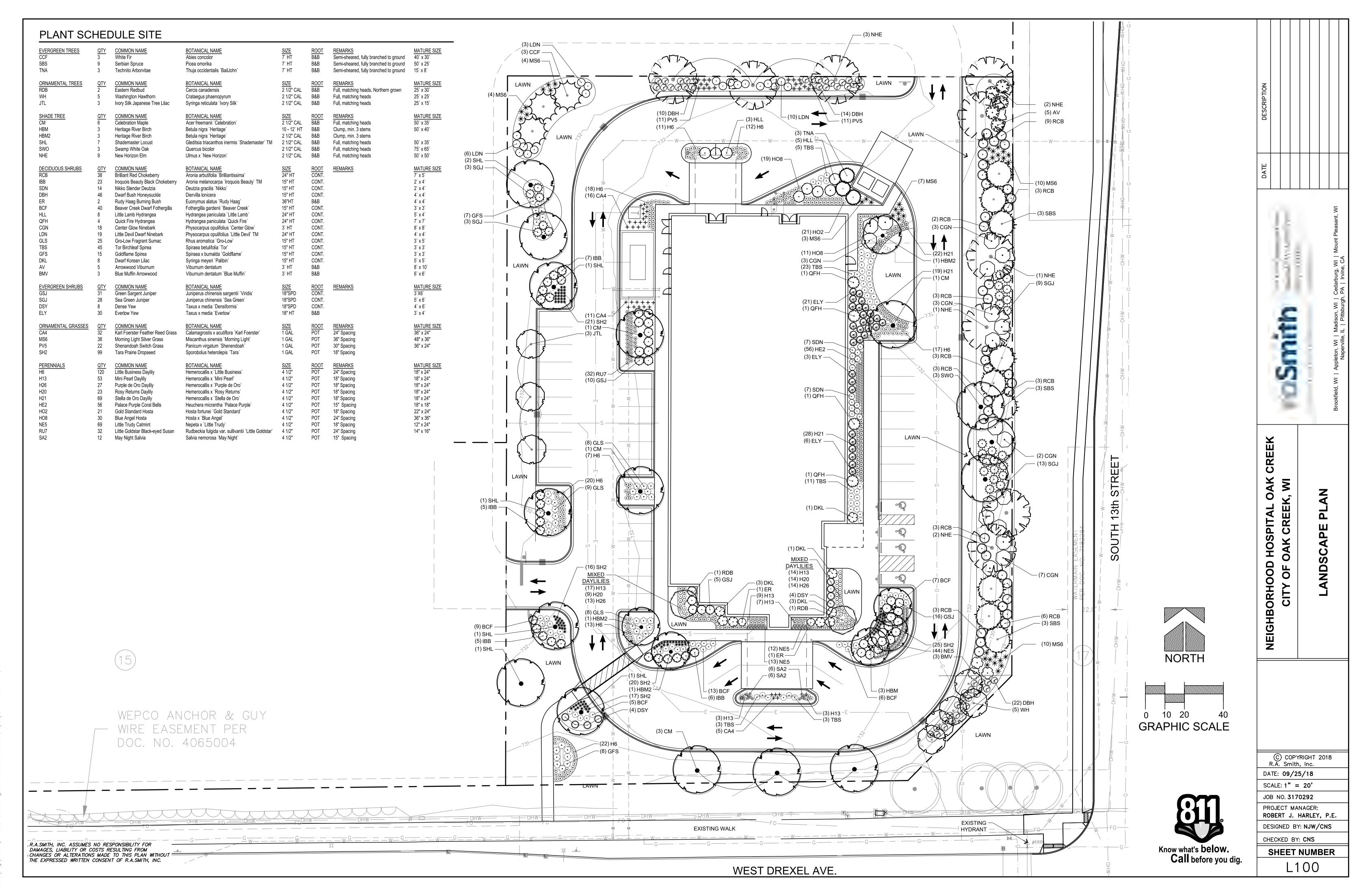
PROJECT MANAGER:
ROBERT J. HARLEY, P.E.

DESIGNED BY: JAH
CHECKED BY: RJH

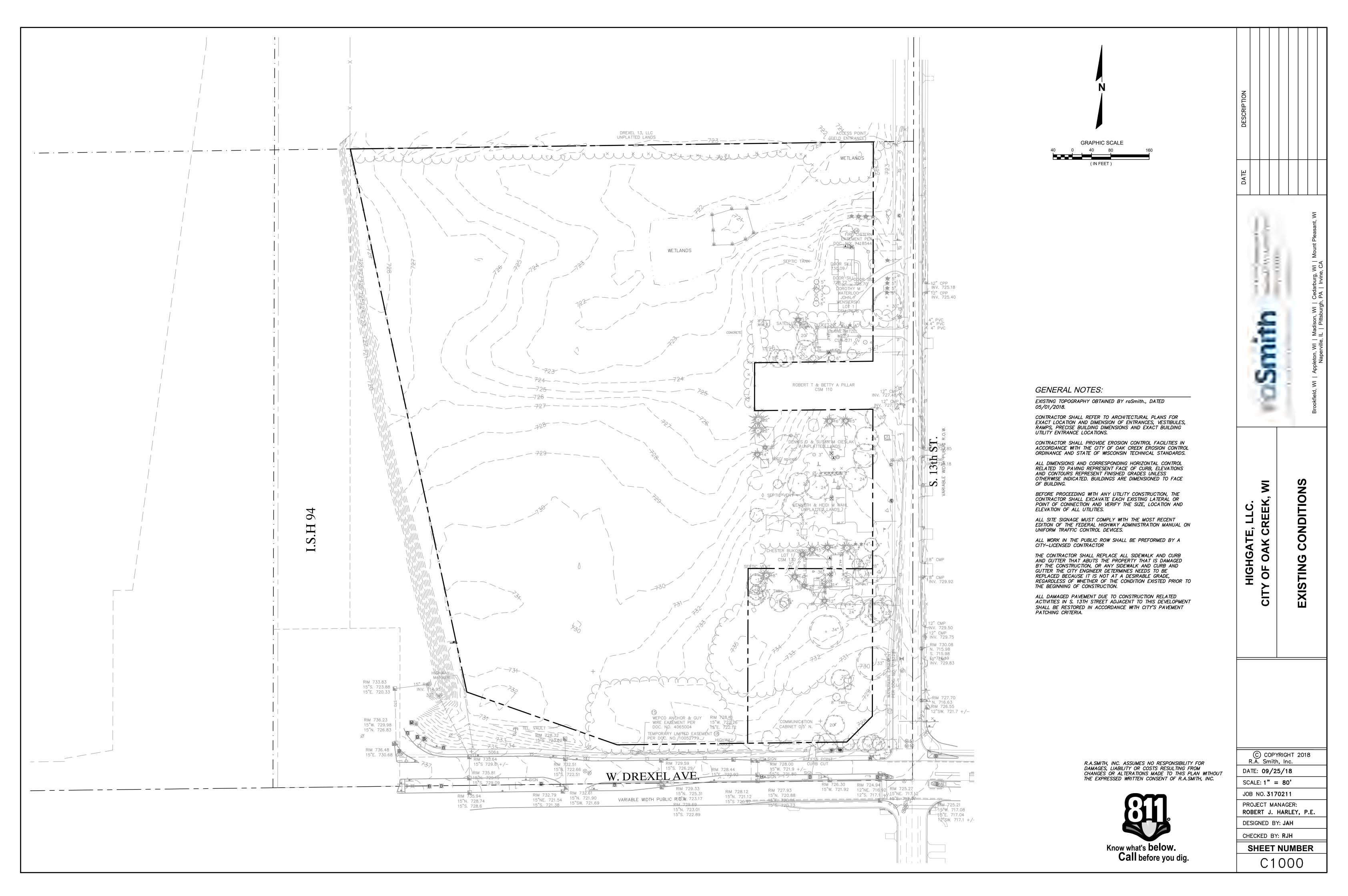
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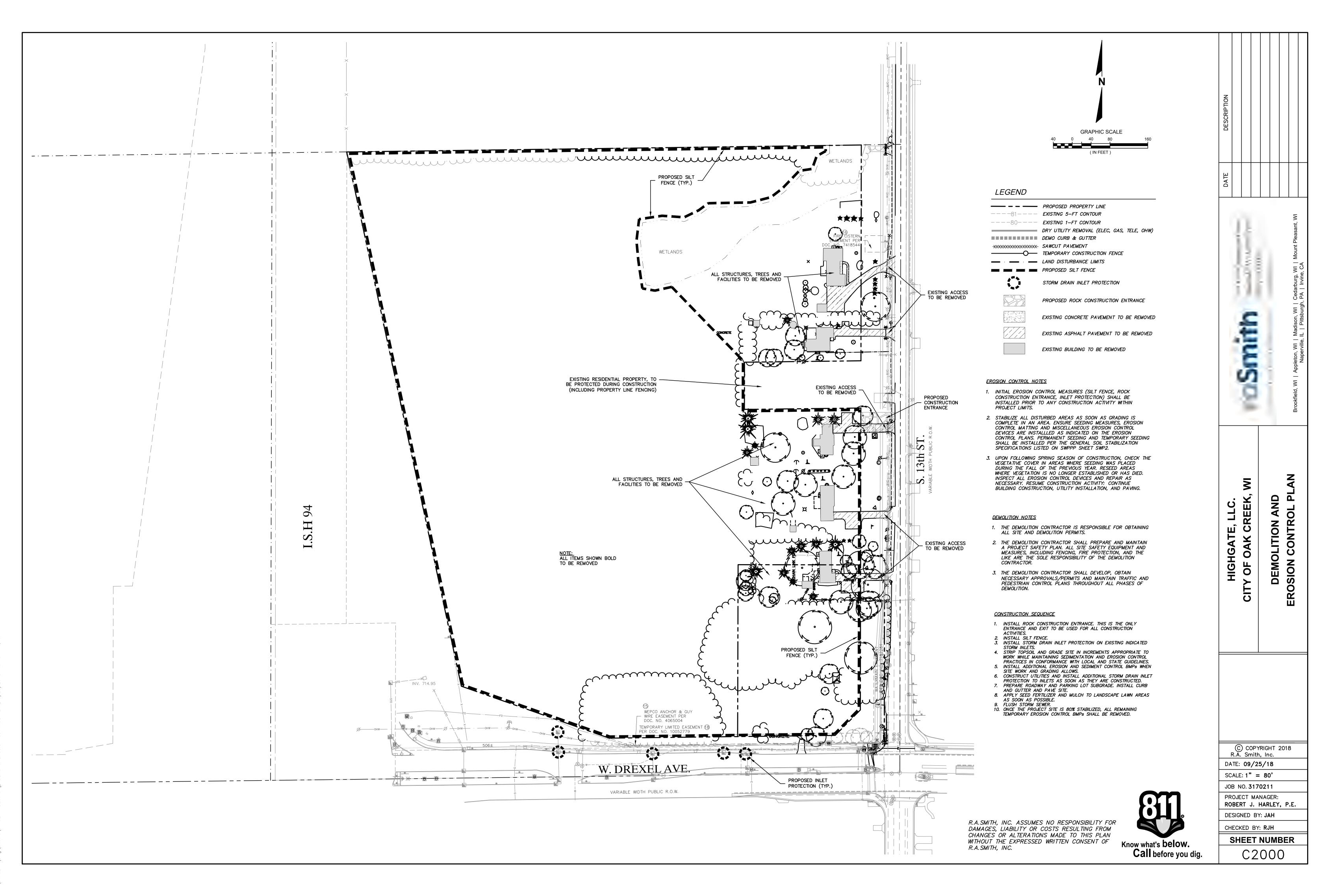
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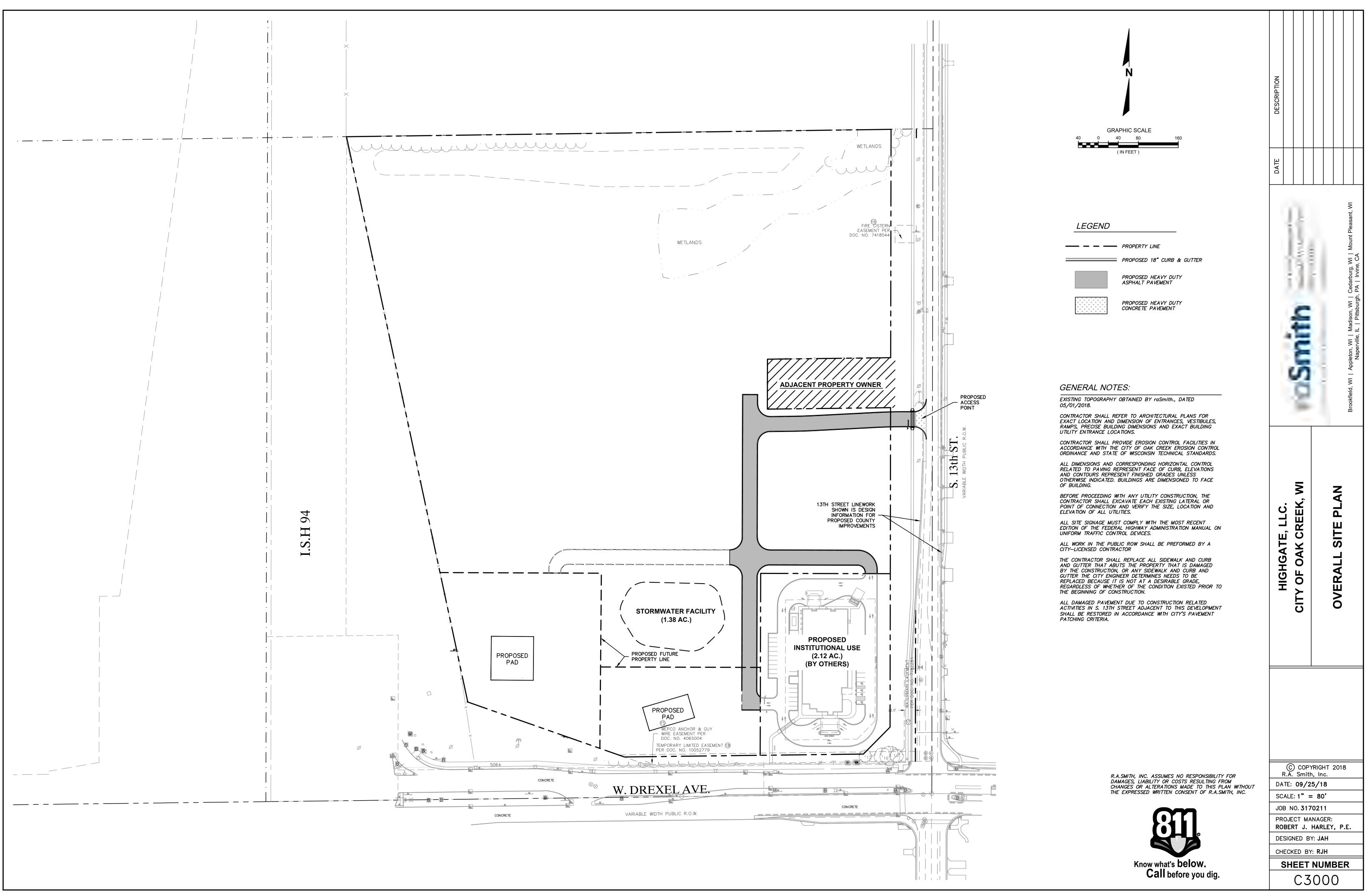
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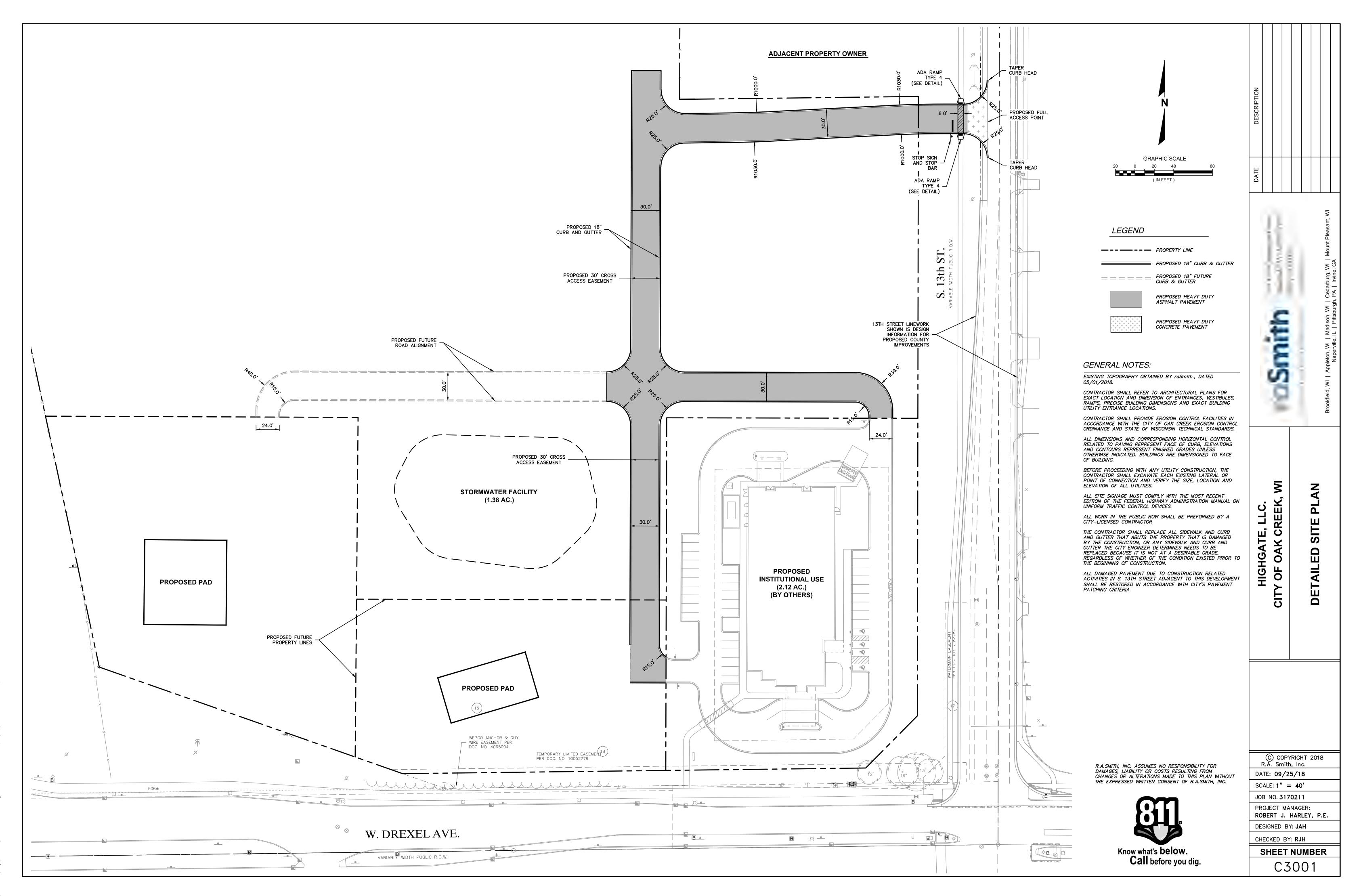


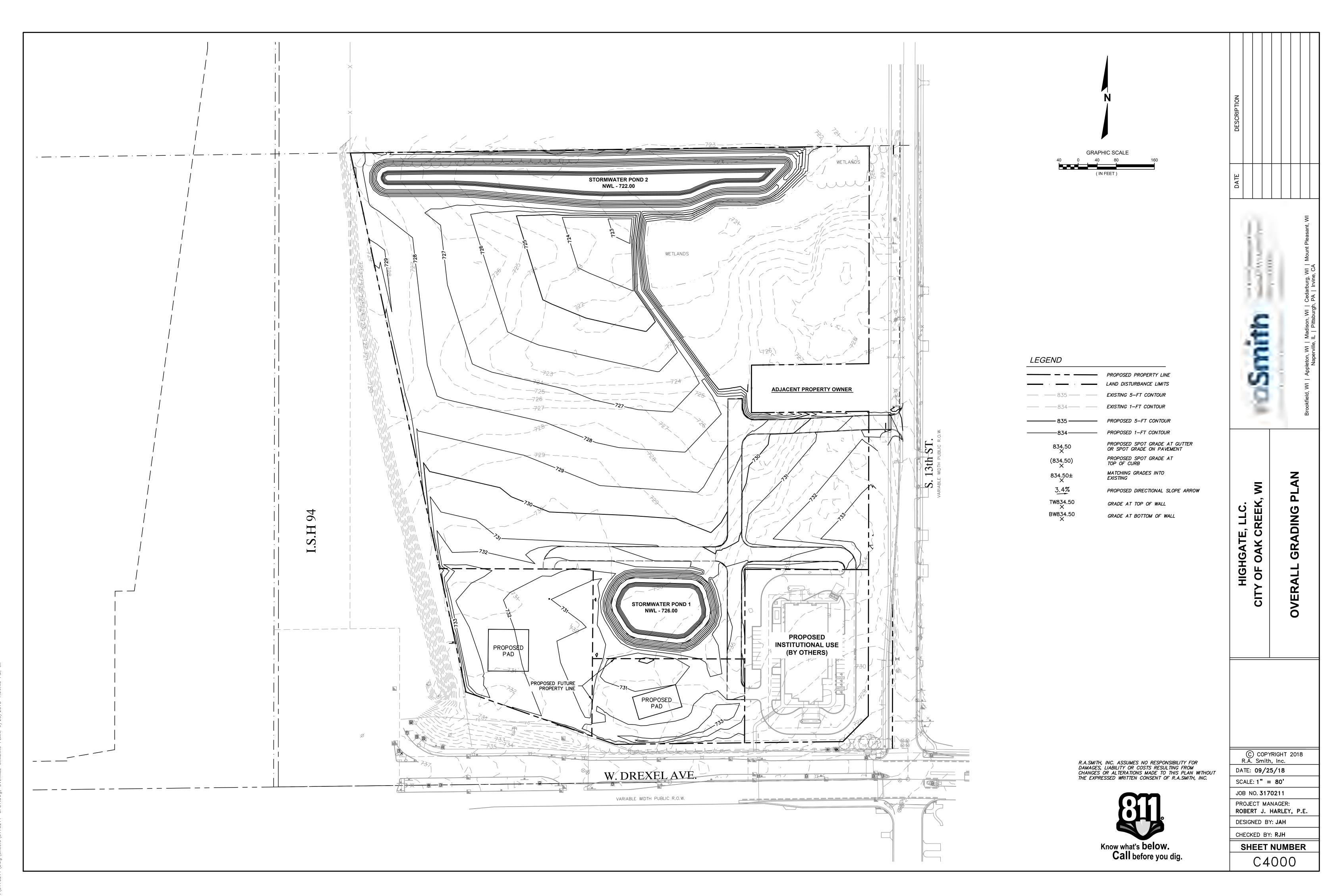
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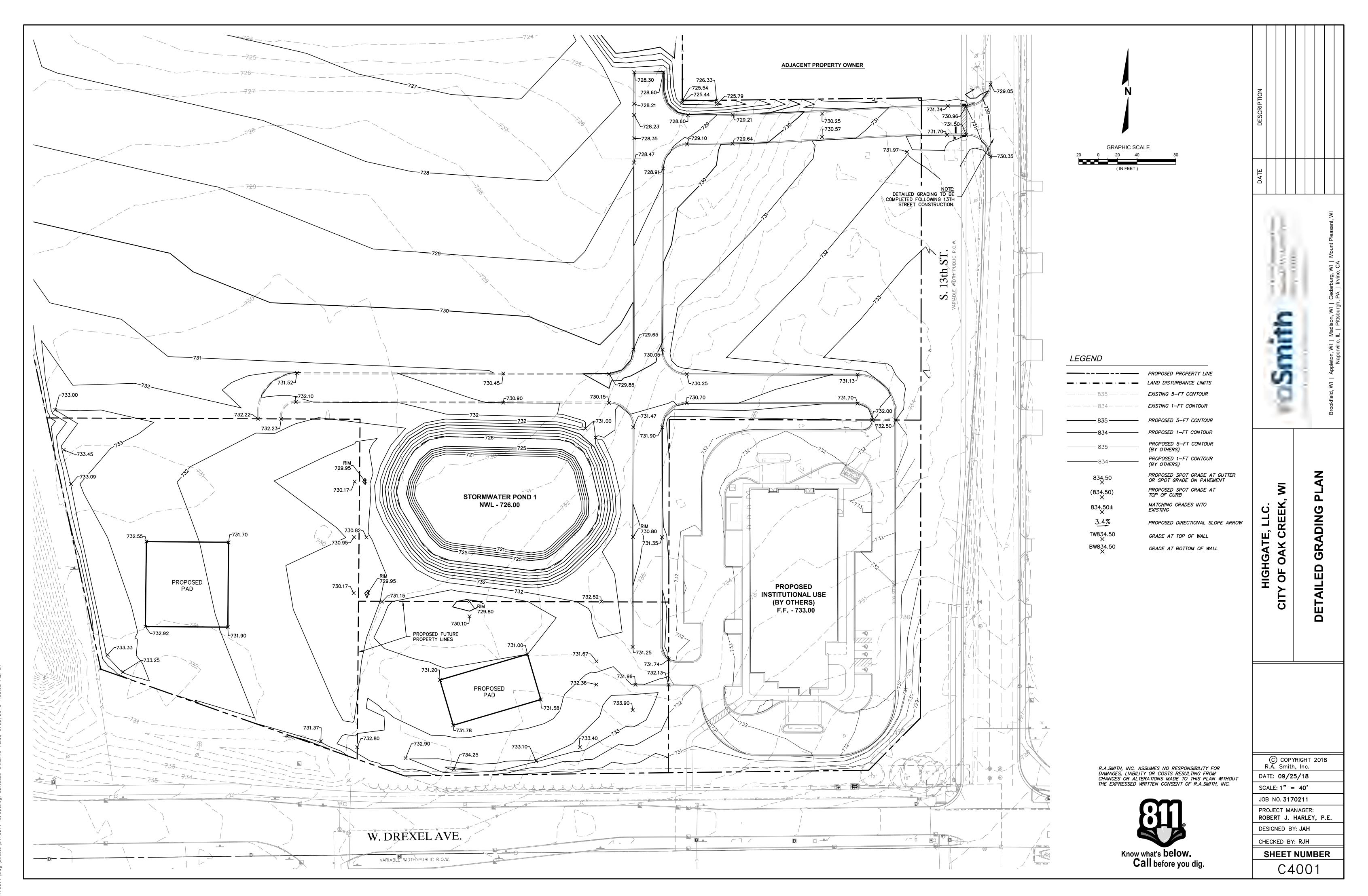
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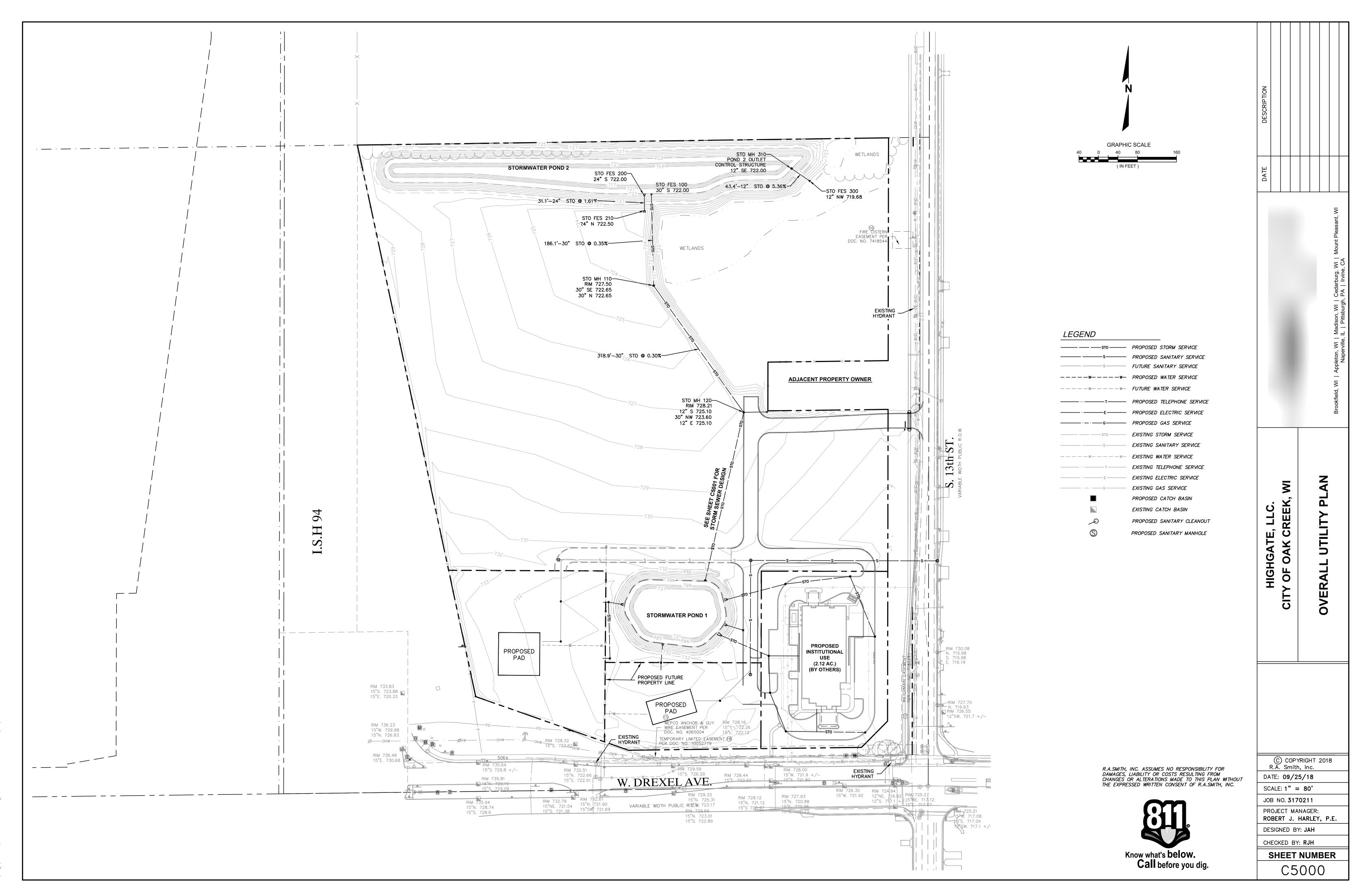




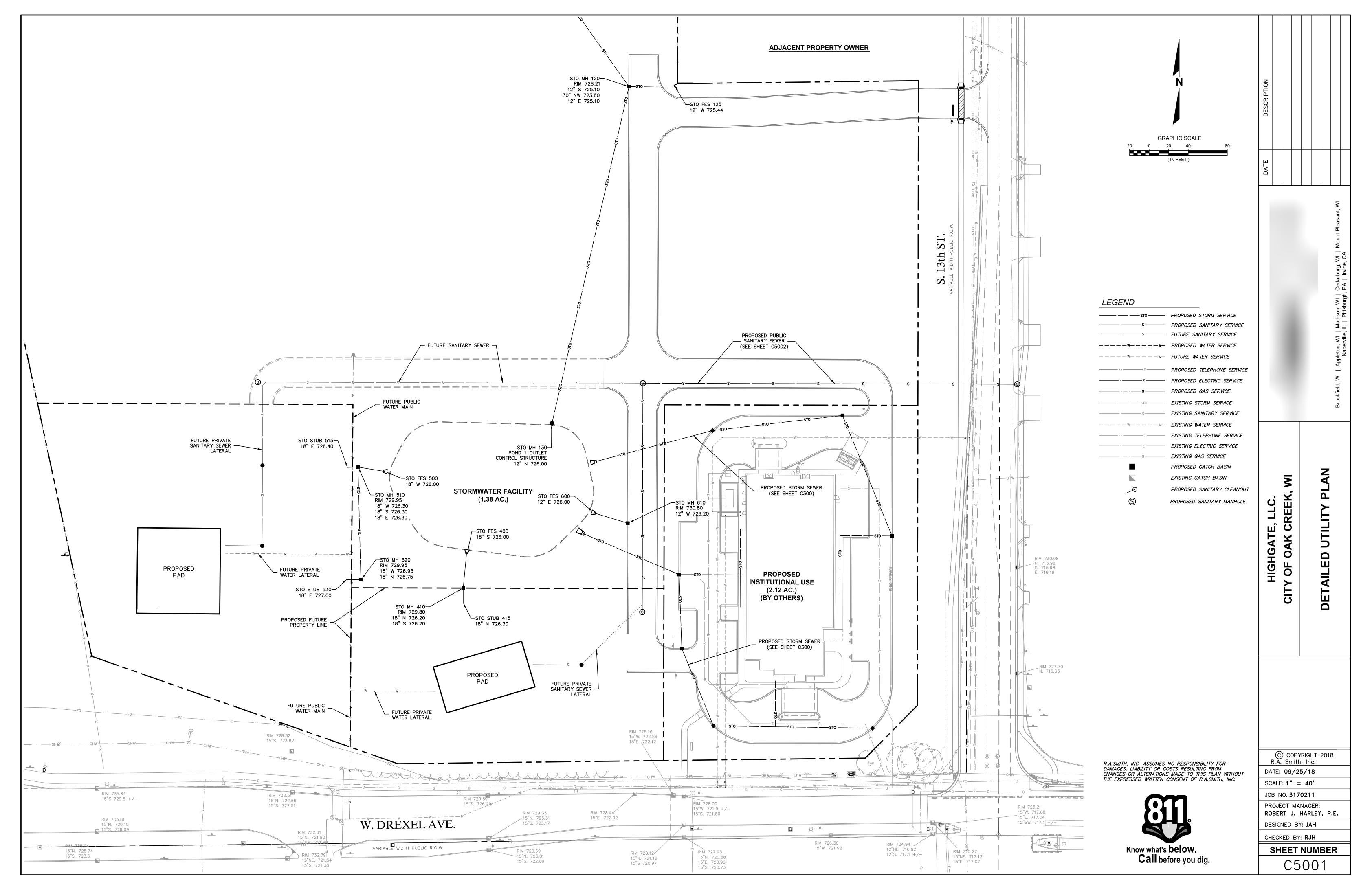
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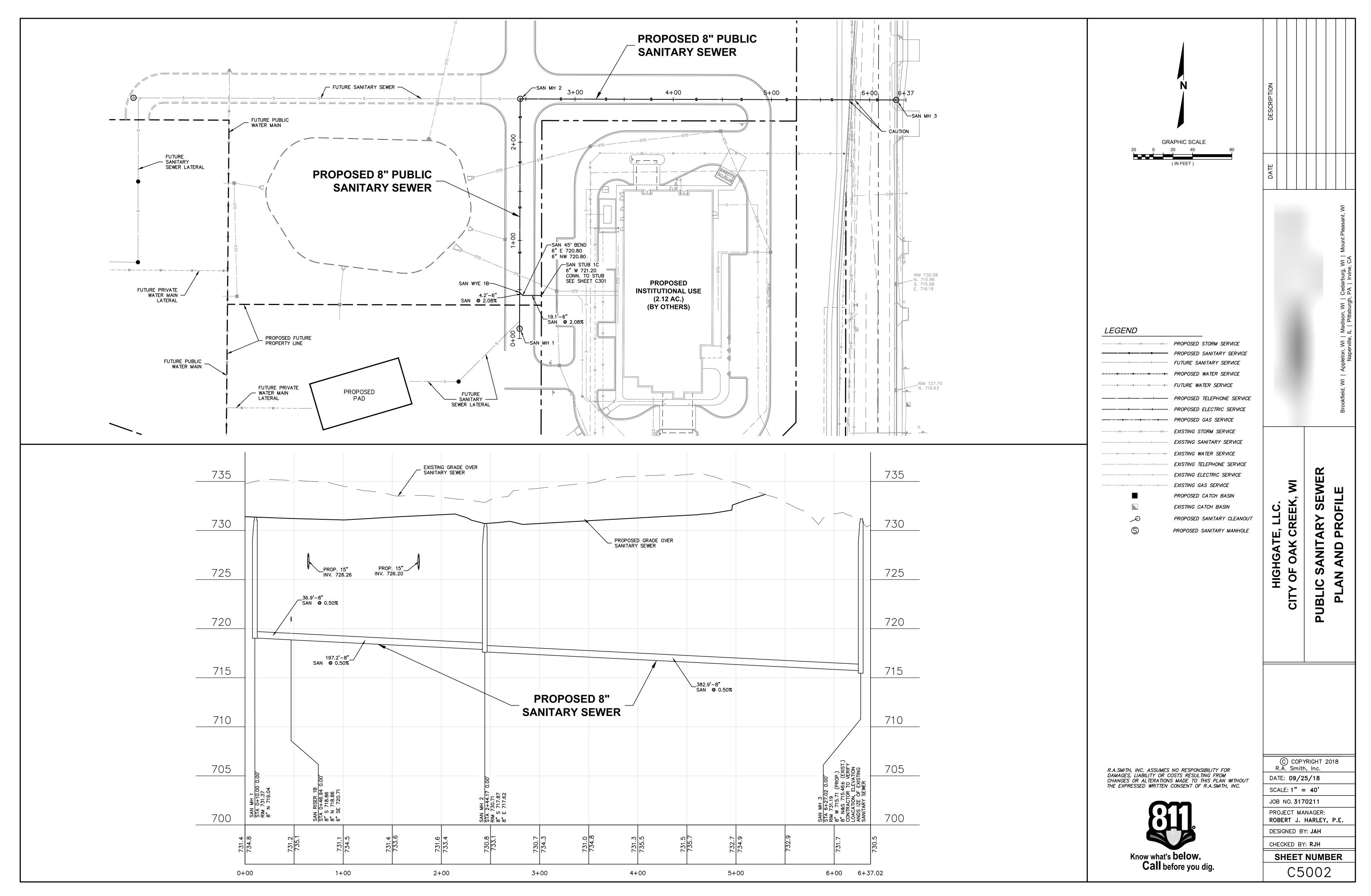
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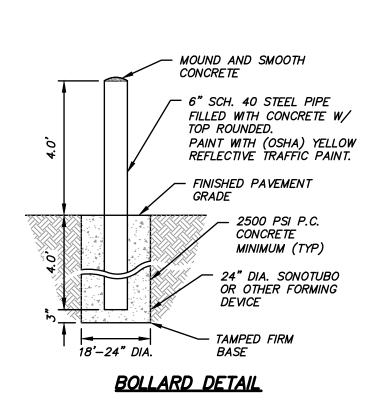
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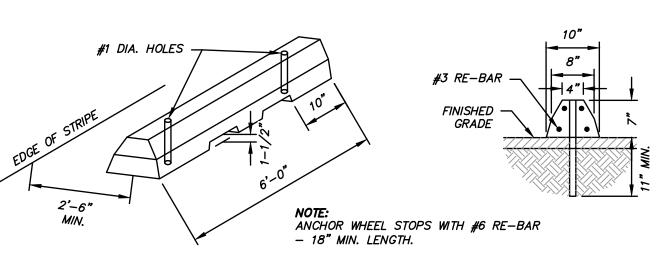
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SOLID YELLOW

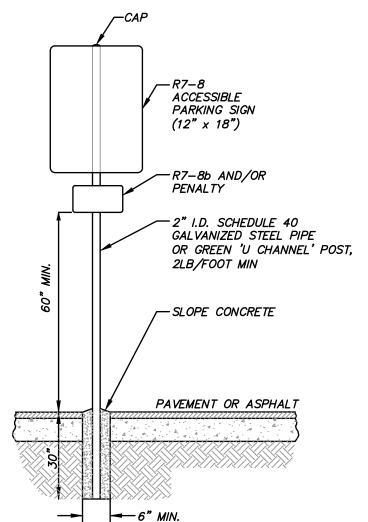
PARKING LOT

DIRECTIONAL ARROW



NOTE TO DESIGNER: VERIFY DETAILS WITH AVAILABLE SUPPLIERS

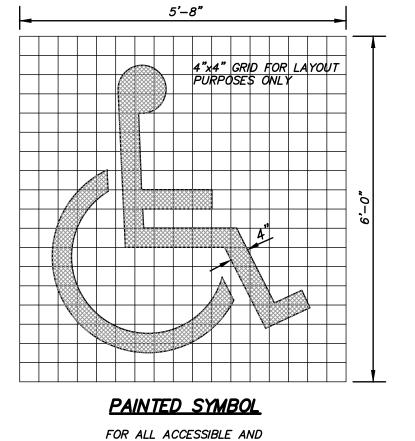
PRECAST CONC. WHEEL STOP



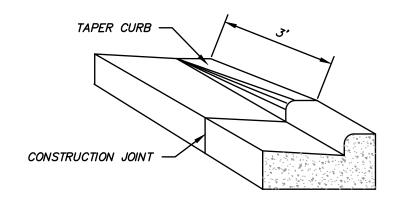
ACCESSIBLE PARKING SIGN AND POST INSTALLATION

TYPE 1





VAN ACCESSIBLE SPACES



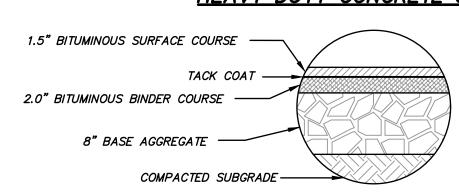
DETAIL OF CURB & GUTTER TERMINI

STANDARD CONCRETE SIDEWALK

6" BASE AGGREGATE

COMPACTED SUBGRADE

HEAVY DUTY CONCRETE SECTION

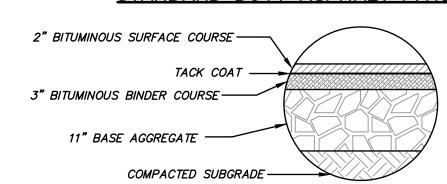


5" CONCRETE PAVEMENT —

4" BASE AGGREGATE ---

COMPACTED SUBGRADE

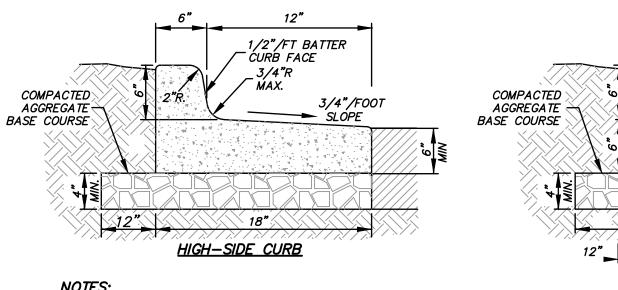
STANDARD DUTY ASPHALT PAVEMENT SECTION

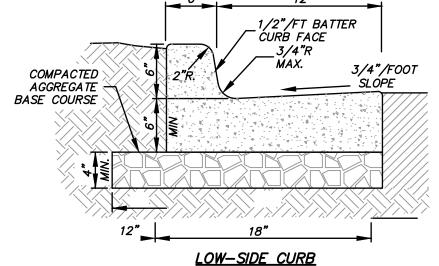


HEAVY DUTY ASPHALT PAVEMENT SECTION

NOTE: SEE GEOTECHNICAL REPORT BY PSI DATED DECEMBER 18, 2017

NOTE:
DIRECT ALL BIDDING QUESTIONS AND/OR
SUBMITTALS FOR PAVEMENT TO GEOTECHNICAL
ENGINEER OR CITY OF OAK CREEK AS APPLICABLE.





A) 3500 PSI CONCRETE SHALL BE USED IN CONSTRUCTION OF THE CURB & GUTTER.

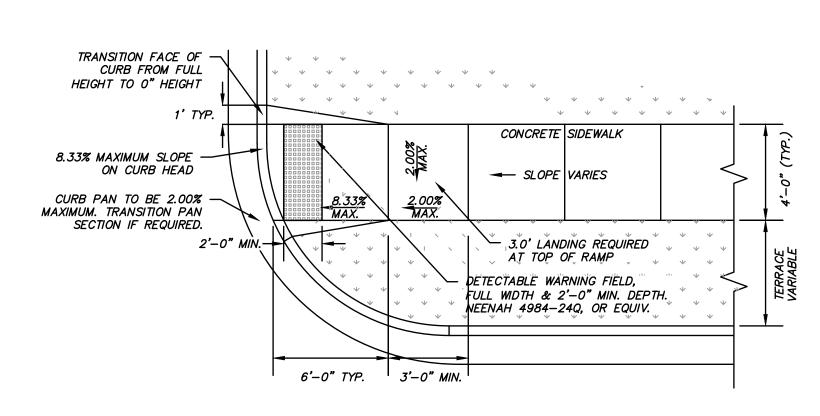
B) THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SLOPE OF THE GUTTER PAN.

C) FOR DEPRESSED CURB HEAD SLOPE, USE THE SAME SLOPE AS ADJACENT SIDEWALK.

D) THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDE MINIMUM 6" GUTTER THICKNESS MAINTAINED. TRANSVERSE CONTRACTION JOINTS SHALL BE CUT OR SAWED AT MAXIMUM 20 FOOT INTERVALS.

E) 1/2" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED TRANSVERSELY IN THE CURB ABUTTING EXISTING CURB AND SIDEWALK, WALLS OR BUILDINGS, AND AT INTERVALS NOT TO EXCEED 300 FEET, WITH PREFERRED LOCATIONS BEING AT RADIUS POINTS OR ANGLE POINTS.

18" CONCRETE CURB & GUTTER DETAIL



TYPE 4 CURB RAMP

**NOTES:**1. SURFACE OF CURB RAMP SHALL HAVE A BROOM FINISH OR SIMILAR SLIP RESISTANT SURFACE.



CITY OF OAK CREEK, WISCONSIN

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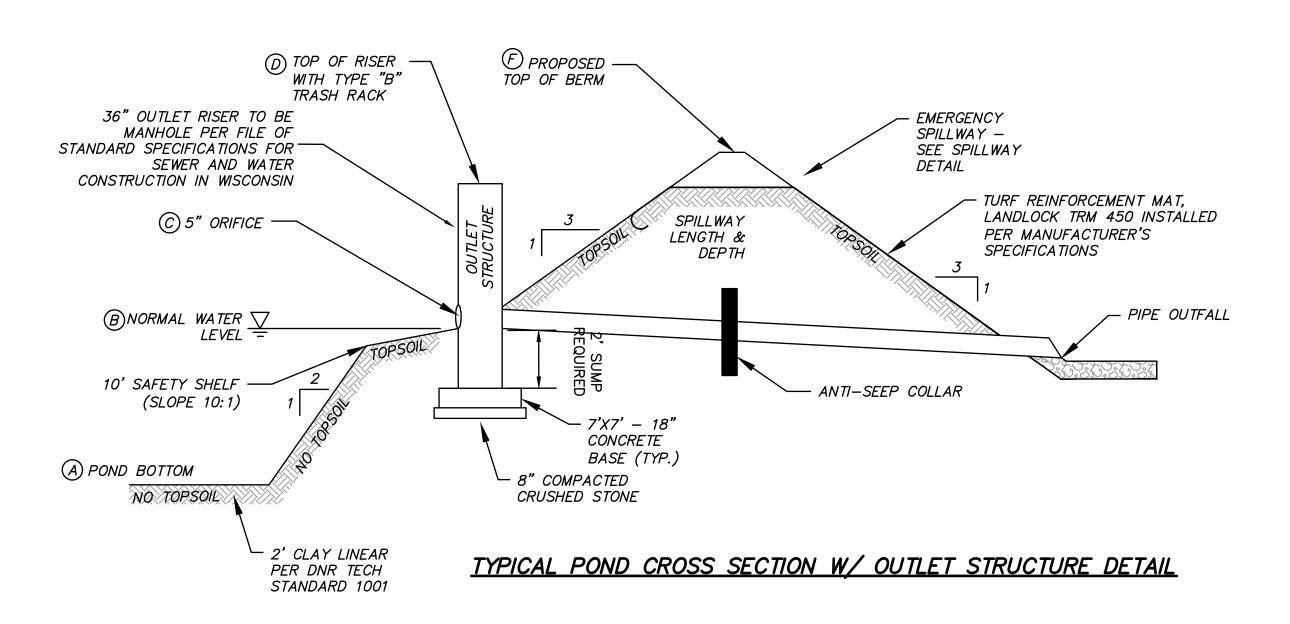
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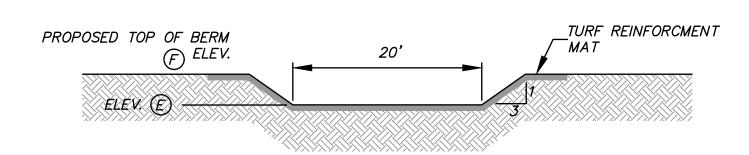
SCALE: N.T.S.

PROJECT MANAGER:
ROBERT J. HARLEY, P.E.
DESIGNED BY: JAH

CHECKED BY: RJH

C6000

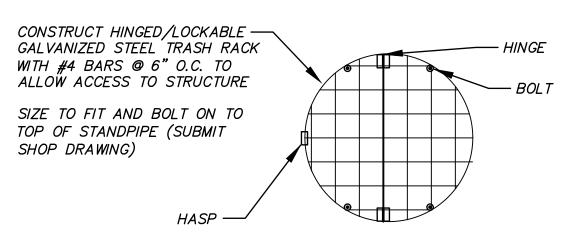




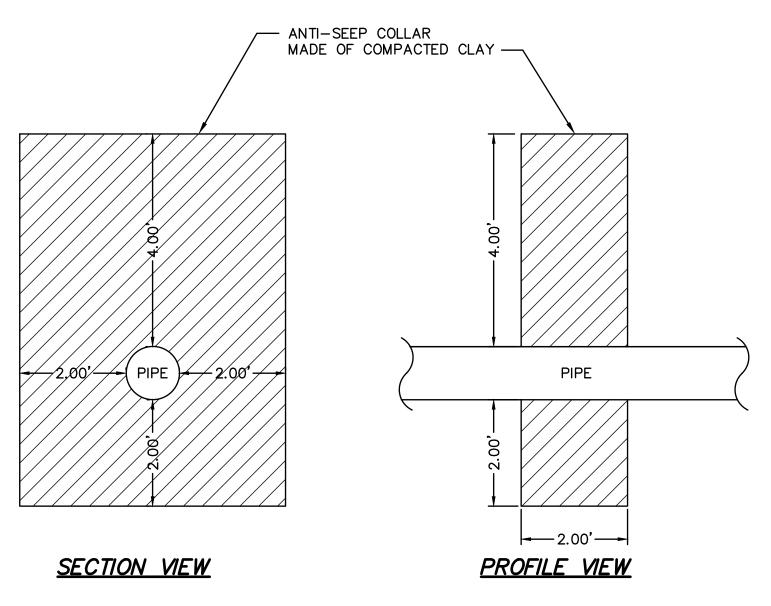
# PROPOSED EMERGENCY SPILLWAY

PROPOSED POND ELEVATIONS

	MH ID	Α	В	С	D	Ε	F
POND 1 (SOUTH POND)	130	721.00	726.00	726.00	729.00	731.00	732.00
POND 2 (NORTH POND)	310	717.00	722.00	722.00	725.50	726.50	727.50



TYPE B TRASH RACK DETAIL



ANTI-SEEP COLLAR DETAIL

DESCRIP IION				
DAIE				



CITY OF OAK CREEK, WI

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SCALE: N.T.S.

JOB NO. 3170211

PROJECT MANAGER:
ROBERT J. HARLEY, P.E.

DESIGNED BY: JAH
CHECKED BY: RJH

SHEET NUMBER
C6001

) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2) 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 OPENING.
3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

GENERAL NOTES

INLET PROTECTION DEVICES SHALL CONFORM TO WIDNR CONSERVATION PRACTICE STANDARD 1060 AND BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE WISDOT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED IF ALLOWED BY ENGINEER.

TYPE A IS TO BE USED PRIOR TO PAVING AND TYPED B, C, AND D ARE TO USED AFTER PAVING IS PLACED.

TYPE A SHALL BE USED AROUND INJETS AND LINEAUED AREAS LINTU PERMANENT

TYPE A SHALL BE USED AROUND INLETS AND UNPAVED AREAS UNTIL PERMANENT STABILIZATION METHODS HAVE BEEN ESTABLISHED.

TYPE B SHALL BE USED AFTER THE CASTING AND GRATE ARE IN PLACE.

TYPE C SHALL BE USED ON STREET INLETS WITH CURB HEADS.

TYPE D SHALL BE USED IN AREAS WHERE OTHER TYPES OF INLET PROTECTION ARE INCOMPATIBLE WITH ROADWAY AND TRAFFIC CONDITIONS (I.E. POSSIBLE SAFETY HAZARD IF PONDING OCCURS.)

#### STALLATION NOTES:

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 PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

STORM DRAIN INLET PROTECTION DETAILS

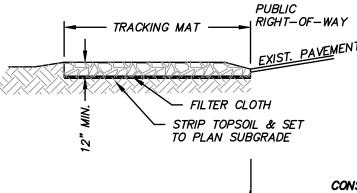
# INTENANCE:

REMOVE INLET PROTECTION DEVICES ONCE THE CONTRIBUTING DRAINAGE AREA IS STABILIZED WITH APPROPRIATE VEGETATION OR IMPERVIOUS AREA.

INLET PROTECTION SHALL BE, AT A MINIMUM, INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.

SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED BETWEEN 1/3 TO 1/2 THE DESIGN DEPTH OF THE DEVICE, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING AS DESIGNED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLET AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.



# CONSIDERATIONS:

- 1. VEHICLES TRAVELING ACROSS THE TRACKING PAD SHOULD MAINTAIN A SLOW CONSTANT SPEED.
- 2. THE BEST APPROACH TO PREVENTING OFF—SITE TRACKING IS TO RESTRICT VEHICLES TO STABILIZED AREAS.
- 3. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.

#### NOTES:

#### A. TRACKING PAD:

- 1. TRACKING PAD TO CONFORM TO WDNR CONSERVATION PRACTICE STANDARD 1057.
- 2. THE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
- 3. THE AGGREGATE FOR TRACKING PADS SHALL BE 3"- 6" CLEAR OR WASHED STONE. ALL MATERIAL SHALL BE RETAINED ON A 3-INCH SIEVE.
- 4. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PRACTICE, STONE TRACKING PADS SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOIL INTO THE STONE.
- 5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE A MINIMUM OF 50 FEET LONG.
- 6. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY FROM TRACKING PADS OR CONVEYED UNDER AND AROUND THEM BY USING A VARIETY OF PRACTICES, SUCH AS CULVERTS, WATER BARS, OR OTHER SIMILAR

#### B. MAINTENANCE

- 1. ROCKS LODGED BETWEEN THE TIRES IF DUAL WHEEL VEHICLES SHALL BE REMOVED PRIOR TO LEAVING THE CONSTRUCTION SITE.
- 2. TRACKING PADS AND TIRE WASHING STATIONS SHALL, AT AT 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.
- 3. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
- 4. A MINIMUM 12-INCH THICK PAD SHALL BE MAINTAINED.

STONE TRACKING PAD DETAIL

# 2"x2" WOODEN STAKE FILTER FABRIC FILL MATERIAL FLOW U—TRENCH

NOTES:

1. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY AND/OR WITHIN 24 HOURS OF CONSTRUCTING DITCHES, DIVERSIONS, OR OTHER CHANNELS.

2. SILT FENCE FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:

- A. GRAB STRENGTH: 100 LBS. (ASTM D-1682) B. MULLEN BURST: 200 PSI MIN. (ASTM D-3786)
- C. EQUIVALENT OPENING SIZE:

  BETWEEN 50 AND 140 FOR SOILS WITH MORE THAN 15

  PERCENT BY WEIGHT PASSING A NO. 200 SIEVE.

  BETWEEN 20 AND 50 FOR SOILS WITH LESS THAN 15

  PERCENT BY WEIGHT PASSING A NO. 200 SIEVE.

  D. WATER FLOW RATE OF 10 GAL/MIN/SQ. FT. AT 50 MM
- CONSTANT HEAD (ASTM D-4491)

  E. ULTRA VIOLET RADIATION STABILITY OF 90%

  F. IF SUPPORT NETTING IS REQUIRED, NETTING SHALL BE
  AN INDUSTRIAL POLYPROPYLENE WITH A 3/4 INCH
- SPACING OR EQUIVALENT. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

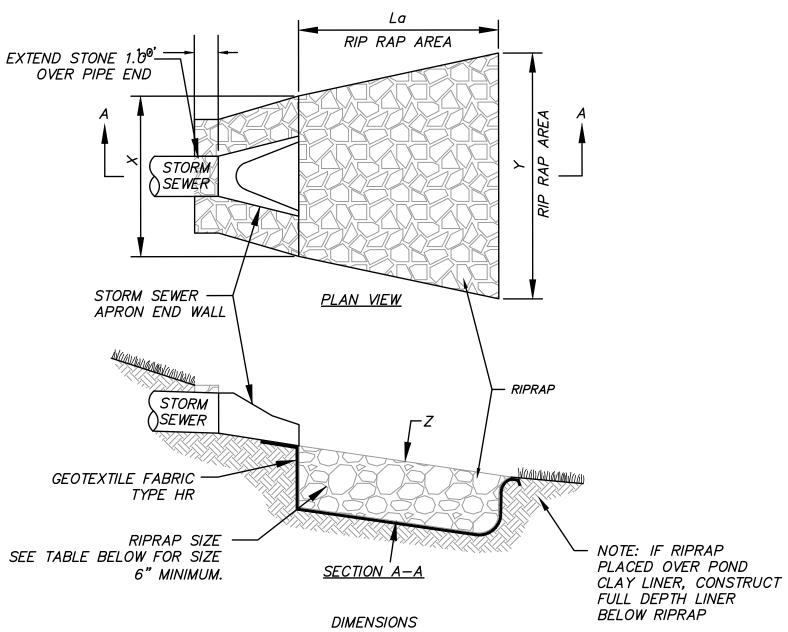
  3. INSTALLATION PROCEDURE AS FOLLOWS:
- A. EXCAVATE A U-TRENCH UPSLOPE FROM THE LINE OF STAKES.

  B. INSTALL SILT FENCE IN TRENCH. CARE SHOULD BE TAKEN TO AVOID TEARING FABRIC. TORN FABRIC SHALL BE REMOVED AND A NEW SEGMENT OF SILT FENCE SHALL BE PLACED. STAKES SHALL BE DRIVEN A MINIMUM OF 12" DEEP. SILT FENCE SHALL BE A MINIMUM OF 18" AND A MAXIMUM OF 36"
- IN HEIGHT.

  C. FIT LOWER 8" OF FILTER FABRIC INTO U—TRENCH.
  BACKFILL AND COMPACT U—TRENCH.

  4. SILT FENCE SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING PERIODS OF PROLONGED RAIN. REPAIR OR REPLACEMENT SHALL BE MADE IMMEDIATELY.
- 5. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT OR WHEN DEPOSITS REACH ONE HALF THE HEIGHT OF THE BARRIER.
- 6. SILT FENCE SHALL BE REMOVED ONLY WHEN THE THREAT OF EROSION HAS PASSED AND PERMANENT VEGETATION HAS BEEN ESTABLISHED.

# SILT FENCE DETAIL



OUTLET I.D.	La	X	Y	Z	RIPRAP SIZE
FES 400	12'	6'	10'	1'	6 INCH
FES 500	12'	6'	10'	1'	6 INCH
FES 700	12'	6'	10'	1'	6 INCH
FES 720	12'	6'	10'	1'	6 INCH

GEOTEXTILE FABRIC SHALL COMPLY WITH THE SECTION 606 OF THE STATE OF WISCONSIN STANDARD FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

RIPRAP OUTFALL DETAIL

# MAINTENANCE, INSPECTIONS AND REPORTING

- 1. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED BEFORE CONSTRUCTION ACTIVITIES BEGIN IN EACH RESPECTIVE PROJECT PHASE. PRACTICES SHALL BE CHECKED FOR EFFECTIVENESS WEEKLY AND FOLLOWING RAINFALL EVENTS ONE HALF INCH OR GREATER. ANY DEVICES NEEDING REPAIR SHALL BE ADDRESSED IMMEDIATELY.
- 2. SEDIMENT BASINS SHALL BE CLEANED OUT WHEN THE SEDIMENT LEVELS HAVE REACHED THREE AND ONE HALF FEET FROM THE PERMANENT STORAGE DESIGN ELEVATION. IF THE OUTLET BECOMES CLOGGED IT SHALL BE CLEANED TO RESTORE FLOW CAPACITY.
- 3. STORM DRAIN INLET PROTECTION SCREENS SHALL BE REPLACED WHEN SEDIMENT COLLECTED IN THE DEVICE HAS REDUCED THE CAPACITY BY HALF. ACCUMULATED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
- 4. SILT FENCES SHALL BE REPAIRED WHEN SEDIMENT HAS REACHED HALF THE HEIGHT OF THE FENCE. SILT FENCES HAVE A LIFE SPAN OF ONE YEAR, AND SHALL BE REPLACED WHEN WORN OUT. DAMAGED OR DECOMPOSED FENCES, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.
- 5. SEEDED AREAS SHALL BE FERTILIZED, RESEEDED AND MULCHED AS NECESSARY. INSPECT SEEDED AREAS WEEKLY AFTER PLANTING TO ENSURE THAT VEGETATION IS ADEQUATELY ESTABLISHED. LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED.
- 6. MULCH THAT IS DISPLACED SHALL BE REAPPLIED AND PROPERLY ANCHORED. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS.
- 7. TEMPORARY DIVERSIONS SHALL BE SEEDED AND MULCHED OR COVERED WITH EROSION MAT IMMEDIATELY FOLLOWING CONSTRUCTION. STABILIZATION OF DIVERSIONS SHALL BE INSPECTED AND REPAIRS MADE AS NECESSARY.
- 8. EROSION MATTING, STRAW WATTLES, TEMPORARY DITCH CHECKS, STONE OUTLET PROTECTION SHALL BE REPLACED AS NECESSARY.
- 9. STONE TRACKING PAD SHALL BE SCRAPED OR TOP DRESSED WHEN EXISTING STONE BECOMES BURIED OR IF SEDIMENT IS NOT BEING REMOVED EFFECTIVELY FROM TIRES. SEDIMENT THAT IS TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. A MINIMUM 12—INCH THICK PAD SHALL BE MAINTAINED.

THE FOLLOWING CONSTRUCTION SITE INSPECTIONS SHALL BE PERFORMED BY THE CONTRACTOR, AND ARE REQUIRED PER THE NR 216 GENERAL PERMIT:

- 1. CONDUCT WEEKLY INSPECTIONS OF IMPLEMENTED EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES, AND REPORTING.
- 2. INSPECTIONS OF EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS AFTER A PRECIPITATION EVENT OF 0.5 INCHES OR GREATER, AND REPORTING.
- 3. REPAIR OR REPLACE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES AS NECESSARY WITHIN 24 HOURS OF AN INSPECTION OR DEPARTMENT NOTIFICATION THAT A REPAIR OR REPLACEMENT IS NEEDED.
- 4. MAINTAIN WEEKLY WRITTEN REPORTS OF ALL INSPECTIONS CONDUCTED AT THE CONSTRUCTION SITE. WEEKLY INSPECTION REPORTS SHALL INCLUDE ALL OF THE FOLLOWING:
  A. DATE, TIME AND LOCATION OF THE CONSTRUCTION SITE INSPECTION.
- B. NAME OF THE INDIVIDUAL WHO PERFORMED THE INSPECTION.
  C. ASSESSMENT OF THE CONDITION OF EROSION AND SEDIMENT CONTROLS.
- D. DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE IMPLEMENTATION AND MAINTENANCE PERFORMED.
- E. DESCRIPTION OF THE PRESENT PHASE OF LAND DISTURBING ACTIVITY AT THE CONSTRUCTION

# GENERAL EROSION NOTES

- 1. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE STATE OF WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (WPDES PERMIT) AND CITY OF OAK CREEK EROSION CONTROL PERMIT AND BECOME FAMILIAR WITH THE CONTENTS. CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
- 2. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- 3. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DISCHARGED TO A TEMPORARY SEDIMENT BASIN.
- 4. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 5. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- 6. ALL EROSION CONTROL MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
- 7. ANY DISTURBED SITE THAT REMAINS INACTIVE FOR GREATER THAN 7 DAYS SHALL BE STABILIZED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING OR MULCHING. FROZEN SOILS DO NOT EXCLUDE THE SITE FROM THIS REQUIREMENT.
- 8. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- 9. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE STORM SEWER DRAINAGE SYSTEMS DEPOSITED PRIOR TO STABILIZATION OF THE SITE..
- 10. SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES.
- 11. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- 12. BMP'S SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCE'S (WDNRs) TECHNICAL STANDARDS. REFER TO THE WDNRs WEBSITE FOR ADDITIONAL DEFINITIONS, CRITERIA AND APPLICATION OF STORMWATER AND EROSION CONTROL DEVICES AT:
- http://dnr.wi.gov/topic/stormwater/standards/const\_standards.html

DATE DESCRIPTION



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DATE: **09/25/18**SCALE: **N.T.S.** 

R.A. Smith, Inc.

JOB NO. **3170211**PROJECT MANAGER:

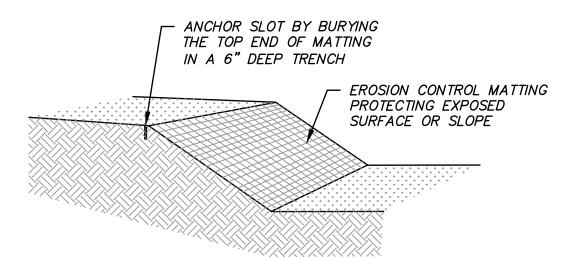
ROBERT J. HARLEY, P.E.

DESIGNED BY: JAH

CHECKED BY: RJH

C6002

SHEET NUMBER



NOTES:

1. PRIOR TO THE INSTALLATION OF ANY EROSION CONTROL MATTING, ALL ROCKS, DIRT CLODS, STUMPS, ROOTS, TRASH AND ANY OTHER OBSTRUCTIONS WHICH WOULD PREVENT THE MAT FROM LAYING IN DIRECT CONTACT WITH THE SOIL SHALL BE REMOVED.

2. EROSION CONTROL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 628 OF THE WISCONSIN DOT STANDARD SPECIFICATIONS, DNR TECHNICAL STANDARD 1052 (NON CHANNEL APPLICATIONS), DNR TECHNICAL STANDARD 1053 (CHANNEL APPLICATIONS), AND LATEST MANUFACTURER SPECIFICATIONS, ESPECIALLY NOTING REQUIRED STAPLE PATTERNS AND ANCHOR TRENCH

3. INSTALLATION PROCEDURES MUST INSURE THAT THE MAT WILL REMAIN IN CONTACT WITH THE SOIL.
4. THE MATTING SHALL BE ANCHORED PER MANUFACTURER REQUIREMENTS

5. THE MATTING SHALL BE ANCHORED TO THE GROUND PER MANUFACTURER REQUIREMENTS
6. TEMPORARY EROSION CONTROL MATTING SHALL BE WISDOT PAL CLASS I, TYPE B AND PERMANENT EROSION CONTROL MATTING SHALL BE WISDOT PAL CLASS III, TYPE A 7. MATTED AREAS MUST BE INSPECTED ON A WEEKLY BASIS, AND AFTER EACH SIGNIFICANT RAINFALL. BARE SPOTS, MISSING OR LOOSENED MATTING MUST BE IMMEDIATELY REPLACED AND/OR RE—ANCHORED.
8. FOR CHANNEL APPLICATIONS, EXTEND MAT UPSLOPE ONE—FOOT MINIMUM VERTICALLY FROM DITCH BOTTOM OR SIX—INCHES HIGHER THAN DESIGN FLOW, WHICHEVER IS

GREATER.

# EROSION CONTROL MATTING DETAIL

#### C. Geotextile Bags

 Geotextile bags shall meet the criteria listed in Table 1.

#### Table 1: Properties for Geotextile Bags

Property	Test Method	Type I	Type II
		Value	Value
Maximum	ASTM D-4751	0.212 mm	0.212 mm
Apparent			
Opening Sizes			
Grab Tensile	ASTM D-4632	200 lbs.	300 lbs.
Strength			
Mullen Burst	ASTM D-3786	350 psi	580 psi
Permeability	ASTM D-4491	0.28 cm/sec	0.2 cm/sec
Fabric	Nominal	8 oz	12 oz
	Representative		
	Weight		

- Geotextile bags shall be sized according to the particle size being trapped, expected flow or pumping rate (gallons per minute) per square foot of fabric and a 50% clogging factor. The footprint of the bag shall be no smaller than 100 square feet.
- Geotextile bags shall be securely attached to the discharge pipe.
- 4. Polymers can be used to enhance the efficiency of geotextile bags. If polymer is used, the polymer shall be approved by the WDNR and meet the criteria stipulated in WDNR Conservation Practice Standard 1051, Sediment Control Water Application of Polymers. The polymer supplier or applicator shall provide certifications showing that products have met the performance requirements of Standard 1051. If the manufacturer has not completed the required testing, the project may be used to gain that certification provided it meets the site requirements of Standard 1051. Any such testing will be monitored by DNR or WisDOT, with testing done by a qualified third party.
- 1. INSTALL GEOTEXTILE BAGS IN LOCATION SHOWN, PLACED ON UNDISTURBED, VEGETATED SOIL. ALL WATER PUMPED SHALL BE
- DISCHARGED THROUGH GEOTEXTILE BAGS.

  2. CONTRACTOR SHALL PROVIDE ENGINEER WITH SIZING CALCULATIONS
  PER WDNR TECHNICAL STANDARD 1061 (SEE ABOVE) PRIOR TO ANY
  PUMPING/DISCHARGE.
- 3. WATER DISCHARGED FROM GEOTEXTILE BAGS SHALL BE IMMEDIATELY ROUTED THROUGH STONE DITCH CHECK FOR ENERGY DISSIPATION PRIOR TO RELEASING INTO STABILIZED TEMPORARY DIVERSION DIKE/BERM.
- 4. REMOVE ACCUMULATED SEDIMENT FROM GEOTEXTILE BAGS AND STONE DITCH CHECK TO MAINTAIN EFFECTIVENESS. ALL SEDIMENT COLLECTED SHALL BE PROPERLY DISPOSED OF TO PREVENT DISCHARGE TO WATERS OF THE STATE.
- 5. THE CONTRACTOR SHALL PROCURE A PERMIT FROM WDNR PRIVATE WATER SUPPLY SECTION FOR ANY DEWATERING OPERATIONS HAVING AN AGGREGATE CAPACITY EXCEEDING 70 GALLONS PER MINUTE.

GEOTEXTILE BAGS

DATE DESCRIPTION



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HIGHGATE, LLC. CITY OF OAK CREEK, WI

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JOB NO. 3170211

SCALE: N.T.S.

PROJECT MANAGER:
ROBERT J. HARLEY, P.E.
DESIGNED BY: JAH

CHECKED BY: RJH

C6003

# **SPECIFICATIONS**

# A. GENERAL

- 1. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY— EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- 3. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE BIDDER WILL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES AND SHALL STATE SUCH QUANTITIES IN THEIR PROPOSAL. THE CONTRACTOR SHALL BASE THEIR BID ON THEIR OWN ESTIMATE OF THE WORK REQUIRED AND SHALL NOT RELY ON
- 5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE
- 6. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS.
- 7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT THEIR WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF THEIR INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- 9. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES.
- 10. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF THE RESTORATION IS CONSIDERED INCIDENTAL, AND SHOULD BE INCLUDED IN THE BID PRICES.

- A. SHOP DRAWINGS AND/OR MANUFACTURER'S PRODUCT DATA SUBMITTALS ARE REQUIRED ONLY IF THE PRODUCT OR METHOD
- a. IS DIFFERENT FROM THAT SPECIFIED OR b. IS PART OF THE WORK THAT WILL BE DEDICATED AS A PUBLIC UTILITY OR ROADWAY AT THE END OF THE PROJECT
- c. IF REQUIRED BY THE MUNICIPAL ENGINEER.
- B. FOR UTILITY OR ROAD WORK THAT WILL BE DEDICATED TO A MUNICIPALITY, CONTRACTOR MUST MAKE SUBMITTALS TO THE MUNICIPALITY AS WELL AS ENGINEER.
- C. ALL DOCUMENTS SUBMITTED FOR REVIEW SHALL HAVE THE SPECIFIC MATERIAL, PART, SIZE, ETC. RELATED TO THE DESIGN HIGHLIGHTED IN SOME FASHION. EXAMPLE: A FITTING CUT SHEET HAS MULTIPLE PRESSURE RATING FOR DIFFERENT SIZE BENDS. HIGHLIGHT THE PRESSURE CLASS & SIZE TO BE USED ON THE PROJECT. ALL SUBMITTALS NOT PROPERLY
- IDENTIFYING THE SPECIFIC MATERIAL BEING USED WILL BE REJECTED. D. ALL DOCUMENTS SUBMITTED FOR REVIEW MUST INDICATE WHAT PART OF THE DESIGN THEY RELATE TO.
- E. CONTRACTOR SHALL ALLOW A MINIMUM OF 10 WORKING DAYS FOR SUBMITTAL REVIEW.
- a. IF A SUBSTITUTION IS REQUESTED, CONTRACTOR SHALL SUBMIT A SHOP DRAWING AND/OR MANUFACTURER'S DATA AND AN EXPLANATION AS TO EXACTLY HOW THE PROPOSED SUBSTITUTION MEETS THE PROPOSED DESIGN TO THE OWNER'S REPRESENTATIVE OR ENGINEER FOR REVIEW AND APPROVAL. PRODUCT SPECIFICATION SHEETS WITHOUT EXPLANATION WILL NOT BE ACCEPTED.
- b. THE CONTRACTOR SHALL ALSO INDICATE WITH THE SUBSTITUTION REQUEST THE AMOUNT THAT WILL BE CREDITED
- FROM THE CONTRACT AMOUNT TO THE OWNER IF THE SUBSTITUTION IS APPROVED. c. THE CONTRACTOR SHALL NOT PROCEED UNTIL THE OWNER'S APPROVAL IS GIVEN.

# **B. EROSION CONTROL**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS, INCLUDING WPDES DISCHARGE PERMITS (IF APPLICABLE), AND THE (LOCAL MUNICIPALITY) EROSION CONTROL PERMIT. CONTRACTOR IS RESPONSIBLE FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
- 2. ALL INSTALLATION AND MAINTENANCE OF EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARD.
- 3. ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH THE DNR WPDES GENERAL PERMIT.
- 4. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL 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. NEEDED REPAIRS WILL BE MADE
- 5. ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN DAYS OR MORE SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH IN ACCORDANCE WITH THE WDNR TECHNICAL STANDARDS 1059 AND 1058.
- 6. TEMPORARY SEED MIXTURE SHALL CONFORM TO 630.2.1.5.1.4 OF THE WISDOT STANDARD SPECIFICATIONS. USE WINTER WHEAT OR RYE FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 1.
- 7. DISTURBED AREAS THAT CANNOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION BY SEEDING AND MULCHING DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION, SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM) IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050.
- 8. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASINS TO MAINTAIN A THREE FOOT DEPTH OF TREATMENT, MEASURED BELOW THE NORMAL WATER ELEVATION. SEDIMENT WILL BE REMOVED FROM THE DIVERSION DITCHES WHEN IT REACHES HALF THE HEIGHT OF THE DITCH. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE AND DITCH CHECKS WHEN IT REACHES HALF THE HEIGHT OF THE FENCE/BALE. THE SILT FENCE AND DITCH CHECKS SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
- 9. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 PRIOR TO DISCHARGE TO WATERS OF THE STATE, WETLANDS, OR OFFSITE. CONTRACTOR RESPONSIBLE FOR REVISING THE PERMIT, IF
- 10. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING ON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL TEMPORARY SEDIMENT TRAPS IN VARIOUS LOCATIONS THROUGHOUT THE PROJECT. TEMPORARY SEDIMENT TRAPS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1063.
- 11. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.
- 12. DUST CONTROL SHALL BE PROVIDED AS NECESSARY IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1068.
- 13. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
- 14. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE APPROVED LANDSCAPE PLAN TO MAINTAIN A VIGOROUS DENSE VEGETATIVE COVER.

# C. GRADING

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE GEOTECHNICAL REPORT AND THE LOCAL ORDINANCES AND
- 2. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING.
- 3. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- 4. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.
- 5. GRADING SHALL CONSIST OF CLEARING AND GRUBBING EXISTING VEGETATION, STRIPPING TOPSOIL, REMOVAL OF EXISTING PAVEMENT OR FOUNDATIONS, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE AN ON-SITE EARTHWORK BALANCE, GRADING THE PROPOSED BUILDING PADS AND PAVEMENT AREAS, SCARIFYING AND FINAL COMPACTION OF THE PAVEMENT SUBGRADE, AND PLACEMENT OF TOPSOIL.
- 6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- 7. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 8. TOPSOIL IN PARKING ISLANDS: ALL PARKING LOT ISLANDS TO BE BACKFILLED WITH TOPSOIL TO A MINIMUM DEPTH OF 18" BY GRADING CONTRACTOR TO INSURE LONG TERM PLANT HEALTH. CROWN ALL PLANTING ISLANDS A MINIMUM OF 6" TO PROVIDE PROPER DRAINAGE, UNLESS OTHERWISE SPECIFIED.

# D. PAVING

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- 2. PAVING SHALL CONSIST OF FINE GRADING PAVEMENT AREAS, INSTALLATION OF CRUSHED STONE BASE, CONCRETE AND/OR BITUMINOUS PAVEMENT, PAVEMENT MARKING, AND CLEANUP. ALL MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR.
- 3. AGGREGATES USED IN THE CRUSHED AGGREGATE BASE SHALL BE (\*-INCH) DENSE GRADED BASE IN ACCORDANCE WITH SUBSECTION 305.2.2 OF THE STANDARD SPECIFICATIONS.
- 4. HOT MIX ASPHALT PAVEMENT (HMA) SHALL BE CLASSIFIED AS (\*\*) IN ACCORDANCE WITH SECTION 460 AND TABLE 460-2 OF THE STANDARD SPECIFICATIONS.
- 5. ASPHALTIC MATERIALS SHALL BE PERFORMANCE GRADED (PG) BINDERS IN ACCORDANCE WITH SECTION 455 OF THE STANDARD
- SPECIFICATIONS. UPPER LAYERS SHALL BE (\*\*\*), AND LOWER LAYERS SHALL BE (\*\*\*). 6. AGGREGATES USED IN THE HMA SHALL BE IN ACCORDANCE WITH SUBSECTION 460.2.2.3 OF THE STANDARD SPECIFICATIONS. THE NOMINAL AGGREGATE SIZE FOR THE UPPER LAYER PAVEMENT SHALL BE (\*\*\*\*), AND THE LOWER LAYER PAVEMENT SHALL BE
- 7. TACK COAT SHALL BE IN ACCORDANCE WITH SUBSECTION 455.2.5 OF THE STANDARD SPECIFICATIONS. THE RATE OF APPLICATION
- SHALL BE 0.050-0.070 GAL/SY. 8. CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL BE GRADE A (OR GRADE A2 IF PLACING BY

SLIP-FORMED PROCESS) AIR ENTRAINED IN ACCORDANCE WITH SECTION 501 FOR THE STANDARD SPECIFICATIONS, WITH A MINIMUM

- 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. 9. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF THE STANDARD SPECIFICATIONS: SECTION 415 FOR CONCRETE PAVEMENT, SECTION 601 FOR CONCRETE CURB AND GUTTER, AND SECTION 602 FOR CONCRETE SIDEWALKS.
- 10. ALL FINISHED CONCRETE SHALL BE COVERED WITH A LIQUID CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE 2, IN ACCORDANCE WITH SECTION 415 OF THE STANDARD SPECIFICATIONS.
- 11. PAVEMENT MARKINGS SHALL BE PAINT IN ACCORDANCE WITH SECTION 646 OF THE STANDARD SPECIFICATIONS. (COLOR SHALL BE AS INDICATED ON THE PLANS.) THE FOLLOWING ITEMS SHALL BE PAINTED WITH COLORS NOTED BELOW:

PARKING STALLS: WHITE PEDESTRIAN CROSSWALKS: WHITE LANE STRIPING WHERE SEPARATING TRAFFIC IS MOVING IN OPPOSITE DIRECTIONS: YELLOW LANE STRIPING WHERE SEPARATING TRAFFIC IS MOVING IN SAME DIRECTIONS: WHITE ADA SYMBOLS: BLUE OR PER LOCAL CODE FIRE LANES: PER LOCAL CODE

EXTERIOR SIDEWALK CURBED, LIGHTPOLE BASES, AND GUARD POSTS: YELLOW

# E. PRIVATE UTILITIES

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO WISCONSIN ADMINISTRATIVE CODE, SECTION SPS 382-384, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- 2. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- 3. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS.
- 4. PROPOSED SANITARY SEWER, WATER MAIN, AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. STORM SEWER CONNECTING TO EXTERIOR DOWN SPOUTS SHALL BE PER DETAILS ON THE ARCHITECTURAL PLANS. THE EXACT LOCATION OF ALL DOWN SPOUTS SHALL BE PER THE
- 5. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS:

STORM SEWER PIPE 30" OR LARGER SHALL BE REINFORCED CONCRETE, ASTM C-76, CLASS III OR GREATER, WITH ELASTOMERIC SEALS CONFORMING TO ASTM C-443.

- STORM SEWER PIPE 24" OR LESS SHALL BE EITHER: A) HIGH DENSITY POLYETHYLENE (HDPE) WITH A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS, SUCH AS ADS
- N-12 WT. HDPE PIPE SHALL CONFORM TO ASTM F2648 AND F2306. JOINTS SHALL BE WATER TIGHT CONFORMING TO ASTM D3212 WITH ELASTOMERIC SEALS (GASKETS) CONFORMING TO ASTM F477. B) POLYVINYL CHLORIDE (PVC) PIPE, ASTM D-3034, SDR 35, WITH ELASTOMERIC PUSH-ON JOINTS CONFORMING TO
- C) REINFORCED CONCRETE, ASTM C-76, CLASS III OR GREATER, WITH ELASTOMERIC SEALS CONFORMING TO ASTM C-443.

TRENCH SECTION SHALL BE CLASS "C" FOR CONCRETE AND CLASS "B" FOR ALL OTHER MATERIALS.

INLETS SHALL BE SOLID CONCRETE BLOCK OR PRE CAST REINFORCED CONCRETE, ASTM C-478.

6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS:

SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212.

TRENCH SECTION SHALL BE CLASS "B" BEDDING. CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. PREFABRICATED WYE CONNECTIONS ARE REQUIRED FOR SANITARY LATERALS

7. MATERIALS FOR WATER SERVICE SHALL BE AS FOLLOWS:

WATER SERVICE SHALL BE PVC, SDR-18, CLASS 235, AWWA C-900, WITH ELASTOMERIC JOINTS (ASTM D-3139), WITH A VALVE

WATER SERVICE SHALL BE DUCTILE IRON (DI), ASTM A-377, WITH ELASTOMERIC JOINTS (AWWA C-111), WITH A VALVE AT THE

WATER SERVICE SHALL BE COPPER, TYPE "K", WITH A VALVE AT THE SUPPLY MAIN.

ALL FITTINGS SHALL BE MECHANICAL JOINT, DUCTILE IRON CONFORMING TO AWWA C-111.

HYDRANTS SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY'S STANDARD SPECIFICATIONS.

GATE VALVES SHALL BE RESILIENT WEDGE TYPE, AWWA C-509, AND SHALL BE INSTALLED WITH AN ADJUSTABLE VALVE BOX AND COVER MARKED "WATER".

TRENCH SECTION SHALL CONFORM TO SECTION 4.3.C, FILE NO. 38 OF THE STANDARD SPECIFICATIONS. SAND OR STONE CHIP BEDDING MATERIAL IS REQUIRED.

- 8. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY.
- 9. UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE
- 11. TRACER WIRE SHALL BE INSTALLED ON ALL BURIED NON-METALLIC SANITARY SEWERS, PRIVATE SANITARY INTERCEPTOR MAIN SEWERS, STORM BUILDING SEWERS, AND PRIVATE STORM INTERCEPTOR MAIN SEWERS THAT DISCHARGE TO MUNICIPAL MAINS. TRACER WIRE SHALL ALSO BE INSTALLED ON ALL BURIED NON-METALLIC WATER SERVICES AND PRIVATE WATER MAINS CONNECTED TO MUNICIPAL SUPPLY SYSTEMS. TRACER WIRE SHALL BE IN ACCORDANCE WITH COMM 82.30(11)(h)(1). TRACER WIRE SHALL BE A MINIMUM OF 18-GAUGE, INSULATED, SINGLE-CONDUCTOR COPPER WIRE OR EQUIVALENT. TRACER WIRE COLOR SHALL BE BLUE FOR POTABLE WATER, GREEN FOR SANITARY SEWER, AND BROWN FOR STORM SEWER.

# E. PUBLIC UTILITIES

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO WISCONSIN ADMINISTRATIVE CODE, SECTION SPS 382-384, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (SPS), LATEST EDITION, AND THE CITY OF OAK CREEK ORDINANCES AND SPECIFICATIONS, LATEST EDITION.
- 2. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION. THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- 3. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS.
- 4. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS:
- REINFORCED CONCRETE, PER OAK CREEK SPECIFICATIONS. 6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS:

PVC, PER OAK CREEK SPECIFICATIONS

- 7. MATERIALS FOR WATER MAIN AND SERVICES SHALL BE PER OAK CREEK SPECIFICATIONS.
- 8. UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
- 10. TRACER WIRE SHALL BE INSTALLED ON ALL BURIED NON-METALLIC SANITARY SEWERS, PRIVATE SANITARY INTERCEPTOR MAIN SEWERS, STORM BUILDING SEWERS, AND PRIVATE STORM INTERCEPTOR MAIN SEWERS THAT DISCHARGE TO MUNICIPAL MAINS. TRACER WIRE SHALL ALSO BE INSTALLED ON ALL BURIED WATER SERVICES, PUBLIC WATER MAIN, AND PRIVATE WATER MAINS CONNECTED TO MUNICIPAL SUPPLY SYSTEMS. TRACER WIRE SHALL BE IN ACCORDANCE WITH COMM 82.30(11)(h)(1). TRACER WIRE SHALL BE A MINIMUM OF 10-GAUGE, INSULATED, SINGLE-CONDUCTOR COPPER WIRE OR EQUIVALENT. TRACER WIRE COLOR SHALL BE BLUE FOR POTABLE WATER, GREEN FOR SANITARY SEWER, AND BROWN FOR STORM SEWER.
- 11. A DETECTION WIRE & LOCATION BOX IS REQUIRED FOR ALL BUILDING SANITARY SEWER & WATER LATERALS.



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(C) COPYRIGHT 2018 R.A. Smith, Inc. DATE: **09/25/18** 

SCALE: N.T.S. JOB NO. **3170211** 

PROJECT MANAGER: ROBERT J. HARLEY, P.E. DESIGNED BY: JAH

SHEET NUMBER C7000

CHECKED BY: RJH

Designer

Date
12/19/2017
Scale
Not to Scale
Drawing No.

Summary

1 of 1

PROJECT ECHO - OAK CREEK SITE LIGHTING CALCULATIONS 08-29-18

#### TYPE SA #DSX1 LED P9 40K T4M MVOLT RPA HS DNAXD - POLE #RTS 25 5-9B DM19AS DNA



# **D-Series Size 1**

#### LED Area Luminaire









#### **Specifications**

Weight

(max):

 EPA:
 1.01 ft² (0.09 m²)

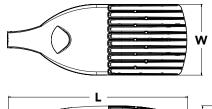
 Length:
 33" (83.8 cm)

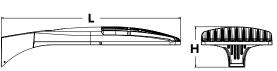
 Width:
 13" (33.0 cm)

 Height:
 7-1/2"

(19.0 cm)

27 lbs







#### **4** Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background.
   DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background¹

To learn more about A+, visit www.acuitybrands.com/aplus.

- 1. See ordering tree for details.
- A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL



# Ordering Information EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA DDBXD

DSX1LED						
Series	LEDs	Color temperature	Distribution	Voltage	Mounting	
DSX1 LED	Forward optics P1 P4 P7 P2 P5 P8 P3 P6 P9 Rotated optics P10¹ P12¹ P11¹ P13¹	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted <sup>2</sup>	T1S Type I short T5S Type V short T2S Type II short T5M Type V medium T2M Type II medium T5W Type V wide T3S Type III short BLC Backlight T3M Type III medium control 23 T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5VS Type V very short	MVOLT 4.5 120 6 208 5.6 240 5.6 277 6 347 5.6.7 480 5.6.7	Shipped included  SPA Square pole mounting  RPA Round pole mounting  WBA Wall bracket  SPUMBA Square pole universal mounting adaptor 8  RPUMBA Round pole universal mounting adaptor 8  Shipped separately  KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) 9	

Control opt	ions			Other	options	Finish (requ	iired)
Shipped in PER PER5 PER7 DMG DS PIR PIRH PIR1FC3V	NEMA twist-lock receptacle only (controls ordered separate) 10 Five-wire receptacle only (controls ordered separate) 10,11 Seven-wire receptacle only (controls ordered separate) 10,11 0-10V dimming extend out back of honsing for external control (leads exit fixture) Dual switching 12,13 Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc 5,14,15 Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc 5,14,15 Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc 5,14,15	PIRH1FC3V  BL30  BL50  PNMTDD3  PNMT5D3  PNMT6D3  PNMT7D3  FAO	Bi-level, motion/ambient sensor, 15-30′ mounting height, ambient sensor enabled at 1fc 3,14,15′ Bi-level switched dimming, 30% 5,13,16′ Bi-level switched dimming, 50% 5,13,16′ Part night, dim till dawn 5,17′ Part night, dim 5 hrs 5,17′ Part night, dim 6 hrs 5,17′ Part night, dim 7 hrs 5,17′ Field adjustable output18′ Bi-level, and since the sensor of	Shipp HS SF DF L90 R90 BS EGS	House-side shield <sup>19</sup> Single fuse (120, 277, 347V) <sup>6</sup> Double fuse (208, 240, 480V) <sup>6</sup> Left rotated optics <sup>1</sup> Right rotated optics <sup>1</sup> Bird spikes External glare shield	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark bronze Black Natural aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white



#### **Ordering Information**

#### **Accessories**

Ordered and shipped separately

Photocell - SSL twist-lock (120-277V) 20
Photocell - SSL twist-lock (347V) 20
Photocell - SSL twist-lock (480V) 20
Shorting cap 20
House-side shield for 30 LED unit <sup>19</sup>
House-side shield for 40 LED unit <sup>19</sup>
House-side shield for 60 LED unit <sup>19</sup>
Square and round pole universal mounting bracket (specify finish) <sup>21</sup>
Mast arm mounting bracket adaptor (specify finish) <sup>8</sup>

For more control options, visit DTL and ROAM online.

#### NOTES

- P10, P11, P12 or P13 and rotated optics (L90, R90) only available together AMBPC is not available with BLC, LCCO, RCCO or P4, P7, P8, P9 or P13.
- Not available with HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Any PIRx with BL30, BL50 or PNMT, is not available with 208V, 240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.

- Single rate (3) regulates 120, 27 V or 34 V. Dooble rate (2) regulates 220 V, 24 V or 43 V.

  Not available in P1 or P10. Not available with BL30, BL50 or PNMT options.

  Existing drilled pole only. Available as a separate combination accessory, for retroft use only. PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.

  Must order fixture with 574 option. Must be ordered as a separate accessory, see Accessories information. For use with 2-3/8" mast arm (not included).

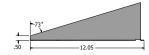
  10 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
- 11 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. Shorting cap included. 12 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PERS, PER7, PIR or PIRH. Not available P1, P2, P3 or P4.
- 13 Requires (2) separately switched circuits.
- 14 Reference Motion Sensor table on page 3.

  15 Reference PER table on page 3 to see functionality.
- 16 Not available with 347V, 480V, PNMT, DS. For PER5 or PER7, see PER Table on page 3.

  17 Not available with 347V, 480V, DS, BL30, BL50. For PER5 or PER7, see PER Table on page 3. Separate Dusk to Dawn required.
- 18 Not available with other dimming controls options
  19 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory, see Accessories information.
- 20 Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3.
- 21 For retrofit use only.

#### **External Glare Shield**

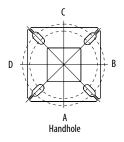


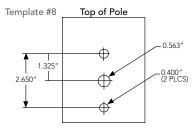




#### **Drilling**

#### HANDHOLE ORIENTATION





#### **Tenon Mounting Slipfitter\*\***

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

	Pole drilling nomenclature: # of heads at degree from handhole (default side A)									
1 @ 90° 2 @ 280° 2 @ 90° 3 @ 120° 3 @ 90° 4 (	DM19AS DM28AS DM29AS DM32AS DM39AS DM49AS									
	90°	° 4@90°	3 @ 90°	3 @ 120°	2 @ 90°	2 @ 280°	1 @ 90°			
Side B Side B & D Side B & C Round pole only Side B, C, & D Sides										

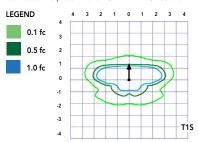
Note: Review luminaire spec sheet for specific nomenclature

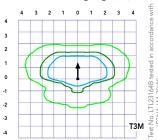
Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3"@90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
DSX SPA	Y	Y	Y	N	-	-	-	-
DSX RPA	Υ	Υ	N	N	Υ	Υ	Y	Υ
DSX SPUMBA	Y	N	N	N	-	-	-	-
DSX RPUMBA	N	N	N	N	Υ	Υ	Y	N
			*3 fixtur	res @120 requir	e round pole top	/tenon.		

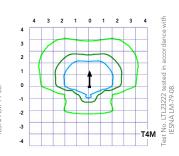
#### **Photometric Diagrams**

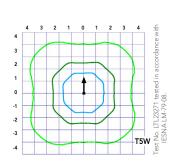
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').











#### **Lumen Ambient Temperature (LAT) Multipliers**

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Am	bient	Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°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

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

	Operating Hours	0	25000	50000	100000
Lun	nen Maintenance Factor	1.00	0.96	0.92	0.85

#### **Electrical Load**

							Curre	nt (A)		
	Performance Package	LED Count	Drive Current	Wattage	120	208	240	277	347	480
	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
Forward Optics (Non-Rotated)	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
Rotated Optics	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
(Requires L90 or R90)	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

		Motion Sensor De	fault Settings			
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use with Inline Dusk to	Dawn or timer.					

			PER Table			
Control	PER	PER	5 (5 wire)		PER7 (7 wi	re)
Control	(3 wire)		Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	~	A	Wired to dimming leads on driver	A	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	0	V	Wired to dimming leads on driver	A	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	$\Diamond$	A	Wires Capped inside fixture	A	Wires Capped inside fixture	Wires Capped inside fixture
Future-proof*	$\Diamond$	A	Wired to dimming leads on driver	<b>V</b>	Wired to dimming leads on driver	Wires Capped inside fixture
Future-proof* with Motion	0	A	Wires Capped inside fixture	<b>V</b>	Wires Capped inside fixture	Wires Capped inside fixture



<sup>\*</sup>Future-proof means: Ability to change controls in the future.



#### **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.

Forward (	Optics																							
LED Count	Drive	Power	System	Dist.		(3000	30K K 70	(RI)			(4000	40K K 70 I	CRI)			(5000	50K	CRI)		(Δ)		AMBPC osphor Co	nverted	
LED Count	Current	Package	Watts	Туре	Lumens	(3000 B	L U	G	LPW	Lumens	B	U U	G	LPW	Lumens	(3000 B	I U	G	LPW	Lumens	B	U	G	LPW
				T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130	3,640	1	0	1	70
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130	3,813	1	0	1	73
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131	3,689	1	0	1	71
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127	3,770	1	0	1	73
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131	3,752	1	0	1	72
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128	3,758	1	0	1	72
30	530	P1	54W	TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131	3,701	1	0	1	71
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136	3,928	2	0	0	76
				T5S T5M	6,728	3	0	1	125 124	7,248 7,229	3	0	1	134 134	7,340 7,321	3	0	2	136 136	3,881 3,930	2	0	1	75 76
				T5W	6,711	3	0	2	123	7,182	3	0	2	133	7,321	3	0	2	135	3,820	3	0	1	73
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107	3,020			'	175
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80					
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80					
				T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129	4,561	1	0	1	67
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128	4,777	1	0	1	70
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129	4,622	1	0	2	68
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125	4,724	1	0	1	69
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129	4,701	1	0	2	69
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126	4,709	1	0	2	69
30	700	P2	70W	TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129	4,638	1	0	2	68
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134	4,922	2	0	0	72
				T5S T5M	8,595	3	0	1	123 122	9,259	3	0	1	132	9,376	3	0	1	134	4,863	3	0	1	72
				T5W	8,573 8,517	3	0	2	122	9,236 9,175	3	0	2	132 131	9,353 9,291	4	0	2	134	4,924 4,787	3	0	1	72 70
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106	4,707	J	U	' '	10
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79					
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79					
				T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125					
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125					
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125					
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121					
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125					
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122					
30	1050	P3	102W	TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125					
				T5VS T5S	12,140 12,150	3	0	1	119 119	13,078 13,089	3	0	1	128 128	13,244 13,254	3	0	1	130					_
				T5M	12,130	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130					
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129					
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102					
				LCC0	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76					
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76					
				T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117					
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117					
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118					
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114					-
				T3M T4M	13,457	2	0	2	108 105	14,497	2	0	3	116	14,681	2	0	3	117 115					+
				TFTM	13,165 13,449	2	0	3	103	14,182 14,488	2	0	3	113 116	14,362 14,672	2	0	3	117					+
30	1250	P4	125W	T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122					+
				TSS	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122				1	<b>T</b>
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122					
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121					
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96					
				LCC0	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72					
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72					
				TIS	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116					
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116					
				T2M T2S	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117					
				T3S T3M	14,274 14,704	2	0	3	103	15,377 15,840	3	0	3	111	15,572 16,040	3	0	3	113 116					
				T4M	14,704	2	0	3	107	15,496	3	0	3	112	15,692	3	0	3	114					
				TFTM	14,695	2	0	3	104	15,490	3	0	3	115	16,030	3	0	3	116					
30	1400	P5	138W	T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121					
				TSS	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121					
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121					
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120					
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95					
				LCC0	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71					
					8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71					



#### **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.

40 1250 40 1400	Power Package	System Watts	Dist. Type  T1S T2S T2M T3S T3M T4M TFTM T5VS T5SM T5W	17,654 17,635 17,726 17,167 17,683 17,299 17,672 18,379		0 0 0 0 0 0	3 3 3 3 3	LPW 108 108 109 105	19,018 18,998 19,096	B 3	10K K, 70 C U	CRI)	LPW	( Lumens	5000 B					mber Ph	AMBPC osphor C	onverted	l)
40 1250	Package	Watts	Type  T1S T2S T2M T3S T3M T4M TFTM T5VS T5S T5M	17,654 17,635 17,726 17,167 17,683 17,299 17,672 18,379	B 3 3 3 3 3 3 3 3	U 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3	108 108 109 105	19,018 18,998 19,096	B 3	U		LPW										_
	P6	163W	T2S T2M T3S T3M T4M TFTM T5VS T5S T5M	17,635 17,726 17,167 17,683 17,299 17,672 18,379	3 3 3 3	0 0 0 0	3 3 3 3	108 109 105	18,998 19,096		0			Luillella	D	U	G	LPW	Lu- mens	В	U	G	LPW
	P6	163W	T2M T3S T3M T4M TFTM T5VS T5S T5M	17,726 17,167 17,683 17,299 17,672 18,379	3 3 3 3	0 0 0 0	3 3 3	109 105	19,096	2	U	3	117	19,259	3	0	3	118					
	P6	163W	T3S T3M T4M TFTM T5VS T5S T5M	17,167 17,683 17,299 17,672 18,379	3 3 3	0 0	3	105			0	3	117	19,238	3	0	3	118					
	P6	163W	T3M T4M TFTM T5VS T5S T5M	17,683 17,299 17,672 18,379	3	0	3			3	0	3	117	19,337	3	0	3	119					
	P6	163W	T4M TFTM T5VS T5S T5M	17,299 17,672 18,379	3	0			18,493	3	0	3	113	18,727	3	0	3	115					
	P6	163W	TFTM T5VS T5S T5M	17,672 18,379				108	19,049	3	0	3	117	19,290	3	0	3	118					_
	P6	163W	T5VS T5S T5M	18,379	)	Λ.	3	106 108	18,635	3	0	4	114	18,871	3	0	4	116 118					_
40 1400			T5S T5M		4	0	1	113	19,038 19,800	3	0	1	117 121	19,279 20,050	3	0	1	123					_
40 1400			T5M	18,394	4	0	2	113	19,800	4	0	2	122	20,030	4	0	2	123					
40 1400				18,348	4	0	2	113	19,766	4	0	2	121	20,000	4	0	2	123					
40 1400				18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122					
40 1400			BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97					
40 1400			LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72					
40 1400			RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72					
40 1400			T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115					
40 1400			T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114					
40 1400			T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115					
40 1400			T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111					
40 1400			T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115					
40 1400			T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112					
40 1400	P7	183W	TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115					
	17	10344	T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119					
			T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119					
			T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119					
			T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118					ــــــ
			BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94					
			LCC0	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70					
			RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70					
			T1S T2S	22,490 22,466	3	0	3	109 109	24,228 24,202	3	0	3	117 117	24,535	3	0	3	119 118					_
			T2M	22,400	3	0	3	109	24,202	3	0	3	117	24,509 24,635	3	0	3	119					
			T3S	21,870	3	0	4	109	23,560	3	0	4	114	23,858	3	0	4	115					_
			T3M	22,527	3	0	4	100	24,268	3	0	4	117	24,575	3	0	4	119					
			T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116					
			TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119					
60 1050	P8	207W	T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123					
			T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123					
			T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123					
			T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122					
			BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97					
			LCC0	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72					
			RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72					
			T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116					
			T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116					<u> </u>
			T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116					
			T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113					ــــــ
			T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116					
			T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113					
60 1250	P9	241W	TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116					+
			TSVS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121					+
			T5S T5M	26,648	5	0	3	111	28,707 28,635	5	0	3	119 119	29,070	5	0	3	121 120					_
			T5W	26,581 26,406	5	0	4	110 110	28,447	5	0	4	118	28,997 28,807	5	0	4	120					+
			BLC	20,400	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95					+
			LCC0	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71					_
			LCCO	15,619	2	0	7	0.5	10,023		v	4	70	17,038	2	0	4	71					+



#### **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.

LED Count	Drive	Power	System	Dist.		(3000	30K K. 70 (	(RI)			(4000	10K K. 70 (	(RI)			(5000	50K K. 70 (	(RI)		(An		AMBPC sphor Co	nverted	)
LLD Count	Current	Package	Watts	Туре	Lumens	В	U		LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134	7,167	2	0	2	72
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133	7,507	2	0	2	76
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136	7,263	2	0	2	73
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131	7,424	2	0	2	75
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136	7,387	2	0	2	75
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133	7,400	2	0	2	75
60	530	P10	106W	TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137	7,288	1	0	2	74
				TSVS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138	7,734	3	0	1	78
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136	7,641	3	0	0	77
				T5M T5W	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136	7,737	3	0	2	78
				BLC	13,137 10,906	3	0	3	124 103	14,153 11,749	3	0	3	134 111	14,332 11,898	3	0	3	135 112	7,522	3	0	2	76
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80					
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80					
				T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132	8,952	2	0	2	68
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131	9,377	2	0	2	72
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133	9,072	2	0	2	69
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129	9,273	2	0	2	71
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133	9,227	2	0	2	70
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131	9,243	2	0	2	71
	700	D4.4	12714	TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134	9,103	2	0	2	69
60	700	P11	137W	T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135	9,661	3	0	1	74
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134	9,544	3	0	1	73
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134	9,665	3	0	2	74
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133	9,395	4	0	2	72
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110					
				LCC0	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79					
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79					
				T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121					
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120					
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123					
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119					
				T3M T4M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123					
				TFTM	22,824 23,414	5	0	5	110 113	24,588 25,223	5	0	5	119 122	24,899 25,543	5	0	5	120 123					
60	1050	P12	207W	TSVS	23,579	5	0	1	114	25,223	5	0	1	123	25,722	5	0	1	123					
				TSS	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123					
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123					
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122					
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101					
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72					
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72					
				T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120					
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119					
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121					
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117					
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121					
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119					
60	1250	P13	231W	TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122					
• •				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123					
				TSS	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122					
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122					
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121					
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100					
				LCC0	15,170 15,150	5	0	5	66	16,342 16,321	5	0	5	71 71	16,549 16,527	5	0	5	72 72					



#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

#### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft²) for optimized pole wind loading.

#### 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 a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

#### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

#### ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1

electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

#### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS<sup>TM</sup> series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

#### LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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 www.designlights.org/QPL to confirm 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.

#### WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

**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.





#### **FEATURES & SPECIFICATIONS**

**INTENDED USE** — Round Tapered Steel is a general purpose light pole for up to 70-foot mounting heights. This pole provides a superior strength design relative other steel pole profiles, yet remains a cost-effective option for mounting area luminaires and floodlights in high wind load applications.

**CONSTRUCTION** — **Pole Shaft:** The pole shaft is of 11-gauge (0.1196") or 7-gauge (0.1793") with a uniform wall thickness and is made of a weldable-grade (ASTM A-595 Grade A or A572 Grade 55), hot-rolled, commercial-quality carbon steel tubing with a minimum yield of 55,000 psi. Shaft is one-piece construction with a full-length longitudinal high-frequency electric resistance weld and round in cross-section having a uniform linear taper of .14" per foot.

**Pole Top:** Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable steel top cap with set screws.

**Handhole:** A reinforced handhole with grounding provision is provided at 18" from the base end of the pole assembly. Every handhole includes a cover and cover attachment hardware. 3" x 5" rectangular handhole is provided on pole with 5.9" diameter. Pole shaft with diameters greater than 5.9" are provided with a 4" x 6.5" oval shaped handhole.

**Base Cover:** A two-piece ABS plastic full base cover is provided with each pole assembly on pole shaft diameters of 9" or less. Shaft sized greater than 9" have a sheet steel two-piece base cover. Additional base cover options are available upon factory request. Bolt cover caps can be substituted on most pole shaft sizes. Options include heavy duty two-piece cast aluminum full base cover and bolt cover caps. All base covers and bolt cover caps are finished to match pole.

**Anchor Base/Bolts:** Anchor base is fabricated from hot-rolled carbon steel plate that conforms with ASTM A36. Anchor bolts are manufactured to ASTM F1554 Standards Grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Upper portion of anchor bolt is galvanized per ASTM A-153; bolts have an "L" bend on bottom end and are galvanized a minimum of 12" on the threaded end. Each hot-dipped galvanized anchor bolt is furnished with two hex nuts and two flat washers.

**HARDWARE** – All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel, or stainless steel.

**FINISH** — Standard finishes include Dark Bronze, White, Black, Medium Bronze, Natural Aluminum, or Hot-dipped Galvanized finish. Classic colors include Sandstone, Charcoal Gray, Tennis Green, Bright Red and

Catalog Number

Notes

Type



Anchor Base Poles

RTS

**ROUND TAPERED STEEL** 

Steel Blue. Architectural Colors and Special Finishes are available by quote and include but are not limited to Hot-dipped Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

**WARRANTY** — 1-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

**NOTE**: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: RTS 30 6-6B DM19 DDB

RTS								
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness <sup>1</sup>	Mounting <sup>2</sup>		_			
RTS	(See technical information table.)	(See technical information table.)	Tenon mou PT T20 T25 T30 T35 KAC/KAD/K DM19 DM28 DM28PL DM29 DM32 DM32 DM39 DM49	nting Open top 2-3/8" O.D. (2" NPS) <sup>2</sup> 2-7/8" O.D. (2-1/2" NPS) <sup>2</sup> 3-1/2" O.D. (3" NPS) <sup>2</sup> 4" O.D. (3-1/2" NPS) <sup>2</sup> (SE/KSF/KVR/KVF Drill mounting <sup>3</sup> 1 at 90° 2 at 180° 2 at 180° with one side plugged 2 at 90° <sup>2</sup> 3 at 120° <sup>2</sup> 3 at 90° <sup>2</sup> 4 at 90° <sup>2</sup>	DM19AS  DM28AS  DM29AS  DM32AS  DM39AS  DM49AS	RIS™/OMERO™ Drill mounting <sup>3</sup> 1 at 90°  2 at 180°  2 at 90°  3 at 120°  3 at 90°  4 at 90°  end drill mounting <sup>3,4</sup> 1 at 90°  2 at 180°  2 at 90°  3 at 90°  4 at 90°  4 at 90°  4 at 90°  4 at 90°	OMERO™ Susp DM19MRT_ DM28MRT_ DM29MRT_ DM39MRT_ DM49MRT_	end drill mounting <sup>3,4</sup> 1 at 90° 2 at 180° 2 at 90° 3 at 90° 4 at 90°

Options  Shipped L/AB	Less anchor bolts	CPL12/xy CPL34/xy	1/2" coupling <sup>5</sup> 3/4" coupling <sup>5</sup>	USPOM	United States point of manufacture <sup>9</sup>	Finish <sup>11</sup> Standar DDB	Dark bronze	<u>Classic colors</u> DSS Sandstone
VD TP HAxy	Vibration damper  Tamper resistant handhole cover fasteners  Horizontal arm bracket (1 fixture) <sup>5,6</sup>	CPL1/xy NPL12/xy NPL34/xy NPL1/xy EHHxy	1" coupling <sup>5</sup> 1/2" threaded nipple <sup>5</sup> 3/4" threaded nipple <sup>5</sup> 1" threaded nipple <sup>5</sup> Extra handhole <sup>5,7</sup>	UL NEC	UL listed with label (Includes NEC compliant cover) NEC 410.30 compliant gasketed handhole	DWH DBL DMB	White Black Medium bronze Natural	DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue Architectural Colors and Special Finishes <sup>11</sup>
FDLxy	Festoon outlet less electrical <sup>5</sup>	MAEX	Match existiing <sup>8</sup>		(Not UL Labeled)	GALV	aluminum Galvanized finish	Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

See footnotes next page.

OUTDOOR

# **RTS** Round Tapered Steel Poles

#### NOTES:

- Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-gauge) in nomenclature. "C" 0.1196" | "G" 0.1793"
- PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
- The drilling template pattern to be used for a particular luminaire depends on the luminaire that is used. Refer to the Technical Data Section of the Outdoor Binder for Drilling Templates.
- Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
- Specify location and orientation when ordering option. For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-". Example: 5ft = 5 and 20ft 3in = 20-3

For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.

Example: 1/2" coupling at 5'8", orientation C = CPL12/5-8C

- Horizontal arm is 18" x 2-3/8" O.D. tenon standard with radius curve providing 12' rise. Combination of tenon-top and drill mount includes extra handhole. Must add original order number of existing pole(s).

- Use when mill certifications are required.
- Provides enhanced corrosion resistance.
- Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

TECHNICA	L INFORMATIO	N — EPA (ft²)	WITH 3-SE	COND GUS	T PER AAS	HTO 2013											
Series	Mounting Height (ft)	Shaft Base Size	90 MPH	Max. weight	100 MPH	Max. weight	110 MPH	Max. weight	120 MPH	Max. weight	130 MPH	Max. weight	140 MPH	Max. weight	150 MPH	Max. weight	Approx. ship weight (lbs.)
RTS	20	5-9B	18	400	14.5	363	12	300	10	250	8.5	213	7	175	6	150	140
RTS	20	6-5B	22	550	18	450	15	375	13	325	11	275	9.5	238	8	200	160
RTS	25	5-9B	13	200	10.5	200	8.5	200	7	175	5.5	138	4.5	113	4	100	155
RTS	25	7-0B	19	475	16	400	13	325	11	275	9	225	8	200	7	175	200
RTS	25	7-0F	21	525	17	425	14	350	11.5	288	9.5	238	8.5	213	7	175	280
RTS	30	6-6B	12.5	200	10	200	7.5	188	6.5	163	5.5	138	4.5	113	3.5	88	200
RTS	30	8-0B	17.5	438	14	350	11.5	288	9.5	238	8	200	6.5	163	5.5	138	265
RTS	30	8-0F	30	750	24.5	613	20.5	513	17.5	438	15	375	12.5	313	11	275	380
RTS	35	7-3B	12	188	9.5	188	7.5	188	6	150	5	125	4	100	3.5	88	250
RTS	35	8-5B	14	350	11	275	9	225	7	175	6	150	5	125	4	100	315
RTS	35	9-5B	16.5	413	13.5	338	11	275	9	225	7.5	188	6	150	5	125	370
RTS	39	7-8B	11.5	188	9	188	6.5	163	5	125	4	100	3	75	2.5	63	285
RTS	39	9-0B	13	325	10	250	8	200	6.5	163	5	125	4	100	3.5	88	355
RTS	39	9-0F	24	600	19.5	488	16	400	13	325	11	275	9.5	238	8	200	515
RTS	45	10-0B	10	250	7.5	188	6	150	4.5	113	3.5	88	2.5	63	2	50	450
RTS	45	10-0F	20.5	513	16	400	13	325	10.5	263	9	225	7.5	188	6	150	650
RTS	50	10-0B	7.5	188	5.5	138	4	100	2.5	63	1.5	38	1	25	0.5	13	475
RTS	50	10-0F	17.5	413	13	325	10.5	263	8	200	6.5	163	5	125	4	100	680
RTS	50	11-0F	19	475	15	375	12	300	10	250	8	200	6.5	163	5	125	812

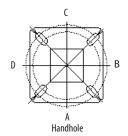
AASHTO 2013 criteria is the most conservative existing EPA calculation. For poles not showing EPA values under AASHTO 2013, EPA values may exist under commercial criteria (see table below).

TECHNICAL INFORMAT	ION												
	Nominal	Pole Shaft Size					EPA (ft²) w	ith 1.3 gust			Bolt		Approximate
Catalog Number	Shaft Length (ft.)	(Base in. x Top in. x ft.)	Wall thick (in)	Gauge	80 MPH	Max. weight	90 MPH	Max. weight	100 MPH	Max. weight	circle (in)	Bolt size (in. x in. x in.)	ship weight (lbs.)
RTS 20 5-9B	20	5.9 x 3.1 x 20	0.120	11	19.3	482	15.1	377	12.2	305	9	1 x 36 x 4	140
RTS 20 6-5B	20	6.5 x 3.7 x 20	0.120	11	24.2	605	19.3	482	15.6	390	9.5	1 x 36 x 4	160
RTS 25 5-9B	25	5.9 x 2.4 x 25	0.120	11	12.5	312	9.9	247	8	200	9	1 x 36 x 4	155
RTS 25 7-0B	25	7.0 x 3.5 x 25	0.120	11	20.3	507	16.2	405	13.1	327	10	1 x 36 x 4	200
RTS 25 7-0F	25	7.0 x 3.5 x 25	0.179	7	30.5	760	24	625	19.8	495	10	1 x 36 x 4	280
RTS 30 6-6B	30	6.6 x 2.4 x 30	0.120	11	11.7	292	9.3	232	7.5	187	9.5	1 x 36 x 4	200
RTS 30 8-0B	30	8.0 x 3.8 x 30	0.120	11	18.9	473	14.9	373	12	300	11	1 x 36 x 4	265
RTS 30 8-0F	30	8.0 x 3.8 x 30	0.179	7	33.5	838	27	675	22	550	11	1-1/4 x 42 x 6	380
RTS 35 7-3B	35	7.3 x 2.4 x 35	0.120	11	11.2	280	8.9	222	7.1	177	10.5	1 x 36 x 4	250
RTS 35 8-5B	35	8.5 x 3.6 x 35	0.120	11	18.9	472	15.1	377	12.2	305	11.5	1 x 36 x 4	315
RTS 35 9-5B	35	9.5 x 4.6 x 35	0.120	11	23.2	580	18.2	455	14.5	363	13	1 x 36 x 4	370
RTS 39 7-8B	39	7.8 x 2.4 x 39	0.120	11	10.7	267	8.5	212	6.6	165	11	1 x 36 x 4	285
RTS 39 9-0B	39	9.0 x 3.6 x 39	0.120	11	17.2	430	13.5	338	10.8	270	12.5	1 x 36 x 4	355
RTS 39 9-0F	39	9.0 x 3.6 x 39	0.179	7	28.5	715	23	575	19	475	12.5	1-1/4 x 42 x 6	515
RTS 45 10-0B	45	10.0 x 3.7 x 45	0.120	11	17.4	435	13.5	338	10.6	265	13.5	1 x 36 x 4	450
RTS 45 10-0F	45	10.0 x 3.7 x 45	0.179	7	28.5	715	23	575	19	475	13.5	1-1/4 x 42 x 6	650
RTS 50 10-0B	50	10.0 x 3.0 x 50	0.120	11	13.2	330	10.6	265	8.3	208	13.5	1 x 36 x 4	475
RTS 50 10-0F	50	10.0 x 3.0 x 50	0.179	7	20.5	512	16.5	412	13.6	340	13.5	1-1/4 x 42 x 6	680
RTS 50 11-0F	50	11.0 x 3.0 x 50	0.179	7	29.9	748	23.5	588	18.6	465	15	1-1/4 x 42 x 6	812
RTS 50 13-0F	50	13.0 x 6.0 x 50	0.179	7	50.4	1260	39.7	992	31.4	785	17	1-1/4 x 54 x 6	1020
RTS 50 13-0M	50	13.0 x 6.0 x 50	0.239	3	69.2	1730	55	1375	44.2	1105	17.5	1-3/4 x 84 x 6	1335



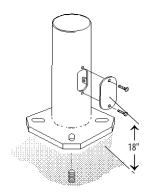
POLE-RTS

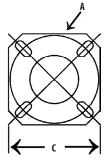
#### **HANDHOLE ORIENTATION**

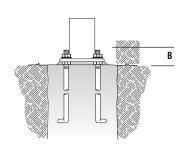


POLE DATA					
Shaft base size	Bolt circle A	Bolt projection B	Base square C	Template description	Anchor bolt description
5.9"	9"	4.13"	10" ABTEMPLATE PJ5		AB36-0
6.5"	9.5"	4.13"	10.5"	ABTEMPLATE PJ50074	AB36-0
7"	9.5"	4.13"	10.5"	ABTEMPLATE PJ50077	AB36-0
7"	10"	4.13"	10.88"	ABTEMPLATE PJ50076	AB36-0
6.6"	10"	4.25"	10.88"	ABTEMPLATE PJ50078	AB36-0
8"	10.5"	4.13"	11.25"	ABTEMPLATE PJ50079	AB36-0
8"	11"	4.13"	11.5"	ABTEMPLATE PJ50080	AB42-0
7.3"	11"	4.13"	11.5"	ABTEMPLATE PJ50081	AB36-0
8.5"	11"	5"	11.5"	ABTEMPLATE PJ50082	AB36-0
9.5"	11.5"	4.25"	12"	ABTEMPLATE PJ50083	AB36-0
7.8"	12.5"	4.25"	12.38"	ABTEMPLATE PJ50084	AB36-0
9"	12.5"	5"	12.38"	ABTEMPLATE PJ50085	AB36-0
9"	13"	4.25"	13"	ABTEMPLATE PJ50086	AB42-0
10"	13.5"	4.25"	14"	ABTEMPLATE PJ50087	AB36-0
10"	13.5"	5"	14"	ABTEMPLATE PJ50088	AB42-0

#### **BASE DETAIL**







#### IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Bolt circles have +/- 1/2" tolerance.
- For poles larger than 10" consult factory.

OUTDOOR:

# Page/



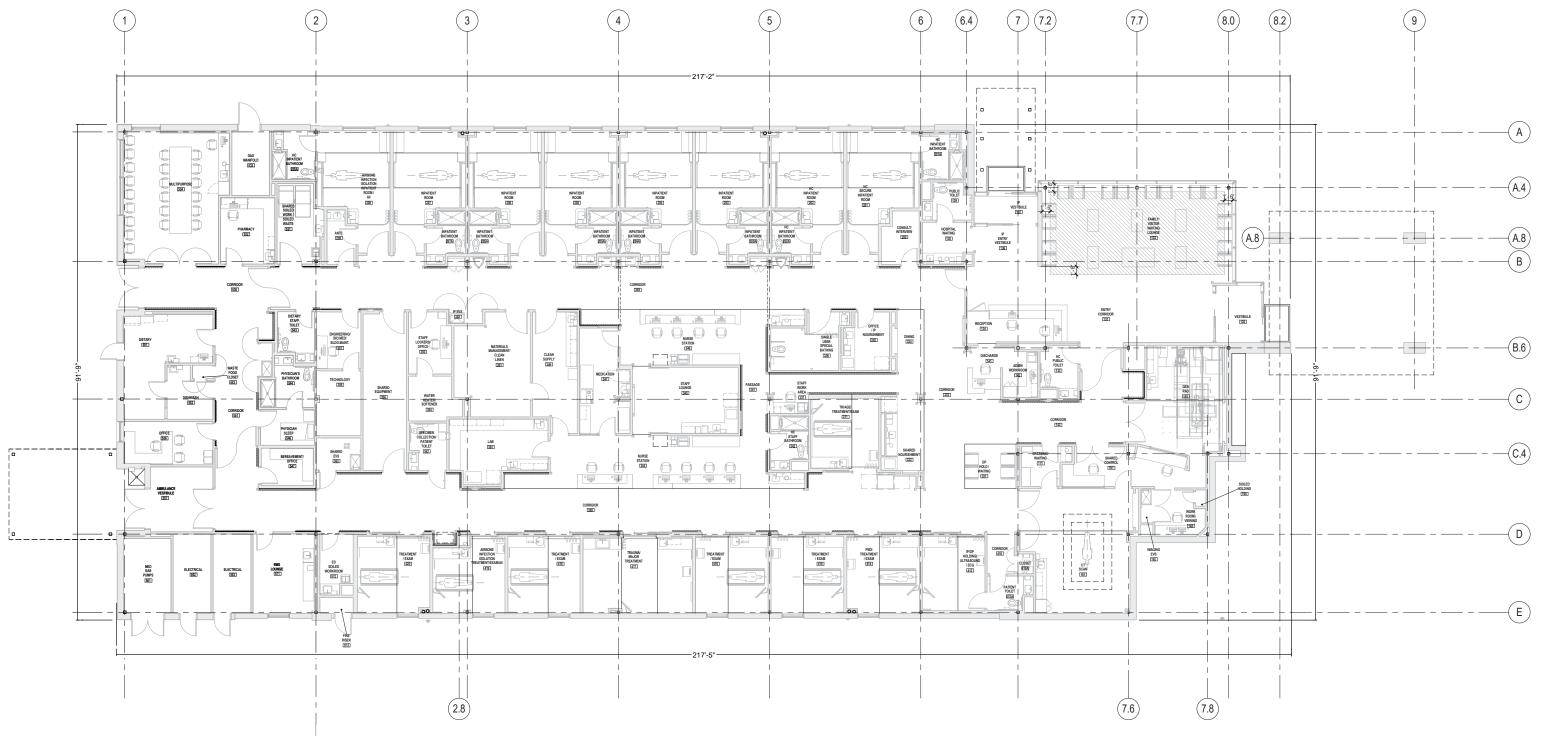
# PROJECT: NEIGHBORHOOD HOSPITAL OAK CREEK

SEPT 19, 2018



# Floor Plan

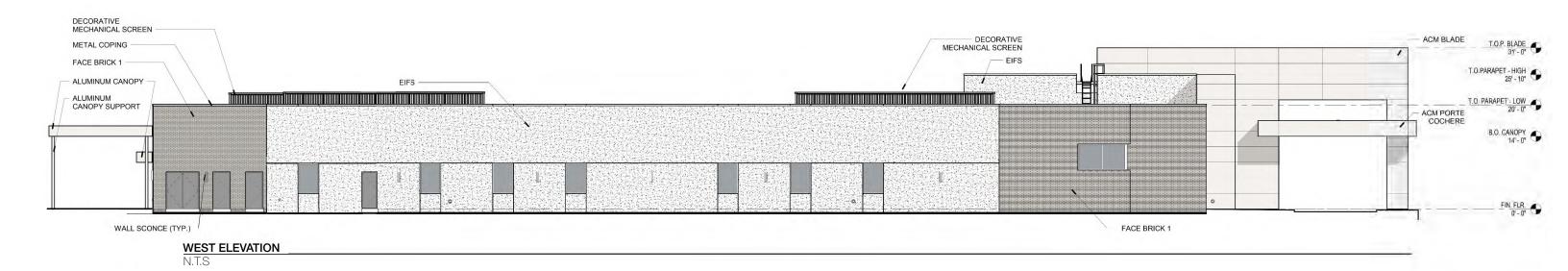
N.T.S

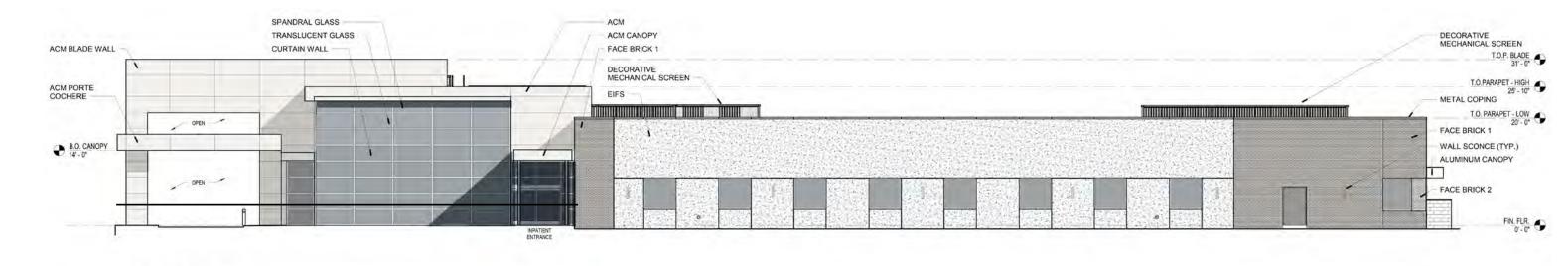






#### **Elevations**





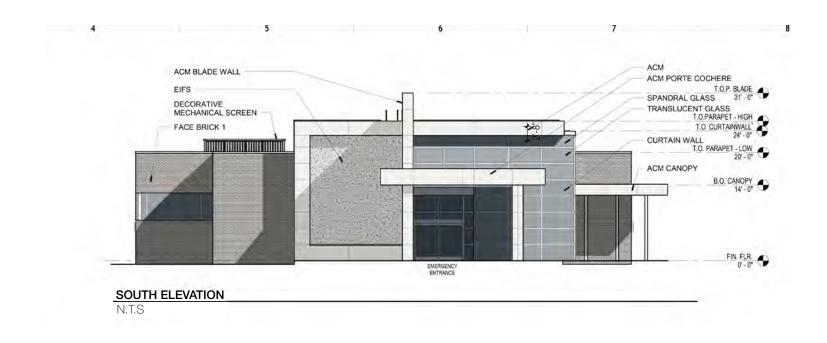
EAST ELEVATION

N.T.S

Face Brick 1 - Cloud Ceramics - Dove Grey Face Brick 2 - Glen Grey - Aspen White Mortar - Argos Masonry Cement - Heritage Ivory ACM - Polar White



#### **Elevations**

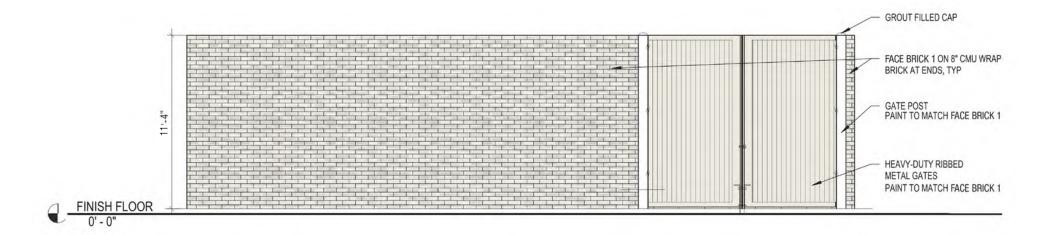




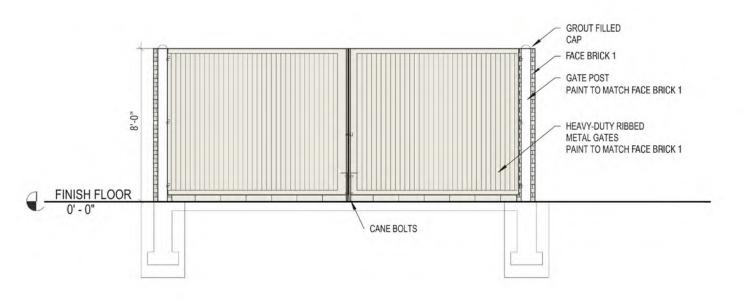
Face Brick 1 - Cloud Ceramics - Dove Grey Face Brick 2 - Glen Grey - Aspen White Mortar - Argos Masonry Cement - Heritage Ivory ACM - Polar White



# **Dumpster Enclosure and Generator Elevations**



**Generator Enclosure Elevation** 



FACE BRICK 2

SIGNAGE
(CONTENT T.B.D.)

EFIS (COLOR TO MATCH BUILDING)

FACE BRICK 1

**Dumpster Enclosure Elevation** 

**Ground Sign Elevation** 



#### **Exterior Materials**



# **Exterior Materials | Glass Spec**



# **Additional Resources**

**Solarban®** 90 glass is **Cradle to Cradle Certified™** and part of **Ecological Solutions from PPG™** 



For more information or to obtain samples of any PPG glass product, call 1-888-PPG-IDEA (774-4332) or visit www.ppgideascapes.com.

PPG is the first U.S. float glass manufacturer to have its products recognized by the *Cradle to Cradle Certified*™ program, and offers more C2C-certified architectural glasses than any other float glass manufacturer.

PPG *IdeaScapes*.™ Integrated products, people and services



With its exceptional solar control performance, **Solarban**® 90 glass enables architects to design expansive glass facades with a true neutral aesthetic or with a range of tinted and reflective glasses by PPG.

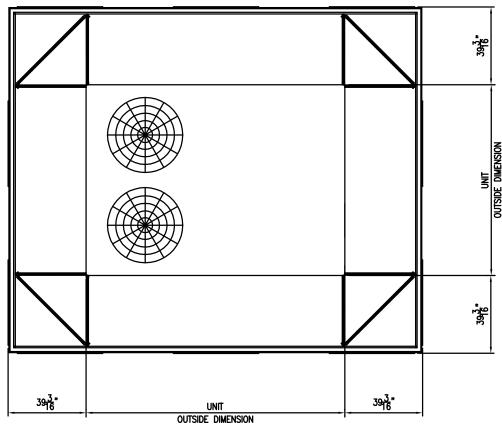
# Solarban® 90 Glass Performance — Commercial Insulating Glass Unit

	Insulating Glass Unit Performance Comparisons 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites								
	Glass Type Outdoor Lite: Indoor Lite:		Visible Light	Visible Light Reflectance		(BTU/hr·ft²·°F) NFRC U-Value		Solar Heat Gain	Light to Solar Gain
C	oating if Any + Surface) Glass	Coating if Any (Surface) Glass	Transmittance (VLT)	Exterior %	Interior %	Winter Night-time	Winter Argon	Coefficient (SHGC)	(LSG)
9	OLARBAN® 90 Solar Con	trol Low-E Glas	S						
	SOI ARRANI 90 (2) Cloar + C	loar	51	12	19	n 29	0.2%	በ 23	2 22
	SOLARBAN 90 (2) STARPHI	RE + STARPHIRE	54	13	20	0.29	0.24	0.23	2.35
	SULARBAN YU (Z) SULEXIA	+ Clear	44	ΙU	19	U.Z9	U.Z4	U.ZZ	Z.UU

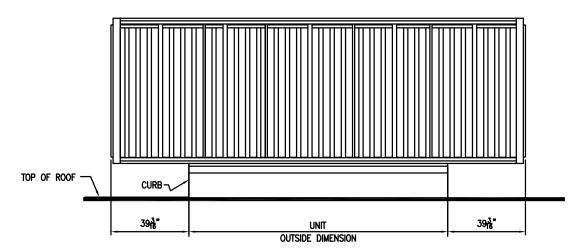


# **Exterior Material | Mechanical Screen Detail**

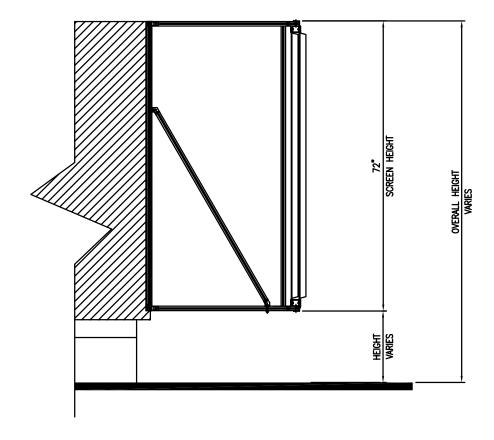
70" VERTICAL STYLE ENVISOR FOOTPRINT



70" VERTICAL STYLE ENVISOR ELEVATION



70" VERTICAL STYLE ENVISOR SECTION



NOTE: The Screen System shown corresponds to a typical construction of the Envisor 70" Vertical Style using Flat Rib Panels. This drawing is intended to illustrate general dimensions of the Envisor System when installed on an average Roof Top Unit. Dimensions and specifications of the system can vary depending on the RTU's location to each other and performance characteristics.



# **Exterior Perspective**







Meeting Date: October 23, 2018

Item No. 5c

#### PLAN COMMISSION REPORT

Proposal:	Certified Survey Map					
Description:	Review of a Certified Survey Map request to combine the existing parcels at 7266 and 7328 S. Howell Ave.					
Applicant(s):	Hume An, MVAH Partners					
Address(es):	7266 & 7328 S. Howell Ave.					
Suggested Motion:	That the Plan Commission recommends to the Common Council that the Certified Survey Map submitted by Hume An, MVAH Partners, for the properties at 7266 and 7328 S. Howell Ave. be approved with the condition that all technical corrections, including, but not limited to spelling errors, minor coordinate geometry corrections, and corrections required for compliance with the Municipal Code and Wisconsin Statutes, are made prior to recording.					
Owner(s):	Walter Wickman, Jr.					
Tax Key(s):	766-0014-000 & 766-0015-000					
Lot Size(s):	2.421 ac (following consolidation)					
Current Zoning District(s):	Rs-3, Single Family R	esidential				
Overlay District(s):	N/A					
Wetlands:	☐ Yes       No	Floodplain:	☐ Yes       No			
Comprehensive Plan:	Mixed Residential					
Background:						

The Applicants are requesting approval of a Certified Survey Map (CSM) to combine the properties at 7266 and 7328 S. Howell Ave. into one conforming lot. Plan Commissioners will recall that these properties were recently the subject of a proposal to amend the Planned Land Use category and Map in the Comprehensive Plan from "Planned Industrial" to "Mixed Residential." Although the Plan Commission expressed concerns regarding limiting an amendment to the Comprehensive Plan to just these two parcels, the Applicant requested Common Council consideration of the proposed Amendment. Council approved the Amendment

Meeting Date: October 23, 2018 Item No.: 5c

at their meeting on October 16. This proposed CSM is in advance of pursuing a future multifamily residential development for workforce housing. Additional reviews (e.g., rezone, Conditional Use Permit, Site Plan Review) will be required prior to any development on these properties. Additionally, WisDOT review and approval of any future access will be required.

The combined property meets the minimum requirements for the existing Rs-3, Single Family Residential zoning district. The combined property would also meet the minimum dimensional requirements of the Rm-1, Multifamily Residential district (rezoning is pending). However, the parcel is not large enough to support the proposed unit count – (50) 2-bedroom and (16) 3-bedroom units. Adjustments may be required as part of the Conditional Use process.

**Options/Alternatives:** The Plan Commission may recommend Common Council approval of the proposed CSM with specified conditions, or that the Common Council not approve of the proposed CSM. Disapproval will likely result in the existing condition of the properties to remain as two lots.

Respectfully submitted:

Douglas Seymour, AICP

Director of Community Development

Prepared:

Kari Papelbon, CFM, AICP

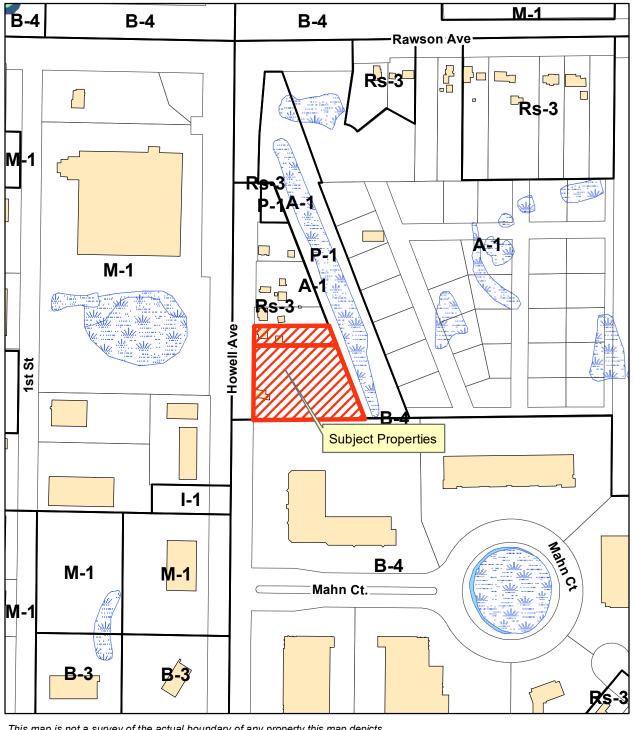
Planner

Attachments:

Location Map

CSM

# **Location Map** 7266 & 7328 S Howell Ave



This map is not a survey of the actual boundary of any property this map depicts.





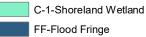
---- Officially Mapped Streets

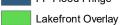
Subject Properties

**Manager** DNR Wetlands Inventory Floodplain 2008

Waterbodies

#### **Zoning Overlays**





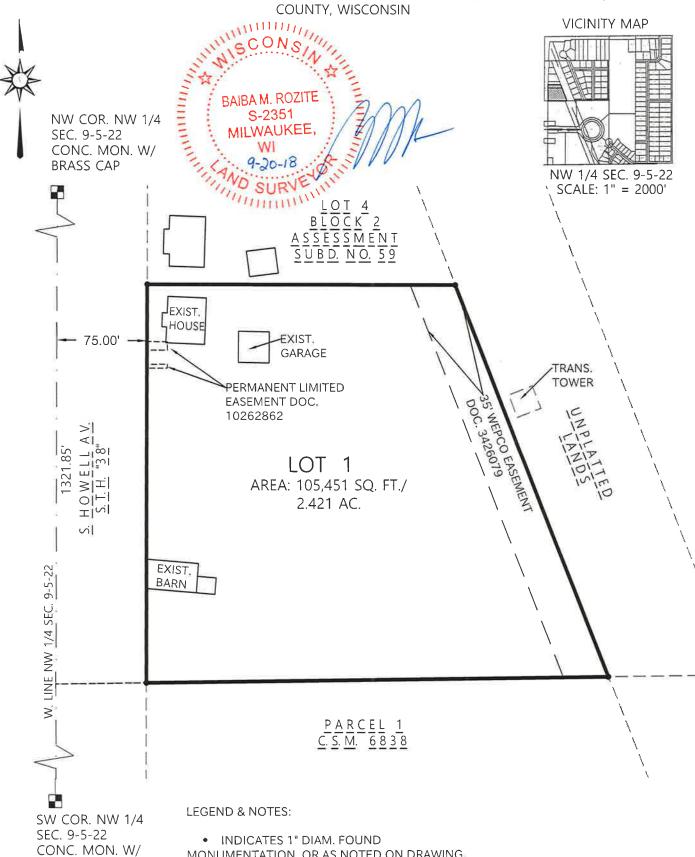
NO-Mixed Use Neighborhood

OO-Mixed Use Office RR-Regional Retail

**Department of Community Development** 

# CERTIFIED SURVEY MAP NO.

PART OF LOTS 4 AND 5, BLOCK 2, ASSESSMENT SUBDIVISION NO. 59, BEING PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 9, TOWNSHIP 5 NORTH, RANGE 22 EAST, CITY OF OAK CREEK, MILWAUKEE



- MONUMENTATION, OR AS NOTED ON DRAWING.
- o INDICATES SET 3/4" DIAM. REBAR, 18" LONG WEIGHING 1.50 LBS/LIN. FT.

BEARINGS REFERENCED THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 1927 WITH THE WEST LINE OF THE NW 1/4 OF SEC. 9-5-22, ASSUMED TO BEAR N 0° 30' 27" E, AS PUBLISHED BY SEWRPC, NAD 1927.

DISTANCES MEASURED TO THE NEAREST 0.011. ANGLES MEASURED TO THE NEAREST 01".



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

BRASS CAP

# CERTIFIED SURVEY MAP NO.

PART OF LOTS 4 AND 5, BLOCK 2, ASSESSMENT SUBDIVISION NO. 59, BEING PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 9, TOWNSHIP 5 NORTH, RANGE 22 EAST, CITY OF OAK CREEK, MILWAUKEE COUNTY, WISCONSIN

SURVEYOR'S CERTIFICATE
STATE OF WISCONSIN)
):SS
MILWAUKEE COUNTY)

I, BAIBA M. ROZITE, Professional Land Surveyor, hereby certify:

That I have surveyed, divided and mapped part of Lots 4 and 5, Block 2, ASSESSMENT SUBDIVISION NO. 59, being part of the Northwest 1/4 of the Northwest 1/4 of Section 9, Township 5 North, Range 22 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Northwest corner of said 1/4 section; thence South 0°30'27" West, 1321.85 feet along the west line of said 1/4 section; thence North 89°21'29" East, 75.02 feet to the East line of South Howell Avenue (S.T.H. "38") and to the point of beginning; thence North 0°30'27" East, 331.18 feet along said East line; thence South 89°54'32" East, 256.44 feet to the Easterly line of said Block 2; thence South 20°56'06" East, 349.52 feet along said Easterly line to the North line of Parcel 1 of Certified Survey Map No. 6838; thence South 89°21'29" West, 384.29 feet along said North line to the point of beginning.

Said parcel contains 105,451 square feet or 2.421 acres of land, more or less.

THAT I have made the survey, land division, and map by the direction of the owner of said land.

THAT the map is a correct representation of all exterior boundaries of the land surveyed and the land division thereof made.

THAT I have fully complied with the provisions of Chapter 236.34 of the Wisconsin Statutes and the City of Oak Creek, Land Division Ordinance in surveying, dividing and mapping the same.

Baiba M. Rozite , Professional Land Surveyor NS , S-2351

BAIBA M. ROZITE
S-2351
MILWAUKEE,
WI
9-20-18
OF

Single Source. Sound Salutions. GROUP
www.thesigmagroup.com

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# CERTIFIED SURVEY MAP NO.

PART OF LOTS 4 AND 5, BLOCK 2, ASSESSMENT SUBDIVISION NO. 59, BEING PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 9, TOWNSHIP 5 NORTH, RANGE 22 EAST, CITY OF OAK CREEK, MILWAUKEE COUNTY, WISCONSIN

#### OWNER'S CERTIFICATE

As Owner, I hereby certify that I caused the land described on this map to be surveyed, divided and mapped as represented on this map.

I further certify that this map is required by s. 236.10 or 236.12 to be submitted to the following for approval or objection:

The City of Oak Creek.

WITNESS the hand and seal of said owner this 24 day of 5EP+, 2018.

In the presence of:

STATE OF WISCONSIN)

)SS

Marinelle COUNTY)

NOTARY PUBLIC signature, STATE OF WISCONSIN

brenda Loruszyns notary printed name

MY COMMISSION EXPIRES May 28 2022

ESIGNA
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# CERTIFIED SURVEY MAP NO.\_\_\_\_\_

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CITY OF OAK CREEK PLAN COMMISSION CER	RTIFICATE OF APPROVAL
APPROVED BY THE PLAN COMMISSION OF T	THE CITY OF OAK CREEK ON THIS DAY OF,
DANIEL BUKIEWICZ, CHAIRMAN CITY OF OAK CREEK	DOUGLAS W. SEYMOUR, CORRESPONDING SECRETARY, CITY OF OAK CREEK
CITY OF OAK CREEK COMMON COUNCIL CERTAPPROVED AND DEDICATION ACCEPTED BY OF, 20, BY RESOLUTION NO	THE COMMON COUNCIL OF THE CITY OF OAK CREEK ON THIS DA
DANIEL BUKIEWICZ MAYOR	CATHERINE A. ROESKE, CLERK

CITY OF OAK CREEK





1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210

CITY OF OAK CREEK