

**Notice of an Electronically Conducted
Regular Meeting of the Charter Township of Union
Planning Commission**

Notice is hereby given that the Charter Township of Union Planning Commission will conduct a regular meeting electronically on Tuesday, January 19, 2021 at 7:00 p.m., consistent with the emergency declarations and direction from state and county health officials to slow the spread of the COVID-19 virus and the Open Meetings Act (Public Act 267 of 1976, as amended)."

There will be no in-person attendance in the Township Hall Board Room (2010 S. Lincoln Rd., Mt. Pleasant, MI 48858), although some Planning Commission members and Township staff may choose to participate from this location.

All interested persons may attend and participate. The public may participate in the meeting by computer and smart phone using the following link to the electronic meeting location: <https://us02web.zoom.us/j/89751444718> (Meeting ID: "897 5144 4718" Passcode "038923"). The moderator will open public access to the electronic meeting space at 6:55 p.m.

To participate via telephone conference call, please call (312) 626-6799. Enter "897 5144 4718" and the "#" sign at the "Meeting ID" prompt. Lastly, re-enter the "#" sign again at the "Participant ID" prompt to join the meeting.

The meeting agenda, packet of materials relating to the meeting, and instructions for connecting to the meeting electronically are available on the Township's website under "Minutes and Board Packets" at <http://www.uniontownshipmi.com/>.

Questions and comments will be received during the public comment sections of the meeting. For participants accessing via computer or smartphone to indicate a desire to address the Planning Commission, please use the "Raise Your Hand" button at the bottom center of the screen. To raise your hand for telephone dial-in participants, press "star" and then the number "nine" (*9). The Chair will call on you by the last three digits of your phone number to invite any comment, at which time you will be unmuted by the meeting moderator.

If there are a large number of participants, the Chair may choose to call on individuals by name or telephone number. Please speak clearly and provide your name and address before making your comments. Please note that the meeting moderator will control the muting and unmuting of participants during public comment.

Written comments to the Planning Commission may also be delivered to the drop box at the Township Hall. Comments received prior to 3:00 p.m. on the day of the meeting will be read aloud to the Planning Commission.

Persons with disabilities needing assistance to participate should call the Township office at (989) 772-4600. Persons requiring speech or hearing assistance may contact the Township through the Michigan Relay Center at 711. A minimum of one (1) business day of advance notice will be necessary for accommodation.

Instructions to Participate in an Electronically Conducted Regular Meeting of the Charter Township of Union Planning Commission

The Charter Township of Union Planning Commission will conduct a regular meeting electronically on Thursday, January 19, 2021 at 7:00 p.m., consistent with the emergency declarations and direction from state and county health officials to slow the spread of the COVID-19 virus and the Open Meetings Act (Public Act 267 of 1976, as amended).

All interested persons may attend and participate. The public may participate in the meeting by computer and smart phone using the following link to the electronic meeting location:
<https://us02web.zoom.us/j/89751444718> (Meeting ID: “897 5144 4718” Passcode “038923”).

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Raise Your Hand for Citizen Participation During the Public Comment Periods

Questions and comments will be received during the public comment sections of the meeting. For participants accessing via computer or smartphone to indicate a desire to address the Planning Commission, please **click on the “Raise Your Hand” icon** near the bottom of your screen.



Click “Lower Hand” to lower it if needed. The host will be notified that you have raised your hand. The Mute/Unmute function will be controlled by the meeting moderator.

To raise your hand for telephone dial-in participants, press “star” and then the number “nine” (*9). The Chair will call on you by the last three digits of your phone number to invite any comment, at which time you will be unmuted by the meeting moderator.

Do I need to download the Zoom app to access the meeting? No. Use of the Zoom app is recommended, but you will have options to “download & run Zoom” or “join from your browser” when you click on the link to join the meeting.

Can I Use Bluetooth Headset? Yes, if the Bluetooth device is compatible with the computer or mobile device that you are using.

Do I have to have a webcam to join on Zoom? While you are not required to have a webcam to join a Zoom Meeting, you will not be able to transmit video of yourself. You will continue to be able to listen and speak during public comment and view the webcam video of other participants.

Leaving the Meeting: Click the “Leave Meeting” link at the bottom right corner of the screen at any time to leave the meeting.



Planning Commission

**Regular Electronic Meeting. Instructions for access will be posted and available on website
(uniontownshipmi.com) home page**

January 19, 2021

7:00 p.m.

1. CALL MEETING TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL
4. APPROVAL OF MINUTES
-December 15, 2020
5. CORRESPONDENCE / BOARD REPORTS / PRESENTATIONS
 - A. Isabella County Jail Presentation for PSUP20-03
 - B. Cody updates from Board of Trustees
 - C. Buckley updates from ZBA
6. APPROVAL OF AGENDA
7. PUBLIC COMMENT: Restricted to (3) minutes regarding items not on this agenda
8. NEW BUSINESS
 - A. Meet with Sidewalks and Pathways Prioritization Committee members**
 - a. Temporary relief from construction policy discussion
 - b. Discussion of long-term (2022 - 2027) sidewalk construction priorities
 - B. PSPR20-02 Sam's Club filling station – preliminary site plan**
 - C. PSPR20-19 Den at Broomfield Preliminary Site plan**
 - D. Appoint Planning Commission Liaison to the ZBA**
 - E. Parks and Recreation Master Plan update – introduction**
9. OTHER BUSINESS
 - A. Master Plan implementation**
10. EXTENDED PUBLIC COMMENT: Restricted to 5 minutes regarding any issue
11. FINAL BOARD COMMENT
12. ADJOURNMENT

CHARTER TOWNSHIP OF UNION
Planning Commission
Regular - Electronic Meeting Minutes

A regular-electric meeting of the Charter Township of Union Planning Commission was held on December 15, 2020 as a virtual meeting through the Zoom meeting platform.

Meeting was called to order at 7:01 p.m.

Welcome Jessica Lapp, newest Planning Commission member.

Roll Call

Present:

Buckley (location: Union Township, Isabella County, Mt. Pleasant, MI)
Clerk Cody (location: Union Township, Isabella County, Mt. Pleasant, MI)
Darin (location: Union Township, Isabella County, Mt. Pleasant, MI)
Fuller (location: Union Township, Isabella County, Mt. Pleasant, MI)
LaBelle (location: Union Township, Isabella County, Mt. Pleasant, MI)
Lapp (location: Elkhart County, Goshen, Indiana)
Shingles (location: Union Township, Isabella County, Mt. Pleasant, MI)
Squatrito (location: Isabella County, Mt. Pleasant, MI)

Others Present

Rodney Nanney, Community and Economic Development Director; Zoning Administrator, Peter Gallinat, and Administrative Assistant, Jennifer Loveberry

Approval of Minutes

Fuller moved **Shingles** supported the approval of the November 17, 2020 regular meeting as presented. **Vote: Ayes: 8 Nays: 0. Motion carried.**

Correspondence / Reports/ Presentations

- A. Board of Trustees updates by Clerk Cody
- B. ZBA updates by Buckley
- C. Sidewalks and Pathway Prioritization updates by Darin

Approval of Agenda

Buckley moved **Darin** supported to approve the Agenda as presented. **Vote: Ayes: 8 Nays: 0. Motion Carried.**

Public Comment

Open 7:10 p.m.

No comments were offered.

Closed 7:11 p.m.

New Business

- A. **PSUP 20-02 (Malley Construction) Special Use Permit Application for a contractor's yard on the southeast corner of Packard St. and Airport Rd.**

- a. Introduction
- b. Public Hearing
- c. Updates from the Applicant and Staff
- d. Deliberation
- e. Action (recommendation to the Board of Trustees)

Applicant is proposing a Contractor’s Yard located east of Packard St. This is an expansion of the business currently conducted at 1565 S. Park Place.

Public Hearing

Open: 7:14 p.m.

Chad Carstensen, 4585 E. Airport Rd – Safety issues

Mike Curtice, 4585 E. Airport Rd – Safety issues

Letter from Barry VanBuskirk commenting on contractor’s yard

Closed: 7:24 p.m.

Brad Malley commented and answered questions by the commissioners. Mr. Malley stated that he didn’t think that the road closure would be shown on the preliminary site plan or would be part of this SUP and confirmed that he wasn’t planning on pursuing the road at this time. He will be working with his attorney to address concerns that he has regarding the road closure and may be back before the commission at a future date.

Cody moved **Buckley** supported to recommend to the Township Board of Trustees to approve the PSUP 20-02 special use permit application from Malley Construction for a Contractor’s Yard on approximately 8.59 acres of land (parcel numbers 14-011-30-001-07 and 14-011-40-002-00) on the south side of East Airport Road and east of Packard St. in the southwest quarter of Section 11 and in the I-1 (Light Industrial) zoning district, finding that it can comply with Section 14.3.J. (Standards for Special Use Approval), subject to the following conditions:

1. The Planning Commission acknowledges that Mr. Malley will remove the proposed closure of Packard St. from the site plan for the Contractor Yard development.
2. A final site plan is approved for the proposed special use PSUP 20-02 development.

Roll Call Vote: Ayes: Buckley, Cody, Darin, Fuller, LaBelle II, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.

B. PSPR 20-15 (Malley Construction, 1565 Park Place) Preliminary Site Plan Application for a contractor’s yard on the southeast corner of Packard St. and Airport Rd.

- a. Introduction
- b. Updates from the Applicant and Staff
- c. Deliberation
- d. Action (approve, deny, approve with conditions)

Malley Construction is proposing to expand their business currently conducted at 1565 S. Park Place.

Buckley moved **Cody** supported to approve the PSPR 20-15 preliminary site plan from Malley Construction for a Contractor’s Yard on approximately 8.59 acres of land (parcel numbers 14-

011-30-001-07 and 14-011-40-002-00) on the south side of East Airport Road and east of Packard St. in the southwest quarter of Section 11 and in the I-1 (Light Industrial) zoning district, finding that the site plan with a revision date of November 19, 2020 can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Remove the proposed closure of Packard St. from the final site plan for the project.
2. Provide all items of required information on the final site plan per Section 14.2.P.
3. Preliminary site plan approval is contingent upon Board of Trustees final approval of the PSUP2 20-02 Contractor's Yard special use permit for this project. **Roll Call Vote: Ayes: Buckley, Cody, Darin, Fuller, LaBelle II, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.**

C. PSPR20-16 (Consumers Energy) Preliminary Site Plan Application for modernization of the "city gate" natural gas facility on the south side of E. Pickard Rd. west of S. Summerton Rd.

- a. Introduction
- b. Updates from the Applicant and Staff
- c. Deliberation
- d. Action (approve, deny, approve with conditions)

The applicant is proposing to reconstruct its existing "city gate" facility, which is an essential component of the utility company's regional natural gas distribution system and is regulated as an "essential service" land use allowed in all zoning districts subject to site plan approval.

Cody moved **LaBelle II** supported to approve the PSPR 20-16 preliminary site plan from Consumers Energy for the Pickard Road City Gate Reconstruction Project on parcel number 14-013-20-001-00 located on the south side of E. Pickard Rd. between S. Summerton Rd. and the Baymont Inn in the northeast quarter of Section 13 and in the B-7 (Retail and Service Highway Business) zoning district, finding that the "Nov 2020" site plan can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. The access, fence height, and planting location modifications are accepted as presented on the site plan per Section 7.15 of the Zoning Ordinance.
2. Include a specific revision date on the final site plan cover sheet.
3. Add the required public sidewalk along the length of the S. Summerton Rd. frontage and associated details to the final site plan. **Roll Call Vote: Ayes: Buckley, Cody, Darin, Fuller, LaBelle II, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.**

D. PSPR20-17 (Reals-Palmer LLC) Preliminary Site Plan Application for Biggby Coffee location on the north side of E. Pickard Rd. west of S. Summerton Rd.

- a. Introduction
- b. Updates from the Applicant and Staff
- c. Deliberation
- d. Action (approve, deny, approve with conditions)

The applicant is proposing a new Biggby Coffee modular building, drive-through lane, and outdoor seating area in the east parking lot of the former Mid Michigan Community College building at 5805 E. Pickard Rd.

Cody moved **Darin** supported to approve the PSPR 20-17 preliminary site plan from Reals-Palmer LLC for the construction of a new Biggby Coffee modular building, drive-through lane, and outdoor seating area on parcel number 14-012-04-007-07 located on the north side of E. Pickard Rd. between S. Summerton Rd. and the former Mid Michigan Community College building at 5805 E. Pickard Rd. in the southeast quarter of Section 12 and in the B-7 (Retail and Service Highway Business) zoning district, finding that the “November 2020” site plan can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Provide documentation of permission from the owner to utilize the adjacent land and driveway at 5805 E. Pickard Rd. for access to the facility with the final site plan submittal.
2. Add the sidewalk connection into the site from E. Pickard Rd. to the final site plan.
3. Update the parking, exterior lighting, and landscaping on the final site plan to conform to Zoning Ordinance requirements and add a specific revision date to the final site plan.
4. Add the new public sidewalk along the length of the S. Summerton Rd. frontage to the final site plan, but temporary relief is granted from construction of this new sidewalk because the applicant does not have leasehold rights to the entire parcel.
5. The future access from S. Summerton Rd. is not necessary and can be removed from the final site plan. **Roll Call Vote: Ayes: Buckley, Cody, Darin, Fuller, LaBelle II, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.**

E. Request for restoration of temporary relief from sidewalk construction for two (2) properties on Remus Rd. (Merchandise Outlet and Woodland Investments).

- a. Introduction
- b. Updates from Staff
- c. Deliberation
- d. Action (approve, deny, approve with conditions)

The applicant has requested by letter that his property be given continued temporary relief, citing that the Michigan Department of Transportation (MDOT) is mandating that additional off-site sidewalk/intersection improvements be provided that have greatly increased the cost of the project. Township staff has also included Merchandise outlet in this request since the same issues will exist.

Cody moved **Lapp** supported to approve the request to re-establish the previously granted temporary relief from sidewalk construction for the parcels at 2467 E. Remus Rd. (Merchandise Outlet) and 2260 E. Remus Rd. (Woodland Investments) in the B-5 (Highway Business) zoning district because the MDOT requirements would unreasonably require the property owner to construct improvements on property not owned by the current property owner, and because the EDA Board has included funds for some additional sidewalks along Remus Rd. in their FY2021 recommended budget, subject to the following condition(s):

1. No new construction or modifications to either existing site requiring site plan approval is proposed, approved, and constructed. If so, sidewalk construction will be required at

that time. **Roll Call Vote: Ayes: Buckley, Cody, Darin, Fuller, LaBelle II, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.**

Other Business

A. Master Plan implementation

a. Continue discussion of action items.

The commission agreed to continue discussion at the next planning commission meeting. No action taken.

Extended Public Comment

Open –9:52 p.m.

No comments were offered.

Closed – 9:52 p.m.

Final Board Comment

Buckley – commented that the Sidewalk and Pathway Prioritization address MDOT requirements

Adjournment – Chairman Squattrito adjourned the meeting at 9:56 p.m.

APPROVED BY:

Alex Fuller - Secretary
Mike Darin – Vice Secretary

(Recorded by Jennifer Loveberry)

City of Mt. Pleasant, Michigan

Mt. Pleasant
[meet here]

CITY HALL
320 W. Broadway • 48858
(989) 779-5300
(989) 773-4691 Fax

PUBLIC SAFETY
804 E. High • 48858
(989) 779-5100
(989) 773-4020 Fax

PUBLIC WORKS
320 W. Broadway • 48858
(989) 779-5400
(989) 772-6250 Fax

December 14, 2020

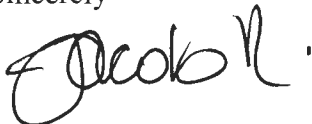
Charter Township of Union Planning Commission
C/O Peter Gallinat, Charter Township of Union Zoning Administrator
2010 S. Lincoln Road
Mt. Pleasant, MI 48858

Dear Mr. Gallinat:

The City of Mt. Pleasant is happy to announce adoption of our 2050 Master Plan on November 9, 2020. The plan is available online at www.mt-pleasant.org/masterplan.

We appreciate the participation of the Charter Township of Union to develop a vision for the future of our community. Please let me know if you have any questions.

Sincerely



Jacob Kain, AICP
Secretary, Mt. Pleasant Planning Commission

Board Expiration Dates

Planning Commission Board Members (9 Members) 3 year term			
#	F Name	L Name	Expiration Date
1-BOT Representative	Lisa	Cody	11/20/2024
2-Chair	Phil	Squatrito	2/15/2023
3-Vice Chair	Ryan	Buckley	2/15/2022
4-Secretary	Alex	Fuller	2/15/2023
5-Vice Secretary	Mike	Darin	2/15/2022
6	Stan	Shingles	2/15/2021
7	Jessica	Lapp	2/15/2023
8	vacant seat		2/15/2021
9	Doug	LaBelle II	2/15/2022
Zoning Board of Appeals Members (5 Members, 2 Alternates) 3 year term			
#	F Name	L Name	Expiration Date
1- PC Rep	Ryan	Buckley	2/18/2021
2 - Chair	Andy	Theisen	12/31/2022
3 - Vice Chair	Liz	Presnell	12/31/2022
4 - Secretary	Taylor	Sheahan-Stahl	12/31/2021
5 - Vice Secretary	Judy	Lannen	12/31/2022
Alt. #1	Brandon	LaBelle	12/31/2022
Alt. #2	Jim	Engler	2/15/2021
Board of Review (3 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Doug	LaBelle II	12/31/2022
2	vacant seat		12/31/2020
3	Bryan	Neyer	12/31/2022
Alt #1	Randy	Golden	12/31/2022
Citizens Task Force on Sustainability (4 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Don	Long	12/31/2020
2	Mike	Lyon	12/31/2020
3	vacant seat		12/31/2018
4-BOT Representative	vacant seat		11/20/2020
Construction Board of Appeals (3 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Colin	Herron	12/31/2021
2	Richard	Jakubiec	12/31/2021
3	Andy	Theisen	12/31/2021
Hannah's Bark Park Advisory Board (2 Members from Township) 2 year term			
1	Mark	Stuhldreher	12/31/2022
2	John	Dinse	12/31/2021
Chippewa River District Library Board 4 year term			
1	Ruth	Helwig	12/31/2023
2	Lynn	Laskowsky	12/31/2021



Board Expiration Dates

EDA Board Members (11 Members) 4 year term			
#	F Name	L Name	Expiration Date
1-BOT Representative	Bryan	Mielke	11/202024
2	Thomas	Kequom	4/14/2023
3	James	Zalud	4/14/2023
4	Richard	Barz	2/13/2021
5	Robert	Bacon	1/13/2023
6	Marty	Figg	6/22/2022
7	Sarvijit	Chowdhary	1/20/2022
8	Cheryl	Hunter	6/22/2023
9	Vance	Johnson	2/13/2021
10	Michael	Smith	2/13/2021
11	David	Coyne	3/26/2022
Mid Michigan Area Cable Consortium (2 Members)			
#	F Name	L Name	Expiration Date
1	Kim	Smith	12/31/2022
2	Vacant		
Cultural and Recreational Commission (1 seat from Township) 3 year term			
#	F Name	L Name	Expiration Date
1	Robert	Sommerville	12/31/2022
Sidewalks and Pathways Prioritization Committee (2 year term -PC Appointments)			
#	F Name	L Name	Expiration Date
1 - BOT Representative	Kimberly	Rice	11/20/2020
2 - PC Representative	Mike	Darin	8/15/2022
3 - Township Resident	Matt	Mertz	8/15/2021
4 - Township Resident	Jeremy	MacDonald	10/17/2022
5 - Member at large	vacant seat		8/15/2021
Mid Michigan Aquatic Recreational Authority (2 seat from Township) 3 year term			
#	F Name	L Name	Expiration Date
1 - City of Mt. Pleasant	John	Zang	12/31/2023
2 - City of Mt. Pleasant	Judith	Wagley	12/31/2022
1 -Union Township	Stan	Shingles	12/31/2023
2 - Union Township			12/31/2022
At Large			
At Large			



ROWE PROFESSIONAL SERVICES COMPANY

Large Firm Resources. Personal Attention. SM

December 22, 2020

Mr. Mark Stuhldreher
Charter Township of Union
2010 S. Lincoln Road
Mt. Pleasant, MI 48858

RE: Isabella Sheriff's Office and Correction Facility – Special Use Permit Application

Dear Mr. Stuhldreher:

On behalf of Isabella County, ROWE Professional Services Company is pleased to submit the Isabella Sheriff's Office and Correction Facility project for consideration for a special use designation within the agricultural district. The proposed project is located at 3110 S. Summerton Road, at the southwest quadrant of S. Summerton Road and E. Remus Road.

Based on section 3.4 of the Charter Township of Union zoning ordinance, public and institutional buildings are a permitted special use in the Agricultural zoning district. As the Sheriff stated during the project introduction to the township board on December 16, 2020, the existing correction facility located in downtown Mount Pleasant is in disrepair, and a new facility is needed to provide the community with safe and controlled means of inmate housing and an overall modern Sheriff's office and correction facility that will serve the Isabella County community for years to come.

In addition to bettering the community, the proposed facility has been sited and designed with the neighboring residents and landowners in mind. Careful attention has been given to building placement as well as utilizing landscaping and "berming" to screen the facility from neighboring residents as much as possible. The facility has been located deep within the parcel, maintaining a natural site buffer and setback from the primary roadways to the north and east, while still allowing future growth. In addition, the architectural character of the facility is not that of a stereotypical decade's old jail. Rather, a strong and approachable civic presence has been created in the public facades that will be visible along both Remus Rd and Summerton Rd. Finally, vehicular access has been orchestrated to provide separate staff and visitor entrances and related internal site circulation.

We are very excited about this project and look forward to working with the Charter Township of Union as we continue forward and doing our part to better the communities of Isabella County and the Charter Township of Union.

Sincerely,
ROWE Professional Services Company

Troy R. Grunder, P.E.
Project Manager

Engineering | Surveying | Aerial Photography/Mapping | Landscape Architecture | Planning

Mt. Pleasant: 127 S. Main Street • Mt. Pleasant, MI 48858 • O (989) 772-2138 • F (989) 773-7757

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www.rowepsc.com

SPECIAL USE PERMIT APPLICATION COMPLETENESS REPORT

TO:	ROWE Professional Services Company	DATE:	December 31, 2020
FROM:	Rodney C. Nanney, AICP Community and Economic Development Director	ZONING:	AG Agricultural District
PROJECT:	Isabella Sheriff's Office and Correctional Facility		
PARCEL(S):	PID 14-024-30-001-00		

Background Information

Applications for special use and preliminary site plan approval for a new Sheriff's Office and correctional facility on S. Summerton Rd. at E. Remus Rd. were received by the Township on December 23, 2020, following an initial presentation made to the Board of Trustees on 12/16/2020. A similar presentation is scheduled for introduction of the project to the Planning Commission during their upcoming 1/19/2021 regular meeting.

Under the Township's established procedures for reviewing these applications, the first step is a technical review by Township staff to confirm that each application is complete and accurate. The following report identifies missing required information and clarifications that are needed for the submitted applications to be complete and ready for Planning Commission review and any required public hearing:

Special Use Permit Application Information

Section 14.3.E. of the Zoning Ordinance establishes the minimum application information requirements for a special use permit application, and Section 14.3.J. establishes the standards for special use approval. The following items of required information and clarifications are necessary for a complete special use permit application:

1. **Provide proof of ownership or owner's consent for the application.** The application form lists Isabella County as the landowner, but proof of ownership is missing from the application materials. If the county has not yet closed on the property and the application has been submitted under terms of an executed purchase agreement, a copy of the signed agreement that includes permission from the current landowner for the application would satisfy this requirement. Financial details can be redacted from a purchase agreement submitted for this purpose.
2. **Provide the name and contact information for the county's representative.** The county contact person's signature is illegible on the form. Please provide the individual's name, position, and contact phone number and email address.

3. **Provide documentation showing how the proposed uses and development conform to Section 14.3.J. (Standards for Special Use Approval).** The applicant's 12/22/2020 letter includes a brief description of the proposed facility and site improvements, along with a summary of the needs for new inmate housing and facilities for the Sheriff's Department that led to submittal of this application. However, documentation addressing how the proposed uses and development satisfy each of the seven (7) standards for special use permit approval listed in Section 14.3.J. is missing from the application materials.

Staff recommends that each standard be addressed separately in the applicant's updated letter. The applicant is encouraged to provide a detailed evaluation of the project and these standards for the Planning Commission's consideration as they review this application.

4. **Correct the general layout of the proposed water supply system connection.** The proposed municipal water system connection to serve the proposed facility is shown as extending from a water line owned and operated by the Saginaw Chippewa Indian Tribe under a franchise agreement with the Township that prohibits extensions of this system beyond service to specified tribal-owned lands and facilities.

Documentation will be needed to demonstrate how water service to the new county facility will conform to Township requirements and be integrated into the Township's municipal water system. This documentation is requested at the special use permit application stage to show that the proposed use and development is consistent with the standard for special use approval listed in Section 14.3.J.7. of the Zoning Ordinance.

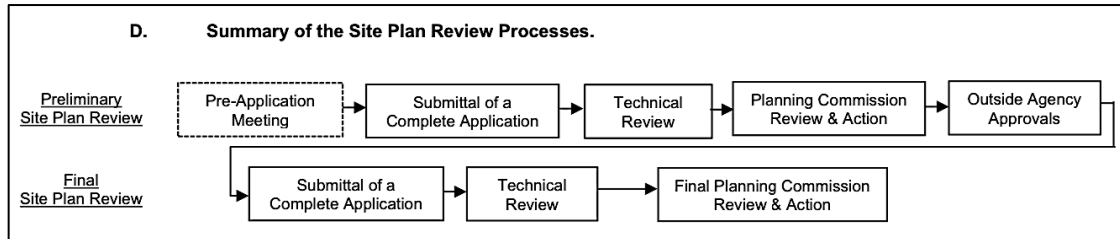
5. **Correct the general layout of the proposed sanitary sewer system.** The proposed sanitary sewer system connection to serve the new county facility is shown as extending from an existing Township sewer line that runs west from the development site to an existing pump station at the west end of E. Remus Rd., which connects into a force main within the US-127 right-of-way that connects to the Township's wastewater treatment facility. However, no documentation has been provided to confirm whether the existing sanitary sewer infrastructure is adequate to support the capacity needs of this new institutional facility.

While it is recognized that some engineering-related details will not be fully resolved until the final site plan stage of this project, this documentation is requested at the special use permit application stage to show that the proposed use and development is consistent with the standard for special use approval listed in Section 14.3.J.7.

Preliminary Site Plan Application Information

The Township's Zoning Ordinance requires both a preliminary and a final site plan approval. Per Section 14.2.J., preliminary site plan approval by the Planning Commission "*shall indicate its general acceptance of the proposed layout of buildings, streets, drives, parking areas, and other facilities and areas.*" Following this preliminary approval, the applicant is responsible for

securing all applicable agency permits and approvals, including the Township’s Public Services Department (for municipal water and municipal sewer services) and other agency approvals. Final site plan approval then “constitutes the final zoning approval for the project and allows for issuance of a building permit to begin site work or construction, provided all other construction and engineering requirements have been met” (Section 14.2.L.).



The following details are missing from or need to be clarified to satisfy the minimum required information for a preliminary site plan application:

- Required Preliminary Site Plan Information.** The following additional details or corrections are needed to conform to Section 14.2.P. (Required Site Plan Information):

Preliminary Site Plan Information Requirements	
Add a detailed use statement to the site plan describing proposed uses of the proposed facility; including building areas for each use, number of units/beds/cells, and number of anticipated employees during peak activity periods.	<input type="checkbox"/>
Correct the delineation of required setbacks to show a minimum required 50.0-foot <u>front</u> yard setback from all lot boundaries abutting parcels 014-024-20-001-00, -02, and -03.	<input type="checkbox"/>
Correct the delineation of required setbacks to show a minimum required 30.0-foot <u>side</u> yard setback from the south side lot boundary abutting parcel 014-024-20-004-02.	<input type="checkbox"/>
Correct the visual engineer’s scale references on sheets C-101 and C-200.	<input type="checkbox"/>
Add the existing zoning classifications, owners’ names, existing uses, and location of structures, drives, and improvements for all surrounding parcels, including land on the north side of E. Remus Road and on the east side of S. Summerton Rd.	<input type="checkbox"/>
Add the required vicinity map to the cover sheet showing the general location of the site.	<input type="checkbox"/>
Add the number of floors, gross and net floor areas, and ground floor area of the proposed building.	<input type="checkbox"/>
Add an elevation detail of the proposed outdoor waste receptacle enclosure showing materials and dimensions.	<input type="checkbox"/>

- Add calculations for required parking to the site plan, including any proposed alternative standard.** The most similar land uses listed in the Section 9.2 parking tables are “Public and Institutional Buildings and Uses” [Section 9.2(E)] and “Business and Professional Offices” [Section 9.2(F)]. Per Section 9.2.A. of the Zoning Ordinance, “The Planning Commission may modify the numerical requirements for off-street parking based on evidence that another standard would be more reasonable....”

If there is a more appropriate parking standard available for county jail and law enforcement office facilities, details will need to be provided on the revised site plan to support this alternative standard as part of the required parking calculations.

Requested Actions

Based on the above findings, it is the determination of Township staff that the specified additional information and clarifications noted in this report are necessary for the submitted applications to be complete and ready for Planning Commission review and any required public hearing.

I would respectfully request that the applicant take action to revise the applications as needed for completeness, and to submit the updated materials and plans to the Township as a supplement to the initial application submittals in the same formats and quantities as required for the initial applications.

Please contact me at (989) 772-4600 ext. 232, or via email at rnanney@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Rodney C. Nanney, AICP

Community and Economic Development Director

SITE PLAN REPORT

TO:	Planning Commission	DATE:	December 28, 2020
FROM:	Peter Gallinat, Zoning Administrator	ZONING:	B-5 Highway Business District
PROJECT:	PSPR 20-02 Preliminary Site Plan Approval Application for a new Sam's Club filling station, 4850 Encore Drive.		
PARCEL(S):	PID 14-026-30-001-07		
OWNER(S):	Sam's Club		
LOCATION:	Approximately 16.8 acres west and north of Encore Drive in the SW 1/4 of Section 26.		
EXISTING USE:	Sam's Club Retail/Warehouse	ADJACENT ZONING:	B-5
FUTURE LAND USE DESIGNATION: <i>Bluegrass Center Area</i> . While currently more auto-centric, this area has the potential to transition into a more walkable, vibrant center. Future uses should be integrated to include multi-story, mixed-use buildings; first floor retail and office uses; public use and spaces; entertainment and restaurant venues; and additional attached housing types such as townhouses. Both vehicular and pedestrian cross connections should be promoted between sites, providing for future connections through easements, and should collectively promote a vibrant, livable center to the neighboring university population.			
ACTION REQUESTED: To review and take action to approve, deny, or approve with conditions the PSPR 20-02 preliminary site plan dated December 3, 2020 for the Sam's Club Filling Station.			

Status of the Special Use Permit for this Project

A special use permit for a filling station was previously approved in 2005, but the required site plan for the filling station was never approved. A new special use permit is not required because this approval stays with the land once approved.

Site Plan Approval Process

Per Section 14.2C of the Zoning Ordinance, both preliminary site plan approval and final site plan approval are required for this project, unless the applicant chooses to submit a combined preliminary/final site plan (as allowed per Section 14.2M) and pay the required fees for both. The applicant checked the "final site plan" box on the application form, but the project has not yet received preliminary approval. **The applicant applied for a preliminary site plan review in July of 2020. The application was not ready to be sent to the Planning Commission. The applicant has made necessary modifications to the plan to be ready for Planning Commission review. Both a preliminary and final site plan will be required for this project.**

Preliminary Site Plan Review Comments

The following additional comments are based on the standards for preliminary site plan approval and specific elements of the proposed site plan:

1. **Section 14.2.P. (Required Site Plan Information).** The following items of required information are missing, but the site plan is sufficiently complete for Planning Commission review and action as a preliminary site plan, provided that **the final site plan for this project shall include these details and all other items of required information** per Section 14.2.P. of the Zoning Ordinance:

Missing Preliminary Site Plan Information	
Add the name, address, and contact information for the applicant and the property owner to the site plan's cover sheet.	<input type="checkbox"/>
Add the tax identification number of the subject parcel to the site plan.	<input type="checkbox"/>
Add a detailed use statement to the site plan's cover sheet describing the proposed use of the subject parcel's proposed development area and include the number of anticipated on-site employees and other applicable information to verify Ordinance compliance.	<input type="checkbox"/>
Add an overall site plan revision date to the site plan's cover sheet.	<input type="checkbox"/>
Add a note to the site plan to confirm that no outdoor sales or display areas are proposed for this filling station site.	<input type="checkbox"/>
Add detailed exterior façade elevation drawings to the site plan for the proposed principal building and for the proposed fueling station canopy structure, drawn to an appropriate scale and indicating types, colors, and dimensions of finished materials.	<input type="checkbox"/>

2. **Section 8 (Environmental Performance Standards).** Applicant has indicated on the site plan that the nearest drinking water well is located approximately 1,500 feet west of the proposed site of the underground fuel storage tanks for this filling station. The site plan includes soil erosion/sedimentation control and stormwater runoff pollution prevention plan details. **The following environmental protection details will need to be addressed by the applicant as part of the final site plan submittal:**

- Application is missing the completed hazardous substance reporting form and EGLE permit checklist form included in the application materials. These completed forms will be required as part of the final site plan submittal.
- Provide documentation of compliance with State of Michigan requirements for underground fuel tanks located less than 2,000 feet from municipal water wells, including tank installation details and copies of required permits and approvals.

3. **Section 9 (Off-Street Parking).** Parking required per section 9.2.f. is 1.5 spaces per fueling station. The site plan depicts 16 fueling stations, which would require a minimum of 24 spaces (including a space at each fueling station, stacking spaces, and employee parking). The applicant's 12/11/2020 response letter notes that the remaining required spaces have been provided, only two (2) spaces are delineated on the site plan. There is more than sufficient space available to meet minimum requirements. **The following parking details will need to be addressed by the applicant as part of the final site plan submittal:**

- Add a dotted line rectangle at least 9 feet in width and 18.5 feet in length to the site plan adjacent to each fueling station, plus two (2) equal sized spaces in each stacking lane. A separate parking plan detail would be preferred.
- Correct the calculations for parking to reference the minimum Section 9.2(F) requirements for a filling station (minimum of 1.5 spaces per fueling location) and to indicate the minimum required number of spaces for the site (24) and the number actually provided (34 total; including 18 parking and 16 stacking spaces).

4. **Section 7.10 (Sidewalks and Pathways).** Applicant has provided sidewalks along the eastern and southern portion of the site along Encore Blvd. The proposed sidewalk is 5 feet in width and continues north from the site to connect to the existing public sidewalks adjacent to the Members First Credit Union and to the existing internal sidewalk connection to the Wal-Mart building (see details on sheets 14 or 15). The site plan also includes a proposed sidewalk along the south side of the filling station site that is actually located on a thin triangle of land owned by Mount Pleasant Holdings LLC. The applicant has submitted a draft amendment to the Easements with Covenants and Restrictions Affecting Land agreement originally entered into in 2005 with Wal-Mart, Sam’s, Menard, and Bluegrass Investment Group, LLC. The draft amendment identifies this thin triangular area of land on “Exhibit A” as “Sam’s Maintenance and Access Area.”

The draft amendment allows for construction of *“additional building improvements, designated vehicular parking spaces that may be covered by a canopy, directional signage, pavement markings, and parking lot signage”* in this triangular area, but does not include an allowance for construction of a public sidewalk. In addition, there is no provision for the necessary easement to cover the short (about 16-foot) section of proposed public sidewalk adjacent to the west driveway located on the Mount Pleasant Holdings LLC land outside of any existing or proposed public access easement. **The following parking details will need to be addressed by the applicant as part of the final site plan submittal:**

- Expand the public access easement to include the short section of proposed public sidewalk adjacent to the west driveway on the Mount Pleasant Holdings LLC land.
- All new easements and the amended agreement will need to be recorded on the subject parcels at the Isabella County Register of Deeds Office.
- Provide as-recorded copies of the 20-foot public access easement, the additional easement area needed for the short section of new public sidewalk, and the updated and notarized Easements with Covenants and Restrictions Affecting Land agreement to the Zoning Administrator prior to issuance of building permits for this project.

5. **Section 6.18 (Filing Stations...).** The proposed site plan complies with Section 6.18 requirements for access, minimum lot size, setbacks, and lighting for a filling station.

6. **Consistency with the Master Plan.** Completion of the public sidewalk network along the west side of Encore Blvd. will help to create a more walkable center consistent with Master Plan goals for the Bluegrass Center Area. The proposed filling station land use is not consistent with the Plan’s focus on mixed-use development, but is consistent with the previously approved special use permit for a filling station at this location.

Additional Comments for Preparation of the Final Site Plan

7. **Section 8.2 (Exterior Lighting).** Lighting details are a final site plan requirement, but the applicant has provided a photometric plan and some details regarding proposed fixtures and light pole height. **The following lighting details will need to be addressed by the applicant as part of the final site plan submittal:**

- Add the manufacturer's specification sheets for each proposed fixture to the final site plan set (not as additional pages) to demonstrate that all fixtures are fully shielded and directed downward.

8. **Section 10.2.B (General Landscaping Requirements).** A detailed landscape maintenance/installation plan is a final site plan detail, but the applicant has provided some conceptual landscaping information on the preliminary site plan. All unpaved portions of the site shall be planted with grass, ground cover, shrubbery or other suitable live plant material, except where specific landscape elements are required. Such plant material shall extend to the edge of any abutting paved area or roadway. Trees and shrubs shall be set back a minimum of ten (10) feet from the paved area or roadway.

Staff would have no objection from a planning perspective to Commission approval of the preliminary site plan with the applicant's proposals to remove some existing landscape plantings that either block clear visibility at the east driveway or are in the path of required sidewalk improvements. **The final site plan will need to include the following landscaping improvements along Encore Drive:**

- a. A minimum of one Deciduous Street Tree per 40 linear feet of road frontage.
- b. A minimum of one Ornamental Tree per 100 linear feet of road frontage.
- c. A minimum of eight shrubs per 40 linear feet of road frontage.

Existing landscaping to remain on the site can be used to satisfy applicable requirements. The location of required landscaping can be adjusted within the development site to avoid utility and safety-related conflicts.

9. **Outside agency approvals.** The applicant shall be responsible for obtaining all necessary permits or approvals from applicable outside agencies, prior to final site plan approval. This plan has approvals from the Mt. Pleasant Fire Department, Isabella County Road Commission, and Storm Water approval from the Isabella County Drain office. Plan still requires approval from Isabella County Transportation Commission, the Township Public Services Department, and the State of Michigan.

Objective

The Planning Commission shall review the application materials and site plan, together with any reports and recommendations. The Planning Commission shall identify and evaluate all relevant factors and shall then take action by motion to approve the site plan, to approve the site plan with conditions, to deny the site plan application, or to postpone further consideration of the site plan to a date certain in accordance with Section 14.2.H. of the Zoning Ordinance.

Key Findings

1. The site plan is missing several items of required preliminary site plan information but is sufficiently complete for Planning Commission review.
2. If updated consistent with the details noted in this report, the preliminary site plan can fully conform to Section 14.2.S. (Standards for Site Plan Approval).
3. The proposed filling station does not conform to the Master Plan's mixed-use goal for the Bluegrass Center Area, but is consistent with the previously approved special use permit for a filling station at this location.

Recommendations

Based on the above findings, I would ask that the Planning Commission consider taking action to approve preliminary site plan PSPR 20-02, subject to the following conditions:

1. Provide the missing items of required information on the final site plan per Section 14.2.P.
2. Update the parking, exterior lighting, sidewalk easement, and landscaping details on the final site plan to conform to Zoning Ordinance requirements.
3. As part of the final site plan submittal, provide the completed hazardous substance reporting form and EGLE permit checklist form from the application materials and documentation of compliance with State of Michigan requirements for underground fuel tanks located less than 2,000 feet from municipal water wells.

Please contact me at (989) 772-4600 ext. 241, or via email at pgallinat@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Peter Gallinat, Zoning Administrator

Community and Economic Development Department

Union Township Site Plan Review Application 2015 Revision

INSTRUCTIONS

- All items in this list must be included in the drawing unless exempted by ordinance or specifically noted as not included. Incomplete submissions may not be forwarded to the Planning Commission for review. All features of the plan must conform to the Union Township Zoning Ordinance 1991-5 and other state and local ordinances and laws as applicable. Union Township Well Head Protection documents are a part of Site Plan Review and required with your Site Plan submission.
- To expedite this process you should make Storm Water Management and Road Permit Applications as soon as possible, and submit a copy of the site plan to the Mt. Pleasant Fire Department. Site plans received prior to these outside approvals may be reviewed as Preliminary Site Plan Reviews and may require a Final Site Plan Review submission after receiving outside agency approvals. You may elect to receive a Preliminary Review by the Planning Commission prior to other submittals. Contact the appropriate agency for their submission requirements and any required forms.
- **Special Use Permits:** Uses requiring a Special Use Permit have both a special use permit approval process and a site plan review. The fee for a Special Use Permit is in addition to the site plan review fee*. This form and a Special Use Permit Application must accompany application for a Special Use Permit. The Planning Commission will make a recommendation to the Charter Township of Union Board who has approval authority, thus requiring two meetings, one of the commission and one of the board. If desired, the applicant may elect to have the Public hearing with a preliminary plan showing sufficient detail to determine the impact on the surrounding properties, and address other issues of concern, and then proceed to final Site Plan Review. In this approach the commission will make its finding subject to final site plan approval at the first meeting, and the applicant will return with a detailed drawing meeting all the elements of site plan review, including submission to outside agencies.
- **SUBMISSION DEADLINE:** Ten copies of the site plan and this completed check list must be submitted no less than 14 days prior to the Planning Commission meeting. The Planning Commission meets at 7:00 PM on the third Tuesday of each month. A Site Plan Review fee* must accompany each submission. You will not receive any notification prior to your scheduled meeting; it is your responsibility to show up at the meeting. If your are uncertain, call the Zoning administrator at (989) 772 4600 ext 41
- Applicants may submit a single copy of the plan and check list prior to the submission deadline to the zoning administrator for review and comment.
- Land Owner (or his / her agent) is responsible to apply for all permits, including Building, Grading and Zoning permit, Sign Permit, Water and Sewer, and Land Divisions (if applicable) AFTER Planning Commission review and approval. The proposed use shall be constructed per the submitted plan including any conditions of approval. Minor revisions may be approved by the zoning administrator. Consult with the township before implementing any changes to the approved site plan.

Union Township Site Plan Review Application 2015 Revision

FILL OUT THE FOLLOWING

- I. This application is for (circle one) Preliminary Site Plan Review ~~Final Site Plan Review~~
- II. Applicant Name Keith Moore, Carlson Consulting Engineers
- III. Applicant Address 7068 Ledgestone Commons, Bartlett, TN 38133
- IV. Applicant Phone 901-384-0404 Owner Phone 417-861-6794
- V. Applicant is (circle) ~~Contractor Architect~~ Engineer ~~Developer Land Owner~~ (skip V& VI)
Other
- VI. Land Owner Name Sam's Real Estate Business Trust
- VII. Land Owner Address 2101 SE Simple Savings Dr, Bentonville, AR 72716
- VIII. Project/Business Name Sam's Fueling Station #4982-211
- IX. Fill out check list that follows. You must check off that each item has been included in the drawing. If an item is not going to be included in the construction, note that in the comment area. For the first three items, check off if you have made the required submittals to other reviewing agencies.

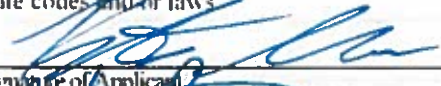
SUBMITTALS TO OTHER AGENCIES		Off
Storm water management plan approval prior to application. Reviewed by the County Engineer		Copy of Union Township Storm Water Management Plan available upon request. Submit (2) copies of plan and calculations directly to the Isabella County Engineer, contact Bruce Rohrer at (989) 772 0911. ext. 231. Any review fees are additional. Submitted on 7/22/2020
All curb cuts, acceleration/deceleration lanes, additional drives, and other matters pertaining to roads to be approved by MDOT or Isabella County Road Commission prior to application.		MDOT (M 20, BR 127 sites) at (989) 773 7756. Contact Isabella County Road Commission (all other county roads) at (989) 773 7131. Submit (3) copies. Submitted on 7/22/2020
Mt. Pleasant Fire Dept.		Sgt Randy Keeler (989) 779-5122. (2) copies Approved on 6/8/2020
Isabella Co Transportation Commission (ICTC)		Rick (989) 773 2913, (2) copies Approved on 6/5/2020
WELLHEAD PROTECTION REPORTING FORMS (Required for all Site Plans)		
Hazardous Substances Reporting Form Part I and II (Forms included in this packet)		Kim Smith (989) 772-4600 ext 224 ksmith@uniontownshipmi.com
PERMIT INFORMATION - DEQ Check List		Submitted on 7/xx/2020
SITE PLAN REQUIREMENTS	I Of	Comments - (also indicate any features which will not be included in the development or are not applicable)
Name and addresses of Property Owner		
Name and Address of Applicant	X	
Provide Construction Type (per Mi Building Code) and if sprinkled. (assume Type IVb, un-sprinkled if not provided)	X	II-B

Union Township Site Plan Review Application 2015 Revision

The date, north arrow and scale. The scale shall be not less than 1"= 20' for property under three (3) acres and not more than 1"=40' for property greater than three acres.	X	
All lot and/or property lines are to be shown and dimensioned, including building setback lines	X	
The location and dimensions of all existing and proposed: fire hydrants (within 400 feet of building) - - - - drives,----- sidewalks, (required) ----- curb openings, ----- acceleration/deceleration lanes, ----- signs, ----- exterior lighting on buildings and parking lots. - - parking areas (Including handicapped parking spaces, barrier-free building access, unloading areas), ----- recreation areas, ----- common use areas. ----- areas to be conveyed for public use and purpose. -	X	
Elevation of building front, side, and back. Include Sign size, height, and design. Canopy heights extending over driveways accommodate Public Transportation	X	
Source of utilities. Public water and sewer approval by Union Township Utility Coordinator prior to application.	X	Note: Union Township policy is to issue sewer and water permits after application for a building permit. Applicant is advised to contact the utility department for availability prior to site plan review. The township does not coordinate other utility matters. Applicant to assure himself that site is suitable for septic systems, contact Central Michigan District Health Department
All dumpsters shall be screened from public view with an opaque fence or wall no less than six feet in height. Show location. (Note most refuse contractors require concrete pad to place dumpsters upon)	N/A	Fuel station will utilize the existing Sam's Club dumpster
The location and right-of-way width of all abutting roads, streets, alleys and easements.	X	
A locational sketch drawn to scale giving the section number and the nearest crossroads.	X	

Union Township Site Plan Review Application 2015 Revision

I submit the site plan and this application as a true representation of existing and proposed conditions. I agree to install all features as shown and to abide by conditions placed upon approval of this plan by the Union Township Planning Commission. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and / or removal of work installed. Any changes to the Site Plan now or in the future must be approved by the Union Township Planning Commission or Zoning Administrator. Approval of this plan shall not constitute the right to violate any provisions of the Union Township Zoning Ordinance 1991-5, or other applicable building or state codes and or laws.



Signature of Applicant

7/28/2020
Date



Signature of Owner (if other than applicant)

7/27/2020
Date

PLEASE PLACE OUR REVIEW ON THE TBD (INSERT DATE)
PLANNING COMMISSION MEETING. An owners representative WILL / WILL NOT attend. You will not receive a reminder of the scheduled meeting.

Union Township Site Plan Review Application 2015 Revision

<u>Township use</u>	Review Comments
File # _____	_____
Fee Paid initial _____	_____
Receipt # _____	_____
Date received _____	_____
Date review completed by Zoning Administrator _____	_____
Place on the _____ Planning Commission Agenda	
Planning Commission Decision _____	_____



Scottsdale Vertex™ (SCV)

Petroleum Canopy LED Luminaire

**IP66**

OVERVIEW

Lumen Package	9,000 - 23,000
Wattage Range	67 - 188
Efficacy Range (LPW)	109 - 154
Weight lbs(kg)	18.5 (8.4)

QUICK LINKS

[Ordering Guide](#)[Performance](#)[Photometrics](#)[Dimensions](#)

FEATURES & SPECIFICATIONS

Construction

- Rugged low-profile die-cast aluminum housing, optical unit, and driver cover.
- Below canopy access to optical chamber and driver housing for serviceability.
- IP66 rated luminaire protects integral components from dust and water.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.
- Four fasteners secure the door frame to housing. Door frame also provides quick and easy access to the electrical compartment for servicing.
- Shipping weight: 18.5 lbs in carton.

Optical System

- Symmetrical distribution utilizes a clear tempered flat glass lens to uniformly illuminate the area under the gas canopy.
- Combination Forward Throw distribution uses clear tempered flat glass and optical grade PMMA acrylic lens to create an industry leading unique distribution pattern to illuminate the area under the gas canopy and the area between the gas canopy and convenience store eliminating the need for extra floodlights.
- Available in 5000K, 4000K and 3000K color temperatures.
- Minimum CRI of 80.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.

- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours (See Lumen Maintenance on Page 2)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F) when mounted to Steel/ Aluminum surfaces for 10L, 13L, & 15L Lumen Packages, +45°C for 20L Lumen Package, and +35°C for 23L Lumen Package. If mounted to a non-metallic surface, reduce ambient by 5°C.
- Power factor: >0.90
- Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs are mounted to (4) circuit boards to maximize heat dissipation
- Driver components are fully encased in potting material for moisture resistance. Driver complies with FCC standards.

Hazardous Location

- Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 with all lumen packages and distributions only when properly installed per LSI installation instructions. Models with optional controls are not approved for Class 1, Division 2 applications.
- **Gas Groups A,B,C, and D** – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

Installation

- Installs in a 12" or 16" deck pan.
- Four fasteners are provided for use in single deck steel canopies. Other suitable fasteners may be required and provided by others.
- Unit is designed to quickly retrofit into existing Scottsdale (4") hole.
- Aluminum locking collar and gasket are included and required for complete seal and support of canopy deck.
- Retrofit panels are available for existing Encores, Richmond, 2x2 Universal, and more.
- Direct mount to surface or recessed J box with hardware bracket kit ordered separately as an accessory.

Warranty

- LSI LED Fixtures carry a 5-year warranty or 10-year warranty with registration for petroleum applications only (contact your LSI representative for details).

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- State of California Title 24 Compliant with IMSBT or ALSC/ALSCS option.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.



**ORDERING GUIDE**[Back to Quick Links](#)TYPICAL ORDER EXAMPLE: **SCV LED 13L SC UNV DIM 50 WHT IMSBT2**

Family / Size	LED Gen	Lumen Package	Distribution	Voltage	Driver	Color Temperature	Finish	Options
SCV - Petroleum Canopy Luminaire	LED	10L - 10000 Lumens 13L - 13000 Lumens 15L - 15000 Lumens 20L - 20000 Lumens 23L - 23000 Lumens Custom Lumen Packages ⁵	SC - Standard Symmetric	UNV - 120-277V HV - 347-480V	DIM - Dims to 10% (0 to 10V dimming)	50 - 5,000K 40 - 4,000K 30 - 3,000K	WHT - White BLK - Black BRZ - Bronze	Blank - NONE ALSC - AirLink Synapse Wireless Control System ALSCS - AirLink Synapse Wireless Control System with Sensor ALBCS1 - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' mounting height) ⁴ ALBCS2 - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' mounting height) ⁴ IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor 8 - 24' mounting height ^{1,4} IMSBT2 - Integral Bluetooth™ Motion and Photocell Sensor 25 - 40' mounting height ^{1,4} HL - Hazardous Location Class 1 Div 2 ⁶
		23L - 23000 Lumens	SCFT - Combination Standard Symmetric and Forward Throw ⁶					

Accessory Ordering Information

Description	Part Number	Description	Part Number
Retrofit Panel Kit - EC / ECTA / SCF to SCV, for 16" Deck Panel with larger openings ²	673425R2	Junction Box	687461
Retrofit Panel Kit - EC / ECTA / SCF to SCV, for 12" Deck Panel ³	676011R2	Kit - Hole Plugs and Sealant (enough for 25 retrofits)	1320540
Retrofit Panel Kit - RECU Richmond to SCV	673426R2	Rectangular Top Plate Kit (includes top plate and sealant)	678291R2WHT
Retrofit Panel Kit - UNV Universal 2x2 to SCV	673427R2	Surface Mount Box	673433R2
Retrofit 2x2 Cover Panel Blank (no holes)	357282	Retrofit Kit - CRU/CRUS to SCV	687462R2
Retrofit RIC Cover Panel Blank (no holes)	354702	Retrofit Kit for SCM/SCV to upgrade SC/SCF/EC/ECTA White	744333
26" X 26" Beauty Plate Kit (with 4" Center hole)	557193WHT	BRKT SCM / SCV DIRECT MNT W/ HDWR	752172R2
26" X 32" Beauty Plate Kit (with 4" Center hole)	564160WHT		

FOOTNOTES:

- 1 - IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
2 - Ideal for 9" to 12" openings.
3 - Ideal for 9" openings.

4 - Not available in HV.

5 - Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.

6 - HL not compatible with AirLink or IMSBT controls



**PERFORMANCE**

DELIVERED LUMENS*										
Drive Current	3000K CCT			4000K CCT			5000K CCT			Wattage
	Delivered Lumens	Efficiency	BUG Ratings	Delivered Lumens	Efficiency	BUG Ratings	Delivered Lumens	Efficiency	BUG Ratings	
10L	9652	144	B3-U0-G1	9928	148	B3-U0-G1	10317	154	B3-U0-G1	67
13L	12567	140	B3-U0-G1	12927	144	B3-U0-G1	13443	149	B3-U0-G1	90
15L	13999	137	B3-U0-G1	14399	141	B3-U0-G1	14963	147	B3-U0-G1	102
20L	18755	141	B4-U0-G1	19598	147	B4-U0-G1	20234	152	B4-U0-G1	133
23L	21783	141	B4-U0-G2	22406	145	B4-U0-G2	23284	150	B4-U0-G2	155
23L (SCFT)	20886	111	B3-U0-G3	23187	123	B4-U0-G3	23101	123	B3-U0-G3	188

*LEDs are frequently updated therefore values are nominal.

ELECTRICAL DATA - Current draw in AMPS*							
Lumen Level	Wattage	120V	208V	240V	277V	347V	480V
10L	67	0.56	0.32	0.28	0.24	0.19	0.14
13L	90	0.75	0.43	0.37	0.32	0.26	0.19
15L	102	0.85	0.49	0.42	0.37	0.29	0.21
20L	133	1.1	0.64	0.55	0.48	0.38	0.28
23L (SC)	155	1.29	0.75	0.65	0.56	0.45	0.32
23L (SCFT)	188	1.57	0.9	0.78	0.68	0.54	0.39

*Electrical data at 25°C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE - SCV 15L SC¹					
Ambient Temperature C	Lumen Multiplier				
	Initial ²	25k hr ²	50k hr ²	75k hr ³	100k hr ³
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
35	102%	97%	92%	88%	84%
40	102%	97%	92%	88%	84%
45	101%	95%	91%	86%	81%
50	101%	95%	90%	85%	80%

RECOMMENDED LUMEN MAINTENANCE - SCV 23 SC¹					
Ambient Temperature C	Lumen Multiplier				
	Initial ²	25k hr ²	50k hr ²	75k hr ³	100k hr ³
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
35	102%	97%	92%	88%	84%
40	101%	96%	91%	86%	82%

RECOMMENDED LUMEN MAINTENANCE - SCV 23 SCFT¹					
Ambient Temperature C	Lumen Multiplier				
	Initial ²	25k hr ²	50k hr ²	75k hr ³	100k hr ³
25	105%	88%	73%	61%	51%
30	105%	80%	61%	47%	36%
35	105%	70%	47%	32%	21%

- Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
- In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).
- In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).





Scottsdale Vertex SCV Petroleum

PHOTOMETRICS

[Back to Quick Links](#)

Luminaire photometry has been conducted by an accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.

SCV-LED-15L-SC-50

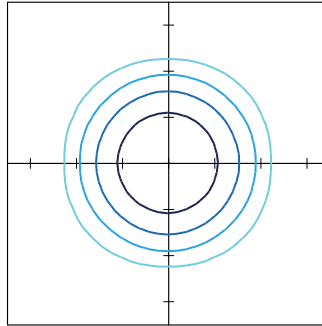
Luminaire Data

Wide Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	15,410
Watts	103
Efficacy	150
IES Type	Type VS - Very Short
BUG Rating	B3-U0-G1

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)°	4101.6	26.6%
Medium (30-60)°	8386.4	54.4%
High (60-80)°	2748.8	17.8%
Very High (80-90)°	173.4	1.1%
Uplight (90-180)°	0.0	0.0%
Total Flux	15410.2	100%

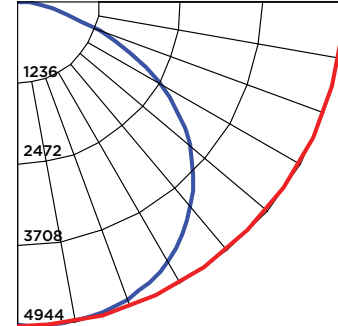
ISOFOOT CANDLE PLOT



15' Mounting Height / 15' Grid Spacing

5 FC 2 FC 1 FC 0.5 FC

POLAR CURVE



SCV-LED-23L-SCFT-50

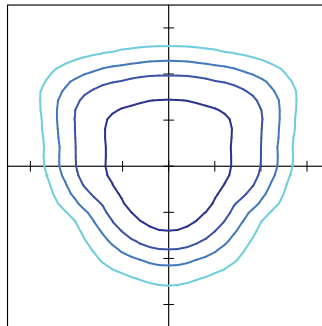
Luminaire Data

Wide Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	24,361
Watts	191.5
Efficacy	127
IES Type	Type IV - Short
BUG Rating	B3-U0-G3

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)°	4368.4	17.9%
Medium (30-60)°	12592.5	51.7%
High (60-80)°	6960.6	28.6%
Very High (80-90)°	439.5	1.8%
Uplight (90-180)°	0.0	0.0%
Total Flux	24361.0	100%

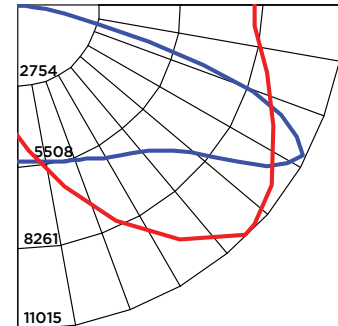
ISOFOOT CANDLE PLOT

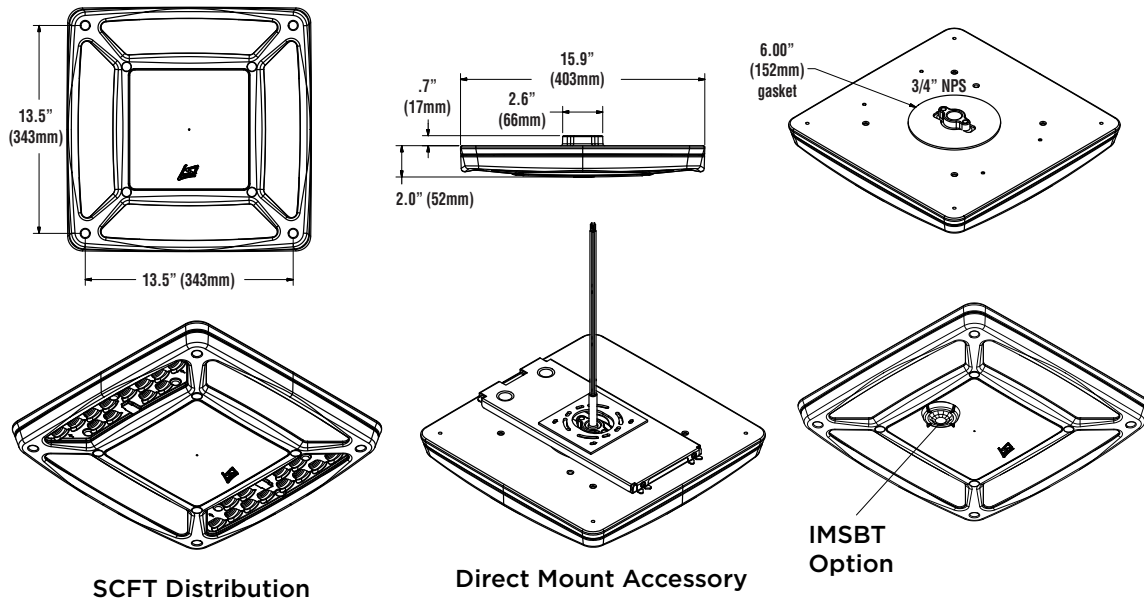


15' Mounting Height / 15' Grid Spacing

5 FC 2 FC 1 FC 0.5 FC

POLAR CURVE



**PRODUCT DIMENSIONS**[Back to Quick Links](#)**CONTROLS****AirLink Wireless Lighting Controller**

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system.

The wireless integrated controller is compatible with this fixture.

Click the link below to learn more details about AirLink.

<https://www.lsicorp.com/wp-content/uploads/documents/products/airlink-outdoor-specsheet.pdf>

Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is rated for cold and wet locations (-30° C to 70° C). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

Click the link below to learn more details about IMSBT.

<https://www.lsicorp.com/wp-content/uploads/documents/products/imsbt-specsheet.pdf>

AirLink™ Blue

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires.

Click the link below to learn more details about AirLink Blue.

<https://www.lsicorp.com/product/airlink-blue/>

RETROFIT KITS

LSI Industries offers a full line of Retrofit Kits for existing Encore, Richmond, 2x2 Universal and many more older canopy luminaires.

Click the link below to see more details on all our Retrofit Kits.

<https://www.lsicorp.com/wp-content/uploads/all/scv-petro-retrofit-specsheet.pdf>

When Recorded Return To:
Walmart, Inc.
Attn: Bernie Coerber, Senior Counsel
2608 S.E. J Street
Bentonville, AR 72716-5560

Cross-Reference:

1. Easements with Covenants and Restrictions Affecting Land recorded on December 16, 2005 in the Isabella County, Michigan records at Liber 1327, Page 250 and
2. First Amendment to Easements with Covenants and Restrictions Affecting Land recording on April 24, 2006 in the Isabella County, Michigan records at Liber 1344, Page 0297.

**SECOND AMENDMENT TO
EASEMENTS WITH COVENANTS AND RESTRICTIONS AFFECTING LAND**

THIS SECOND AMENDMENT TO EASEMENTS WITH COVENANTS AND RESTRICTIONS AFFECTING LAND (this "Amendment") is made as of this ___ day of _____, 20___, between **SAM'S REAL ESTATE BUSINESS TRUST**, a Delaware statutory trust ("Sam's"), whose address is 2608 SE J Street, Bentonville, Arkansas 72716-5560, **WAL-MART REAL ESTATE BUSINESS TRUST**, a Delaware statutory trust ("Walmart"), whose address is 2608 SE J Street, Bentonville, Arkansas 72716-5560; **MENARD, INC.**, a Wisconsin corporation ("Menard"), whose address is _____; **MOUNT PLEASANT HOLDINGS, LLC**, a Michigan limited liability company ("MPH"), whose address is _____; **MEMBER'S FIRST CREDIT UNION**, a _____ ("MFCU"), whose address is _____; and **KOHL'S MICHIGAN, L.P.**, a Delaware limited partnership ("Kohl's" and collectively with Sam's, Walmart, Menard, MPH, and MFCU, the "Parties").

WITNESSETH:

WHEREAS, Wal-Mart, Sam's, Menard, and Bluegrass Investment Group, LLC ("Bluegrass") entered into that certain Easements with Covenants and Restrictions Affecting Land dated as of November 23, 2005 and recorded in the Isabella County, Michigan records at Liber 1327, Page 0250 (the "Original ECR");

WHEREAS, Wal-Mart, Sam's, Menard, Bluegrass, and Kohl's entered into that certain First Amendment to Easements with Covenants and Restrictions Affecting Land dated as of April 21, 2006 and recorded in the Isabella County, Michigan records at Liber 1344, Page 0297 (the "First Amendment" and together with the Original ECR, the "ECR");

WHEREAS, MPH and MFCU are each successors-in-interest to Bluegrass;

WHEREAS, as more particularly set forth herein, the Parties have agreed to amend the ECR; and

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree to the amendments and provisions set forth herein as follows:

1. Definitions. Except as otherwise defined herein, capitalized terms used herein shall have the meanings set forth in the ECR.
2. Amendments.
 - a. Site Plan. Exhibit A attached hereto shall be an addition and supplement to and comprise a part of the Site Plan attached to the First Amendment. The term "Site Plan" as used in the ECR shall mean and refer to Exhibit A attached to the First Amendment and Exhibit A attached hereto.
 - b. Online Pickup and Fuel Programs. Notwithstanding anything to the contrary in the ECR, each of Sam's shall have the right to construct and operate a fuel station on the Sam's Tract (the "Sam's Fuel Program"), and each of Sam's and Walmart shall have the right to implement an on-line pickup program on such Party's Tract pursuant to which customers will order grocery products, general merchandise, and other products online for pickup within a vehicular pickup area to be constructed and operated on such Tract (an "Online Pickup Program"). In connection with an Online Pickup Program, each of Sam's and Walmart shall have the right to make and construct the following improvements on such Party's Tract without the requirement of further consent or approval under the ECR: additional building improvements, designated vehicular parking spaces that may be covered by a canopy, directional signage, pavement markings, and parking lot signage.
 - c. Branding Updates. In connection with an Online Pickup Program or other business activities such Party's Tract, each of Sam's and Walmart shall have the right to update building colors, signage, and elevations in accordance with such Party's then-current branding, which may change from time to time.
 - d. Sam's Maintenance and Access Area. Notwithstanding the provisions of Section 6.4(2) or any other provision of the ECR, Sam's shall have the exclusive right to grade from time to time, and to maintain, the portion of the Undevelopable Areas labeled as "Sam's Maintenance and Access Area" on Exhibit A attached hereto. Sam's shall have the right to access the

Sam's Tract using the access drive located in the Sam's Maintenance and Access Area, as shown on Exhibit A. During the construction of improvements in connection with the Sam's Fuel Program, Sam's shall have a temporary construction easement over the Sam's Maintenance and Access Area for the staging of construction materials and equipment and use of such area in connection with the construction of such improvements. Following completion of such improvements, Sam's shall restore the surface of the Sam's Maintenance and Access Area and maintain such area in accordance with the requirements of the ECR as if such area was part of the Sam's Tract.

3. Miscellaneous.

- a. Severability. If any term, covenant or condition of this Amendment, or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Amendment shall not be affected, and each and every remaining term, covenant or condition of this Amendment shall be valid and enforced to the fullest extent permitted by law.
- b. Ratification; Conflict. All terms and conditions of the ECR not amended pursuant to this Amendment are hereby ratified and confirmed and shall remain in full force and effect; provided that in the event of any inconsistency or conflict between this Amendment and the ECR, the terms of this Amendment shall control.
- c. Binding Effect. This Amendment shall run with the land and shall be binding upon and inure to the benefit of the respective heirs, successors, and assigns of the Parties, the other Owners, and the property subject to the ECR.
- d. Headings; Counterparts. The headings herein are inserted only as a matter of convenience and for reference, and in no way define, limit, or describe the scope or intent of this document nor in any way affect the provisions hereof. This Amendment may be executed in several counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same Amendment. Facsimile and email signatures shall be deemed valid and binding on all documents related to this Amendment. The Parties agree this Amendment has been jointly drafted.
- e. Authority. Each of the Parties represents and warrants that such Party has the authority and right to enter into this Amendment and bind such Party's property to the provisions of this Amendment without the consent, approval or joinder of any party, and, if such consent is required, such consent has been obtained. Each person executing this Amendment

represents and warrants that such person is fully authorized and empowered to do so.

- f. Entire Agreement. The ECR, as modified by this Amendment, contains the entire agreement by and between the parties with respect to the subject matter hereof.

[SIGNATURES COMMENCE ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have executed this Amendment the day and year first written above.

SAM'S REAL ESTATE BUSINESS TRUST

By: _____

Print Name: _____

Title: _____

[SEAL]

State of Arkansas)
)ss.
County of Benton)

On this day, before me, a Notary Public, (or before any officer within this State or without the State now qualified under existing law to take acknowledgments), duly commissioned, qualified and acting, within and for said County and State, appeared in person the within named _____ (being the person authorized by said statutory trust to execute such instrument, stating his/her respective capacity in that behalf), to me personally well known (or satisfactorily proven to be such person), who stated that he/she was the of Sam's Real Estate Business Trust, a Delaware statutory trust, and was duly authorized in his/her respective capacity to execute the foregoing instrument for and in the name and behalf of said statutory trust, and further stated and acknowledged that he/she had so signed, executed, and delivered said foregoing instrument for the consideration, uses, and purposes therein mentioned and set forth.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal this _____ day of _____, 20____.

Notary Public
My commission expires: _____

[SEAL]

[signatures continue on following page]

WALMART REAL ESTATE BUSINESS TRUST

By: _____

Print Name: _____

Title: _____

[SEAL]

State of Arkansas)
)ss.
County of Benton)

On this day, before me, a Notary Public, (or before any officer within this State or without the State now qualified under existing law to take acknowledgments), duly commissioned, qualified and acting, within and for said County and State, appeared in person the within named _____ (being the person authorized by said statutory trust to execute such instrument, stating his/her respective capacity in that behalf), to me personally well known (or satisfactorily proven to be such person), who stated that he/she was the of Wal-Mart Real Estate Business Trust, a Delaware statutory trust, and was duly authorized in his/her respective capacity to execute the foregoing instrument for and in the name and behalf of said statutory trust, and further stated and acknowledged that he/she had so signed, executed, and delivered said foregoing instrument for the consideration, uses, and purposes therein mentioned and set forth.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal this ____ day of _____, 20_____.

Notary Public
My commission expires: _____

[SEAL]

[signatures continue on following page]

MENARD, INC.

By: _____

Print Name: _____

Title: _____

[SEAL]

STATE OF WISCONSIN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____, 20____
by _____, as _____ [title] of MENARD, INC., a
Wisconsin corporation.

Notary Public
My commission expires: _____

(seal)

[signatures continue on following page]

MOUNT PLEASANT HOLDINGS, LLC

By: _____

Print Name: _____

Title: _____

[SEAL]

STATE OF _____)

)SS

COUNTY OF _____)

The foregoing instrument was acknowledged before me on _____, 20____
by _____, the _____ [title] of MOUNT
PLEASANT HOLDINGS, LLC, a Michigan limited liability company, on behalf of the
company.

Notary Public

My commission expires: _____

(seal)

[signatures continue on following page]

MEMBER'S FIRST CREDIT UNION

By: _____

Print Name: _____

Title: _____

[SEAL]

STATE OF WISCONSIN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____, 20____
by _____, as _____ [title] of MEMBER'S FIRST
CREDIT UNION.

Notary Public
My commission expires: _____

(seal)

[signatures continue on following page]

KOHL'S MICHIGAN, L.P.

By: Kohl's Department Stores, Inc., its sole
general partner

By: _____

Print Name: _____

Title: _____

[SEAL]

STATE OF WISCONSIN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____, 20____
by _____, as _____ [title] of Kohl's Department
Stores, Inc., the sole general partner of KOHL'S MICHIGAN, L.P., a Delaware limited
partnership.

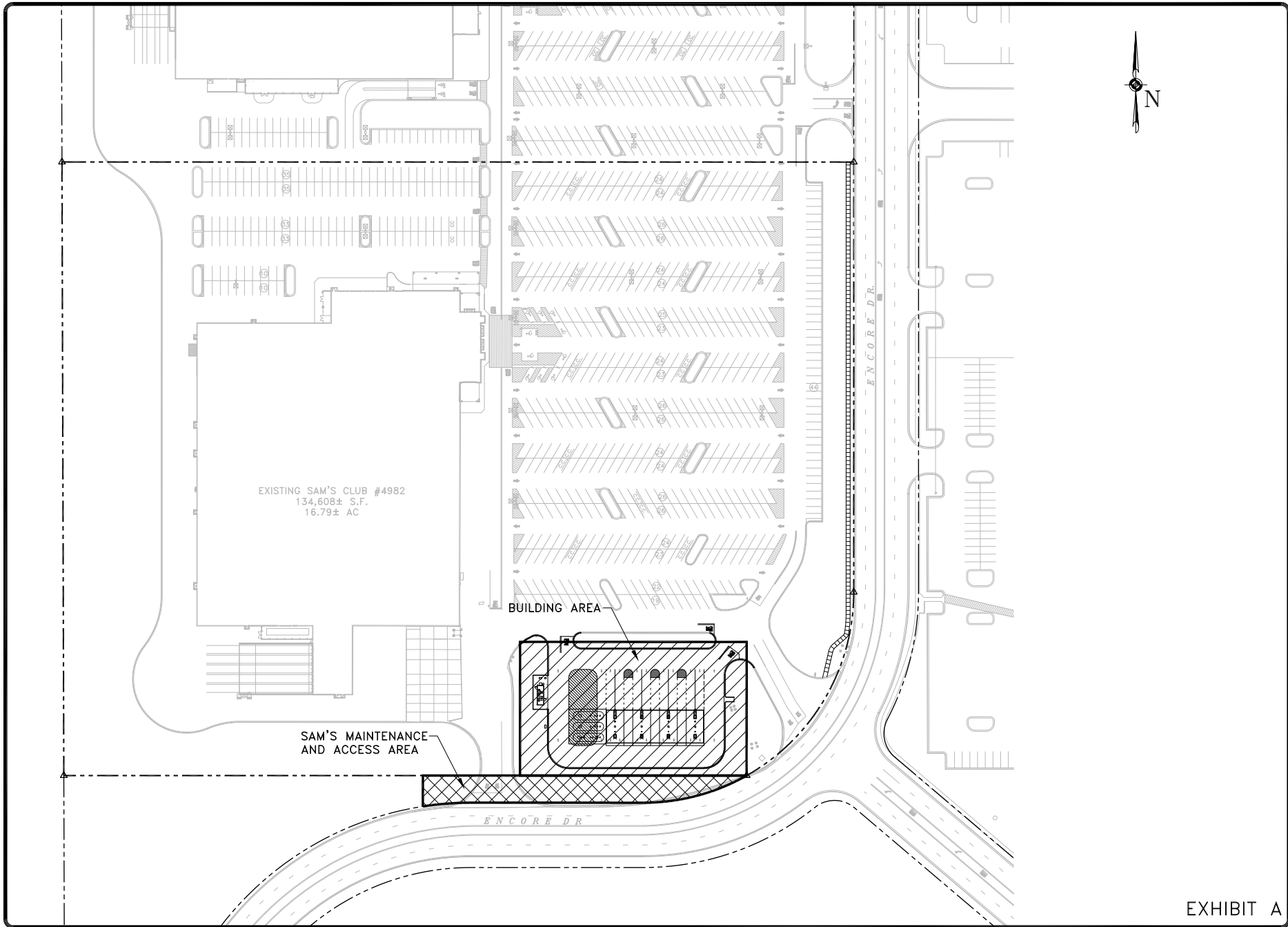
Notary Public
My commission expires: _____

(seal)

Exhibit A

Supplement to Site Plan

[See Attached]

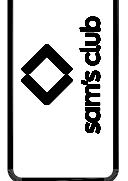


REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
 708 LIPSCOMB CORPORS
 100 WEST UNIVERSITY AVENUE, SUITE 200
 BENTONVILLE, AR 72716

SAM'S CLUB #4982-211
 MT. PLEASANT, MICHIGAN

SAM'S REAL ESTATE BUSINESS TRUST
 2101 SE SIMPLE SAVINGS DRIVE
 BENTONVILLE, AR 72716



DRAWN	AS
CHECKED	BKM
DATE	06/15/2020
SCALE	NTS
JOB NO.	4982-211
SHEET	3 OF 20 SHEETS

EXHIBIT A



December 11, 2020

Peter Gallinat, Zoning Administrator
Union Township
2010 South Lincoln Road
Mt Pleasant, Michigan 48858

Re: Sam's Club Fueling Station #4982-211; 4850 Encore Drive
Site Plan Review Comment Responses

Mr. Gallinat,

Please see below our responses to the comments received as part of the initial review of the above referenced project. Responses have only been provided for comments with an action to Disapprove. However, if additional information is required, feel free to call or email with any questions.

Comment 1 – Outdoor Lighting

Response:

The canopy lights have been reduced to the specified lighting levels. Additionally, site lighting has been incorporated to provide adequate lighting to the fueling station area beyond the canopy area. The proposed site lights will be mounted at 22 feet above grade. Refer to the revised Site Development Plans as well as the light fixture cut sheets included with this submittal for additional information.

Comment 2 – Setbacks

Response:

Requested setbacks and roadway information has been added to the Site Plan. Refer to the Topographical Survey for existing easements within the project area.

Comment 3 – Parking

Response:

New parking has been incorporated into the proposed fueling station to address this comment. As such, the parking calculations table has been revised to now only include the fueling station parking requirements since the existing Sam's Club parking stalls and ratio will not be impacted by this project.

Refer to the Fuel Station Lane Striping and Pavement Markings Detail on Sheet 21 of 22 for dimensions of proposed fuel service and stacking areas. As shown on this detail, 40' of stacking, or two vehicle lengths, is provided in advance of each set of refueling positions.

Comment 4 – Parking

Response:

Plans have been revised to address all comments regarding sidewalks.

Comment 5 – Landscaping and Traffic Safety at the Intersection

Response:

The additional evergreen tree is shown to be removed in the revised plans. Additionally, new tree plantings to replace the removed trees have been added to the Site Plan.

Comment 6 – Parking

Response:

Based upon discussions internally with our team, including Sam’s in-house and outside legal counsel, we do not feel that the requested boundary adjustment is necessary. This is primarily due to the project being located within an area that is subject to an ECR agreement. As such, a modification to the ECR, which will require approval of the adjacent landowner, is required prior to commencing construction of the fueling station. Due to the concerns with Sam’s Club currently accessing and maintaining the adjacent property, language has been incorporated into the draft version of the ECR amendment that will specifically address these concerns. Once all applicable parties agree to the amendment language, it will be executed and recorded with the county thus providing the necessary specific right for this area to be used and maintained.

I have included the draft ECR Amendment language and exhibits in this submittal package for your review. The applicable language is highlighted for easy reference. However, please be aware that it is in draft form and subject to change as it is reviewed by the applicable parties.

Comment 7 – Signs

Response:

Acknowledged. No response to comment necessary.

Comment 8 – State Agency Requirements and Approvals

Response:

The state review of the proposed USTs is ongoing, but we will gladly provide you with documentation of approval once received.

Comment 9 – Outside Agency Approvals

Response:

Subsequent to the comment letter being issued, we have received approvals from the Isabella County Road Commission and the Isabella County Drain Commission. The applicable approval letter and email discussion has been included with this resubmittal.

Thank You,



Keith Moore, PE
Carlson Consulting Engineers, Inc.

Keith Moore

From: Keith Moore
Sent: Monday, August 3, 2020 11:03 AM
To: Pat Gaffney
Cc: '(pgallinat@uniontownshipmi.com)'
Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Follow Up Flag: Follow up
Flag Status: Flagged

Thanks Pat. Per our discussion, I understand that the minor grading within the ROW will not require a permit. However, if the contractor needs to close a lane while constructing the sidewalk such as for the concrete trucks, then they will need to obtain a permit for a lane closure. I'll add a note to the contractor on the plans stating that they must obtain a permit if any lane closures are required. Thank you for your help.

Keith Moore, PE

Lead Project Manager | Carlson Consulting Engineers, Inc

7068 Ledgestone Commons | Bartlett, TN 38133
Ph. 901.384.0404 (Ext 108) | Fax 901.384.0710 | www.CarlsonConsulting.net

From: Pat Gaffney <PGaffney@isabellaroads.com>
Sent: Monday, August 3, 2020 10:53 AM
To: Keith Moore <KeithMoore@carlsonconsulting.net>
Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Keith,

It appears that the sidewalk is going to be outside of the ROW. Only minor grading between the sidewalk and back of curb would need to be done. Attached is the permit form for working in the ROW.

Any construction signing for a lane closure shall be per the MMUTCD. MDOT Traffic standards.

Patrick J. Gaffney, PE
Engineer Superintendent
Isabella CRC
989-773-7131 x115
989-772-2371 fax
pgaffney@isabellaroads.com

From: Keith Moore <KeithMoore@carlsonconsulting.net>
Sent: Monday, August 3, 2020 10:09 AM
To: Pat Gaffney <PGaffney@isabellaroads.com>
Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Pat,

Following up again. Best I can tell, there isn't any information on the Isabella Roads website about permitting work within the ROW. Please let me know what all you need from me to submit for review. Thank you.

Keith Moore, PE

Lead Project Manager | Carlson Consulting Engineers, Inc

7068 LedgeStone Commons | Bartlett, TN 38133

Ph. 901.384.0404 (Ext 108) | Fax 901.384.0710 | www.CarlsonConsulting.net

From: Keith Moore

Sent: Monday, July 27, 2020 1:37 PM

To: 'pgaffney@isabellaroads.com' <pgaffney@isabellaroads.com>

Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Pat,

Touching base on the below issue. Attached is a more up-to-date Site Plan and a Grading Plan for the sidewalk extension for your use. Let me know what else you need from me to get the permit process started. Thank you!

Keith Moore, PE

Lead Project Manager | Carlson Consulting Engineers, Inc

7068 LedgeStone Commons | Bartlett, TN 38133

Ph. 901.384.0404 (Ext 108) | Fax 901.384.0710 | www.CarlsonConsulting.net

From: Keith Moore

Sent: Wednesday, July 22, 2020 9:35 AM

To: 'pgaffney@isabellaroads.com' <pgaffney@isabellaroads.com>

Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Pat,

Per more recent conversations with Township staff, it looks like we're going to have to add a sidewalk in along our site's Encore Drive frontage. Attached is our updated Site Plan that shows the new sidewalk. I assume we'll now need a permit from you since we will be working within the ROW. I wanted to go ahead and start coordinating that with you so if you could, please give me a call or shoot me an email with any applicable information on the sidewalk design that we'll need to incorporate and also info on the permitting process that will now be required. Thanks in advance.

Keith Moore, PE

Lead Project Manager | Carlson Consulting Engineers, Inc

7068 LedgeStone Commons | Bartlett, TN 38133

Ph. 901.384.0404 (Ext 108) | Fax 901.384.0710 | www.CarlsonConsulting.net

From: Keith Moore

Sent: Wednesday, June 24, 2020 1:51 PM

To: 'pgaffney@isabellaroads.com' <pgaffney@isabellaroads.com>

Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Pat,

As discussed, we'll forward you an electronic set of our plans once we have them ready to submit to the Township. As of right now, there are no plans to perform any work within the ROW. It's my understanding that assuming that doesn't change, no permit for the Road Commission will be required. However, if sidewalks or any other improvements end up being required within the ROW, a permit will be required and we can coordinate the permit requirements at that time.

Keith Moore, PE

Lead Project Manager | Carlson Consulting Engineers, Inc

7068 LedgeStone Commons | Bartlett, TN 38133

From: Keith Moore
Sent: Wednesday, June 24, 2020 10:05 AM
To: 'pgaffney@isabellaroads.com' <pgaffney@isabellaroads.com>
Subject: RE: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Patrick,

Wanted to reach out again to see if there's any review/permitting required with your office for this project. Please let me know your thoughts. Thanks.

Keith Moore, PE
Lead Project Manager | Carlson Consulting Engineers, Inc
7068 LedgeStone Commons | Bartlett, TN 38133
Ph. 901.384.0404 (Ext 108) | Fax 901.384.0710 | www.CarlsonConsulting.net

From: Keith Moore
Sent: Friday, June 5, 2020 9:06 AM
To: pgaffney@isabellaroads.com
Subject: #4982-211 Mt Pleasant - Sam's Fuel Station - ICRC Review

Patrick,

I left you a voicemail yesterday, but wanted to follow up via email as well. We're preparing plans on behalf of Sam's for constructing a fueling station in the grassed area south of their existing parking area. Attached is our Overall Site Plan for your reference. The plan does not include any modifications to the existing entrance drives and we do not anticipate any work within the ROW to be required. As such, I assume no permit will be required from your office, but the Township is requesting that I obtain confirmation of this before submitting for their review. Can you please review the attached plan and let me know if a permit or more in-depth review by your office will be required? Feel free to reach out if you have any questions. Thank you!

Keith Moore, PE
Lead Project Manager | Carlson Consulting Engineers, Inc
7068 LedgeStone Commons | Bartlett, TN 38133
Ph. 901.384.0404 (Ext 108) | Fax 901.384.0710 | www.CarlsonConsulting.net

Sam **B**er **E**ngineering

Bruce E. Rohrer, P.E.
1216 E. Gaylord Street
Mt. Pleasant, Michigan 48858
(989) 330-2150

August 18, 2020

Peter Galliant
Charter Township of Union Planner
2010 S. Lincoln Road
Mt. Pleasant, MI 48858

RE: Storm Water Management Plan for Sam's Club Fueling Station

Dear Mr. Galliant:

The Sam's Real Estate Business Trust, for Sam's Club of Mt. Pleasant, MI has asked for a storm water plan review for a fueling station.

The Sam's Club Fueling Station and all other businesses on Encore Blvd., located in the SW $\frac{1}{4}$ of Section 26, Union Township, were incorporated into one overall stormwater design plan. The design calculations were based on all sites being developed. Therefore, the proposed fueling station for Sam's Club, drawing dated 07/22/2020, sheet 15 of 20, falls within the current overall storm water design and is consistent with the Union Township Storm Water Ordinance.

If you have any questions or need any further information, please feel free to contact me.

Sincerely,



Bruce E. Rohrer, P.E.
Consulting Engineer
Isabella County

BER/taw

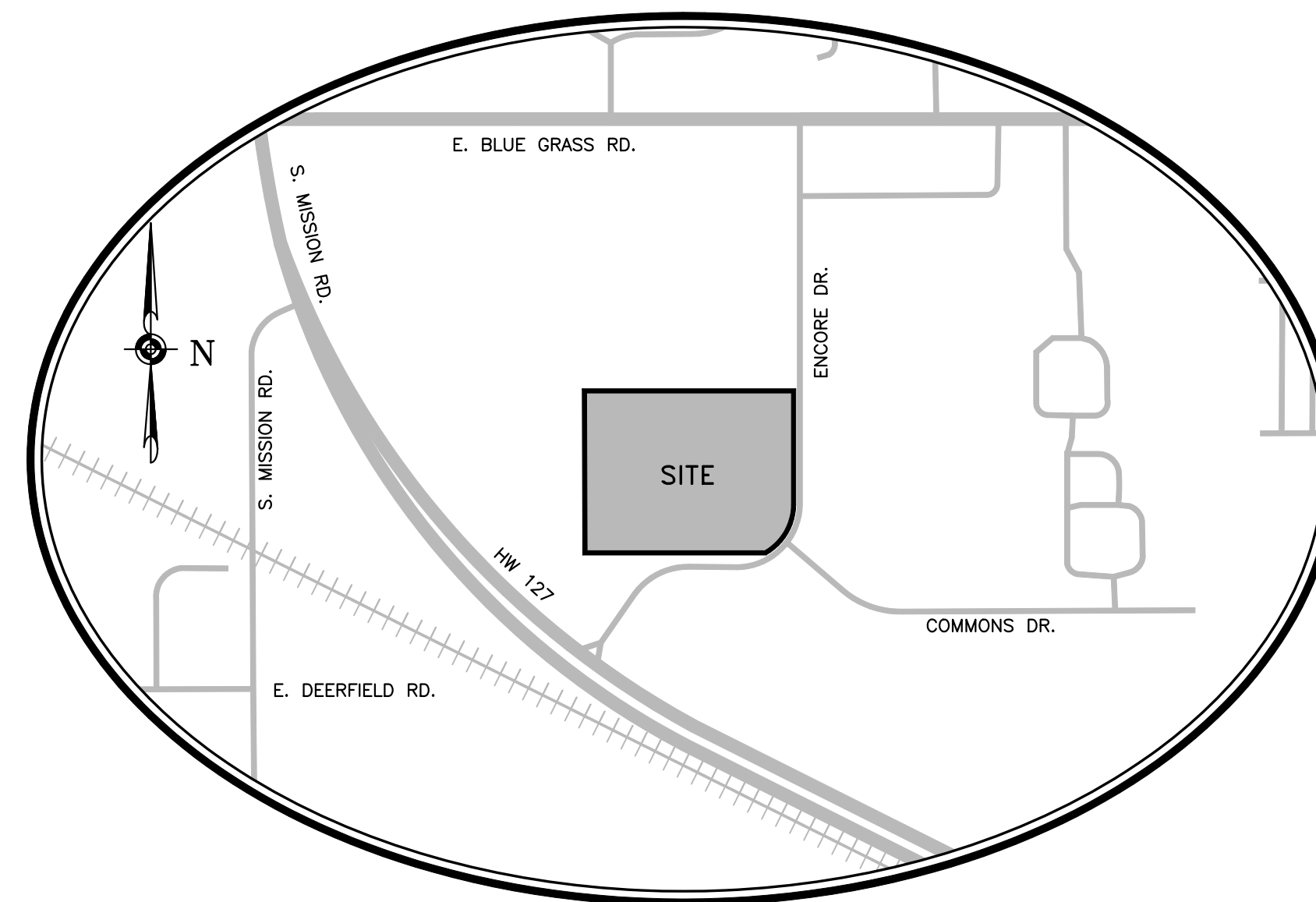
cc: Keith Moore, PE: Carlson Consulting Engineers, INC; keithmoore@carlsonconsulting.net

SITE DEVELOPMENT PLANS

SAM'S FUELING STATION #4982-211

4850 ENCORE DRIVE

MT PLEASANT, MI 48858



VICINITY MAP
NTS

DEVELOPED BY:



SAM'S REAL ESTATE BUSINESS TRUST
2101 SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716
(479) 273-4000

ENGINEER:



INDEX OF SHEETS

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SHEET 7	PHASE II EROSION AND SEDIMENTATION CONTROL PLAN
SHEET 8	EROSION CONTROL DETAILS
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PROJECT CLOSEOUT REQUIREMENTS

CONTRACTOR'S SCOPE SHALL INCLUDE PREPARING/PROVIDING ALL AHJ REQUIRED PROJECT CLOSEOUT DOCUMENTATION SUCH AS AS-BUILT SURVEYS, FINAL TESTING REPORTS, INSPECTION LOGS, ETC. ALL ITEMS SHALL BE PREPARED IN ACCORDANCE WITH APPLICABLE AHJ REQUIREMENTS. BY SUBMITTING A BASE BID, CONTRACTOR ACKNOWLEDGES THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THIS REQUIREMENT.

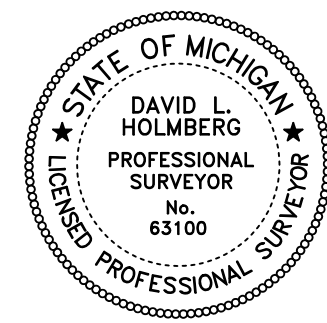
CONSTRUCTION PHASING NOTICE

THE SAM'S CLUB WILL REMAIN OPERATIONAL THROUGHOUT THE DURATION OF THIS PROJECT. CONSTRUCTION SEQUENCING AND CLOSE COORDINATION WITH THE WALMART CONSTRUCTION MANAGER AND SAM'S CLUB MANAGER ARE REQUIRED TO HELP MINIMIZE DISRUPTIONS TO THE SAM'S CLUB NORMAL OPERATIONS (INCLUDING DELIVERIES, TMA SERVICES, OUTDOOR SALES AND STORAGE, ETC.) AND THEIR CUSTOMERS AND ASSOCIATES. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS EXAMINED THE PROJECT TO THE DEGREE NECESSARY TO PROVIDE A LUMP SUM PRICE FOR THE WORK AND THAT HE/SHE HAS INCLUDED NECESSARY FUNDS FOR ANY ADDITIONAL TEMPORARY PROTECTION, TRAFFIC CONTROL, LOW IMPACT CONSTRUCTION EQUIPMENT, AND/OR WORK REQUIRED DURING NON-PEAK BUSINESS HOURS THAT MAY BE REQUIRED TO MINIMIZE DISRUPTIONS AND/OR INCONVENIENCE TO THE SAM'S CLUB OPERATIONS AND ITS CUSTOMERS AND ASSOCIATES.

THE SITEWORK FOR THE SAM'S CLUB PORTION OF THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS."

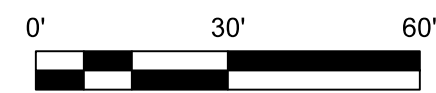
ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO CONTRACT COMPLETION AND THE FINAL CONNECTION OF SERVICES.

CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.



LEGEND

- PAVEMENT MARKING
- STORM MANHOLE
- MONITORING WELL
- SANITARY MANHOLE
- HYDRANT
- WATER VALVE
- SIGN
- LIGHT POLE
- BOLLARD
- HYDRANT
- CATCH BASIN
- POWER POLE
- GUY ANCHOR
- FND PIPE
-
-
-
-
-
-



VERTICAL DATUM

(NAVD 88) NORTH AMERICAN VERTICAL DATUM OF 1988

NOTES:
A CERTIFIED BOUNDARY SURVEY WAS COMPLETED BY HOLMBERG LAND SURVEYING, LLC ON 10/7/2019 JOB #088-19_B. SAID BOUNDARY HAS BEEN OVERLAID ONTO THIS TOPOGRAPHICAL SURVEY.

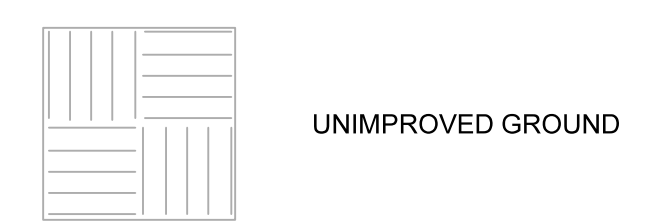
THE EASEMENTS SHOWN ARE BASED ON THE TITLE WORK SUPPLIED, THE SURVEYOR MAKES NO GUARANTEES THAT THE EASEMENTS SHOWN HEREON COMPRISE OF ALL EASEMENTS IN THE AREA.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

- EXISTING SANITARY PIPE
- EXISTING POWER
- BARRIED CABLE
- EXISTING STORM PIPE

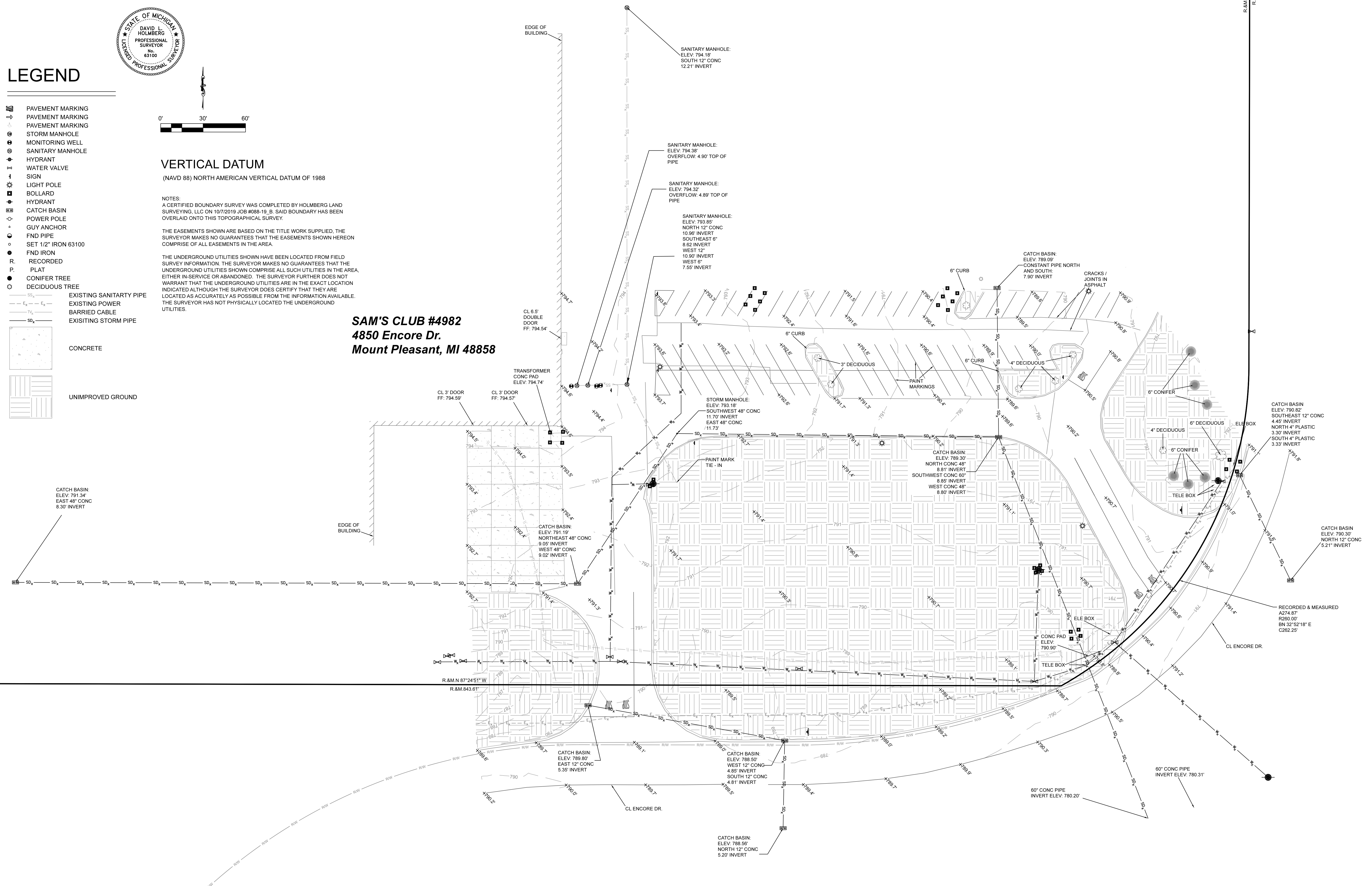


CONCRETE



UNIMPROVED GROUND

SAM'S CLUB #4982
4850 Encore Dr.
Mount Pleasant, MI 48858



HOLMBERG LAND SURVEYING, LLC
19757 Fowler Rd
Lake Ann, Michigan 49650
231-371-4785

Topographical Survey

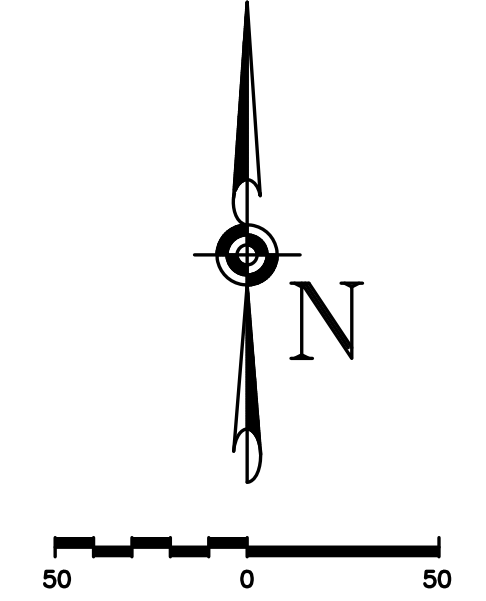
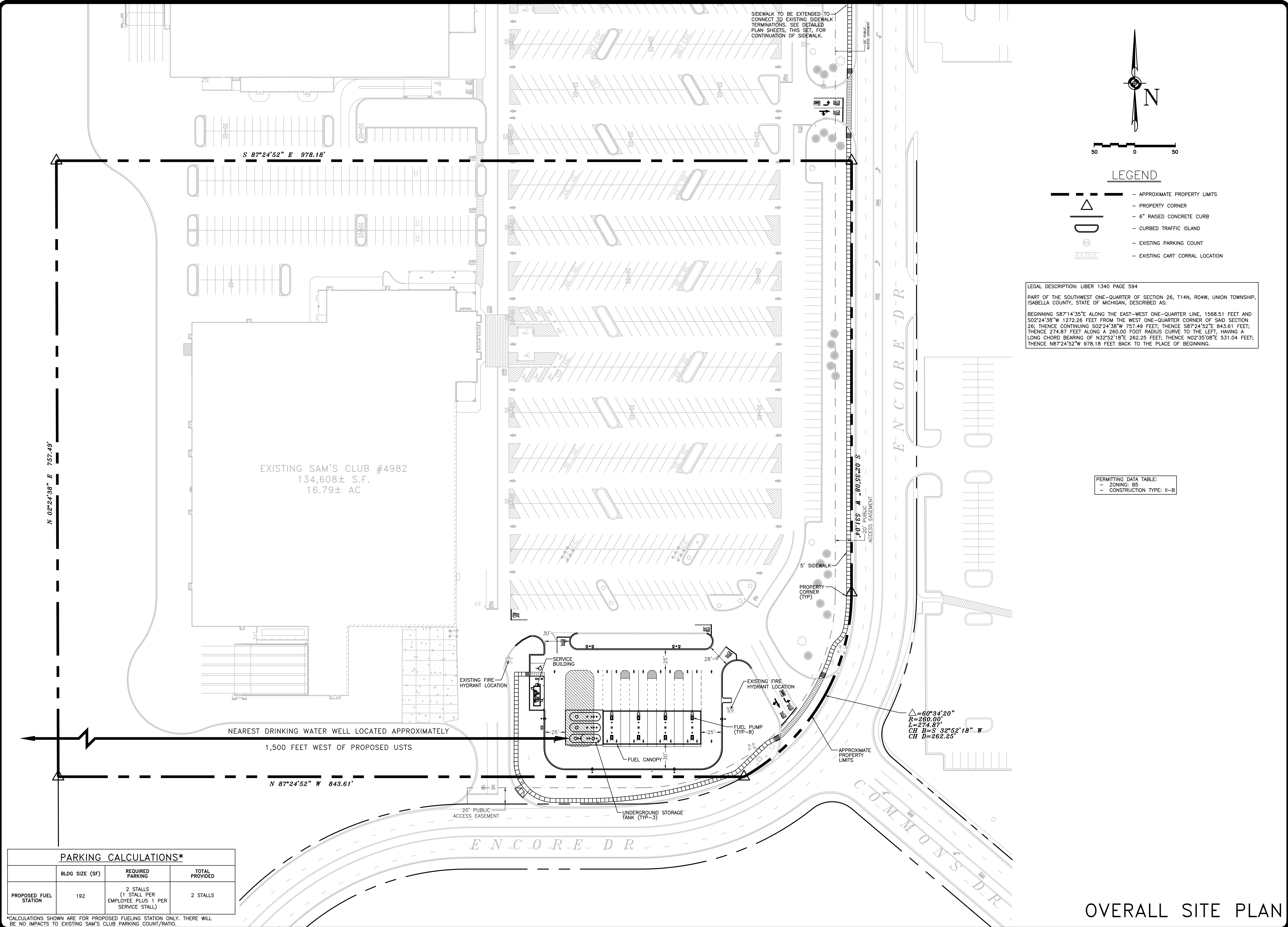
Carlson Consulting Engineers
7066 Ledgestone Commons
Bartlett, TN 38133

DRAWN BY: DLH
SCALE: 30'
JOB NUMBER: 088-19_A
DATE: 10/8/2019
SHEET # 1 OF 1

© 2019 HOLMBERG LAND SURVEYING, LLC

I, David L. Holmberg, a duly Licensed Professional Surveyor of Michigan, have surveyed and mapped the land described above.

LEGEND:
 R = RECORDED
 M = MEASURED
 C = CALCULATED
 L = LATH ON LINE
 X = CHISELED 'X'
 S = SET NAIL/SPIKE
 F = FOUND IRON



LEGEND

- - - - - APPROXIMATE PROPERTY LIMITS
- △ PROPERTY CORNER
- ▬ 6" RAISED CONCRETE CURB
- ▭ CURBED TRAFFIC ISLAND
- ⊙ EXISTING PARKING COUNT
- ⊞ EXISTING CART CORRAL LOCATION

LEGAL DESCRIPTION: LIBER 1340 PAGE 594
PART OF THE SOUTHWEST ONE-QUARTER OF SECTION 26, T14N, R04W, UNION TOWNSHIP, ISABELLA COUNTY, STATE OF MICHIGAN, DESCRIBED AS:
BEGINNING S87°14'35"E ALONG THE EAST-WEST ONE-QUARTER LINE, 1568.51 FEET AND S02°24'38"W 1272.26 FEET FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 26; THENCE CONTINUING S02°24'38"W 757.49 FEET, THENCE S87°24'52"E 843.61 FEET; THENCE 274.87 FEET ALONG A 260.00 FOOT RADIUS CURVE TO THE LEFT, HAVING A LONG CHORD BEARING OF N32°52'18"E 262.25 FEET; THENCE N02°35'08"E 531.04 FEET; THENCE N87°24'52"W 978.18 FEET BACK TO THE PLACE OF BEGINNING.

PERMITTING DATA TABLE:
- ZONING: B5
- CONSTRUCTION TYPE: II-B

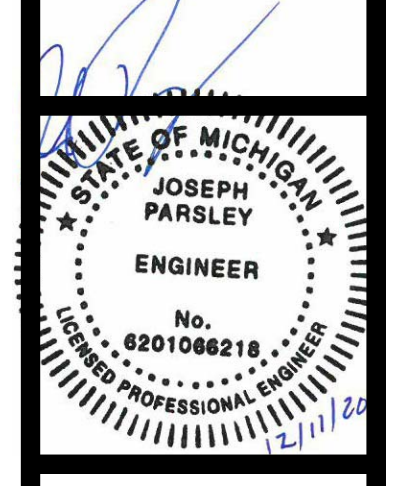
PARKING CALCULATIONS*

	BLDG SIZE (SF)	REQUIRED PARKING	TOTAL PROVIDED
PROPOSED FUEL STATION	192	2 STALLS (1 STALL PER EMPLOYEE PLUS 1 PER SERVICE STALL)	2 STALLS

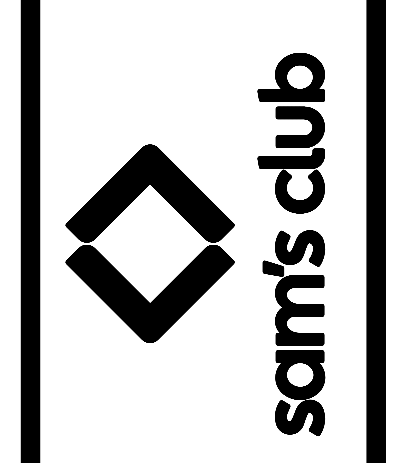
*CALCULATIONS SHOWN ARE FOR PROPOSED FUELING STATION ONLY. THERE WILL BE NO IMPACTS TO EXISTING SAM'S CLUB PARKING COUNT/RATIO.

REVISIONS	BY

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7088 LEDGESTONE COMMONS
PH: (801) 384-0404 • FX: (801) 384-0710

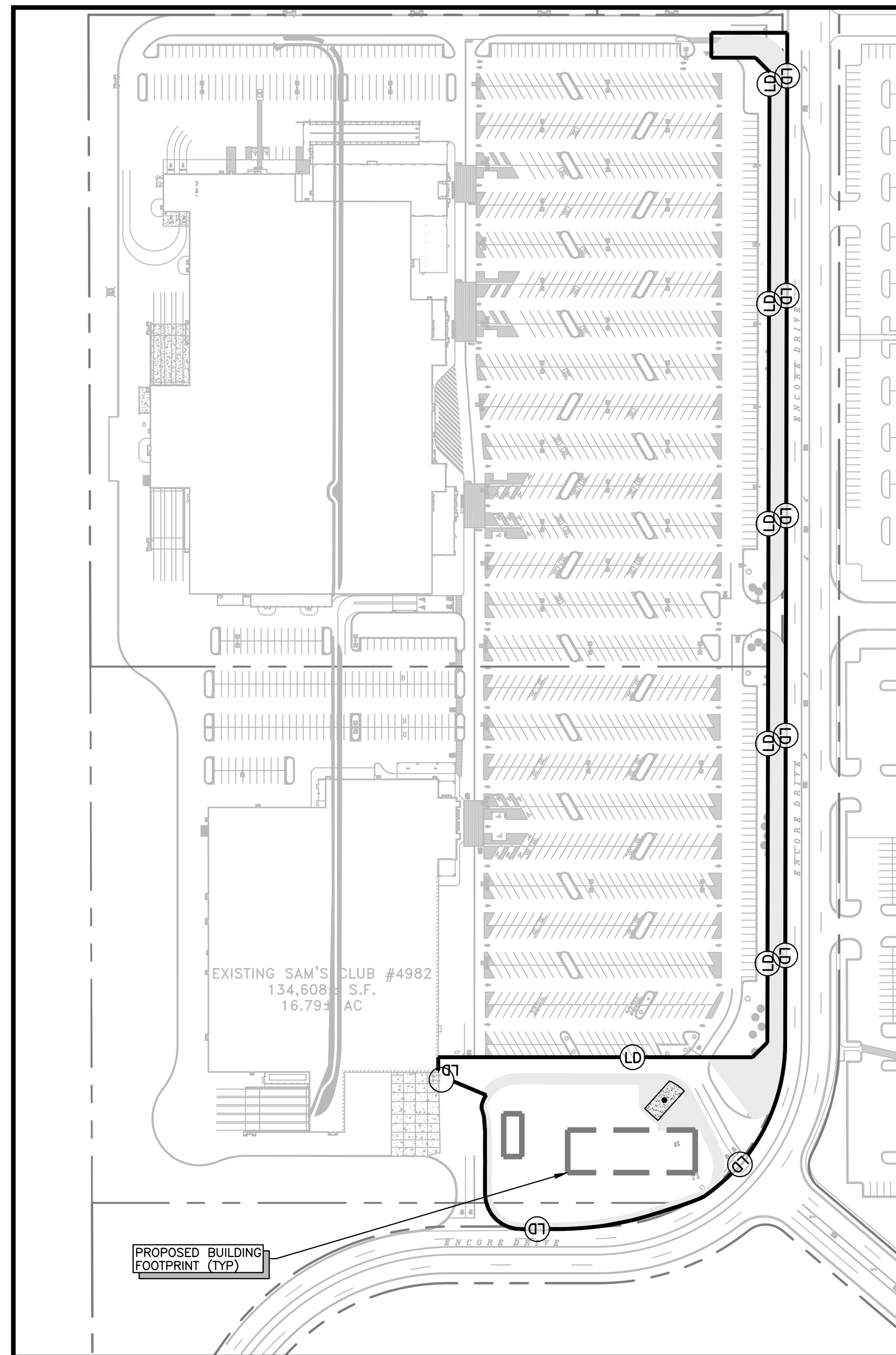


SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	1"=50'
JOB No.	4982-211
SHEET	3 OF 22 SHEETS

OVERALL SITE PLAN



PHASE I LIMITS OF WORK
N.T.S.

SWPPP IMPLEMENTATION SEQUENCE

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE AREAS/CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ALL AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

NOTE: DOWN SLOPE PROTECTIVE MEASURES MUST ALWAYS BE IN PLACE BEFORE SOIL IS DISTURBED. ACTIVITIES ARE PRESENTED IN THE ORDER OR SEQUENCE IN WHICH THEY ARE REQUIRED TO BE COMPLETED.

PHASE I

1. INSTALL THE SWPPP INFORMATION SIGN AND POST REQUIRED DOCUMENTS NEAR THE PLANNED CONSTRUCTION EXIT, AND WITHIN EASY ACCESS TO THE GENERAL PUBLIC WITHOUT ENTERING THE SITE.
2. STAKE/FLAG THE LOD (WHERE STAKING IS NOT POSSIBLE/PRACTICAL, THE LOD MUST BE CONSPICUOUSLY, AND PROMINENTLY, MARKED TO DENOTE THE BOUNDARY). LOD MUST REMAIN CONSPICUOUSLY MARKED THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT.
3. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON THE DEMOLITION AND TRAFFIC CONTROL PLAN.
4. INSTALL PERIMETER SEDIMENT CONTROL BMPs AND INLET PROTECTION DEVICES IN THE VICINITY OF, AND DOWN GRADIENT FROM, THE LOCATION OF THE PLANNED CONSTRUCTION EXIT, CONSTRUCTION OFFICE TRAILER, AND TEMPORARY PARKING AND STORAGE AREAS. CLEAR ONLY THE MINIMUM AREA ABSOLUTELY NECESSARY TO INSTALL THESE PERIMETER CONTROL BMPs AND INLET PROTECTION DEVICES.
5. INSTALL CONSTRUCTION EXIT WITH SEDIMENT TRAP, AND SET THE PROJECT OFFICE TRAILER.
6. INSTALL REMAINING PERIMETER SEDIMENT CONTROL BMPs, AS SHOWN ON THE SITE MAPS AND AS CONSTRUCTION PROGRESS DICTATES. CLEAR ONLY THE MINIMUM AREA NECESSARY TO INSTALL PERIMETER CONTROL BMPs. SILT FENCE 1 (SF1) SHALL BE INSTALLED PRIOR TO MOVING TO NEXT STEP.
7. PREPARE TEMPORARY PARKING AND STORAGE AREA.
8. HALT ALL ACTIVITIES.

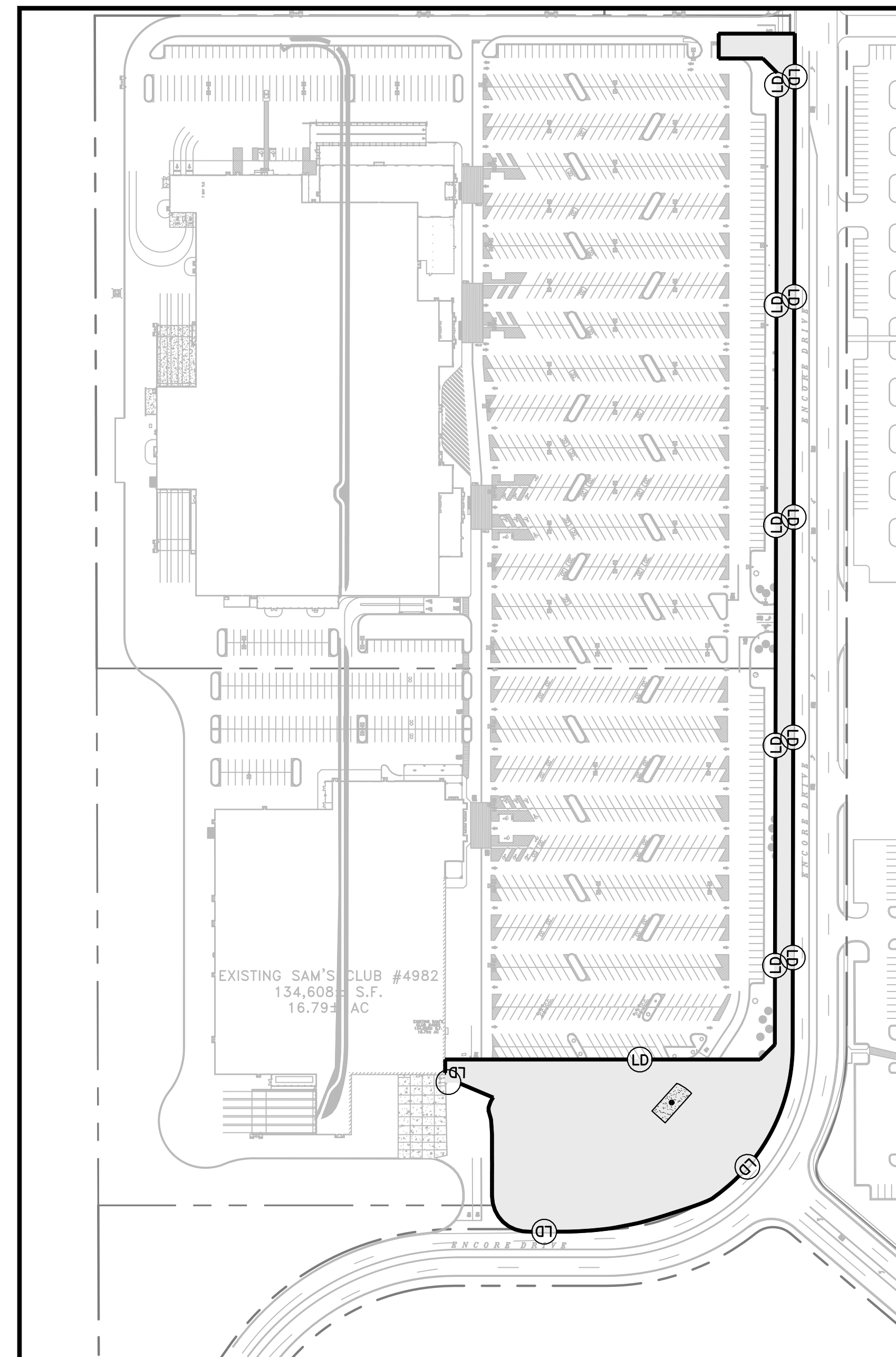
CONTACT THE CEC TO PERFORM INSPECTION AND CERTIFICATION OF BMPs. BMP CERTIFICATION MUST OCCUR BEFORE STORMWATER PRE-CONSTRUCTION MEETING. (THIS SHALL BE SCHEDULED IN ADVANCE IN ANTICIPATION OF THE EXPECTED DATE WHEN THE ABOVE SEQUENCE ITEMS WILL BE COMPLETED.)

ALL EXCEPTIONS NOTED ON THE BMP CERTIFICATION FORM MUST BE ADDED AS DEFICIENCIES WITHIN THE BMP CERTIFICATION FORM AND RESOLVED WITHIN 24-HOURS. BMPs MUST NOT BE CERTIFIED IF ONE OR MORE OF THE EXCEPTIONS WILL NOT BE RESOLVED WITHIN 24-HOURS OF THE BMP CERTIFICATION BY THE CEC.

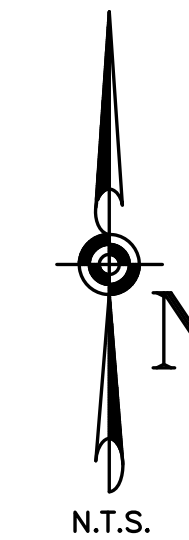
IF THE CEC IS UNABLE TO CERTIFY THAT SITE CONDITIONS ARE PER PLANS AND SPECIFICATIONS, THE CERTIFICATION OF BMPs MUST BE RESCHEDULED. THE STORMWATER PRE-CONSTRUCTION MEETING MAY ONLY OCCUR AFTER BMPs CAN BE CERTIFIED.

GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT THE STORMWATER PRE-CONSTRUCTION MEETING WITH THE CEC, OWNER'S CONSTRUCTION MANAGER, AGENCY(IES) AND SUBCONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

DAILY STORMWATER INSPECTION REPORTS IN THE ONLINE SWPPP REPORTING SYSTEM PROVIDED BY THE OWNER MUST START ON THE NEXT BUSINESS DAY AFTER THE SITE BMPs & PRECONSTRUCTION MEETING CERTIFICATION IS SIGNED/CERTIFIED BY THE CEC.



PHASE II LIMITS OF WORK
N.T.S.



LEGEND

- LD - LIMITS OF DISTURBANCE
- LD - LIMITS OF WORK

LIMITS OF DISTURBANCE

CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.

NOTE TO GENERAL CONTRACTOR

PRIOR TO CONSTRUCTION, GC MUST CLEARLY DELINEATE AND MARK AREAS IDENTIFIED IN THE SWPPP OR IN THE FIELD, TO BE PROTECTED (SUCH AS, NATURAL BUFFERS, TREES, HABITATS OF ENDANGERED/THREATENED SPECIES, HISTORIC PROPERTIES, ETC.).

CAUTION NOTICE TO CONTRACTOR

IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

SPECIFICATIONS REQUIREMENTS

THE REQUIREMENTS SHOWN ON THIS PLAN ARE SUPPLEMENTED BY THE SWPPP CONTAINED WITHIN THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICTS BETWEEN THE PLANS, SWPPP SPECIFICATIONS AND THE ACTUAL GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

NOTICE TO CONTRACTOR

MINIMIZATION OF DISTURBED AREAS:

1. CONTRACTOR SHALL MANAGE CONSTRUCTION ACTIVITIES TO REDUCE EROSION AND RETAIN SEDIMENT AND OTHER POLLUTANTS IN THE SOIL AT THE CONSTRUCTION SITE.
2. CONTRACTOR SHALL MINIMIZE THE TIME BARE SOIL IS EXPOSED.
3. CONTRACTOR SHALL MINIMIZE SITE DISTURBANCE BY MINIMIZING THE EXTENT OF GRADING AND CLEARING TO EFFECTIVELY REDUCE SEDIMENT YIELD.

NOTE TO GC: OWNER HAS AUTHORITY AT ANY TIME TO LIMIT SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY CLEARING AND GRUBBING, EXCAVATION, BORROW AND EMBANKMENT OPERATIONS AND TO DIRECT THE GC TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES.

PHASE II

1. BEGIN CLEARING, GRUBBING, AND STRIPPING THE SITE. (PHASE CLEARING AND GRUBBING TO THE EXTENT PRACTICAL TO MINIMIZE THE AMOUNT OF AREA DISTURBED AT ANY POINT IN TIME)
2. BEGIN GRADING THE SITE.
3. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
4. TEMPORARILY STABILIZE, THROUGHOUT CONSTRUCTION IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING/GRADING ACTIVITY, ANY DISTURBED AREAS, INCLUDING MATERIAL STOCKPILES THAT ARE SCHEDULED OR LIKELY TO REMAIN INACTIVE FOR 14 DAYS OR MORE.
5. INSTALL UTILITIES, STORM SEWERS, CURBS AND GUTTERS.
6. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
7. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
8. PREPARE SITE FOR PAVING.
9. PAVE SITE.
10. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
11. OBTAIN CONCURRENCE FROM THE OWNER CONSTRUCTION MANAGER (CM) THAT THE SITE HAS BEEN FULLY STABILIZED AND ALL CONSTRUCTION HAS BEEN COMPLETED. THEN:
 - A. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs).
 - B. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF TEMPORARY BMPs, AND
 - C. ASK THE CM TO CONTACT THE CEC TO COMPLETE THE CEC PRE-NOT SITE INSPECTION AND REPORT (ONLY CM MAY DO THIS).
12. CONTINUE DAILY INSPECTIONS AND REPORTS UNTIL THE CM FINAL DAILY INSPECTION REPORT, MARKED 'READY TO TERMINATE PERMIT', IS SIGNED BY THE CONSTRUCTION MANAGER AND SUBMITTED VIA THE ONLINE SWPPP REPORTING SYSTEM PROVIDED BY THE OWNER.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY, ONLY IF ALL PRECEDING BMPs AND STABILIZATION ACTIVITIES HAVE BEEN COMPLETELY INSTALLED. BMP-RELATED STEPS IN THE ABOVE SEQUENCE ARE BOLDED FOR CLARITY. THE CEC MUST APPROVE, IN WRITING, ANY CHANGES IN THE ABOVE SWPPP IMPLEMENTATION SEQUENCE, BEFORE THEIR IMPLEMENTATION BEGINS.

THE ESTIMATED DATES OF IMPLEMENTATION OF POLLUTION CONTROL MEASURES SHALL BE DOCUMENTED BY THE CONTRACTOR ON THE SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE ON SHEET SW-5.

DEVELOPER/OWNER
SAM'S REAL ESTATE BUSINESS TRUST
MAIL STOP 0505
702 S.W. 8TH STREET
BENTONVILLE, AR 72716-0505
(479) 204-3314

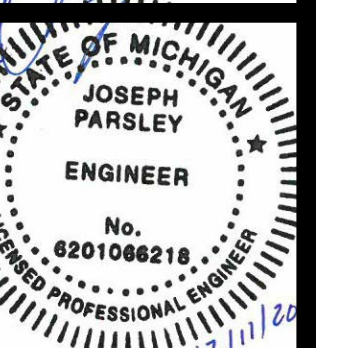
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

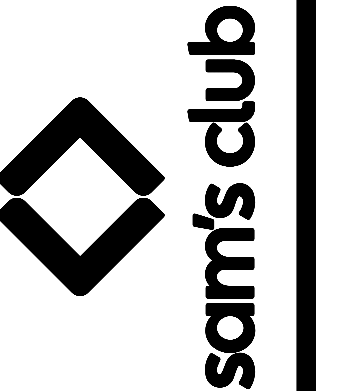
IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7086 LEDGESTONE COMMONS
PH. (801) 384-0404 • FX. (801) 384-0710

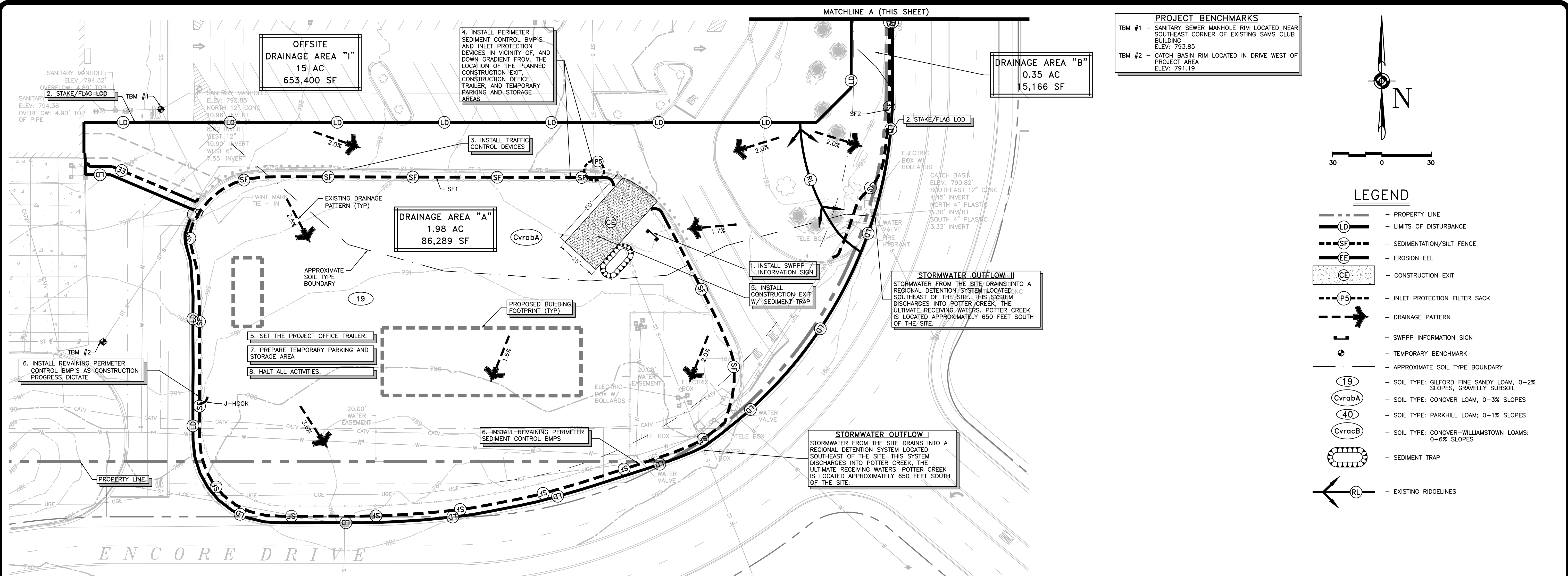


SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



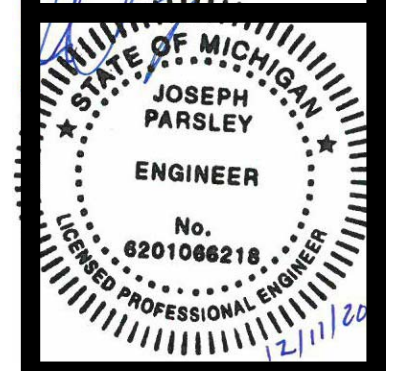
DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	N.T.S.
JOB No.	4982-211
SHEET	5 OF 22 SHEETS

SW-2
SWPPP IMPLEMENTATION SEQUENCE
AND LIMITS OF WORK



REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
 7088 LEDSTONE COMMONS
 PH. (901) 384-0404 • FX. (901) 384-0710



TRACK OUT PREVENTION
 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE VEHICLES ARE ADEQUATELY CLEANED PRIOR TO EXITING THE LIMITS OF DISTURBANCE TO PREVENT TRACK OUT. IF THE ACTION OF THE STONE CONSTRUCTION EXIT DOES NOT SATISFACTORILY PREVENT TRACK OUT FROM TRAFFIC EXITING THE SITE, THE CONTRACTOR SHALL IMPLEMENT A WHEEL WASH SYSTEM AT THE CONSTRUCTION EXIT WATER FROM THE WHEEL WASH SYSTEM SHALL BE DIRECTED TOWARDS THE CONSTRUCTION EXIT SEDIMENT TRAP FOR TREATMENT OF THE SEDIMENT LADEN WATER. THE CONTRACTOR SHALL ALSO HAVE AN ATTENDANT STATIONED AT THE CONSTRUCTION EXIT. THE ATTENDANT SHALL HAVE THE AUTHORITY TO PROHIBIT TRAFFIC FROM EXITING THE SITE IF IT APPEARS THAT VEHICLES EXITING THE SITE WILL CAUSE TRACK OUT. IT IS ULTIMATELY THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRAFFIC FROM THE SITE WILL NOT CAUSE TRACK OUT FROM THE PROJECT SITE BY SUBMITTING A BID ON THE PROJECT, THE CONTRACTOR AFFIRMS THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THESE REQUIREMENTS.

PERIMETER BMP'S LOCATION
 PERIMETER BMP'S (SILT FENCE, EROSION EELS, ETC.) LOCATION SHOWN ON PLAN HAVE BEEN OFFSET FOR CLARITY. WHERE PERIMETER BMP'S IS SHOWN ADJACENT TO LIMITS OF DISTURBANCE IT IS THE INTENTION THAT PERIMETER BMP'S BE INSTALLED ALONG LIMITS OF DISTURBANCE (NO DISTURBANCE BEYOND PERIMETER BMP'S).

LIMITS OF DISTURBANCE
 CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.

NOTE TO GENERAL CONTRACTOR
 PRIOR TO CONSTRUCTION, GC MUST CLEARLY DELINEATE AND MARK AREAS IDENTIFIED IN THE SWPPP OR IN THE FIELD, TO BE PROTECTED (SUCH AS, NATURAL BUFFERS, TREES, HABITATS OF ENDANGERED/THREATENED SPECIES, HISTORIC PROPERTIES, ETC.).

CAUTION NOTICE TO CONTRACTOR
 IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

SPECIFICATIONS REQUIREMENTS
 THE REQUIREMENTS SHOWN ON THIS PLAN ARE SUPPLEMENTED BY THE SWPPP CONTAINED WITHIN THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICTS BETWEEN THE PLANS, SWPPP SPECIFICATIONS AND THE ACTUAL GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

SWPPP UPDATES AND AMENDMENTS
 THE CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, FOOTING INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

IMPORTANT:
 THE CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CEC AND OBTAIN WRITTEN CEC APPROVAL BEFORE DOING ANY OF THE FOLLOWING:

- MODIFYING EROSION OR SEDIMENT CONTROL BMP'S (SUBSTITUTIONS ARE TYPICALLY ONLY APPROVED IF SPECIFIED MATERIALS ARE NOT AVAILABLE OR THERE IS A VALID REASON THE SPECIFIED BMP WILL NOT WORK)
- ADDING/DELETING EROSION OR SEDIMENT CONTROL BMP'S
- MODIFYING THE SWPPP IMPLEMENTATION SEQUENCE, OR
- PERFORMING ANY ACTIONS OR IN ANY MANNER THAT IS CONTRARY TO THE SWPPP.

THE CONTRACTOR MAY MODIFY OR ADD ADDITIONAL BMP'S, WITHOUT CEC APPROVAL, IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY. HOWEVER, CONTRACTOR MUST NOTIFY THE CEC AS SOON AS PRACTICAL AS TO THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

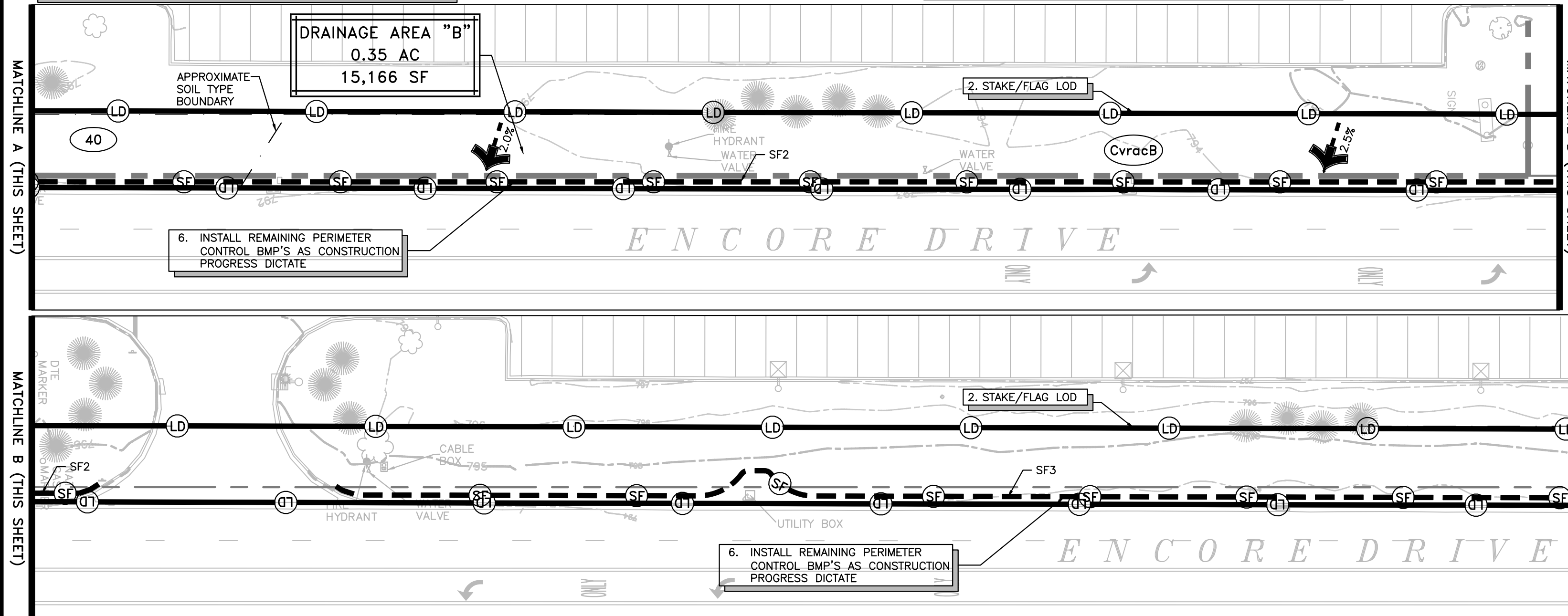
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DEVELOPER/OWNER
 SAM'S REAL ESTATE BUSINESS TRUST
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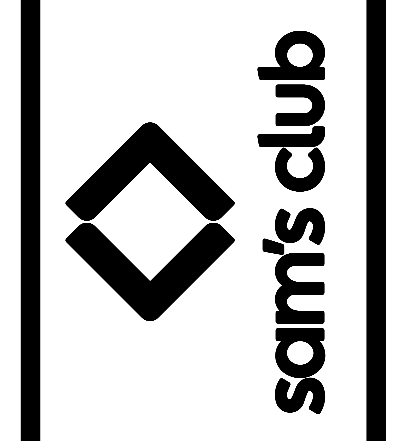
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

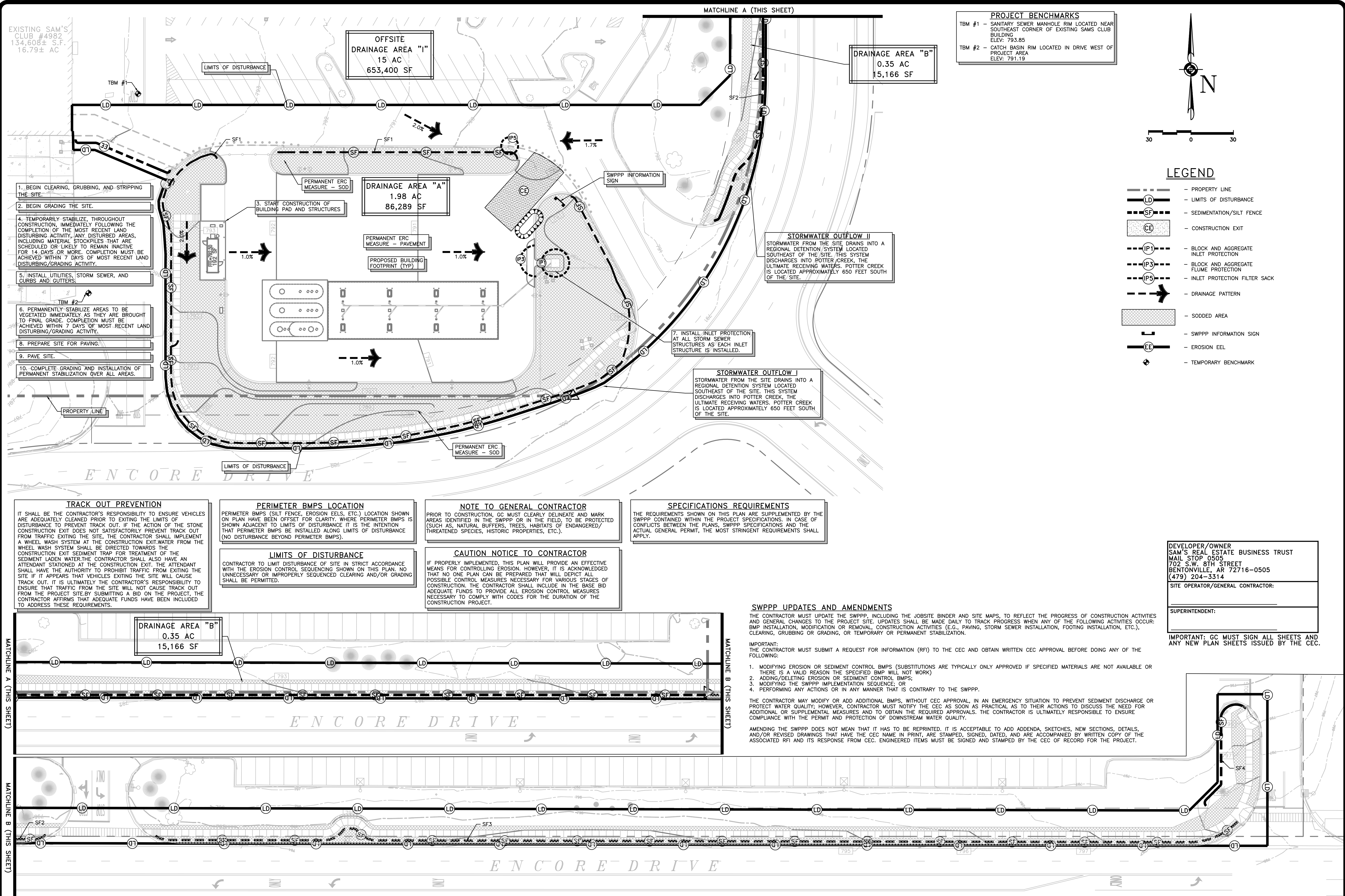


SAM'S CLUB #4982-211
 MT. PLEASANT, MICHIGAN
 SAM'S REAL ESTATE BUSINESS TRUST
 2101 SE SIMPLE SAVINGS DRIVE
 BENTONVILLE, AR 72716



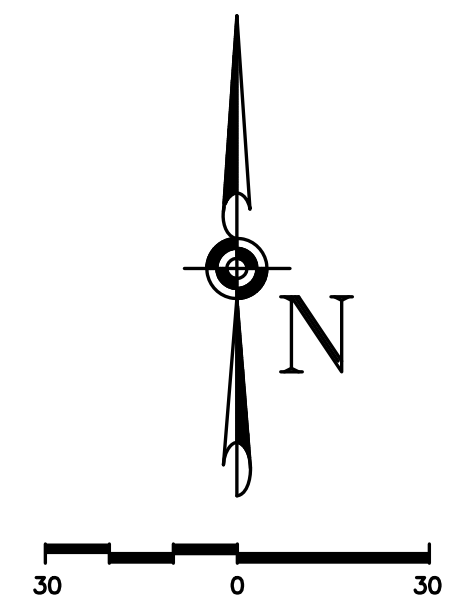
SW-3
 PHASE I EROSION AND
 SEDIMENTATION CONTROL PLAN

DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	1"=30'
JOB No.	4982-211
SHEET	6 OF 22 SHEETS



PROJECT BENCHMARKS

TBM #1	SANITARY SEWER MANHOLE RIM LOCATED NEAR SOUTHEAST CORNER OF EXISTING SAM'S CLUB BUILDING ELEV: 793.85
TBM #2	CATCH BASIN RIM LOCATED IN DRIVE WEST OF PROJECT AREA ELEV: 791.19



LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- SEDIMENTATION/SILT FENCE
- CONSTRUCTION EXIT
- BLOCK AND AGGREGATE INLET PROTECTION
- BLOCK AND AGGREGATE FLUME PROTECTION
- INLET PROTECTION FILTER SACK
- DRAINAGE PATTERN
- SODDED AREA
- SWPPP INFORMATION SIGN
- EROSION EEL
- TEMPORARY BENCHMARK

1. BEGIN CLEARING, GRUBBING, AND STRIPPING THE SITE.
2. BEGIN GRADING THE SITE.
3. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
4. TEMPORARILY STABILIZE, THROUGHOUT CONSTRUCTION, IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING ACTIVITY. ANY DISTURBED AREAS, INCLUDING MATERIAL STOCKPILES THAT ARE SCHEDULED OR LIKELY TO REMAIN INACTIVE FOR 14 DAYS OR MORE, COMPLETION MUST BE ACHIEVED WITHIN 7 DAYS OF MOST RECENT LAND DISTURBING/GRADING ACTIVITY.
5. INSTALL UTILITIES, STORM SEWER, AND CURBS AND GUTTERS.
6. PERMANENTLY STABILIZE AREAS TO BE VEGETATED IMMEDIATELY AS THEY ARE BROUGHT TO FINAL GRADE. COMPLETION MUST BE ACHIEVED WITHIN 7 DAYS OF MOST RECENT LAND DISTURBING/GRADING ACTIVITY.
8. PREPARE SITE FOR PAVING.
9. PAVE SITE.
10. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.

TRACK OUT PREVENTION
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE VEHICLES ARE ADEQUATELY CLEANED PRIOR TO EXITING THE LIMITS OF DISTURBANCE TO PREVENT TRACK OUT. IF THE ACTION OF THE STONE CONSTRUCTION EXIT DOES NOT SATISFACTORILY PREVENT TRACK OUT FROM TRAFFIC EXITING THE SITE, THE CONTRACTOR SHALL IMPLEMENT A WHEEL WASH SYSTEM AT THE CONSTRUCTION EXIT. WATER FROM THE WHEEL WASH SYSTEM SHALL BE DIRECTED TOWARDS THE CONSTRUCTION EXIT SEDIMENT TRAP FOR TREATMENT OF THE SEDIMENT LADEN WATER. THE CONTRACTOR SHALL ALSO HAVE AN ATTENDANT STATIONED AT THE CONSTRUCTION EXIT. THE ATTENDANT SHALL HAVE THE AUTHORITY TO PROHIBIT TRAFFIC FROM EXITING THE SITE IF IT APPEARS THAT VEHICLES EXITING THE SITE WILL CAUSE TRACK OUT. IT IS ULTIMATELY THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRAFFIC FROM THE SITE WILL NOT CAUSE TRACK OUT FROM THE PROJECT SITE BY SUBMITTING A BID ON THE PROJECT, THE CONTRACTOR AFFIRMS THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THESE REQUIREMENTS.

PERIMETER BMPS LOCATION
PERIMETER BMPS (SILT FENCE, EROSION EELS, ETC.) LOCATION SHOWN ON PLAN HAVE BEEN OFFSET FOR CLARITY. WHERE PERIMETER BMPS IS SHOWN ADJACENT TO LIMITS OF DISTURBANCE IT IS THE INTENTION THAT PERIMETER BMPS BE INSTALLED ALONG LIMITS OF DISTURBANCE (NO DISTURBANCE BEYOND PERIMETER BMPS).

LIMITS OF DISTURBANCE
CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.

NOTE TO GENERAL CONTRACTOR
PRIOR TO CONSTRUCTION, GC MUST CLEARLY DELINEATE AND MARK AREAS IDENTIFIED IN THE SWPPP OR IN THE FIELD, TO BE PROTECTED (SUCH AS, NATURAL BUFFERS, TREES, HABITATS OF ENDANGERED/THREATENED SPECIES, HISTORIC PROPERTIES, ETC.).

CAUTION NOTICE TO CONTRACTOR
IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

SPECIFICATIONS REQUIREMENTS
THE REQUIREMENTS SHOWN ON THIS PLAN ARE SUPPLEMENTED BY THE SWPPP CONTAINED WITHIN THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICTS BETWEEN THE PLANS, SWPPP SPECIFICATIONS AND THE ACTUAL GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

SWPPP UPDATES AND AMENDMENTS
THE CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, FOOTING INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

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3. MODIFYING THE SWPPP IMPLEMENTATION SEQUENCE; OR
4. PERFORMING ANY ACTIONS OR IN ANY MANNER THAT IS CONTRARY TO THE SWPPP.

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DEVELOPER/OWNER
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(479) 204-3314

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

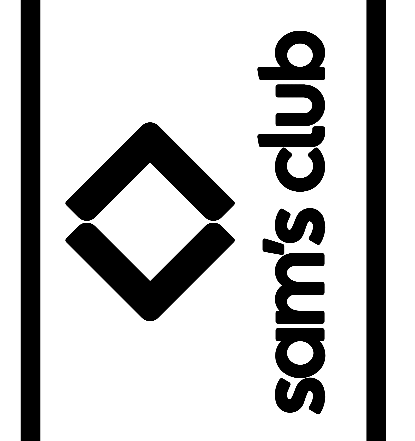
IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7088 LEDGESTONE COMMONS
PH. (901) 354-0404 • FX. (901) 384-0710

JOSEPH PARBLEY
ENGINEER
No. 6201066218
LICENSED PROFESSIONAL ENGINEER

SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	1"=30'
JOB No.	4982-211
SHEET	7 OF 22 SHEETS

SW-4
PHASE II EROSION AND
SEDIMENTATION CONTROL PLAN

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR ESTIMATED PROJECT SCHEDULE.

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION EXITS												
TEMPORARY CONTROL MEASURES												
SEDIMENT CONTROL BASIN(S)/TRAP(S)												
STRIP & STOCKPILE TOPSOIL												
ROUGH GRADING												
STORM FACILITIES												
SITE CONSTRUCTION												
FINISH GRADING												
PERMANENT CONTROL STRUCTURES												
FOUNDATION / BUILDING CONSTRUCTION												
LANDSCAPING/SEED/FINAL STABILIZATION												

1) CONTRACTOR MUST COMPLETE TABLE WITH ESTIMATED DATES OR PROJECT ACTIVITIES PRIOR TO BMP CERTIFICATION.
2) TIME SCHEDULE MUST COINCIDE WITH THE SWPPP IMPLEMENTATION SEQUENCE.

SOURCE BOX
LAST REVISED: APRIL 30, 2011
WAL-MART STANDARD DETAIL

ACREAGE SUMMARY
(IN ACRES)

1	SAM'S PROPERTY AREA	16.79
2	PERMITTED AREA WITHIN SAM'S PROPERTY	2.75
3	PERMITTED AREA OUTSIDE OF SAM'S PROPERTY	0.25
4	TOTAL PERMITTED PROJECT AREA	3.00
5	IMPERVIOUS AREA BEFORE PROJECT	1.00
6	IMPERVIOUS AREA AT COMPLETION	2.00
7	PERVIOUS AREA AT COMPLETION	1.00

SOURCE BOX
LAST REVISED: JUNE 2013
WAL-MART STANDARD DETAIL

OFF-SITE RUN-ON SUMMARY

OFF-SITE DRAINAGE AREA	FLOW (QFS)	AREA (ACRES)	AVERAGE SLOPE	MAXIMUM SLOPE	COVER TYPE
AREA "1"	77	15	2.00%	33%	PAVED/GRASSED

SOURCE BOX
LAST REVISED: JUNE 2012
WAL-MART STANDARD DETAIL

SITE SOILS SUMMARY

SOIL TYPE AND TEXTURE:	PER THE PROJECT GEOTECHNICAL EXPLORATION, SOILS ACROSS THE SITE GENERALLY CONSIST OF SILTY CLAYS OVERLYING SANDS.
AVERAGE DEPTH OF TOPSOIL:	9" PER PROJECT GEOTECHNICAL EXPLORATION.
AVERAGE DEPTH TO GROUNDWATER:	15 FEET PER PROJECT GEOTECHNICAL EXPLORATION.

NOTE: THE ABOVE SOILS INFORMATION IS FOR INFORMATION ONLY AND SHOULD NOT BE USED FOR BIDDING PURPOSES, CONSTRUCTION COSTS OR ESTIMATING.

SOURCE BOX
LAST REVISED: JUNE 2012
WAL-MART STANDARD DETAIL

RUNOFF COEFFICIENT SUMMARY

PRE-CONSTRUCTION SCS TR-55 CURVE NUMBER:	CN = 63
POST-CONSTRUCTION SCS TR-55 CURVE NUMBER:	CN = 86

SOURCE BOX
LAST REVISED: JUNE 2012
WAL-MART STANDARD DETAIL

SITE LOCATION SUMMARY

ADDRESS:	4850 ENCORE DRIVE, MT. PLEASANT, MICHIGAN 48058
CENTER OF SITE:	
LATITUDE:	43°34'12" N (43.570024° N)
LONGITUDE:	84°45'32" W (84.758772° W)
ADJACENT SURROUNDING PROPERTIES:	WEST, NORTH AND EAST: COMMERCIAL DEVELOPMENT SOUTH: ENCORE DRIVE FOLLOWED BY A REGIONAL STORMWATER RETENTION POND.

SOURCE BOX
LAST REVISED: JUNE 2012
WAL-MART STANDARD DETAIL

SITE TOPOGRAPHY SUMMARY

LOWEST ELEVATION OF PROJECT SITE:	789
HIGHEST ELEVATION OF PROJECT SITE:	794
PERCENT SLOPE VARIATION:	SLOPES ACROSS THE SITE VARY FROM 1% IN PAVED AREAS TO 33% IN GRASSED SLOPE AREAS.
TOPOGRAPHY CHANGES:	DUE TO THE SITE BEING IN AN EXISTING COMMERCIALY DEVELOPED AREA, TOPOGRAPHY ACROSS THE SITE WILL REMAIN RELATIVELY UNCHANGED WITH MINIMAL CUT/FILL OPERATIONS REQUIRED.
VEGETATION:	ALL VEGETATIVE AREAS REMOVED FROM THE SITE DURING CONSTRUCTION WILL BE REPLACED WITH IMPERVIOUS AREA OR RE-VEGETATED UPON COMPLETION OF GRADING ACTIVITIES
AVERAGE SLOPE:	EXISTING SLOPES ACROSS THE SITE RANGE FROM 1% TO 33%

SOURCE BOX
LAST REVISED: JUNE 2013
WAL-MART STANDARD DETAIL

SITE RAINFALL SUMMARY

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
AVERAGE RAINFALL IN INCHES	1.74	1.38	1.99	2.71	2.99	3.06	2.78	3.01	3.10	2.56	2.23	1.64

THE TOTAL AVERAGE ANNUAL RAINFALL FOR THE PROJECT AREA IS: 29.18 INCHES
THE DESIGN RAIN EVENT FOR THE PROJECT IS: 2 YEAR, 24 HOUR RAIN EVENT: 2.4 INCHES

SOURCE BOX
LAST REVISED: JUNE 2012
WAL-MART STANDARD DETAIL

DEVELOPER/OWNER
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MAIL STOP 0505
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BENTONVILLE, AR 72716-0505
(479) 204-3314
SITE OPERATOR/GENERAL CONTRACTOR:

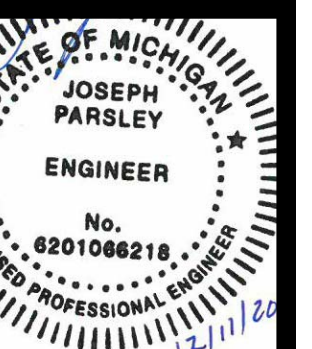
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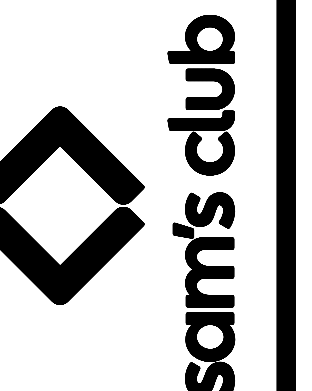
SW-5
EROSION CONTROL DETAILS

REVISIONS	BY

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7088 LEDGESTONE COMMONS
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SAM'S CLUB #4982-211
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2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	NTS
JOB No.	4982-211
SHEET	8 OF 22 SHEETS

PERFORMANCE STANDARDS

NOTES:

- THE GC SHALL IDENTIFY MASONS' AREA WITH LEGIBLE SIGNAGE ON THE SITE. TO THE EXTENT PRACTICAL, ALL MASONRY TOOLS, MATERIAL, INCLUDING SAND AND SACKED CEMENT AND/OR MORTAR MATERIALS, MIX, AND EQUIPMENT SHALL BE LOCATED WITHIN THE AREA IDENTIFIED. MATERIALS VULNERABLE TO WEATHER ELEMENTS SHALL BE STORED IN CONTAINERS AT THE END OF EACH WORK DAY; SUCH MATERIALS SHALL REMAIN STORED IN CONTAINERS WHEN NOT IN USE.
- RUNOFF CONTROL, SUCH AS DIVERSION BERMS, SILT FENCE, SILT DIKE, OR OTHER MEANS OF CONTAINMENT SHALL BE PROVIDED TO PREVENT THE MIGRATION OF STORMWATER POLLUTANTS FROM THE MASONS' AREA. COVERED RECEPTACLES FOR DEBRIS AND TRASH DISPOSAL SHALL ALSO BE PROVIDED.
- THE MASONS' AREA SHALL MEET OSHA AND OTHER REGULATORY REQUIREMENTS FOR PERSONAL PROTECTIVE EQUIPMENT (PPE), FIRE EXTINGUISHERS, ETC. GC SHALL PROVIDE SCREENING OR OTHER TECHNOLOGIES FOR MASONS' AREA TO PREVENT AIRBORNE TRANSPORT OF CEMENT DUST AND OTHER PARTICULATES DUE TO HIGH SPEED WIND OR OTHER CONDITIONS. THE LOCATION OF THE MASONS' AREA SHALL BE SHOWN ON THE SITE MAPS.

MA MASONS' AREA

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- IMPORTANT: GC SHALL NOT APPLY FLOCCULANTS WITHOUT PREVIOUS REVIEW AND WRITTEN CONFIRMATION BY CEC.
- FLOCCULANTS SHALL BE USED AS FAR UPSTREAM OF BASINS, TRAPS, TANKS, OR OTHER WATER CONTAINMENT AREAS AS POSSIBLE. THE EFFECTIVENESS OF FLOCCULANTS DEPENDS ON THE TRAVEL TIME AND AGITATION OF THE WATER, FOR PROPER MIXING.
- ALL SEDIMENTATION/SETTLING MUST OCCUR WITHIN THE LOD, THAT IS, VELOCITY OF FLOW IN WATER CONTAINMENT SHALL BE NEAR ZERO, AND THE TIME OF RESIDENCE AS LONG AS POSSIBLE.
- FLOC BLOCKS, FLOCCULANT-IMPREGNATED WATTLES, AND ANY OTHER CONTROL MEASURES WHICH SUPPLY FLOCCULANTS MUST BE REGULARLY INSPECTED AND MAINTAINED, AS ARE ALL OTHER CONTROL MEASURES.
- STANDARD EROSION AND SEDIMENT CONTROLS ARE REQUIRED BOTH PRIOR TO AND AFTER CHEMICAL TREATMENT IN ACCORDANCE WITH THE SWPPP PLANS.

CES CHEMICALLY-ENHANCED SETTLING PASSIVE TREATMENT SYSTEMS

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2012

NOTES:

- SUBSTANCES THAT HAVE THE POTENTIAL FOR POLLUTING SURFACE AND/OR GROUNDWATER MUST BE CONTROLLED BY ANY MEANS NECESSARY TO ENSURE THAT THOSE DO NOT DISCHARGE FROM THE SITE. IN THIS REGARD, POTENTIALLY POLLUTING SUBSTANCES SHALL BE STORED AND HANDLED IN A MANNER CONSISTENT WITH THE RISK OF IMPACT THOSE REPRESENT, AND ACCORDING WITH THE REGULATIONS.
- NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS: 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. THE CONTAINERS SHALL BE HAULED AWAY FROM THE SITE AND EMPTIED WHEN THOSE BECOME 95% FULL, OR AS NECESSARY, BY A CERTIFIED TRASH DISPOSAL SERVICE. LIDS OR COVERS FOR THE CONTAINERS SHALL BE PROVIDED FOR USE DURING RAIN EVENTS TO PREVENT WASTE CONTACT WITH STORMWATER. WASTES THAT CANNOT BE STORED IN A CONTAINER MUST BE STORED UNDER COVER OR INDOORS. THE LOCATION OF SOLID WASTE RECEPTACLES SHALL BE SHOWN ON THE SITE MAPS.

SWD SOLID WASTE DISPOSAL

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- CONTRACTOR SHALL PROVIDE DESIGNATED LOCATION FOR SORTING AND SEPARATING HAZARDOUS WASTES.
- HAZARDOUS WASTE STORAGE MUST BE PROTECTED FROM WEATHER ELEMENTS AND HAVE RESTRICTED ACCESS.
- HAZARDOUS WASTE STORAGE MUST COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- HAZARDOUS WASTE STORAGE MUST COMPLY WITH CONTRACT DOCUMENTS.

HWD HAZARDOUS WASTE DISPOSAL

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- PROVIDE WASH STATION IN A LOCATION PROTECTED FROM WEATHER ELEMENTS.
- COLLECT ALL USED WASH WATER AND DISPOSE OF IT PROPERLY.
- PROVIDE ADEQUATE SUPPLY OF WATER AND ANY OTHER SUPPLIES TO ENSURE PROPER OPERATION OF WASH STATION WHEN NEEDED.

PSW PAINT AND STUCCO WASHOUT

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- VERIFY WITH CEC WHICH DISCHARGES FROM DEWATERING ACTIVITIES ARE ALLOWED OR ARE NOT ALLOWED NON-STORMWATER DISCHARGES UNDER THE GENERAL PERMIT AND OTHER REGULATIONS. OBTAIN ALL DEWATERING PERMITS AND AUTHORIZATIONS REQUIRED BY STATE AND LOCAL REGULATIONS. SEE THE REQUIRED DEWATERING PERMITS AND AUTHORIZATIONS TABLE BELOW. GC MUST COMPLETE COLUMNS 3 AND 4.
- GC MUST WANT TO HAVE WRITTEN COPY OF ALL REQUIRED DEWATERING PERMITS AND AUTHORIZATIONS BEFORE PERFORMING DEWATERING ACTIVITIES.
- DISCHARGES FROM DEWATERING OPERATIONS MUST BE DIRECTED THROUGH AN APPROPRIATE POLLUTION PREVENTION/TREATMENT SYSTEM OF CONTROL MEASURES, SUCH AS A SEDIMENT/FILTER BAG, SEDIMENT TRAP OR SEDIMENT BASIN, AND OTHERS, AS NEEDED, PRIOR TO BEING DISCHARGED FROM THE SITE OR INTO A WATER BODY OF THE STATE. UNDER NO CIRCUMSTANCES ARE DISCHARGES FROM DEWATERING OPERATIONS TO BE DISCHARGED DIRECTLY INTO SANITARY SEWER SYSTEMS, STREAMS, RIVERS, LAKES OR OTHER AREAS BEYOND THE PERMITTED PROJECT AREA. LIKEWISE, DISCHARGES INTO STORM SEWER SYSTEMS THAT DO NOT DRAIN TO A SUITABLE ON-SITE TREATMENT FACILITY, SUCH AS A BASIN, ARE ALSO PROHIBITED. DISCHARGES FROM DEWATERING OPERATIONS MUST ALSO BE CONDUCTED IN A MANNER SUFFICIENT TO PREVENT EROSION FROM THE DISCHARGE RUNOFF.
- IN SEDIMENT TRAP OR BASIN OR POND DEWATERING OPERATIONS, WATER MUST ONLY BE REMOVED FROM THE SURFACE OF THE CONTAINED WATER. A SKIMMER OR SIMILAR FLOATING DEVICE MUST BE USED, TO ONLY REMOVE THE WATER OF THE SURFACE.
- DO NOT DISCHARGE ON A SLOPE GREATER THAN THREE PERCENT NOR WITHIN 20 FEET OF A SURFACE WATER BODY.
- DEWATERING SHALL NOT OCCUR DURING OR IMMEDIATELY AFTER PRECIPITATION EVENTS, BUT EXCEPTIONS SHALL BE EVALUATED ON CASE BY CASE BASIS. CONTACT THE CEC AND RECEIVE WRITTEN APPROVAL.

REQUIRED DEWATERING PERMITS AND AUTHORIZATIONS			
1	2	3	4
GOVERNING AGENCY	PERMIT NAME/TYPE	PERMIT NO. (GC TO COMPLETE)	DATE PERMIT WAS ISSUED BY AGENCY (GC TO COMPLETE)
DEWATERING ACTIVITIES FOR THIS PROJECT ARE RESTRICTED UNDER THE NPDES AUTHORIZATION AND THE CONDITIONS OF THE GENERAL PERMIT			

DW DEWATERING

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2012

NOTES:

- ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. PORTABLE TOILETS MUST BE LOCATED AT LEAST 30 FEET FROM INLETS, CHANNELS, SWALES, OR PERMITTED LIMITS OF DISTURBANCE, AND MUST BE LOCATED AT LEAST 50 FEET FROM WATERS OF THE STATE, OR WATERS OF THE U.S. PORTABLE TOILETS MUST BE SECURELY ANCHORED AND/OR TIED DOWN. SECONDARY CONTAINMENT SHALL BE PROVIDED AND FULL CAPACITY SHALL BE RESTORED IMMEDIATELY UPON DISCOVERY OF ITS DIMINISHMENT. THE LOCATION OF SANITARY FACILITIES SHALL BE SHOWN ON THE SITE MAPS.

SAF SANITARY FACILITIES

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

TP TEMPORARY PARKING

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- THE GC SHALL DESIGNATE AREAS ON THE SITE MAPS FOR EQUIPMENT CLEANING, MAINTENANCE, AND REPAIR. THE GC AND SUBCONTRACTORS SHALL UTILIZE SUCH DESIGNATED AREAS, CLEANING, MAINTENANCE, AND REPAIR AREAS SHALL BE PROTECTED BY A TEMPORARY PERIMETER BERM, SHALL NOT OCCUR WITHIN 150 FEET OF ANY WATERWAY, WATER BODY OR WETLAND, AND SHALL OCCUR IN AREAS LOCATED AS FAR AS PRACTICAL FROM STORM SEWER INLETS. DRIP PANS SHALL BE USED FOR VEHICLE MAINTENANCE ACTIVITIES AND RESULTANT WASTES SHALL BE DISPOSED OF IN ACCORDANCE WITH THE HAZARDOUS MATERIAL MANAGEMENT AND SPILL REPORTING PLAN NOTES INCLUDED ON THIS PLAN SHEET.
- USE OF DETERGENTS FOR LARGE SCALE WASHING IS PROHIBITED (FOR EXAMPLE, WASHING VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.). ALL WASH WATER SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

EMA EQUIPMENT AND VEHICLE CLEANING AND MAINTENANCE AREAS

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- ALL ON-SITE TOPSOIL MUST BE PRESERVED FOR REUSE ON THE SITE DURING REVEGETATION, UNLESS IT IS INFEASIBLE OR UNREASONABLE TO DO SO. (NOTE: TOPSOIL STOCKPILING ON-SITE MAY BE INFEASIBLE IF SPACE IS NOT AVAILABLE ON-SITE FOR TOPSOIL STOCKPILING OR IF LITTLE TO NO VEGETATION IS TO REMAIN UNDER POST CONSTRUCTION CONDITIONS. STOCKPILING OF TOPSOIL AT AN OFF-SITE LOCATION OR TRANSFER OF TOPSOIL TO OTHER LOCATIONS MAY ALSO BE ACCEPTABLE BUT MUST BE AUTHORIZED BY THE CEC).
- ALL SOIL STOCKPILES MUST BE STABILIZED TO PREVENT EROSION AND FUGITIVE DUST. THE SURFACE OF THE STOCKPILE MUST BE PROPERLY PROTECTED TO ELIMINATE THE RISK OF EROSION. SEE TEMPORARY SEEDING OR STABILIZATION DETAIL. SUITABLE ALTERNATIVE MEANS OF STABILIZATION CAN BE USED, SUCH AS PROPERLY ANCHORED PLASTIC TARPS.
- PERIMETER SEDIMENT CONTROLS ALSO MUST BE INSTALLED AT STOCKPILE LOCATIONS TO PREVENT CONTACT WITH STORMWATER, INCLUDING RUN-ON.
- STOCKPILES MUST BE LOCATED OUTSIDE OF ANY VEGETATED BUFFER AREAS AND SHALL BE LOCATED AS FAR AS PRACTICABLE FROM STORMWATER CONVEYANCES AND IMPOUNDMENTS AND WATER BODIES.
- STOCKPILE LOCATIONS SHALL BE NOTED ON THE SITE MAPS.

SP STOCKPILES

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2012

NOTES:

- LARGE AREAS OF SOIL THAT ARE DENuded OF VEGETATION AND HAVE NO PROTECTION FROM PARTICLES BEING PICKED UP AND CARRIED BY WIND SHALL BE PROTECTED WITH A TEMPORARY COVER OR KEPT UNDER CONTROL WITH WATER OR OTHER SOIL ADHERING PRODUCTS TO PREVENT SOIL PARTICLES FROM BECOMING AIRBORNE, AND FROM EXITING THE SITE PERIMETER.
- WATER TRUCKS OR OTHER DUST CONTROL AGENTS SHALL BE USED AS NEEDED DURING CONSTRUCTION TO MINIMIZE DUST GENERATED ON THE SITE. TACKIFIERS MAY BE USED TO HOLD SOIL IN PLACE AND PREVENT DUST. MANUFACTURER RECOMMENDATIONS FOR APPLICATION LOCATIONS AND RATES MUST BE USED FOR DUST CONTROL APPLICATION. ONLY SWPPP-SPECIFIED TACKIFIERS MAY BE USED ON THE PROJECT SITE; ANY CHEMICAL APPLICATION NOT INCLUDED IN THE SWPPP MUST BE APPROVED, IN WRITING, BY THE CEC.
- DUST CONTROL MUST BE PROVIDED BY THE GC TO A DEGREE THAT IT IS IN COMPLIANCE WITH APPLICABLE FEDERAL, LOCAL, AND STATE DUST CONTROL REGULATIONS.
- THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- IN ADDITION TO BMPs, GC SHALL PERFORM PER PRACTICES AND PROCEDURES WHICH MINIMIZE AND PREVENT AIRBORNE DUST OR OTHER PARTICLES FROM OCCURRING.

DC DUST CONTROL

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2012

NOTES:

- MATERIAL STORAGE AREAS SHALL BE LOCATED, WHEN POSSIBLE, TO MINIMIZE EXPOSURE TO WEATHER. INSPECTIONS SHALL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM OR DISCHARGING FROM THE SITE. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVERS MUST BE REPAIRED OR SUPPLEMENTED. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS. GC SHALL ADHERE TO ALL STATE AND LOCAL REGULATIONS PERTAINING TO MATERIAL STORAGE AREAS.
- CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC MATERIALS MUST BE STORED IN WATERPROOF CONTAINERS. EXCEPT DURING APPLICATION, THE CONTAINERS AND THE CONTENTS MUST BE KEPT IN TRUCKS OR INSIDE OF STORAGE FACILITIES. RUNOFF CONTAINING SUCH MATERIAL MUST BE COLLECTED, REMOVED FROM THE SITE, TREATED, AND DISPOSED OF AT AN APPROVED SOLID WASTE AND CHEMICAL DISPOSAL FACILITY.

MLSA MATERIAL LAYDOWN AND STORAGE AREA

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- CONCRETE WASTE MANAGEMENT PERTAINS TO WASTE FROM CONCRETE READY-MIX TRUCKS, MASONRY OPERATIONS, AND SIMILAR WASTE.
- WASTEWATER FROM WASHOUT OF CONCRETE IS PROHIBITED BY THE GENERAL PERMIT UNLESS MANAGED BY AN APPROPRIATE CONTROL. THE GENERAL CONTRACTOR SHALL ENSURE THAT APPROPRIATE BMP'S ARE IN PLACE PRIOR TO ANY DISCHARGE OF WASTEWATER AS A RESULT OF CONCRETE WASHOUT ACTIVITIES.
- DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS IS ALLOWED AT THE CONSTRUCTION SITE. ONLY COMMERCIALLY AVAILABLE ABOVE GROUND PORTABLE CONCRETE WASHOUT CONTAINERS ARE ALLOWED AND MUST BE PROTECTED FROM VEHICLE TRAFFIC AND CLEARLY IDENTIFIED BY LEGIBLE SIGNAGE, AND MUST BE LOCATED OUTSIDE OF VEGETATED BUFFERS AND AS FAR AS PRACTICABLE FROM STORMWATER CONVEYANCES AND IMPOUNDMENTS AND WATER BODIES. PORTABLE CONCRETE WASHOUT CONTAINERS SHALL CONTAIN AND/OR ACTIVELY MANAGE BOTH, SOLID AND FLUID, COMPONENTS OF THE MIX. CONCRETE WASHOUT CONTAINERS MUST BE CLEANED OR EXCHANGED WHEN THE REMAINING VOLUME IS REDUCED BY 85% TO PREVENT ANY POTENTIAL OVERFLOW IN A STORM EVENT.
- ALTERNATIVELY, WASTE CONCRETE CAN BE PLACED INTO FORMS TO MAKE RIP RAP AND/OR OTHER USEFUL CONCRETE PRODUCTS. PORTABLE CONCRETE WASHOUT CONTAINERS SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE GC IS RESPONSIBLE FOR ASSURING THAT THESE PROCEDURES, APPLICABLE LAWS, AND ENVIRONMENTAL REGULATIONS ARE FOLLOWED. THE LOCATION OF CONCRETE WASHOUT CONTAINERS SHALL BE SHOWN ON THE SITE MAPS.

CW CEMENT AND CONCRETE WASHOUT

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- THE GC SHALL IDENTIFY FUELING AREAS WITH LEGIBLE SIGNAGE ON THE SITE. TEMPORARY ON-SITE FUEL TANKS FOR CONSTRUCTION VEHICLES SHALL MEET ALL LOCAL, STATE AND FEDERAL REGULATIONS. ALL TANKS, SINGLE AND DOUBLE WALLED, SHALL BE PROVIDED WITH SECONDARY CONTAINMENT (THAT IS CONTAINMENT EXTERNAL TO AND SEPARATE FROM PRIMARY CONTAINMENT). TANKS SHALL HAVE APPROVED SPILL CONTAINMENT WITH THE CAPACITY REQUIRED BY THE APPLICABLE REGULATIONS. SECONDARY CONTAINMENT SHALL BE CONSTRUCTED OF MATERIALS OF SUFFICIENT THICKNESS, DENSITY, AND COMPOSITION SO AS NOT TO BE STRUCTURALLY WEAKENED AS A RESULT OF CONTACT WITH THE FUEL STORED AND CAPABLE OF CONTAINING DISCHARGED FUEL FOR A PERIOD OF TIME EQUAL TO OR LONGER THAN THE MAXIMUM ANTICIPATED TIME SUFFICIENT TO ALLOW RECOVERY OF DISCHARGED FUEL. IT SHALL BE CAPABLE OF CONTAINING 110% OF THE VOLUME OF THE PRIMARY TANK IF A SINGLE TANK IS USED, OR IN THE CASE OF MULTIPLE TANKS, 150% OF THE LARGEST TANK OR 110% OF THE AGGREGATE, WHICHEVER IS LARGER.
- THE TANKS SHALL BE IN SOUND CONDITION, FREE OF RUST OR OTHER DAMAGE WHICH MIGHT COMPROMISE CONTAINMENT. FUEL STORAGE AREAS SHALL MEET ALL EPA, OSHA AND OTHER REGULATORY REQUIREMENTS FOR SIGNAGE, FIRE EXTINGUISHERS, ETC. HOSES, VALVES, FITTINGS, CAPS, FILLER NOZZLES, AND ASSOCIATED HARDWARE SHALL BE MAINTAINED IN PROPER WORKING CONDITION AT ALL TIMES. TANKS SHALL BE LOCATED TO MINIMIZE EXPOSURE TO WEATHER AND SURFACE WATER DRAINAGE FEATURES. THE LOCATION OF FUEL TANKS SHALL BE SHOWN ON THE SITE MAPS.
- A SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN MUST BE DEVELOPED IF ABOVEGROUND OIL STORAGE CAPACITY AT THE CONSTRUCTION SITE EXCEEDS 1,320 GALLONS OR AS SPECIFIED BY STATE.
- CONTAINERS WITH A STORAGE CAPACITY OF LESS THAN 55-GALLONS ARE NOT INCLUDED WHEN CALCULATING SITE STORAGE CAPACITY. THE GC SHALL WORK WITH THE CEC TO DEVELOP AND IMPLEMENT A SPCC PLAN IN ACCORDANCE WITH THE OIL POLLUTION PREVENTION REGULATION AT TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PART 112, (40 CFR 112).

FPSU FUEL AND PETROLEUM STORAGE AND USE

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

- USING WATER FROM BASINS, TRAPS, TANKS, OR OTHER WATER CONTAINMENT AREAS FOR IRRIGATION MINIMIZES DISCHARGES FROM THE SITE AND IT MAY SATISFY OTHER NEEDS OF THE CONSTRUCTION PROJECT, SUCH AS DUST CONTROL, VEGETATIVE ESTABLISHMENT, ETC.
- CARE SHALL BE TAKEN THAT WATER UTILIZED FROM CONTAINMENT AREAS ON-SITE FOR CONSTRUCTION PURPOSES DOES NOT DISCHARGE OFF-SITE. IF DISCHARGE IS ANTICIPATED OR OBSERVED, DEWATERING PROCEDURES STATED IN THE DEWATERING DETAIL MUST BE FOLLOWED.
- GC SHALL IMPLEMENT IRRIGATION OR DISPERSION AS PRACTICABLE TO REDUCE WATER VOLUME IN IMPOUNDMENTS AND TO FOSTER VEGETATION GROWTH.

ID IRRIGATION OR DISPERSION

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2012

NOTES:

- STORM DRAIN INLET PROTECTION MEASURES SHALL PREVENT SOIL AND DEBRIS FROM ENTERING STORM DRAIN INLETS.
- TEMPORARY CONTROLS SHALL BE CONSTRUCTED BEFORE THE SURROUNDING AREA IS DISTURBED.
- TO PREVENT CLOGGING, STORM DRAIN CONTROL STRUCTURES MUST BE MAINTAINED FREQUENTLY.
- CHECK ALL TEMPORARY CONTROL MEASURES DAILY, AND AFTER EACH STORM EVENT.
- CONTROL MEASURES MUST BE BUILT PER DETAIL AND PLANS, AND MUST BE IN GOOD WORKING CONDITION AT ALL TIMES.

IP INLET PROTECTION

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

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FPSU FUEL AND PETROLEUM STORAGE AND USE

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

NOTES:

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- USE OF DETERGENTS FOR LARGE SCALE WASHING IS PROHIBITED (FOR EXAMPLE, WASHING VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.). ALL WASH WATER SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

EMA EQUIPMENT AND VEHICLE CLEANING AND MAINTENANCE AREAS

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

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EMA EQUIPMENT AND VEHICLE CLEANING AND MAINTENANCE AREAS

SOURCE BOX

LAST REVISED: WAL-MART STANDARD DETAIL
JUNE 2013

DEVELOPER/OWNER
SAM'S REAL ESTATE BUSINESS TRUST
MAIL STOP 0505
702 S.W. 8TH STREET
BENTONVILLE, AR 72716-0505
(479) 204-3314
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

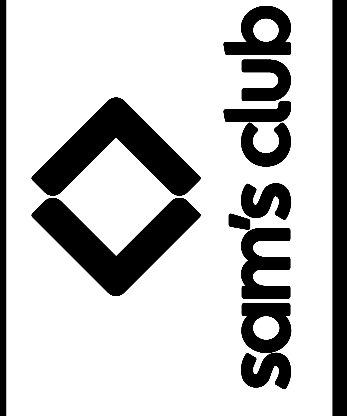
SW-6
EROSION CONTROL DETAILS

REVISIONS	BY

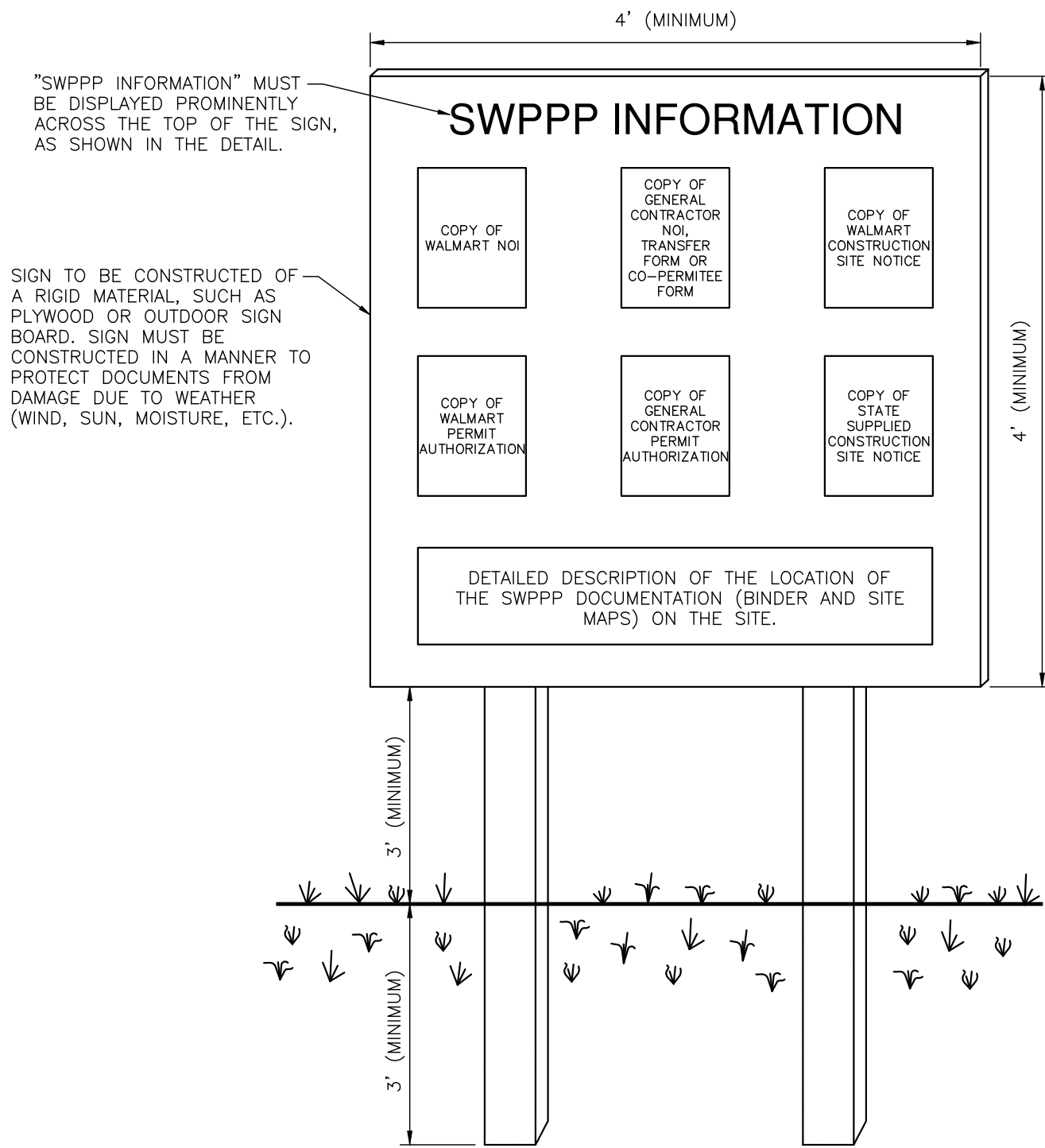
CARLSON CONSULTING ENGINEERS, INC.
7086 LEDGERSTONE COMMONS
PH. (801) 384-0000 • FX. (801) 384-0710

JOSEPH PARBLEY
ENGINEER
No. 6201066218
LICENSED PROFESSIONAL ENGINEER

SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



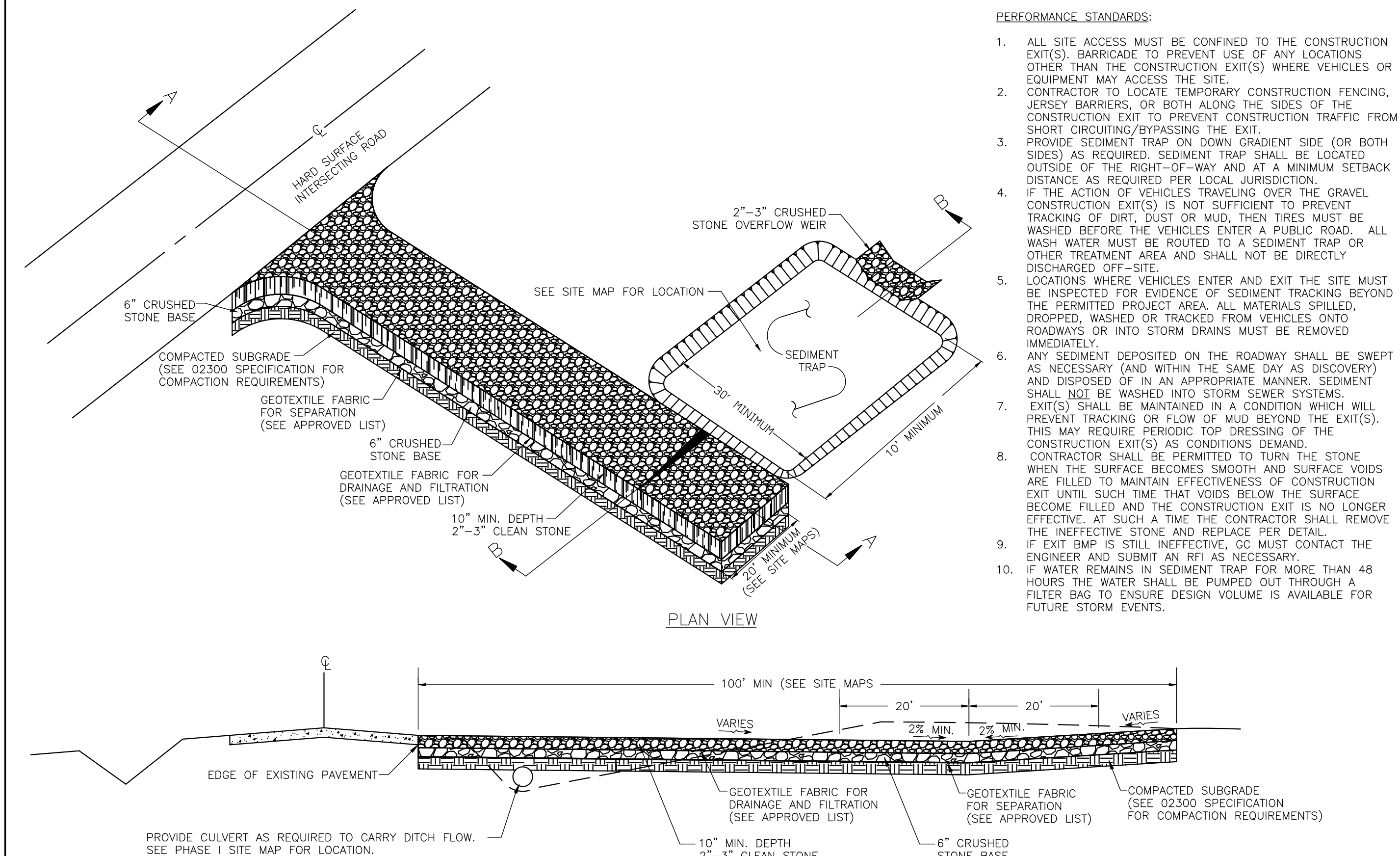
DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	NTS
JOB No.	4982-211
SHEET	9 OF 22 SHEETS



- NOTES:
1. THE SWPPP INFORMATION SIGN MUST BE LOCATED IN A PROMINENT, PUBLICLY ACCESSIBLE LOCATION NEAR THE MAIN ENTRANCE OF THE SITE, SUCH THAT THE DOCUMENTATION CAN BE READ WITHOUT ACCESSING THE JOBSITE, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A TRAFFIC SAFETY HAZARD.
 2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
 3. ALL PAGES OF NOTICES OF INTENT AND PERMIT AUTHORIZATIONS MUST BE POSTED. THE CONTRACTOR MAY UTILIZE ACCESSIBLE WATERPROOF FOLDERS TO STORE THESE DOCUMENTS IF IT WILL BE DIFFICULT TO POST ALL PAGES INDIVIDUALLY.
 4. CONTRACTOR SHALL POST OTHER STORMWATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCIES.
 5. SUBSEQUENT PERMIT MODIFICATION REQUESTS OR RENEWAL APPLICATIONS AND THEIR ASSOCIATED AUTHORIZATIONS OR RESPONSES SHALL BE POSTED ON THE SWPPP SIGN.
 6. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
 7. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

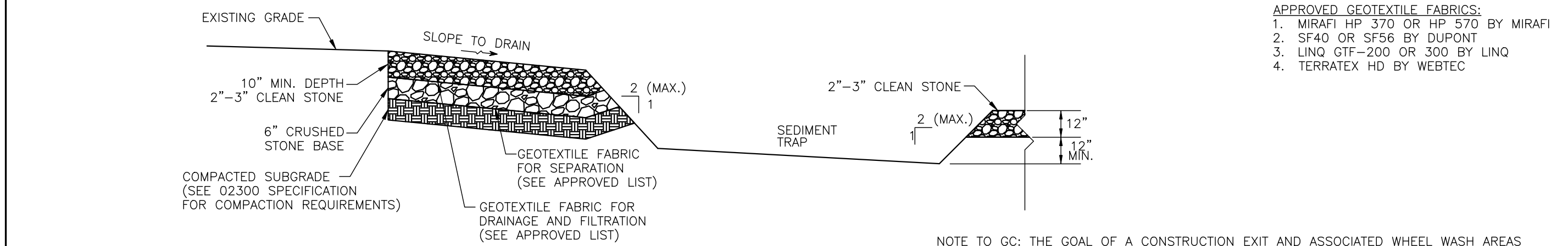
SS SWPPP INFORMATION SIGN
N.T.S.

LAST REVISED:	SOURCE BOX
JUNE 2012	WAL-MART STANDARD DETAIL



- PERFORMANCE STANDARDS:
1. ALL SITE ACCESS MUST BE CONFINED TO THE CONSTRUCTION EXIT(S). BARRICADE TO PREVENT USE OF ANY LOCATIONS OTHER THAN THE CONSTRUCTION EXIT(S) WHERE VEHICLES OR EQUIPMENT MAY ACCESS THE SITE.
 2. CONTRACTOR TO LOCATE TEMPORARY CONSTRUCTION FENCING, JERSEY BARRIERS, OR BOTH ALONG THE SIDES OF THE CONSTRUCTION EXIT TO PREVENT CONSTRUCTION TRAFFIC FROM SHORT CIRCUITING/BYPASSING THE EXIT.
 3. PROVIDE SEDIMENT TRAP ON DOWN GRADIENT SIDE (OR BOTH SIDES) AS REQUIRED. SEDIMENT TRAP SHALL BE LOCATED OUTSIDE OF THE RIGHT-OF-WAY AND AT A MINIMUM SETBACK DISTANCE AS REQUIRED PER LOCAL JURISDICTION.
 4. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION EXIT(S) IS NOT SUFFICIENT TO PREVENT TRACKING OF DIRT, DUST OR MUD, THEN TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. ALL WASH WATER MUST BE ROUTED TO A SEDIMENT TRAP OR OTHER TREATMENT AREA AND SHALL NOT BE DIRECTLY DISCHARGED OFF-SITE.
 5. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF SEDIMENT TRACKING BEYOND THE PERMITTED PROJECT AREA. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
 6. ANY SEDIMENT DEPOSITED ON THE ROADWAY SHALL BE SWEEP AS NECESSARY (AND WITHIN THE SAME DAY AS DISCOVERY) AND DISPOSED OF IN AN APPROPRIATE MANNER. SEDIMENT SHALL NOT BE WASHED INTO STORM SEWER SYSTEMS. EXIT(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD BEYOND THE EXIT(S). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXIT(S) AS CONDITIONS DEMAND.
 7. CONTRACTOR SHALL BE PERMITTED TO TURN THE STONE WHEN THE SURFACE BECOMES SMOOTH AND SURFACE VOIDS ARE FILLED TO MAINTAIN EFFECTIVENESS OF CONSTRUCTION EXIT UNTIL SUCH TIME THAT VOIDS BELOW THE SURFACE BECOME FILLED AND THE CONSTRUCTION EXIT IS NO LONGER EFFECTIVE. AT SUCH A TIME THE CONTRACTOR SHALL REMOVE THE INEFFECTIVE STONE AND REPLACE PER DETAIL.
 8. IF EXIT BMP IS STILL INEFFECTIVE, GC MUST CONTACT THE ENGINEER AND SUBMIT AN RFI AS NECESSARY.
 9. IF WATER REMAINS IN SEDIMENT TRAP FOR MORE THAN 48 HOURS THE WATER SHALL BE PUMPED OUT THROUGH A FILTER BAG TO ENSURE DESIGN VOLUME IS AVAILABLE FOR FUTURE STORM EVENTS.

SECTION A-A



SECTION B-B

NOTE TO GC: THE GOAL OF A CONSTRUCTION EXIT AND ASSOCIATED WHEEL WASH AREAS IS TO ELIMINATE TRACK OUT. SIMPLY MANAGING TRACK OUT THROUGH DESIGNATED OR CONTINUAL STREET SWEEPING IS NOT AN ACCEPTABLE PRACTICE. WHILE STREET SWEEPING IS AN ACCEPTABLE PRACTICE FOR REMOVING DUST AND MINIMAL AMOUNTS OF FINE SEDIMENT, OBSERVABLE TRACK OUT FROM THE PROJECT SHALL TRIGGER THE USE OF ADDITIONAL MEASURES (WHEEL WASH), CONSIDERATION OF ALTERNATE EXITS, OR DISCONTINUING VEHICLE TRAFFIC UN-ON-SITE HAVE IMPROVED. TRACK OUT IS A SEDIMENT RELEASE. ALL SEDIMENT RELEASES MUST BE REPORTED TO THE SWCT VIA THE ONLINE CRITICAL INCIDENT REPORT.

LAST REVISED:	SOURCE BOX
OCTOBER 2013	WAL-MART STANDARD DETAIL

CE CONSTRUCTION EXIT
N.T.S.

- NOTES:
1. CONSIDERATION MUST BE GIVEN TO ANTICIPATED CLIMATE AND SEASONAL CONDITIONS WHEN PLANTING SEED.
 2. SEED SHALL BE FREE OF WEEDY SPECIES AND APPROPRIATE FOR SITE SOILS AND REGIONAL CLIMATE. SEED AND MULCH PER THE CONSTRUCTION DRAWINGS AND THE 02900 PLANTING SPECIFICATION IMMEDIATELY AFTER TOPSOIL IS APPLIED AND FINAL GRADE IS REACHED.
 3. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OTHER LANDSCAPING COVER (STONE, MULCH, ETC.), OR HAVE A STAND OF GRASS WITH A MINIMUM OF 70 PERCENT DENSITY OVER THE ENTIRE VEGETATED AREA, OR GREATER IN ACCORDANCE WITH THE GENERAL PERMIT REQUIREMENTS.
 4. VEGETATED AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS REQUIREMENT.
 5. THE VEGETATIVE DENSITY MUST BE MAINTAINED THROUGH PROJECT COMPLETION TO BE CONSIDERED STABILIZED. AREAS PROTECTED BY EROSION CONTROL BLANKETS ARE NOT PERMANENTLY STABILIZED UNTIL THE APPLICABLE GENERAL PERMIT REQUIREMENT FOR FINAL VEGETATIVE DENSITY IS ACHIEVED.
 6. RIP-RAP, MULCH, GRAVEL, DECOMPOSED GRANITE OR OTHER EQUIVALENT PERMANENT STABILIZATION MEASURES MAY BE EMPLOYED IN LIEU OF VEGETATION BASED ON SITE-SPECIFIC CONDITIONS, DESIGN AND GOVERNING AUTHORITY APPROVAL.
 7. ALL SEED AREAS SHALL BE INSPECTED REGULARLY TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED.

SVR SEEDING/VEGETATION REQUIREMENTS

LAST REVISED:	SOURCE BOX
JUNE 2012	WAL-MART STANDARD DETAIL

- NOTES:
1. THE GC IS REQUIRED TO, AT A MINIMUM, INITIATE SOIL STABILIZATION MEASURES IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT LIKELY RESUME FOR A PERIOD EXCEEDING [14] CALENDAR DAYS.
 2. THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON-VEGETATED MEASURES, IF UTILIZED.
 3. ALL DISTURBED AREAS MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES APPROPRIATE FOR SITE SOIL AND CLIMATE CONDITIONS. MULCH IS REQUIRED FOR ALL SEEDING APPLICATIONS, AND ALL MULCH APPLICATIONS MUST INCLUDE A SUITABLE FORM OF MULCH ANCHORING TO MINIMIZE MOVEMENT OF MULCH BY WIND OR WATER.
 4. ALTERNATIVE STABILIZATION MEASURES TO SEEDING, SUCH AS ANCHORED MULCH APPLICATION (WITHOUT SEEDING), MAY BE UTILIZED DURING PERIODS WHEN VEGETATIVE GROWTH IS UNLIKELY (E.G. WINTER MONTHS).
 5. IT IS NOT ACCEPTABLE TO ALLOW BARE SOIL TO REMAIN EXPOSED AT ANY TIME DURING THE YEAR, REGARDLESS OF WEATHER/TEMPERATURE/SITE CONDITIONS.
 6. ALTERNATIVE STABILIZATION MEASURES INCLUDE, BUT ARE NOT LIMITED TO: ANCHORED STRAW/HAY MULCH, WOOD CELLULOSE FIBER MULCH, SPRAY-ON SOIL GLUES/BINDERS, AND ROLLED EROSION CONTROL PRODUCTS.
 7. ALL ROLLED EROSION CONTROL PRODUCTS SHALL HAVE CURRENT QDOR(TM) STATUS ISSUED BY THE EROSION CONTROL TECHNOLOGY COUNCIL (ECTC) PLUS ANY STATE OR AGENCY-SPECIFIC REQUIREMENTS. EVIDENCE OF QDOR(TM) APPROVAL SHALL ACCOMPANY THE PRODUCT SHIPPING TO THE JOBSITE FOR READY IDENTIFICATION BY THE CONTRACTOR OR AGENCY INSPECTOR.
 8. ROLLED EROSION CONTROL PRODUCTS (NETS, BLANKETS, TURF REINFORCED MATS) AND VEGETATED AREAS NOT MEETING REQUIRED VEGETATIVE DENSITIES FOR FINAL STABILIZATION MUST BE INSPECTED DAILY. RILING, RUTTING AND OTHER SIGNS OF EROSION INDICATE THE SPECIFIED EROSION CONTROL DEVICE IS NOT FUNCTIONING OR INSTALLED PROPERLY AND/OR ADDITIONAL EROSION CONTROL DEVICES ARE WARRANTED.

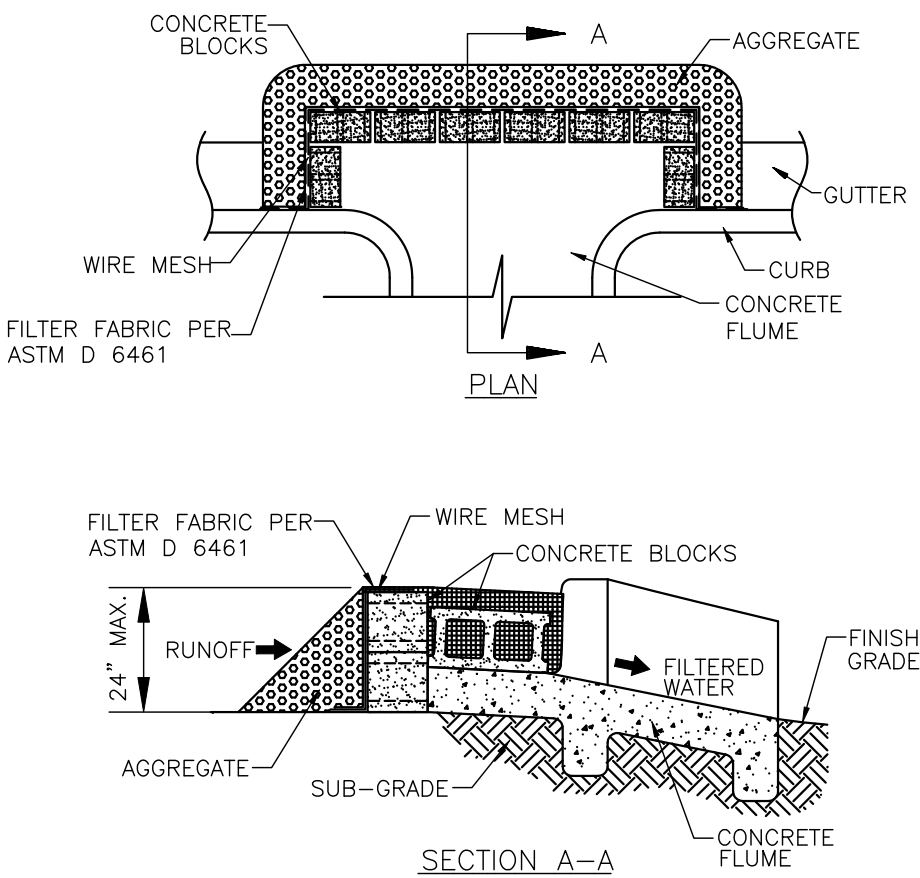
TS TEMPORARY SEEDING OR STABILIZATION

LAST REVISED:	SOURCE BOX
JUNE 2012	WAL-MART STANDARD DETAIL

- NOTES:
1. PERMANENT STABILIZATION SHALL BE ACCOMPLISHED IN ALL DISTURBED AREAS BY COVERING THE SOIL WITH PAVEMENT, BUILDING STRUCTURES, VEGETATION, OR OTHER FORMS OF SOIL STABILIZATION.
 2. THE GC IS REQUIRED TO INITIATE PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY UPON REACHING FINAL GRADE. FOR THOSE AREAS NOT AT FINAL GRADE THAT WILL NOT BE DISTURBED FOR GREATER THAN 14 DAYS, THE CONTRACTOR SHALL INITIATE TEMPORARY STABILIZATION PER THE TEMPORARY SEEDING OR STABILIZATION DETAIL.
 3. THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON-VEGETATED MEASURES, IF UTILIZED.
 4. SOILS MUST BE PREPARED BEFORE INSTALLATION OF SOD OR SEED. SEE 02900 SPECIFICATION FOR INSTRUCTION ON PROPER SOIL PREPARATION.
 5. AT THE COMPLETION OF GROUND-DISTURBING ACTIVITIES, THE ENTIRE SITE MUST HAVE PERMANENT VEGETATIVE COVER MEETING VEGETATIVE DENSITY REQUIREMENTS IN THE GENERAL PERMIT, OR MULCH PER LANDSCAPE PLAN, IN ALL AREAS NOT COVERED BY HARDSCAPE (STONE, PAVEMENT, BUILDINGS, ETC.).
 6. SEEDED AREAS SHALL BE PROTECTED WITH STRAW MULCH, HYDRAULIC MULCH OR A ROLLED EROSION CONTROL PRODUCT. STRAW MULCH MUST BE TACKIFIED OR CRIMPED BY DISC OR OTHER MACHINERY, AND ROLLED EROSION CONTROL PRODUCTS MUST BE INSTALLED PER MANUFACTURER RECOMMENDATIONS. ONLY ROLLED EROSION CONTROL PRODUCTS ARE PERMITTED TO BE USED IN FLOW CHANNELS.
 7. ALL AREAS TO BE SEEDDED MUST MEET TOPSOIL DEPTH, PH AND ORGANIC CONTENT REQUIREMENTS AS SPECIFIED IN THE 02900 SPECIFICATION - PLANTING OR XERISCAPE SPECIFICATION.
 8. FINAL SITE STABILIZATION IS ACHIEVED WHEN PERENNIAL VEGETATIVE COVER PROVIDES PERMANENT STABILIZATION WITH A UNIFORM DENSITY GREATER THAN 70 PERCENT OVER THE ENTIRE AREA TO BE STABILIZED BY VEGETATIVE COVER. THIS AREA IS EXCLUSIVE OF AREAS THAT ARE COVERED WITH ROCK (CRUSHED GRANITE, GRAVEL, ETC.) OR LANDSCAPE MULCH, PAVED OR HAVE A BUILDING OR OTHER PERMANENT STRUCTURE ON THEM.

PS PERMANENT SEEDING, SOD OR MULCHING

LAST REVISED:	SOURCE BOX
JUNE 2012	WAL-MART STANDARD DETAIL



NOTES:

1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF FLUME ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. TOP OF BARRIER MUST BE LOWER THAN TOP OF CURB ELEVATIONS ADJACENT TO FLUME. MAX. HEIGHT SHALL BE 24".
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE 3/4" - 2" ANGULAR CLEAN STONE WHICH WILL SLOW THE FLOW OF WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE FLUME.
5. IF ROAD OR PARKING AREA IS OPEN TO PUBLIC, VERIFY SUITABILITY OF BMP WITH AGENCIES HAVING JURISDICTION AND WITH CEC.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT-TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGON IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

IP3 BLOCK AND AGGREGATE FLUME PROTECTION
N.T.S.

LAST REVISED:	SOURCE BOX
JUNE 2012	CEC STANDARD DETAIL

DEVELOPER/OWNER
SAM'S REAL ESTATE BUSINESS TRUST
MAIL STOP 0505
702 S.W. 8TH STREET
BENTONVILLE, AR 72716-0505
(479) 204-3314
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

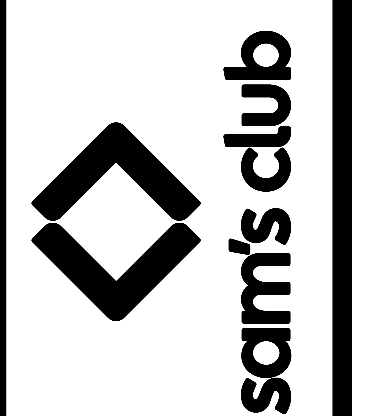
IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7088 LEDGESTONE COMMONS
PH. (801) 384-0404 • FX. (801) 384-0710

JOSEPH PARBLEY
ENGINEER
No. 6201066218
LICENSED PROFESSIONAL ENGINEER

SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	NTS
JOB No.	4982-211
SHEET	10 OF 22 SHEETS

**SW-7
EROSION CONTROL DETAILS**

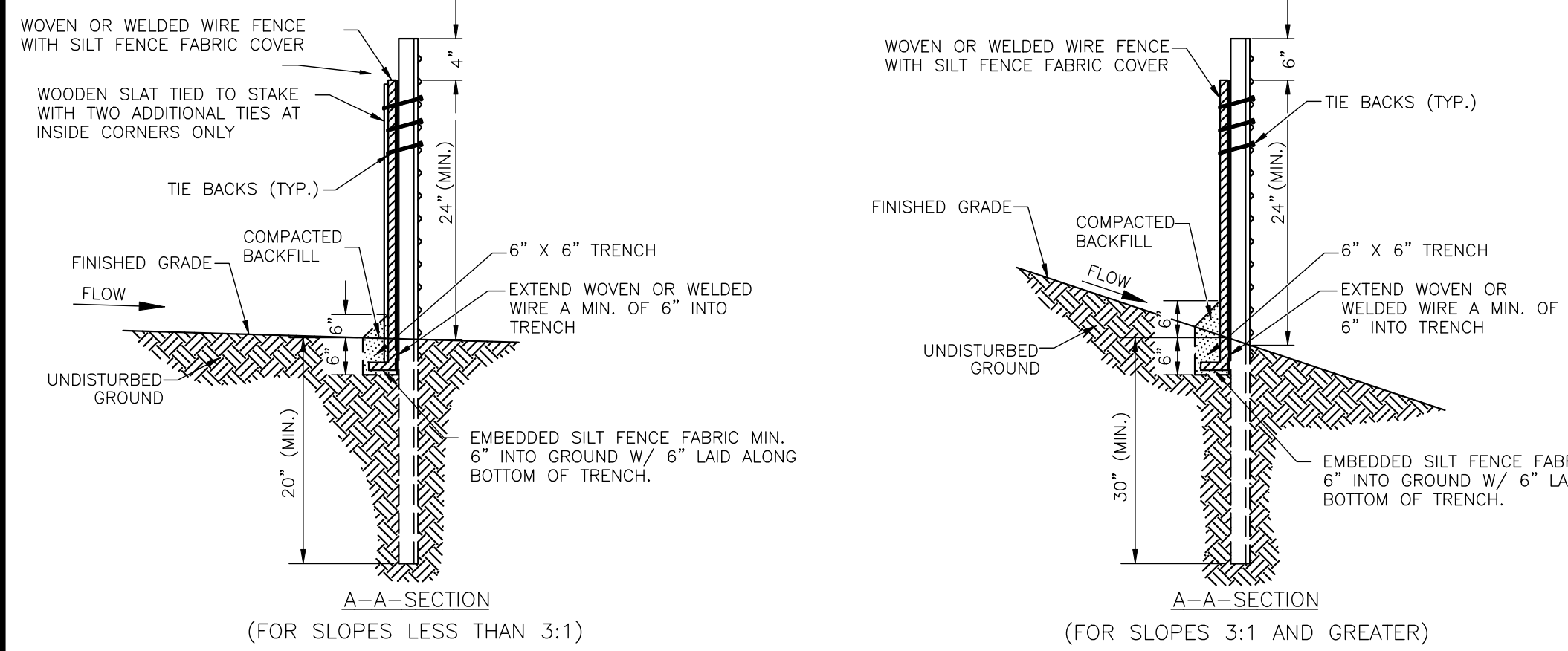
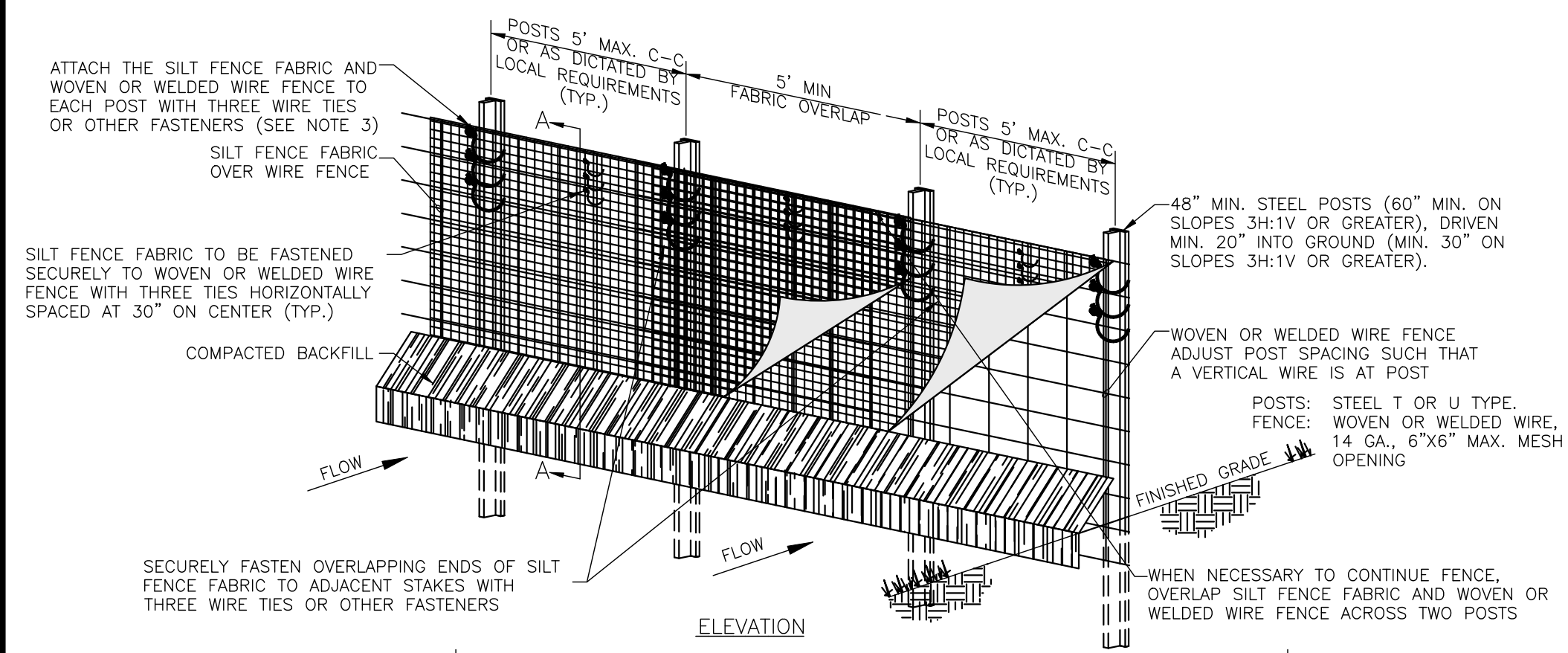


TABLE 1 Temporary Silt Fence Material Property Requirements

SILT FENCE SECTION	TYPE (WIRE BACK OR SLICED)	SECTION LENGTH (FT)	DRAINAGE AREA (ACRES)	AVERAGE SLOPE OF AREA	SILT FENCE	
					WIRE BACK	SLICED
SECTION 1	WIRE BACK	890	1.5	3%	400 (90)	550 (90)
SECTION 2	WIRE BACK	680	0.2	2%	400 (90)	450 (90)
SECTION 3	WIRE BACK	775	0.2	2%	400 (90)	450 (90)
SECTION 4	WIRE BACK	90	0.2	2%	400 (90)	450 (90)

TABLE 1 Temporary Silt Fence Material Property Requirements

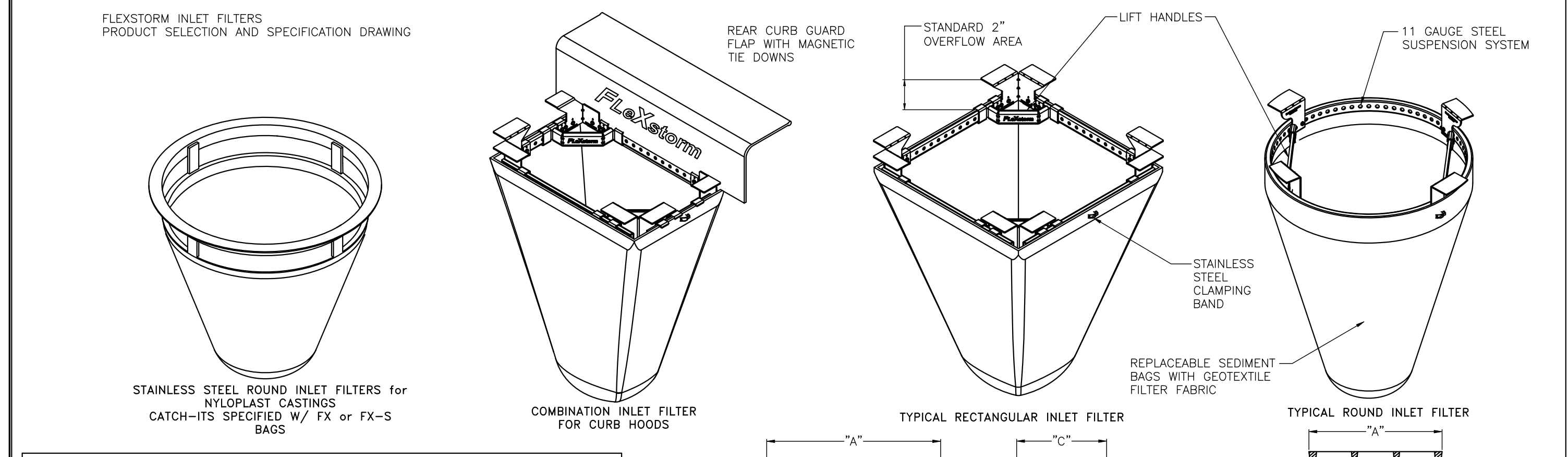
Grab Strength	Test Method	Units	Supported ^a Silt Fence		Type of Value
			Supported ^a Silt Fence	Unsupported ^a Silt Fence	
MARV	Machine Direction	N (lbs)	400 (90)	550 (90)	MARV
			400 (90)	450 (90)	
MARV	x-Machine Direction	N (lbs)	400 (90)	450 (90)	MARV
			400 (90)	450 (90)	
Permittivity #	ASTM D 4491	sec-1	0.05	0.05	MARV
Apparent Opening Size ^b	ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV ^c
Ultraviolet Stability	ASTM D 4355	% Retained Strength	70% after 500 h of exposure	70% after 500 h of exposure	Typical

^a Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent strength.
^b These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 shall be performed by the agency to confirm suitability of these requirements.
^c As measured in accordance with Test Method D 4632.

TABLE 1 TAKEN FROM ASTM D 6411-99 (2007)

SF SEDIMENTATION/SILT FENCE WITH WIRE BACKING
N.T.S.

SOURCE BOX	
LAST REVISED:	WAL-MART MODIFIED DETAIL
JUNE 2012	DETAIL



1. IDENTIFY YOUR FRAME STYLE, SIZE, AND MATERIAL

STYLE	FRAME STYLE AND SIZE	FRAME P/N:
ROUND	SMALL ROUND (UP TO 20.0" DIA GRATES (A) DIM)	62SRD
	MED ROUND (UP TO 20.1"-26" DIA GRATES (A) UP TO 25" DIA OPENINGS (B))	62MRD
	LARGE ROUND (UP TO 26.1"-32.0" DIA GRATES (A) UP TO 30" DIA OPENINGS (B))	62LRD
RECT/SQUARE	XL ROUND (UP TO 32.1"-39" DIA GRATES (A) UP TO 37" DIA OPENING (B))	62XLRD
	SMALL RECT / SQUARE (UP TO 16" (B) x 16" (D) OPENINGS OR 64" PERIMETER)	62SSQ
	MED RECT / SQUARE (UP TO 24" (B) x 24" (D) OPENINGS OR 96" PERIMETER)	62MSQ
COMBO INLETS	LARGE RECT / SQUARE (UP TO 36" (B) x 24" (D) OPENINGS OR 120" PERIMETER)	62LSQ
	XL RECT/SQUARE (SIDE BY SIDE 2 PC SET TO FIT UP TO 48" (B)x36" (D) OPENINGS)	62XLSQ
	SMALL RECT / SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62SCB
NYLOPLAST	MED RECT / SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62MCRB
	LARGE RECT / SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62LCB
	XL RECT / SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62XLCB
WALL MOUNT	12" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6212NY
	15" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6215NY
	18" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6218NY
	24" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6224NY
	30" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6230NY
	OPEN THROAT GUTTERS - CURB OPENING SIZE	
	UP TO 4" (1 FILTER AND MOUNTING HARDWARE)	62WM1
	BETWEEN 4" AND 8" (2 FILTERS AND MOUNTING HARDWARE)	62WM2
	BETWEEN 8" AND 12" (3 FILTERS AND MOUNTING HARDWARE)	62WM3
	BETWEEN 12" AND 16" (4 FILTERS AND MOUNTING HARDWARE)	62WM4
	UPGRADED FRAMING MATERIAL OPTIONS (STANDARD IS ZINC PLATED)	SUFFIX
	CHROME PLATED FRAMING FOR HIGH SALT EXPOSURE	-CHR
	STAINLESS STEEL FRAMING FOR HIGH SALT AND / OR CHEMICAL EXPOSURE	-SS

2. SELECT YOUR FILTER BAG PART NUMBER

FLEXSTORM FILTER BAGS	(22" DEPTH)		(12" DEPTH)		CLEAN WATER FLOW RATE (GPM/SQFT)	MIN A.O.S. (US SIEVE)
	STD BAG P/N	SHORT BAG P/N	STD BAG P/N	SHORT BAG P/N		
FX: STANDARD WOVEN BAG	FX	FX-S	FX-S	FX-S	200	40
FX+: WOVEN W/ MYCLEX	FXP	FXP-S	FXP-S	FXP-S	200	40
FXO: WOVEN W/OIL BOOM	FXO	FXO-S	FXO-S	FXO-S	200	40
PC: POST CONSTRUCTION BAG	PC	PC-S	PC-S	PC-S	137	140
PC+: PC BAG W/ MYCLEX	PCP	PCP-S	PCP-S	PCP-S	137	140
LL: LITTER AND LEAF BAG	LL	LL-S	LL-S	LL-S	HIGH	3.5
IL: IDOT NON-WOVEN BAG	IL	IL-S	IL-S	IL-S	145	70

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

FRAME P/N FROM STEP 1	FILTER BAG P/N FROM STEP 2	FRAMING MATERIAL

INSTALLATION:

- REMOVE GRATE
- DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
- REPLACE GRATE

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

NOMINAL BAG SIZE	SOLIDS STORAGE (CU FT)	FILTERED FLOW RATE AT 50% MAX		PC IL (NON WOVEN)	*PC OIL RETENT (OZ)	**PCP OIL RETENT (OZ)
		FX (WOVEN)	PC (POST CONSTR)			
SMALL	1.6	1.2	0.8	0.9	66	155
MEDIUM	2.1	1.8	1.2	1.3	96	185
LARGE	3.8	2.2	1.5	1.6	120	209
XL	4.2	3.6	2.4	2.6	192	370

*PC FILTER BAG AT 50% MAX ABSORPTION CAPACITY
**PCP FILTER BAG AT 50% CAPACITY AND MYCLEX SKIMMER AT 100% CAPACITY

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC. DISTRIBUTED BY ADS. WWW.INLETFILTERS.COM (866) 287-8655 PH (630) 355-3477 FX INFO@INLETFILTERS.COM

SOURCE BOX

LAST REVISED:		MANUFACTURER	
APRIL 22, 2013	DETAIL		

IP5 FILTER BAG

SIZE	DWG NO	REV

SCALE: SHEET 1 OF 1

- SPECIFICATIONS FOR SILT FENCE INSTALLATION**
- MATERIALS AND INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
 - INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR THE ANTICIPATED RUNOFF.
 - ATTACH THE GEOTEXTILE OR FABRIC TO THE WOVEN OR WELDED WIRE FENCE WITH THREE WIRE TIES OR OTHER FASTENERS (HORIZONTALLY SPACED EVERY 30"). ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. AT EACH POST, ATTACH THE GEOTEXTILE OR FABRIC AND THE WOVEN OR WELDED WIRE FENCE TO THE POST AS PREVIOUSLY STATED. IN ADDITION, EACH TIE PLACED ON A POST SHALL BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
 - WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
 - ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT.
 - WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
 - COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
 - ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

- MAINTENANCE NOTES**
- SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM READING ONE-THIRD THE HEIGHT OF THE SILT FENCE.
 - ALL MATERIAL EXCAVATED FROM BEHIND SILT FENCE SHALL BE STOCKPILED ON AN UPLAND PORTION OF THE SITE IF SUITABLE FOR REUSE.
 - SPECIAL ATTENTION SHALL BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
 - IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPs (PENDING CEC APPROVAL) TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
 - SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

NOTICE TO CONTRACTOR

WHERE FILTER BAGS ARE SPECIFIED, THE CONTRACTOR SHALL USE FLEXSTORM INLET FILTERS BY NYLOPLAST FOR INLET PROTECTION. SINCE THE INLET FILTERS ARE CUSTOMIZED FOR EACH INLET, THE DETAIL PROVIDED SHALL BE USED FOR GENERAL INFORMATION ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ORDER THE APPROPRIATE FLEXSTORM INLET FILTER FOR EACH EXISTING, OR PROPOSED, INLET TYPE REQUIRING PROTECTION. THE CONTRACTOR SHALL CONTACT GARVIN COX, OR THE LOCAL NYLOPLAST SALES REPRESENTATIVE, FOR ORDERING INFORMATION. AT A MINIMUM, THE CONTRACTOR SHALL BE PREPARED TO PROVIDE THE NYLOPLAST SALES REPRESENTATIVE INFORMATION RELATED TO INLET TYPE AND DIMENSIONS FOR EACH INLET REQUIRING PROTECTION.

Nyloplast
A division of ADS

GARVIN COX
303 W.M. BAUGH LANE
BROWNWOOD, TX 76801

CELL: (915) 309-8259
FAX: (866) 843-1147
garvin.cox@ads-pipe.com

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7086 LEDSTONE COMMONS
PH. (901) 354-0404 • FX. (800) 384-0710

STATE OF MICHIGAN
JOSEPH PARSELY
ENGINEER
No. 620106218
LICENSED PROFESSIONAL ENGINEER

SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716

sam's club

DEVELOPER/OWNER
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MAIL STOP 0505
702 S.W. 8TH STREET
BENTONVILLE, AR 72716-0505
(479) 204-3314

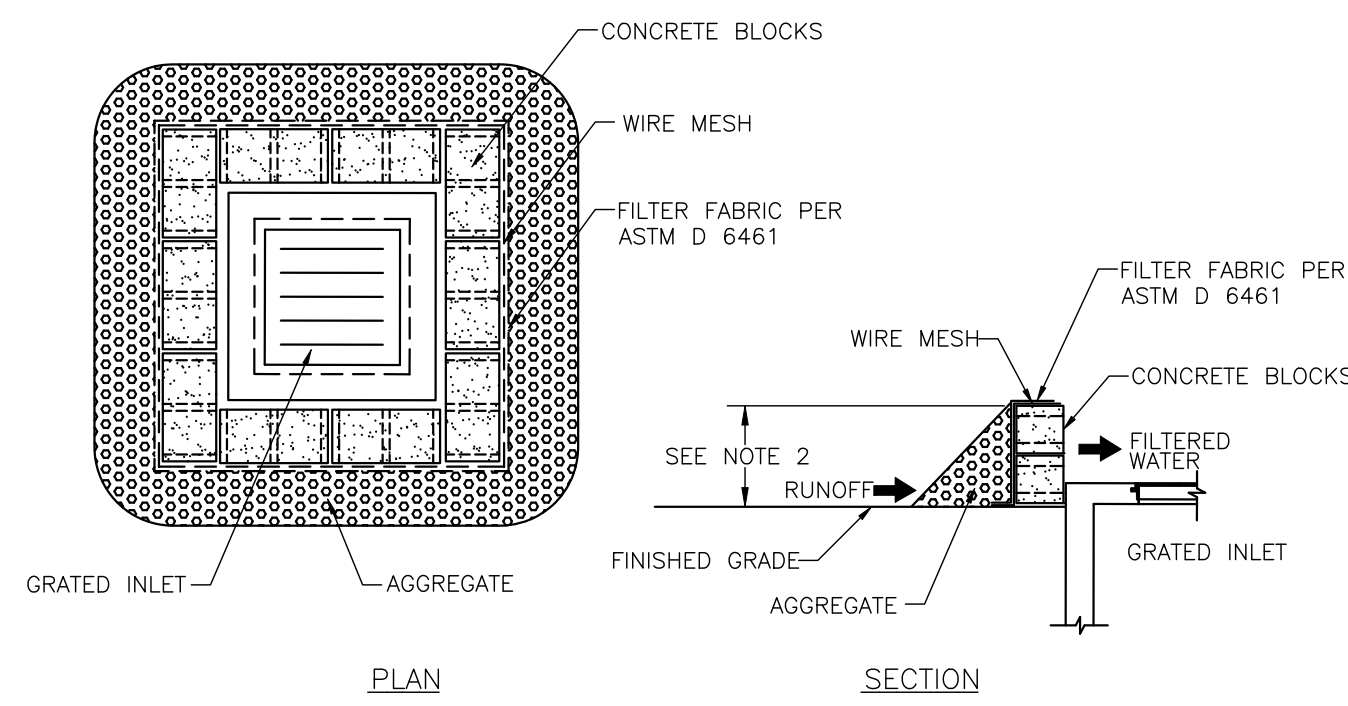
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	NTS
JOB No.	4982-211
SHEET	11 OF 22 SHEETS

SW-8
EROSION CONTROL DETAILS

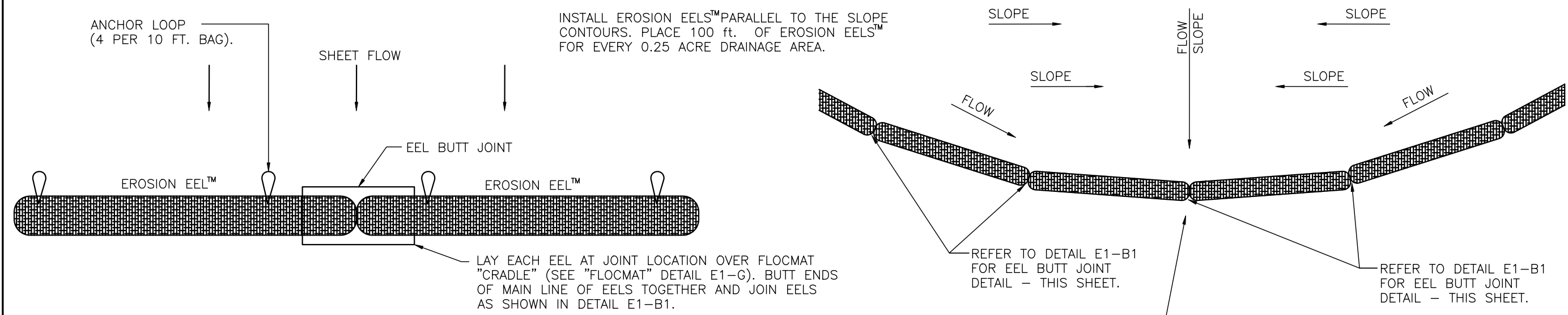


- NOTES:
1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
 2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. MIN. HEIGHT OF BARRIER SHALL BE 12" AND MAX. HEIGHT SHALL BE 24".
 3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
 4. THE AGGREGATE SHALL BE 3/4"-2" ANGULAR CLEAN STONE, WHICH WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

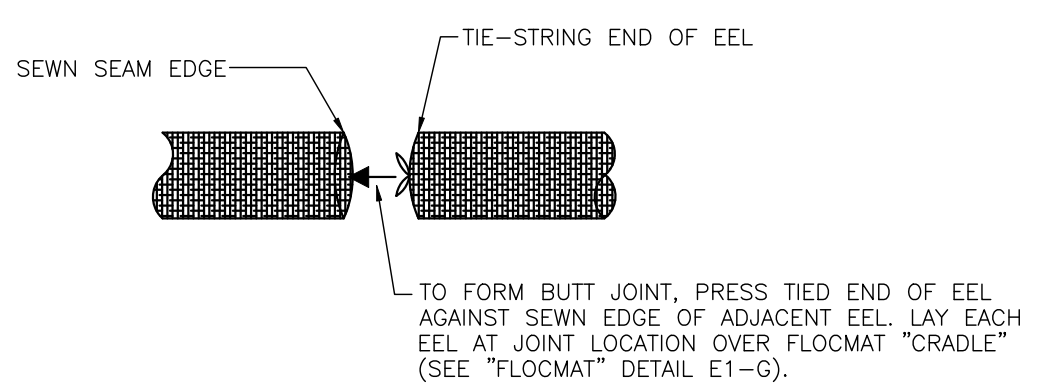
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 2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
 3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
 4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPs, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
 5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

IP1 BLOCK AND AGGREGATE INLET PROTECTION
N.T.S.

LAST REVISED: CEC STANDARD DETAIL
APRIL 30, 2011



DETAIL E1-B: INTERCEPTING SHEET FLOW PERPENDICULAR TO FLOW PATH - PLAN VIEW
N.T.S.



BUTT JOINT DETAIL E1-B1
N.T.S.

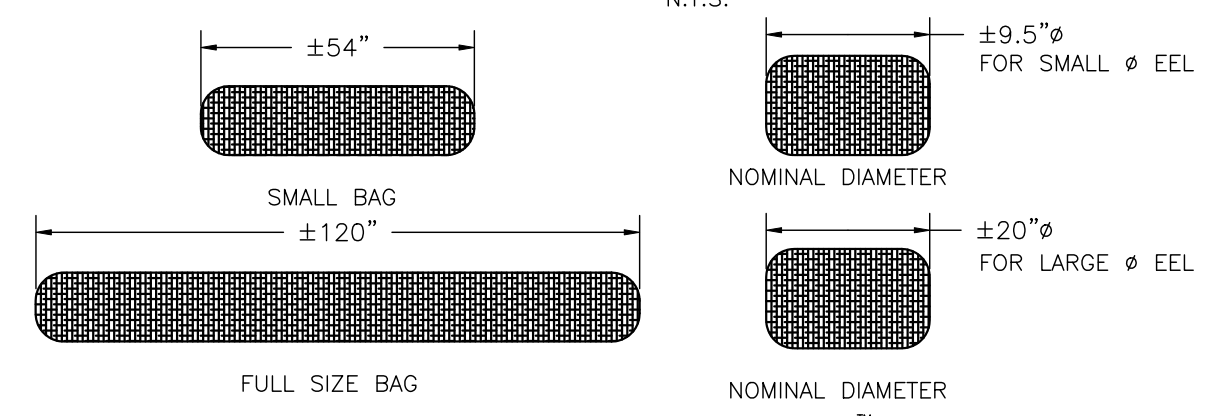
SPACING RECOMMENDATIONS FOR THE EROSION EEL™ FOR PERIMETER CONTROLS AND INTERCEPTING SHEET FLOW ON SLOPES

SLOPE(%)	SINGLE EEL SPACING(ft)
0.5	300
1	200
2	160
3	80
4	50
5	40
6	35
8	30
10	25
15	+17
20	+12
25	N/A
33	N/A
50	N/A

CONTACT INFORMATION
FRIENDLY ENVIRONMENT
100 PRINCE STREET
SHELBYVILLE, TN 37160
1-866-H2O-EELS
INFO@FRIENDLYENVIRONMENTUS.COM
http://FRIENDLYENVIRONMENTUS.COM

LAST REVISED: CEC STANDARD DETAIL
OCTOBER 2012

DETAIL E1-F: PLAN VIEW - TYPICAL ARRANGEMENT OF EELS USED FOR PERIMETER CONTROL
N.T.S.

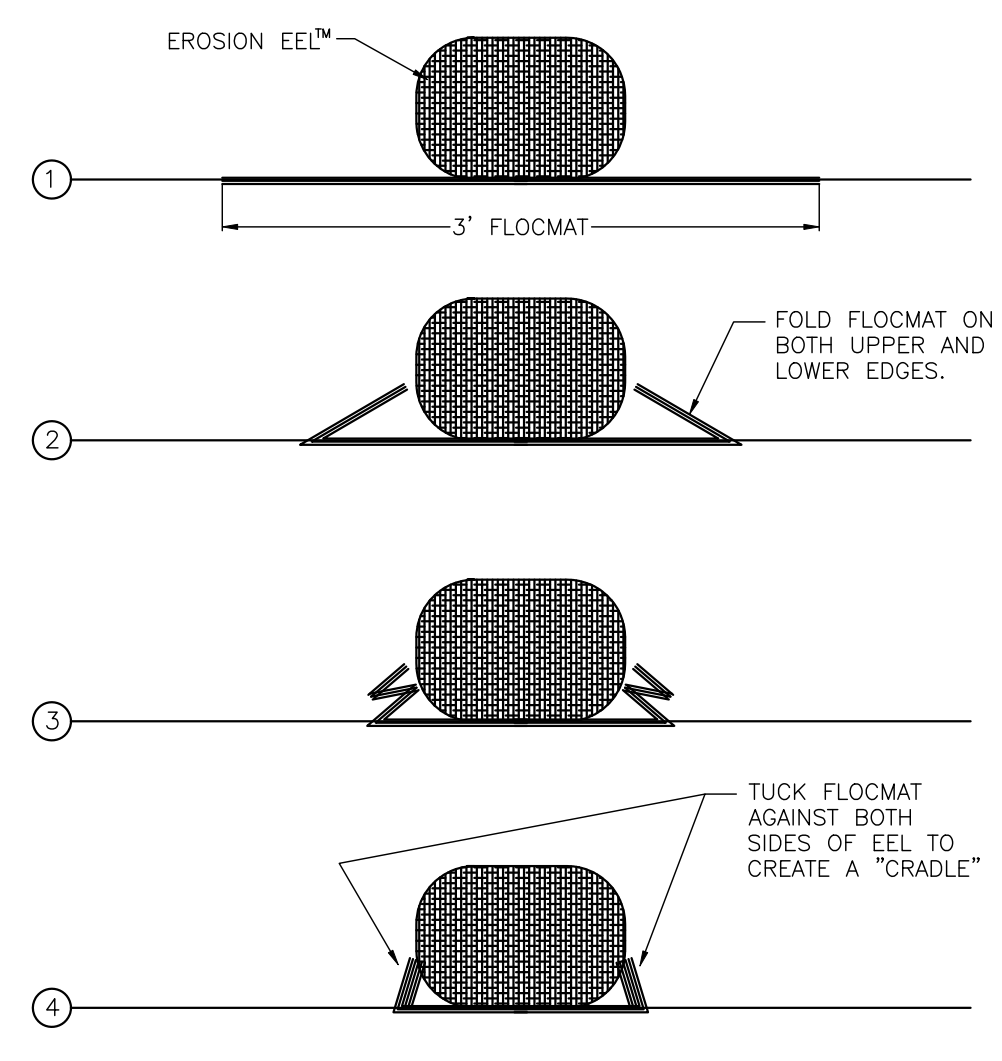


DETAIL E1-A: EROSION EELS™
N.T.S.

GENERAL NOTES

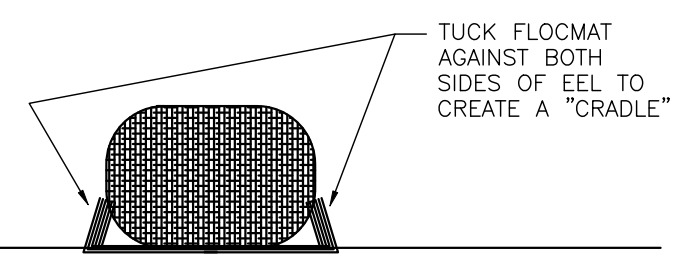
1. EROSION EELS™ USED IN PERIMETER CONTROL APPLICATIONS SHALL HAVE A SPECIFICATION MIXTURE 1.0 OR 2.0.
A. MIXTURE SPECIFICATION 1.0. A FILTER MATERIAL COMPRISED OF 100% RUBBER SHREDS. THE RUBBER SHALL BE DERIVED FROM RECYCLED TIRES AND SHALL BE SHREDDED TO PRODUCE A MAXIMUM PARTICLE SIZE OF +/- 3/4 INCH.
B. MIXTURE SPECIFICATION 2.0. A FILTER MIXTURE COMPRISED OF 100% SHREDDED RUBBER DERIVED FROM RECYCLED TIRES. MAXIMUM PARTICLE SIZE IS ±2 INCHES.
2. LENGTHS OF EROSION EELS™ SHALL BE EITHER A NOMINAL +/-10 FT. OR +/- 4.5 FT. NOMINAL DIAMETER SHALL BE +/-9.5 INCHES FOR PERIMETER CONTROLS AND +/-20 INCHES FOR CHECK DAM APPLICATIONS.
3. EROSION EELS™ CAN BE PLACED AT THE TOP, ON THE FACE, OR AT THE TOE OF SLOPES TO INTERCEPT RUNOFF, REDUCE FLOW VELOCITY, RELEASE THE RUNOFF AS SHEET FLOW AND PROVIDE REMOVAL OF SEDIMENT FROM THE RUNOFF.
4. EROSION EELS™ SHALL BE INSTALLED ALONG THE GROUND CONTOUR, AT THE TOE OF SLOPES, AT AN ANGLE TO THE CONTOUR TO DIRECT FLOW AS A DIVERSION BERM, AROUND INLET STRUCTURES, IN A DITCH AS A CHECK DAM TO HELP REDUCE SUSPENDED SOLIDS LOADING AND RETAIN SEDIMENT, OR AS A GENERAL FILTER FOR ANY DISTURBED SOIL AREA.
5. NO TRENCHING IS REQUIRED FOR INSTALLATION OF EROSION EELS™.
6. PREPARE BED FOR EEL INSTALLATION BY REMOVING ANY LARGE DEBRIS INCLUDING ROCKS, SOIL CLODS, AND WOODY VEGETATION. EROSION EELS™ CAN ALSO BE PLACED OVER PAVED SURFACES INCLUDING CONCRETE AND ASPHALT WITH NO SURFACE PREPARATION REQUIRED.
7. RAKE BED AREA WITH A HAND RAKE OR BY DRAG HARROW.
8. DO NOT PLACE EEL DIRECTLY OVER RILL AND GULLIES UNTIL AREA HAS BEEN HAND-EXCAVATED AND RAKED TO PROVIDE A LEVEL BEDDING SURFACE. ALL SURFACES SHALL BE UNIFORMLY COMPACTED FOR MAXIMUM SEATING OF EELS IN PLACE.
9. FOR LOCATIONS WHERE EELS WILL BE PLACED IN CONCENTRATED FLOWS (SUCH AS CHECK DAMS, INLET PROTECTION) AND FOR PERIMETER CONTROLS, BED THE EELS IN A FLOCMAT CRADLE PER THE DETAILED DRAWINGS.
10. FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE AREA SHALL BE 10 ACRES.
11. IF MORE THAN ONE EROSION EEL™ IS PLACED IN A ROW, PREPARE JOINTS PER DETAIL E1-B1.
12. EROSION EELS™ SHALL REMAIN IN PLACE UNTIL FULLY ESTABLISHED VEGETATION HAS COMPLETELY DEVELOPED OR UNTIL THE STORAGE CAPACITY/FUNCTIONAL LIFE OF THE EEL HAS BEEN EXHAUSTED (REQUIRING REPLACEMENT WITH NEW EELS).
13. ANCHORING POSTS FOR CHECK DAM APPLICATIONS SHALL HAVE A MINIMUM WEIGHT OF 1.25 LBS/FT STEEL T-POSTS (5 TO 7 FT. LENGTHS) ROLLED FROM HIGH CARBON STEEL. POSTS SHOULD BE HOT-DIP GALVANIZED OR COATED WITH A WEATHER-RESISTANT PAINT FOR STEEL APPLICATION. POSTS SHOULD BE EQUIPPED WITH A METAL ANCHOR PLATE.
14. PLACE T-POSTS THROUGH HANDLE OF BAGS. DO NOT DRIVE POSTS THROUGH EROSION EELS™. T-POSTS ARE TO BE EMBEDDED A MINIMUM OF 3 FT. INTO GROUND ON STEEP SLOPES GREATER THAN 25%.

EE EROSION EEL
N.T.S.



DETAIL E1-G: SECTION - FLOCMAT
N.T.S.

INSTALL FLOCMAT AT MAIN DISCHARGE LOCATIONS FOR WATERSHED.



DEVELOPER/OWNER
SAM'S REAL ESTATE BUSINESS TRUST
MAIL STOP 0505
702 S.W. 8TH STREET
BENTONVILLE, AR 72716-0505
(479) 204-3314

SITE OPERATOR/GENERAL CONTRACTOR:

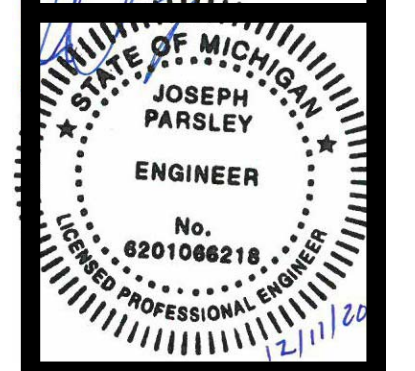
SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

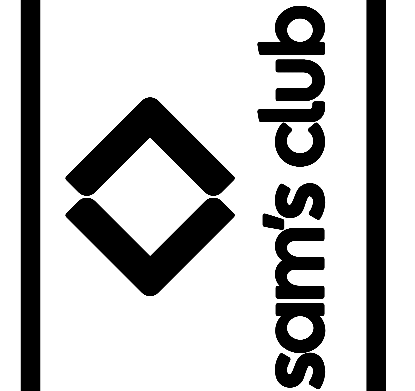
SW-9
EROSION CONTROL DETAILS

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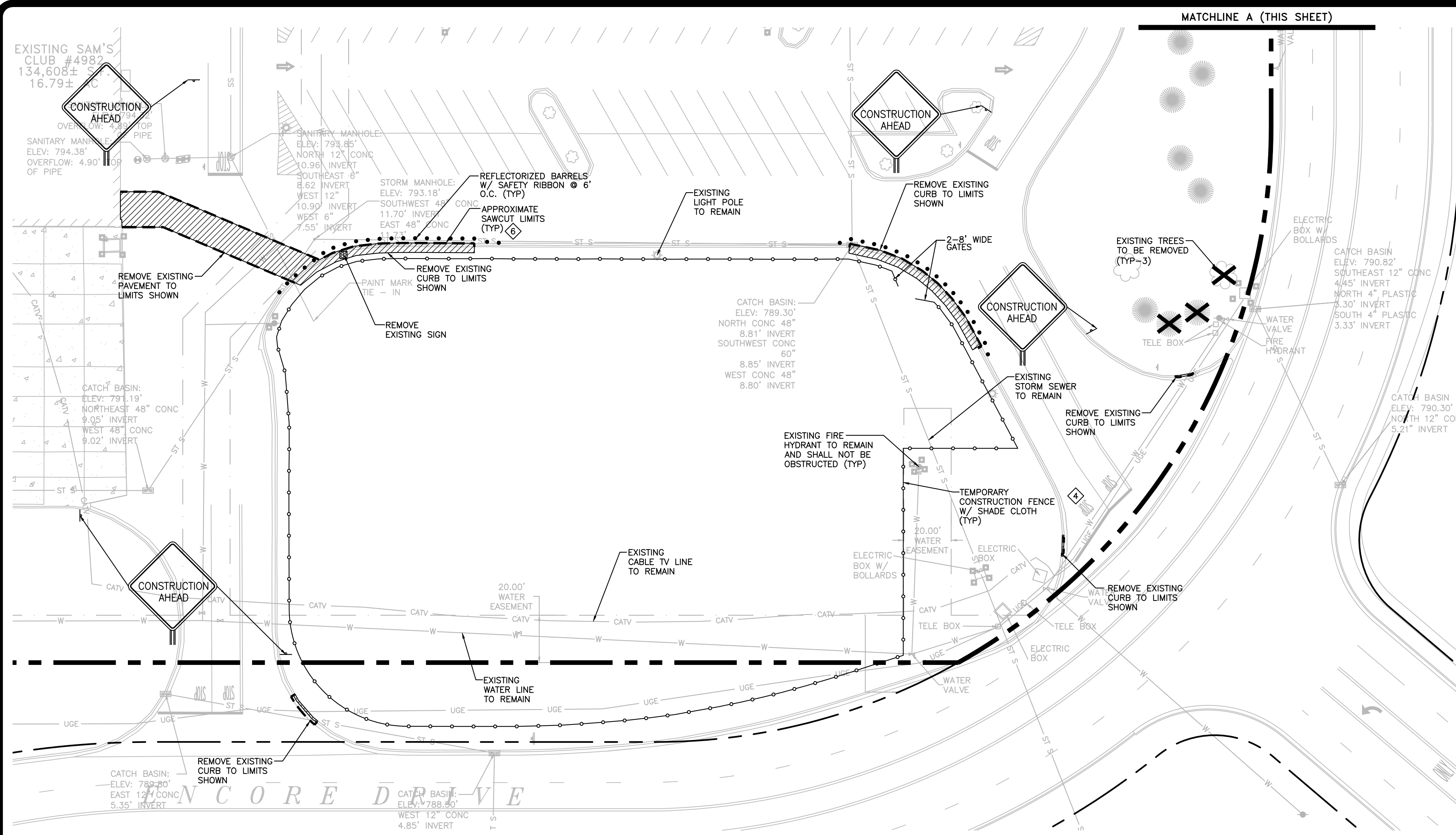
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BENTONVILLE, AR 72716



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CHECKED	BKM
DATE	12/03/2020
SCALE	NTS
JOB No.	4982-211
SHEET	12 OF 22 SHEETS



NOTES:

- THIS PLAN IS INTENDED TO GIVE AN OVERVIEW OF THE DEMOLITION WORK REQUIRED FOR THE CONSTRUCTION. IT HAS BEEN PREPARED FROM THE PROJECT SURVEY AND SHOWS ITEMS REPRESENTED ON THE SURVEY. IT DOES NOT, HOWEVER, NECESSARILY REPRESENT ALL ITEMS PRESENT IN THE FIELD. THE INTENT OF THIS DRAWING IS TO REMOVE/RELOCATE ALL ITEMS WHICH CONFLICT WITH THE PLANNED IMPROVEMENTS. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE TO THE LEVEL NECESSARY TO INCLUDE THIS WORK IN THE BASE BID.
- ALL SITEWORK FOR THE WALKWAY PORTION OF THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS".
- ALL NECESSARY INSPECTIONS, APPROVALS, AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR AUTHORITIES SHALL BE COMPLETED PRIOR TO THE ANNOUNCED BUILDING POSSESSION AND THE FINAL CERTIFICATION OF SERVICES.
- EXISTING STRIPING THAT CONFLICTS WITH TEMPORARY AND/OR PROPOSED IMPROVEMENTS SHALL BE REMOVED BY BEAD BLASTING.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE PUBLIC AT ALL TIMES. FENCING, BARRICADES, ENCLOSURES, BARRELS, OTHER TRAFFIC CONTROL DEVICES, ETC. SHALL BE USED IN THE BEST POSSIBLE MANNER AND AS APPROVED AND/OR DIRECTED BY THE SAMS CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL SAWCUT ALONG EDGE OF PAVEMENT REMOVAL LIMITS TO ENSURE CLEAN, STRAIGHT JOINT BETWEEN OLD AND NEW PAVING SECTIONS.
- ALL Voids SHALL BE FILLED IN ACCORDANCE WITH THE SPECIFICATIONS.
- SEE OTHER PLAN SHEETS FOR PLANNED IMPROVEMENTS, INCLUDING RELOCATIONS.
- THE CONTRACTOR SHALL DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIAL RESULTING FROM DEMOLITION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ANY UTILITY COMPANY WHICH MAINTAINS A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY FOR ANY DAMAGE, INCURRED BY ANY UTILITY COMPANY, TO THEIR LINES AS A RESULT OF HIS ACTIVITIES, WHETHER THESE LINES ARE SHOWN ON THE CONSTRUCTION PLANS OR NOT.
- ALL SOLID WASTE MATERIALS, INCLUDING WITHOUT LIMITATION, HOUSEHOLD TRASH, USED TIRES, CONSTRUCTION DEBRIS, ETC. SHALL BE PROPERLY DISPOSED OF IN A SOLID WASTE LANDFILL.
- EXISTING UTILITY LINES TO REMAIN UNLESS NOTED OTHERWISE.
- REFER TO UTILITY PLAN, THIS SET, FOR ADDITIONAL INFORMATION REGARDING REMOVAL/RELOCATION OF EXISTING UTILITY LINES CONFLICTING WITH PROPOSED IMPROVEMENTS.
- PERMANENTLY PLUG END OF EXISTING LINES TO REMAIN ABANDONED IN PLACE.
- ALL TEMPORARY TRAFFIC LANES SHALL BE A MINIMUM OF TWELVE FEET WIDE, U.N.O.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN PERFORMING CONSTRUCTION ACTIVITIES IN THE VICINITY OF EXISTING UTILITIES. EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE RELOCATED OR ADJUSTED IN PLACE TO MEET THE SEPARATION AND MINIMUM REQUIREMENTS ESTABLISHED BY ALL APPLICABLE CODES. ANY COSTS ASSOCIATED WITH THIS WORK SHALL BE IN THE CONTRACTOR'S BID FOR THE PROJECT.
- CONTRACTOR SHALL KEEP ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. OUTSIDE THE PROJECT LIMITS CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL.
- LIMITS OF DEMOLITION AND SAWCUT SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS ONLY. CONTRACTOR IS RESPONSIBLE FOR SAWCUTTING AND REMOVING EXISTING SITE ITEMS AS NECESSARY TO REMOVE/INSTALL ALL ITEMS ASSOCIATED WITH THIS PROJECT. BY SUBMITTING A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES THIS LIMITATION AND ENSURES THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THIS SITUATION.
- CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL RELOCATE ALL PORTIONS OF THE EXISTING IRRIGATION SYSTEM THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL ENSURE IRRIGATION SYSTEM IS FULLY OPERATIONAL AT PROJECT COMPLETION.
- ALL TRAFFIC CONTROL DEVICES (BARRELS, JERSEY WALLS, ETC.) SHALL BE EQUIPPED WITH REFLECTIVE BANDS.
- CONTRACTOR SHALL ENSURE THAT ALL EXISTING LIGHTS TO REMAIN ARE FUNCTIONING PROPERLY AT THE COMPLETION OF THIS PROJECT.
- THE TRAFFIC CONTROL MEASURES SHOWN ON THIS SHEET REPRESENT MINIMUM REQUIREMENTS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ADJUSTMENTS IN THE FIELD, AS NECESSARY AND AS APPROVED BY THE CONSTRUCTION MANAGER, TO ACCOMMODATE THE VARIOUS PHASES OF CONSTRUCTION AND TO PROMOTE SAFE PEDESTRIAN AND VEHICULAR TRAFFIC FOR THE DURATION OF CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, SHORING, ETC. AS NECESSARY TO PROTECT ITEMS TO REMAIN ADJACENT TO WORK AREAS.
- ALL TEMPORARY SIGNAGE SHALL BE 30"x30" DIAMOND SIGNS WITH RETROREFLECTIVE ORANGE BACKGROUND AND BLACK LEGEND/SYMBOLS U.N.O. SIGNS SHALL BE PER MUTCD STANDARDS.

LEGEND

- PROPERTY LINE
- EXISTING PAVEMENT/CURB AND GUTTER/ SIDEWALK INCLUDING BASE MATERIALS TO BE REMOVED
- EXISTING UTILITIES AND APPURTENANCES TO BE REMOVED
- - - APPROXIMATE SAWCUT LIMITS
- REFLECTORIZED BARRELS W/SAFETY RIBBON
- TEMPORARY CONSTRUCTION FENCE W/ SHADE CLOTH
- TEMPORARY SIGN
- X --- EXISTING TREE TO BE REMOVED

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JOSEPH FARLEY
 ENGINEER
 No. 6201066218
 LICENSED PROFESSIONAL ENGINEER

WORK OUTSIDE FENCED AREA

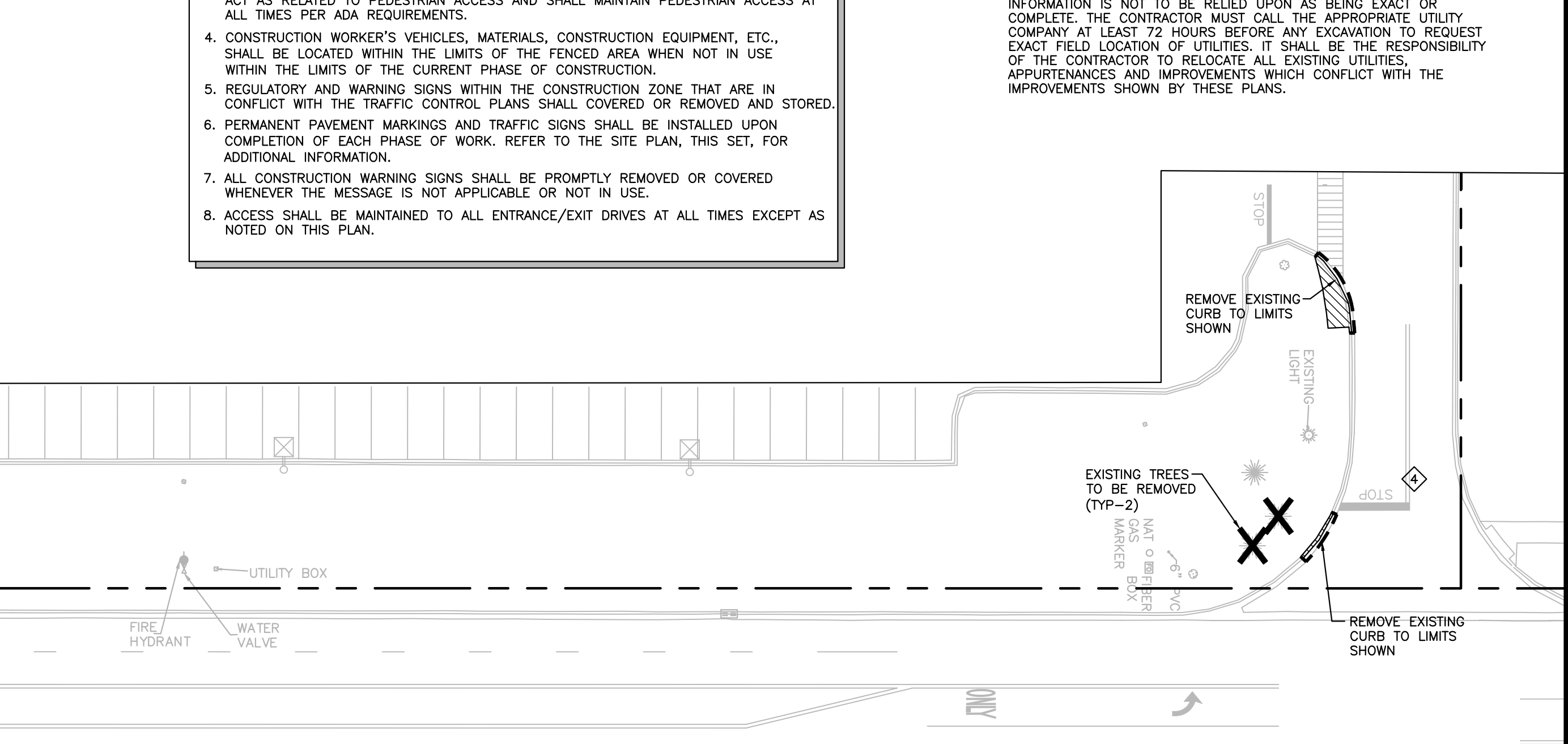
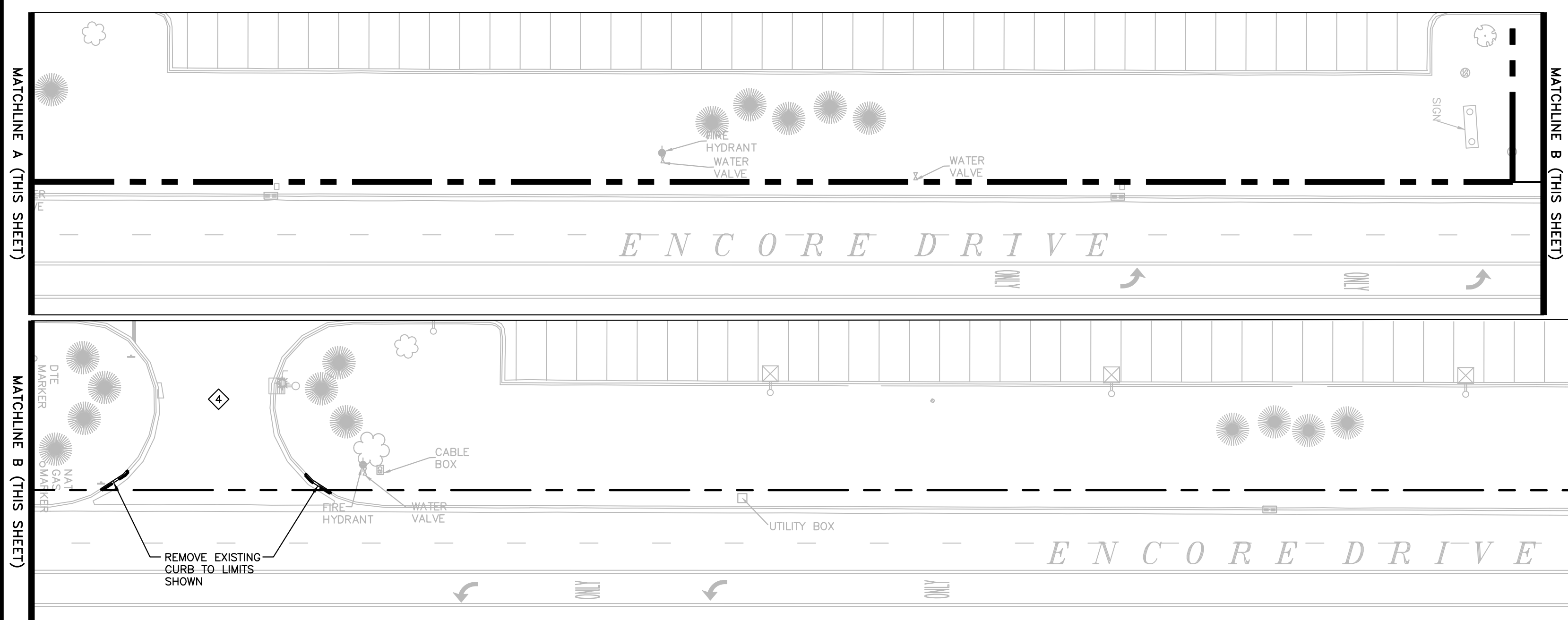
CONTRACTOR SHALL COORDINATE ALL DEMOLITION AND CONSTRUCTION ACTIVITIES OUTSIDE THE FENCED AREA WITH THE OWNER'S CONSTRUCTION MANAGER, UNLESS SPECIFICALLY AUTHORIZED BY THE CM. ALL ACTIVITIES BEYOND THE FENCED AREA SHALL BE PERFORMED OUTSIDE THE CLUB'S NORMAL BUSINESS HOURS.

TRAFFIC CONTROL NOTES

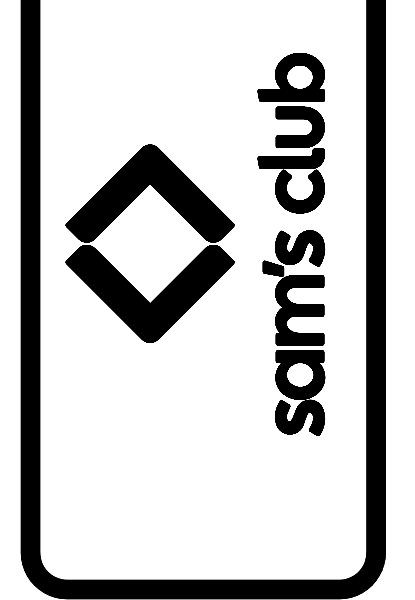
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY.
- ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING THE COMPLETION OF EACH CONSTRUCTION STAGE AND THE PERMANENT TRAFFIC CONTROL DEVICES AND STRIPING SHALL BE RESTORED TO THEIR ORIGINAL AND/OR FINAL CONFIGURATION AS APPLICABLE.
- CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT AS RELATED TO PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS.
- CONSTRUCTION WORKER'S VEHICLES, MATERIALS, CONSTRUCTION EQUIPMENT, ETC., SHALL BE LOCATED WITHIN THE LIMITS OF THE FENCED AREA WHEN NOT IN USE WITHIN THE LIMITS OF THE CURRENT PHASE OF CONSTRUCTION.
- REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL COVERED OR REMOVED AND STORED.
- PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS SHALL BE INSTALLED UPON COMPLETION OF EACH PHASE OF WORK. REFER TO THE SITE PLAN, THIS SET, FOR ADDITIONAL INFORMATION.
- ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.
- ACCESS SHALL BE MAINTAINED TO ALL ENTRANCE/EXIT DRIVES AT ALL TIMES EXCEPT AS NOTED ON THIS PLAN.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, APPURTENANCES AND IMPROVEMENTS WHICH CONFLICT WITH THE IMPROVEMENTS SHOWN BY THESE PLANS.

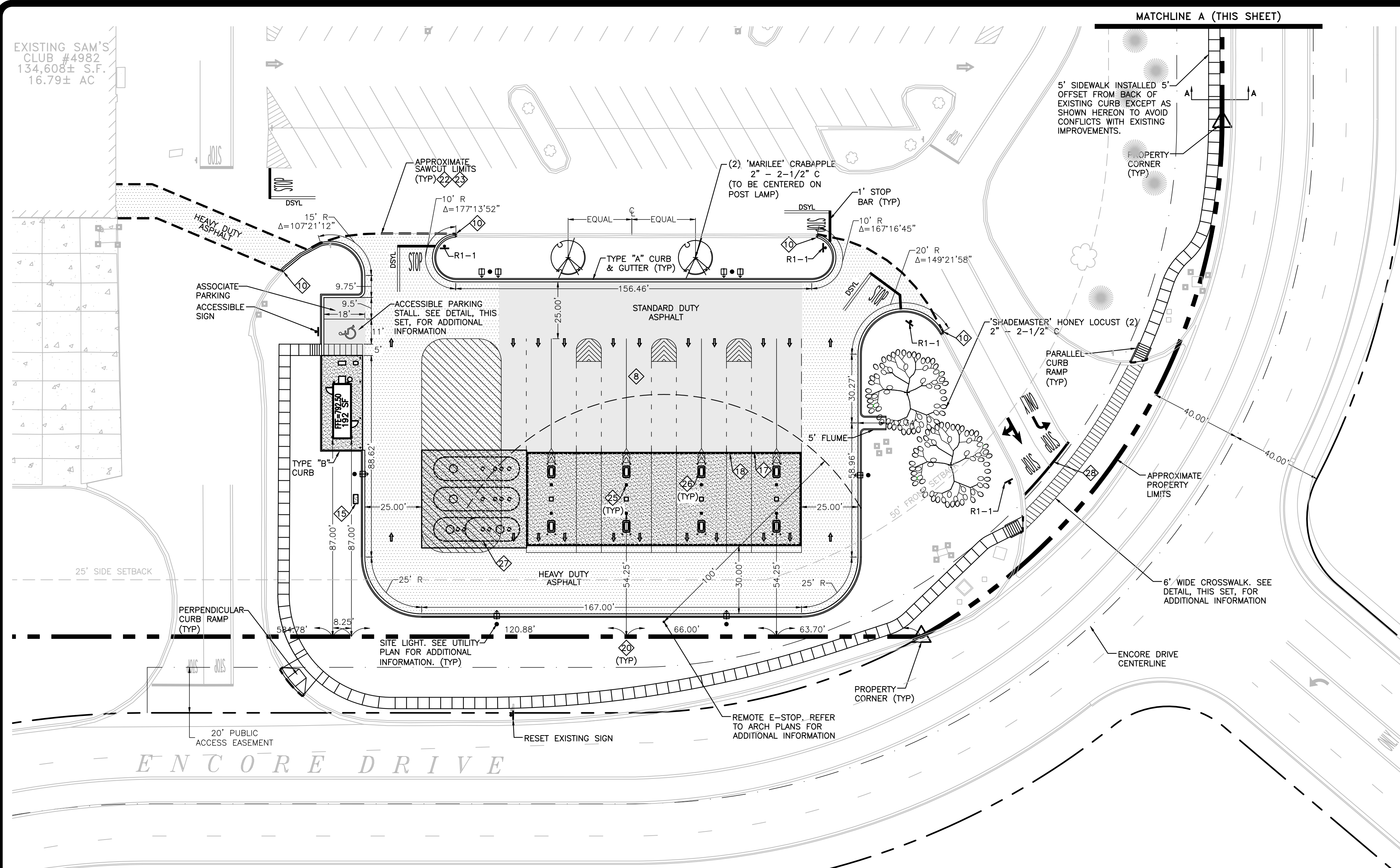


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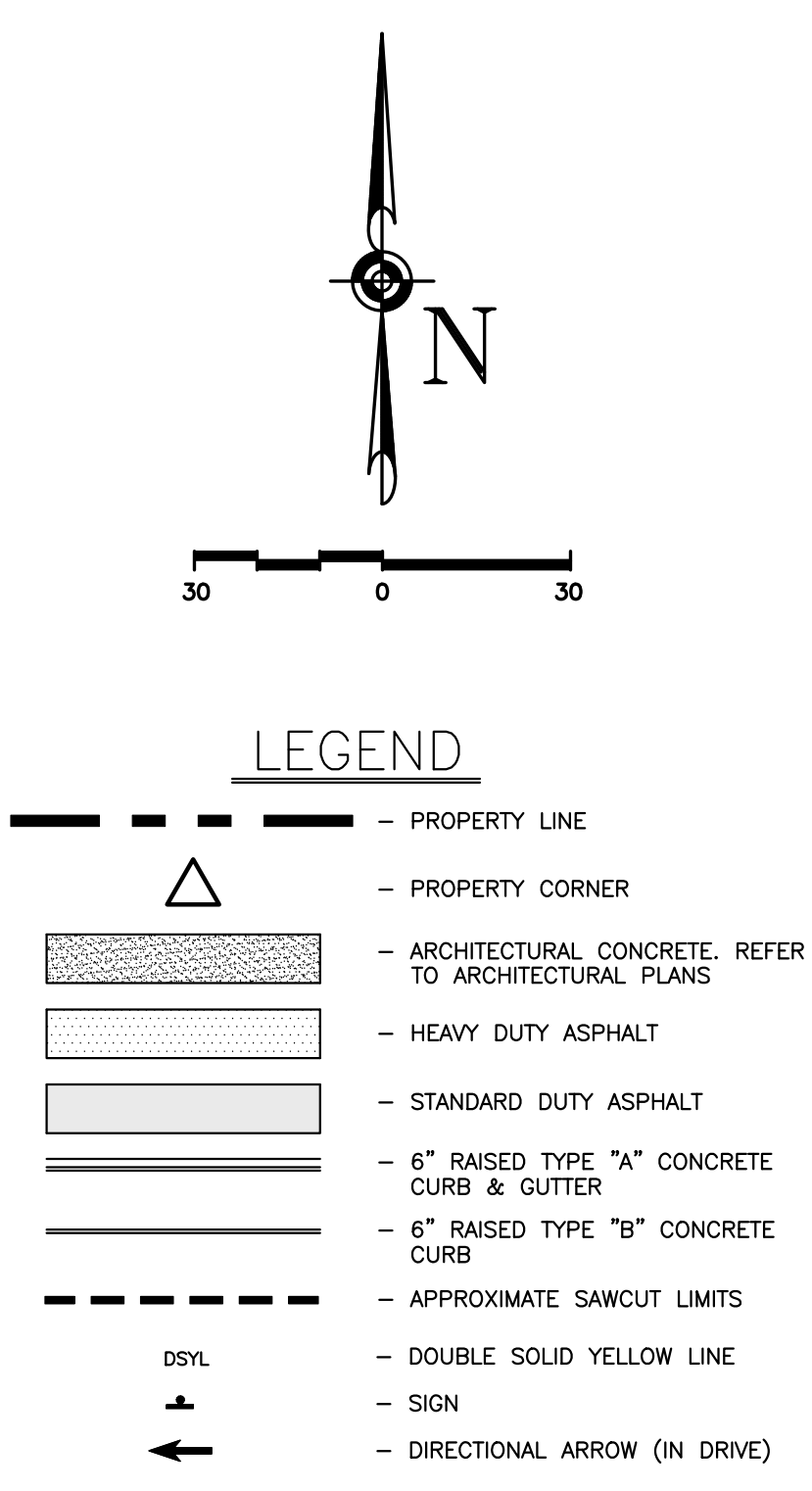


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SCALE	1"=30'
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DEMOLITION AND TRAFFIC CONTROL PLAN



- NOTES:
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF THE EXISTING CONDITIONS OF THE SITE, AND OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE HIM OF ANY RESPONSIBILITY FOR PERFORMING HIS WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO THE FAILURE OF THE GENERAL CONTRACTOR TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.
 - COORDINATE PROJECT PHASING AND STORAGE OF MATERIALS WITH SAM'S CONSTRUCTION MANAGER AND SAM'S CLUB STORE MANAGER.
 - AREAS OF EXISTING PAVEMENT THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE SAWCUT THEN REMOVED AND REPLACED TO MATCH EXISTING PAVEMENT TYPE. THE REPLACEMENT SECTION SHALL MATCH EXISTING PAVING SECTION THICKNESS OR THE THICKNESS INDICATED IN THE "PAVING SECTIONS" DETAILS, THIS SET, WHICH EVER IS THICKER.
 - ALL CONDITIONS SHOWN TO BE "EXISTING" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE SAM'S CONSTRUCTION MANAGER AND THE ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THE PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE SAM'S CONSTRUCTION MANAGER AND THE ENGINEER PRIOR TO MAKING ANY CHANGES.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THIS PROJECT IS CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND IN COMPLIANCE WITH CODES INDICATED HEREIN. THE QUALITY OF WORKMANSHIP AND INSTALLATION OF MATERIALS SPECIFIED BY CARLSON ARE THE RESPONSIBILITY OF THE CONTRACTOR. ENGINEERS AND THE ARCHITECT WILL NOT BE HELD RESPONSIBLE FOR ANY SUBSTANDARD OR INSUFFICIENT WORKMANSHIP, MATERIAL, OR SERVICES PROVIDED IN THE EXECUTION OF ANY PHASE OF CONSTRUCTION OF THIS PROJECT.
 - ALL MATERIALS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL MANUFACTURER'S WARRANTIES WILL BE HONORED.
 - THE GENERAL CONTRACTOR SHALL PROVIDE DUMPSTERS, PORTABLE TOILETS AND TEMPORARY POWER FOR UNRESTRICTED PROJECT RELATED USE BY OTHERS FOR THE DURATION OF THE PROJECT.
 - SEE DETAILS FOR ADDITIONAL INFORMATION ON FUEL STATION LANE STRIPING AND PAVEMENT MARKINGS.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE SAFETY OF ALL PERSONS ON THE JOB SITE AT ALL TIMES, INCLUDING (BUT NOT LIMITED TO) SUBCONTRACTORS, STORE PERSONNEL, VENDORS, DESIGN STAFF PROFESSIONALS AND INSPECTION PERSONNEL.
 - CONNECT TO EXISTING CURB. TRANSITION TO MATCH EXISTING IN TYPE, GRADE AND ALIGNMENT OVER LAST 10 FEET.
 - THE GENERAL CONTRACTOR IS RESPONSIBLE FOR RECEIVING, UNLOADING, AND PROTECTING OF MATERIALS AND EQUIPMENT SUPPLIED BY THE OWNER UNTIL IT HAS BEEN INSTALLED AND ACCEPTED BY THE OWNER.
 - ALL DIMENSIONS SHOWN ARE TO THE GUTTER LINE (OR FACE OF CURB IF NO GUTTER), OR CENTER OF STRIPE, U.N.O.
 - ALL CURB RADI ARE 3' U.N.O.
 - ALL DELTA ANGLES ARE 90° U.N.O.
 - REMOTE VENT CONCRETE PAD. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - TANK SLAB. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - CANOPY SLAB. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - OVERHEAD CANOPY. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - SEE DETAIL SHEET FOR DETAIL OF CURBED ISLANDS. ALL CURB AND GUTTER SHALL BE TYPE A CURB CURB AND GUTTER U.N.O.
 - CONTROL POINTS SHOWN FROM BUILDING CORNERS AND THE CENTER OF CANOPY COLUMNS TO A POINT PERPENDICULAR TO THE PROPERTY LINE.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE AREA CLEAN AND FREE OF DEBRIS AT ALL TIMES DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL POWER WASH THE ENTIRE FUELING STATION CONSTRUCTION AREA PRIOR TO TURNOVER TO THE OWNER.
 - CONTRACTOR SHALL SAWCUT ALONG EDGE OF PAVEMENT REMOVAL LIMITS TO ENSURE CLEAN, STRAIGHT JOINT BETWEEN OLD AND NEW SURFACES.
 - ELEVATION OF NEW PAVEMENT TO MATCH ELEVATION OF PAVEMENT TO REMAIN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE POSITIVE DRAINAGE IN ALL AREAS.
 - UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON-SITE OR OFF-SITE ITEMS THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC AND WALMART CM. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND WALMART CM HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE WALMART CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.
 - CANOPY COLUMN (TYPICAL OF 8) REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - FUEL DISPENSER (TYPICAL OF 8) REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - UNDERGROUND FUEL STORAGE TANK (TYPICAL OF 3). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 - STOP BARS SHALL BE LOCATED 4' IN ADVANCE OF CROSSWALK



CAUTION - NOTICE TO CONTRACTOR

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PLANT SCHEDULE

NOTE: ALL SIZES AND CONDITION OF NURSERY STOCK SHALL MEET THE STANDARDS ESTABLISHED IN THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE (BOTH MIN'S TO BE MET)	SPACING	CONDITION	REMARKS
TREES:							
2		GLEDITSIA TRIACANTHOS VAR. INERMIS 'SHADEMASTER'	'SHADEMASTER' THORNLESS HONEYLOCUST	2" - 2-1/2" C / 8' - 10' HT	AS SHOWN	B&B	FULL HEAD w/UNIFORM GROWTH
2		MALLUS 'JARMIN' PP 14337	MARILEE CRABAPPLE	2" - 2-1/2" C / 8' - 10' HT	AS SHOWN	B&B	FULL HEAD w/UNIFORM GROWTH
2		PINUS NIGRA	AUSTRIAN BLACK PINE	6'-8' HT. FULL TO GROUND	AS SHOWN	B&B	STRONG CENTRAL LEADER

NOTE: SYMBOLS SHOWN IN TABLE ABOVE ARE FOR SPECIES IDENTIFICATION ONLY. PLANT SIZE SHOWN IN THE TABLE IS NOT INTENDED TO BE REPRESENTATIVE OF THE PLANT AT EITHER INSTALLATION OR MATURITY. SIZE OF SYMBOL SHOWN IN TABLE ABOVE MAY VARY FROM THOSE SHOWN ON PLANS.

NOTE: NO SUBSTITUTIONS OF PLANT MATERIALS ARE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.

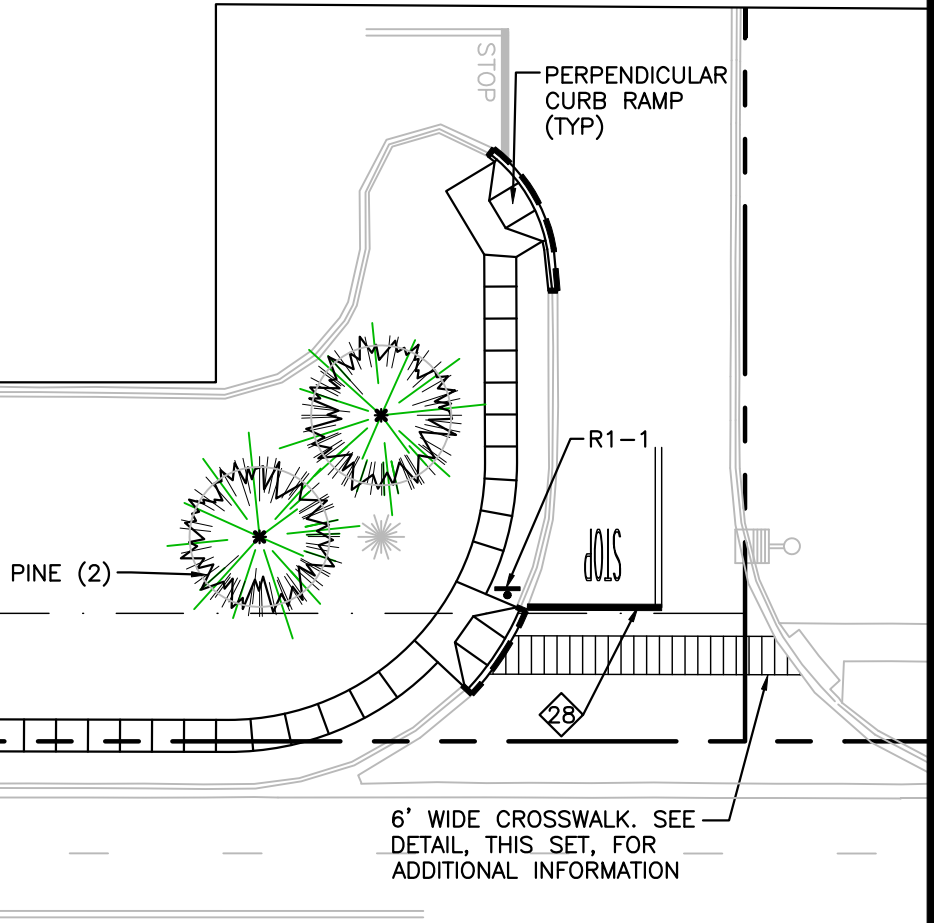
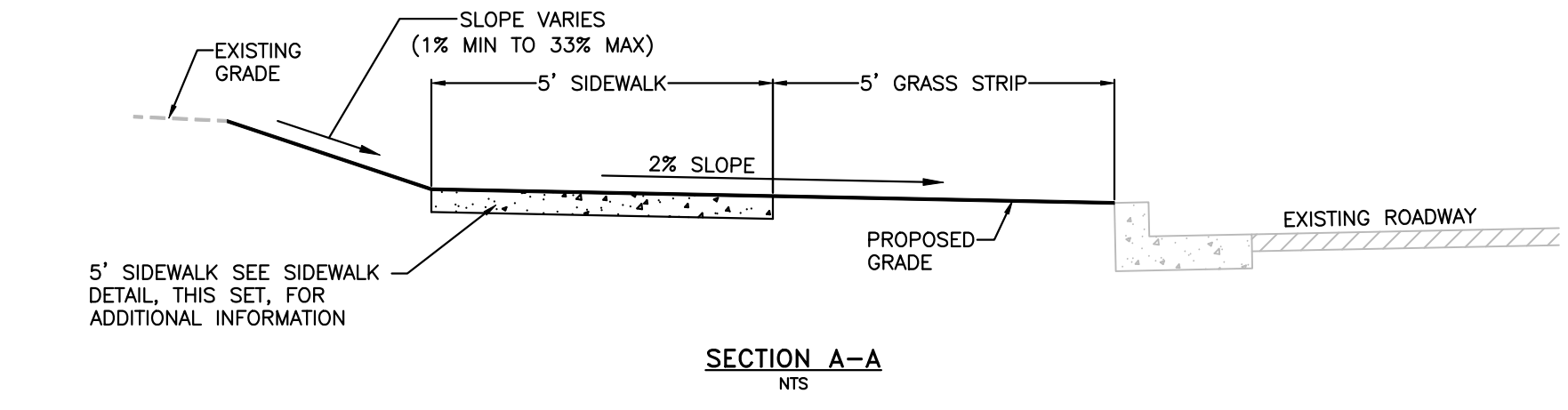
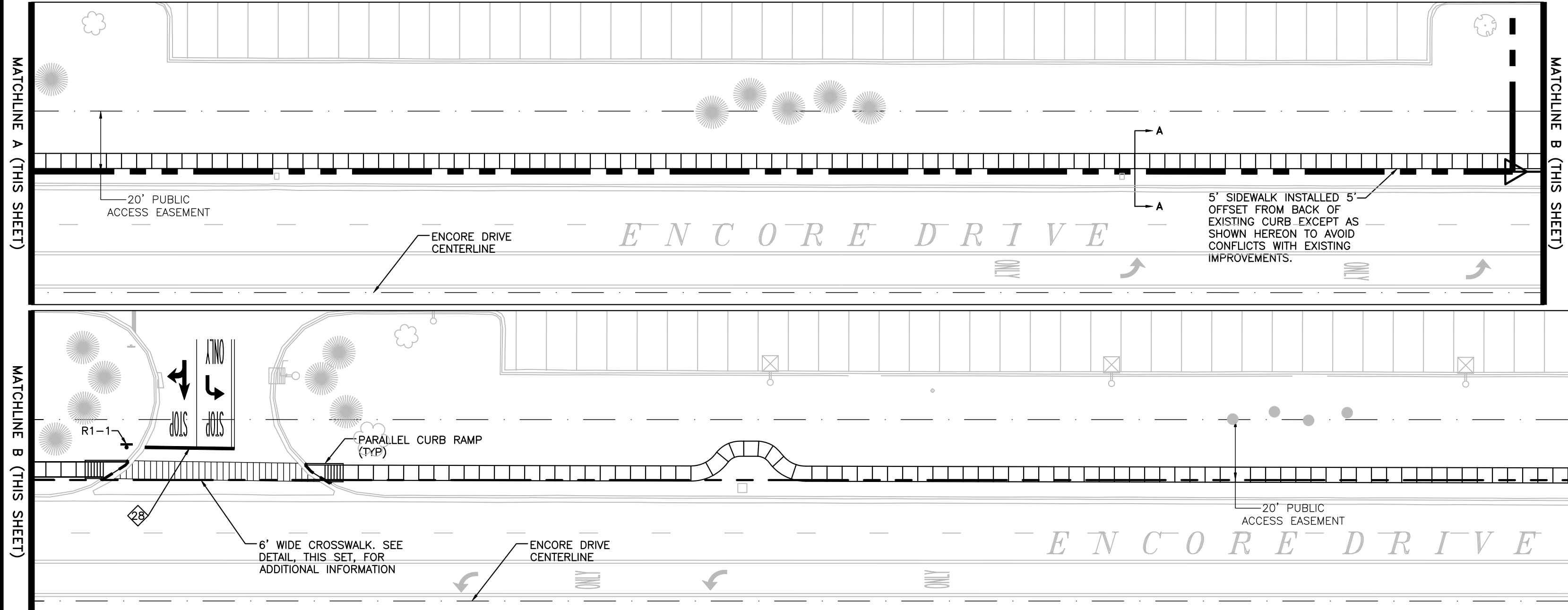
PARKING CALCULATIONS*

PROPOSED FUEL STATION	BLDG SIZE (SF)	REQUIRED PARKING	TOTAL PROVIDED
	192	2 STALLS (1 STALL PER EMPLOYEE PLUS 1 PER SERVICE STALL)	2 STALLS

*CALCULATIONS SHOWN ARE FOR PROPOSED FUELING STATION ONLY. THERE WILL BE NO IMPACTS TO EXISTING SAM'S CLUB PARKING COUNT/RATIO.

NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT DAMAGE TO EXISTING ROADWAYS AND INFRASTRUCTURE. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON-SITE OR OFF-SITE ITEMS INCLUDING RELATED APPURTENANCES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC AND WALMART CM. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND WALMART CM HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE WALMART CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.



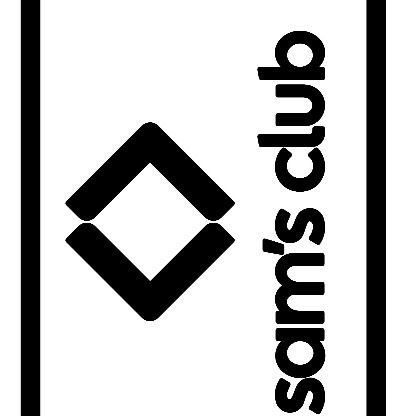
SITE PLAN

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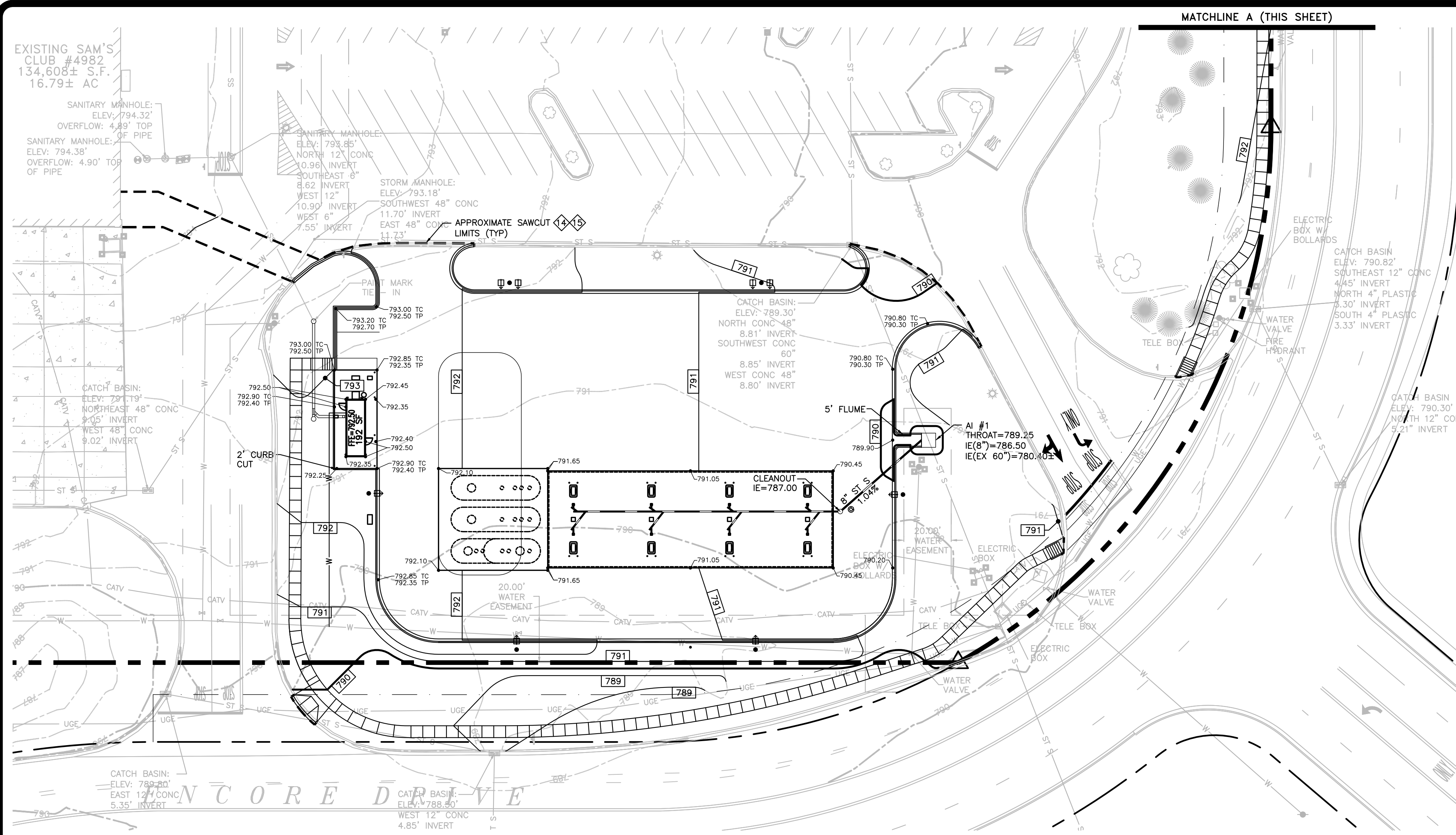
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 JOSEPH PARLEY
 ENGINEER
 No. 6201066218
 LICENSED PROFESSIONAL ENGINEER

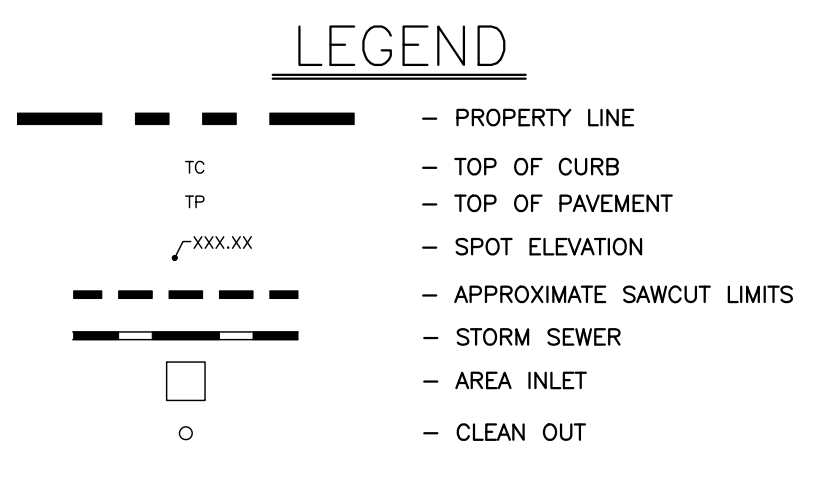
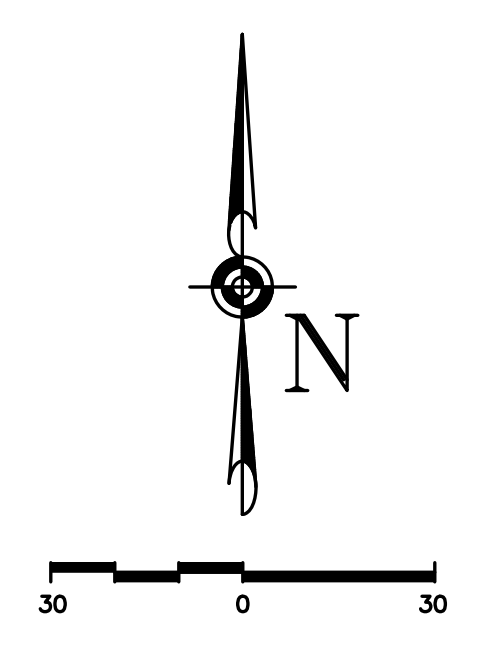
SAM'S CLUB #4982-211
 MT. PLEASANT, MICHIGAN
 SAM'S REAL ESTATE BUSINESS TRUST
 2101 SE SIMPLE SAVINGS DRIVE
 BENTONVILLE, AR 72716



DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	1"=30'
JOB No.	4982-211
SHEET	14 OF 22 SHEETS



- NOTES:
1. THE GENERAL CONTRACTOR SHALL PROVIDE DUMPSTERS, PORTABLE TOILETS, AND TEMPORARY POWER FOR UNRESTRICTED PROJECT RELATED USE BY OTHERS FOR THE DURATION OF THE PROJECT.
 2. ALL UNSURFACED AREAS SHALL RECEIVE 4" TOPSOIL AND SOD. WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
 3. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING FOR ALL NATURAL AND PAVED AREAS.
 4. SEE PROJECT SITING SPECIFICATIONS FOR SITE PREPARATION PROCEDURES FOR ALL AREAS EXCLUSIVE OF THE BUILDING, TANK, AND CANOPY PADS.
 5. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS NOTED OTHERWISE.
 6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THIS PROJECT IS CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND IN COMPLIANCE WITH CODES INDICATED HEREIN. THE QUALITY OF WORKMANSHIP AND INSTALLATION OF MATERIALS ARE THE RESPONSIBILITY OF THE CONTRACTOR, ENGINEER AND THE ARCHITECT WILL NOT BE HELD RESPONSIBLE FOR ANY SUBSTANDARD OR INSUFFICIENT WORKMANSHIP, MATERIALS, OR SERVICES PROVIDED IN THE EXECUTION OF ANY PHASE OF CONSTRUCTION OF THIS PROJECT.
 7. SEE FOUNDATION SUBSURFACE PREPARATION NOTE FOR GRANULAR MATERIAL UNDER SLABS.
 8. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE AREA CLEAN AND FREE OF DEBRIS AT ALL TIMES DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL POWER WASH THE ENTIRE FUELING STATION CONSTRUCTION AREA PRIOR TO TURNOVER TO THE OWNER.
 9. ALL CONDITIONS SHOWN TO BE "EXISTING" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE SAM'S CONSTRUCTION MANAGER AND THE ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THE PROJECT DUE TO EXISTING CONDITIONS MUST BE APPROVED BY BOTH THE SAM'S CONSTRUCTION MANAGER AND THE ENGINEER PRIOR TO MAKING ANY CHANGES.
 10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF THE EXISTING CONDITIONS OF THE SITE, AND OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE HIM OF ANY RESPONSIBILITY FOR PERFORMING HIS WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO THE FAILURE OF THE GENERAL CONTRACTOR TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.
 11. EXISTING PAVEMENT THAT WILL REMAIN AFTER CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE. AREAS OF EXISTING PAVING THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE SAWCUT, THEN REMOVED AND REPLACED.
 12. THE GENERAL CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES, INCLUDING IRRIGATION, SPECIFIC TO THIS PROJECT PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION. SHOULD ANY UTILITY REQUIRE RELOCATION, CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION MANAGER AND THE ARCHITECT/ENGINEER.
 13. SITE PAVING SHALL BE FLUSH WITH THE TANK SLAB, SERVICE BUILDING APRON AND CANOPY SLAB.
 14. CONTRACTOR SHALL SAWCUT ALONG EDGE OF PAVEMENT REMOVAL LIMITS TO ENSURE CLEAN, STRAIGHT JOINT BETWEEN OLD AND NEW SURFACES.
 15. ELEVATION OF NEW PAVEMENT TO MATCH ELEVATION OF PAVEMENT TO REMAIN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE POSITIVE DRAINAGE IN ALL AREAS.
 16. THE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO STARTING CONSTRUCTION. ANY DISCREPANCIES SHALL BE SUBMITTED TO ENGINEER FOR REVIEW.
 17. THE GENERAL CONTRACTOR SHALL PROTECT ALL NEW CONCRETE PAVING FOR THE TANK SLAB AND UNDER THE CANOPY FROM TIRE MARKS AND DAMAGE.
 18. ACCEPTABLE STORM SEWER MATERIALS (THERE WILL BE NO SUBSTITUTIONS ALLOWED FOR PIPES SHOWN IN THIS PLAN):
 1) CORRUGATED POLYETHYLENE (N-12)
 2) POLYVINYL CHLORIDE (PVC) - ONLY PERMITTED IN 15" DIAMETER OR LESS.
 SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
 19. THE CONTRACTOR SHALL ENSURE THAT PONDING OF WATER DOES NOT OCCUR ADJACENT TO THE DISPENSERS. REFER TO ARCHITECTURAL PLANS FOR ELEVATIONS WITHIN THE CANOPY SLAB AREA.
 20. THE PAVEMENT SURROUNDING THE PRODUCT FILL MANHOLE TOPS SHALL BE RAMPED UP AT LEAST 1" HIGHER THAN THE FINISHED GRADE OF THE CONCRETE TANK SLAB TO ENSURE POSITIVE DRAINAGE AWAY FROM THE PRODUCT FILL MANHOLE TOPS. SEE ARCHITECTURE PLANS FOR MORE INFORMATION. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AROUND ALL MANHOLE TOPS.
 21. CONTRACTOR SHALL USE EXTREME CAUTION WHEN PERFORMING CONSTRUCTION ACTIVITIES IN THE VICINITY OF UTILITIES TO REMAIN.



CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, APPURTENANCES AND IMPROVEMENTS WHICH CONFLICT WITH THE IMPROVEMENTS SHOWN BY THESE PLANS.

FOUNDATION SUBSURFACE PREPARATION

FOUNDATION SUBSURFACE PREPARATION
 WAL-MART JOB #0406437R2, MT. PLEASANT, MICHIGAN
 06/04/20

UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE DRAWINGS AND/OR SPECIFICATIONS, THE LIMITS OF THIS SUBSURFACE PREPARATION ARE CONSIDERED TO BE THAT PORTION OF THE SITE DIRECTLY BENEATH AND 2.5 FEET BEYOND THE FUEL STATION SERVICE BUILDING, AS WELL AS DIRECTLY BENEATH CANOPY FOUNDATIONS. AT THE SERVICE BUILDING, THE EXTENTS OF SUBSURFACE PREPARATION SHALL BE SLOPED AWAY FROM THE 2.5 FOOT PERIMETER AT A MINIMUM 1:1 SLOPE.

APPURTENANCES ARE THOSE ITEMS ATTACHED TO THE BUILDING PROPER (REFER TO DRAWING SHEET SP1), TYPICALLY INCLUDING, BUT NOT LIMITED TO, THE BUILDING SIDEWALKS, GARDEN CENTER, PORCHES, RAMPS, STOOPS, TRUCK WELLS/DOCKS, CONCRETE APRONS AT THE AUTOMOTIVE CENTER, COMPACTOR PAD, ETC. THE BASE AND THE VAPOR BARRIER, WHERE REQUIRED, DO NOT EXTEND BEYOND THE LIMITS OF THE ACTUAL BUILDING AND THE APPURTENANCES.

ESTABLISH THE FINAL SUBGRADE ELEVATION TO ALLOW FOR THE CONCRETE SLAB, BASE, AND SUBBASE (IF SUBBASE IS REQUIRED BELOW). REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED SLAB THICKNESS. THE MINIMUM 4" THICK BASE MATERIAL SHALL CONFORM TO MDOT CLASS II. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL CUT AND FILL DEPTHS REQUIRED. ANY PROPOSED EQUIVALENT ALTERNATIVE BASE MATERIAL MUST BE SUBMITTED FOR APPROVAL WITHIN 30 DAYS AFTER AWARD OF CONTRACT. ANY EQUIVALENT ALTERNATIVE SHALL ONLY BE USED IF APPROVED IN WRITING BY THE CEC AND AOR.

AFTER THE TOPSOIL AND OLD FILL SOILS OR LOOSE/SOFT SOILS (IF ENCOUNTERED) HAVE BEEN REMOVED FROM THE AREAS OF CONSTRUCTION AND ANY CUT SECTIONS ARE PERFORMED, EXPOSED SUBGRADES SHOULD BE OBSERVED AND THOROUGHLY PROOF ROLLED/COMPACTED WITH A LARGE, HEAVY RUBBER-TIRED VEHICLE PRIOR TO THE PLACEMENT OF ENGINEERED FILL OR BACKFILL REQUIRED TO ACHIEVE THE PROPOSED SUBGRADE ELEVATION. AREAS THAT EXHIBIT INSTABILITY OR ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOAD SHOULD BE FURTHER UNDERCUT, STABILIZED BY AERATION, DRYING (IF WET) AND ADDITIONAL COMPACTION TO ATTAIN A STABLE FINISHED SUBGRADE. THE PROOF ROLLING/COMPACTING AND UNDERCUTTING ACTIVITIES SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER AND SHOULD BE PERFORMED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER'S REPRESENTATIVE.

SUBGRADE MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557) AT A MOISTURE CONTENT WITHIN 3 PERCENT BELOW TO 3 PERCENT ABOVE THE OPTIMUM.

THE FOUNDATION SYSTEM SHALL BE ISOLATED SPREAD FOOTINGS AT COLUMNS AND CONTINUOUS SPREAD FOOTINGS AT WALLS.

THIS FOUNDATION SUBSURFACE PREPARATION DOES NOT CONSTITUTE A COMPLETE SITE WORK SPECIFICATION. IN CASE OF CONFLICT, INFORMATION COVERED IN THIS PREPARATION SHALL TAKE PRECEDENCE OVER THE WAL-MART SPECIFICATIONS. REFER TO THE SPECIFICATIONS FOR SPECIFIC INFORMATION NOT COVERED IN THIS PREPARATION. THIS INFORMATION WAS TAKEN FROM A GEOTECHNICAL REPORT PREPARED BY IJAH KHALAF, P.E. DATED: 6/4/2020 (GEOTECHNICAL REPORT IS FOR INFORMATION ONLY AND IS NOT A CONSTRUCTION SPECIFICATION).

CAUTION - NOTICE TO CONTRACTOR REGARDING EXISTING UTILITIES

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE PERFORMING ANY CONSTRUCTION ACTIVITIES TO REQUEST EXACT FIELD LOCATIONS OF THEIR UTILITIES. THE CONTRACTOR MUST BE AWARE THAT SOME EXISTING UTILITIES, SUCH AS UNDERGROUND ELECTRIC LINES SERVING PARKING LOT LIGHTING, STORM SEWER LINES, CABLES FOR SECURITY CAMERAS, ETC. MAY NOT BE LOCATED BY LOCAL OR STATE UTILITY COMPANIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE NECESSARY ACCOMMODATIONS TO ACCURATELY LOCATE ALL EXISTING UTILITIES.

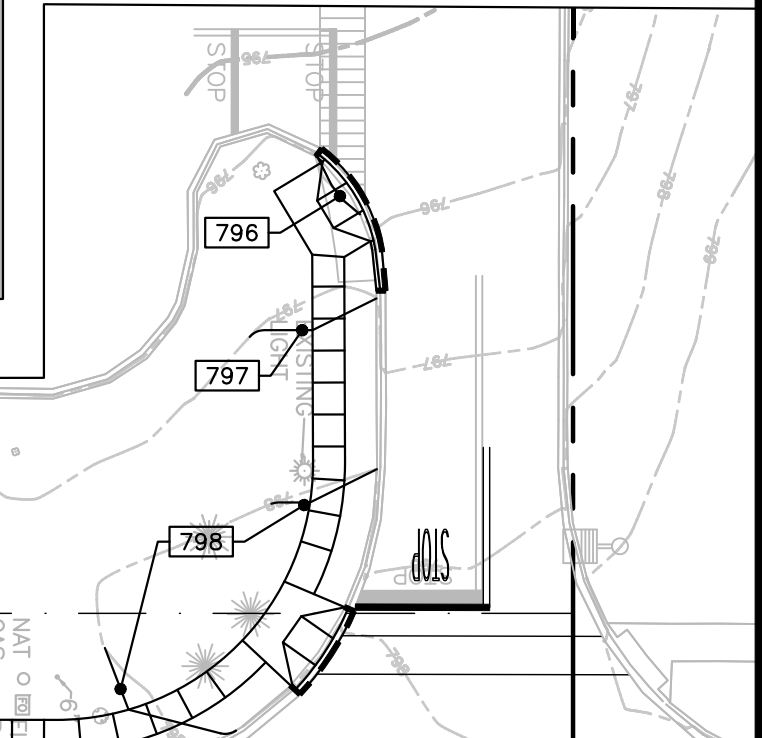
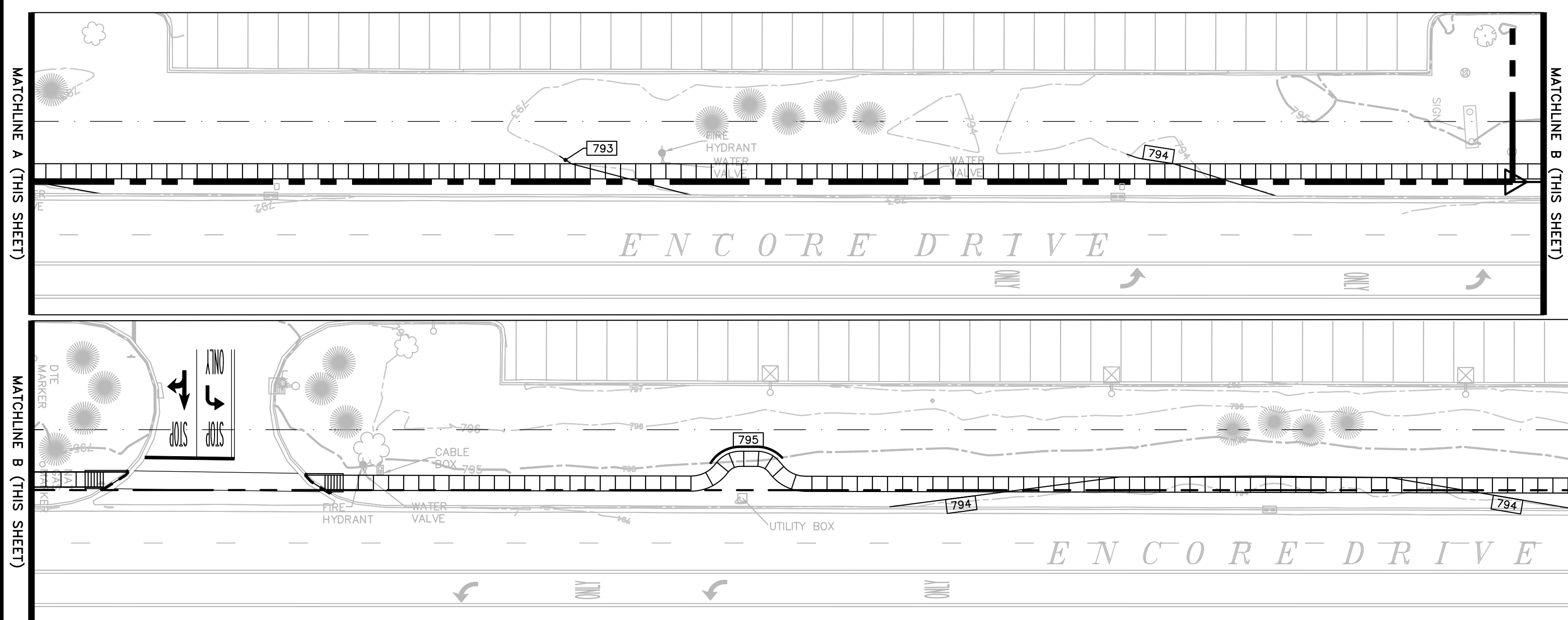
ALL EXISTING UTILITIES SERVING THE SAM'S CLUB, SAM'S CLUB PROPERTY, OR ADJACENT DEVELOPMENTS SHALL REMAIN IN PLACE AND OPERATIONAL AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE EXISTING UTILITIES WHEN NECESSARY TO FACILITATE THE REQUIRED IMPROVEMENTS SHOWN BY THESE PLANS. THE CONTRACTOR MUST COORDINATE ANY RELOCATIONS OR MODIFICATIONS TO THE EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANY, SAM'S CLUB STORE MANAGER, AND WALMART CONSTRUCTION MANAGER.

UNDERCUTTING NOTICE

THE CONTRACTOR IS SPECIFICALLY CAUTIONED REGARDING THE PRESENCE OF POTENTIALLY UNSTABLE SOILS ON THIS SITE AND THE NEED FOR UNDERCUTTING AND/OR STABILIZATION. THE CONTRACTOR'S BASE BID SHALL INCLUDE PROVISIONS FOR ADDRESSING THIS CONDITION.

DEWATERING/GROUNDWATER NOTICE

THE CONTRACTOR IS SPECIFICALLY CAUTIONED REGARDING THE PRESENCE OF GROUNDWATER ON THIS SITE. WHEN PERFORMING GRADING OPERATIONS CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. REFER TO MASTER SITE SPECIFICATIONS. THE CONTRACTOR'S BASE BID SHALL INCLUDE PROVISIONS FOR ADDRESSING THIS CONDITION.



ENCORE DRIVE

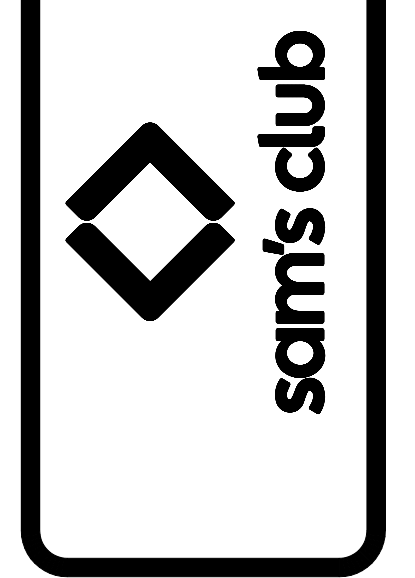
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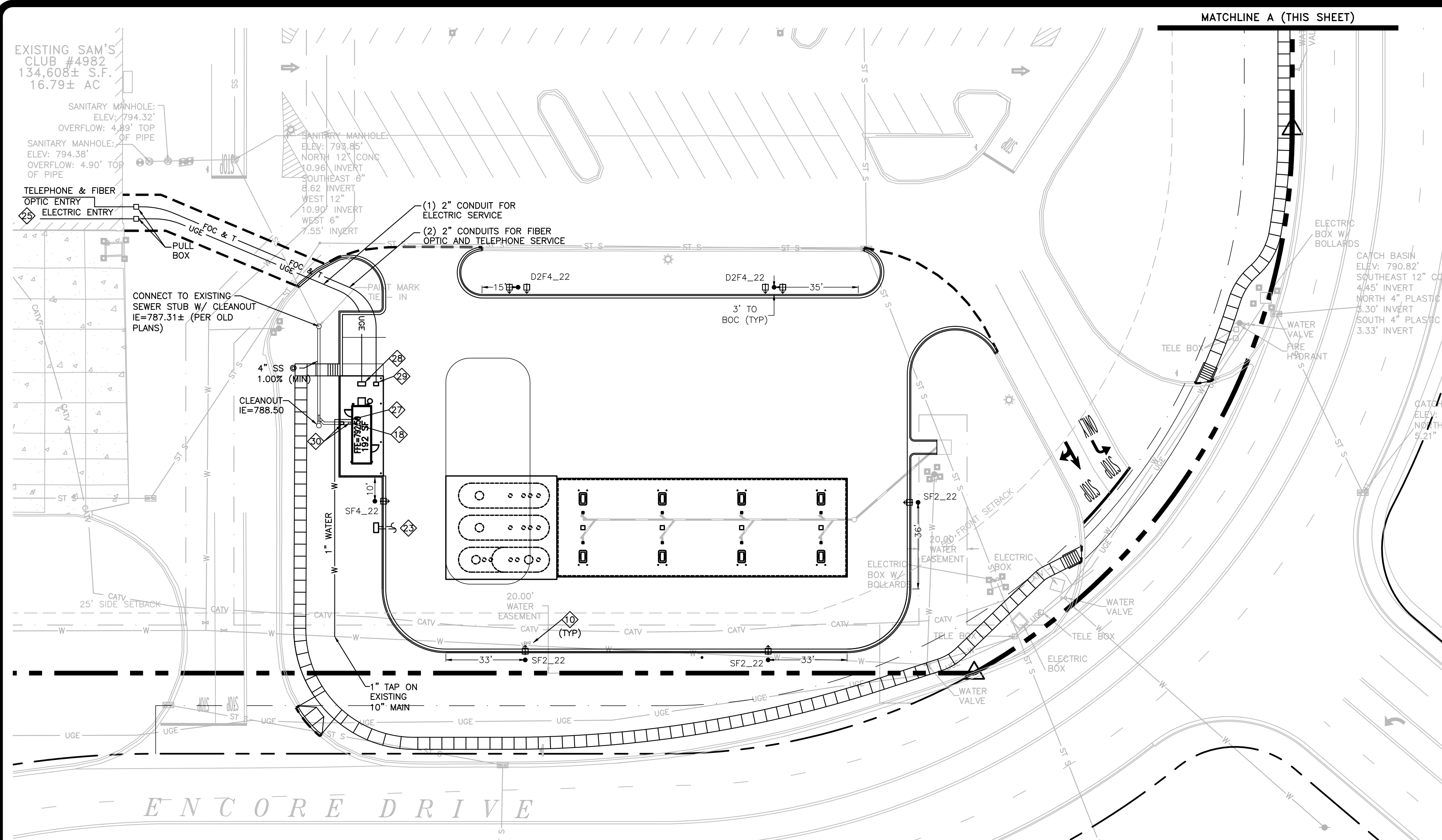
7686 LEDSTONE COMMONS
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STATE OF MICHIGAN
 JOSEPH PARBLEY
 ENGINEER
 No. 6201066218
 LICENSED PROFESSIONAL ENGINEER

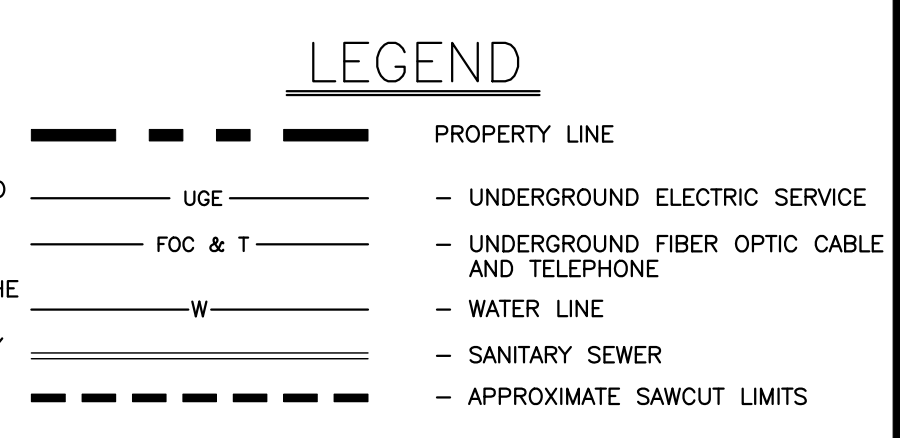
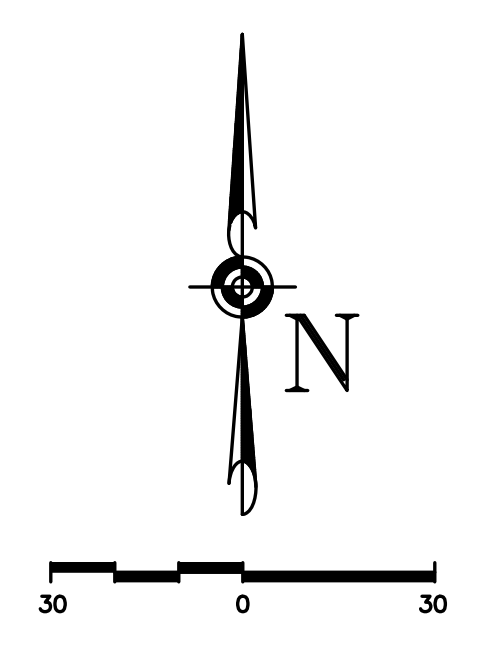
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 DATE 12/03/2020
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 JOB No. 4982-211
 SHEET 15 OF 22 SHEETS



- NOTES:**
1. ALL UTILITIES SHALL BE INSTALLED IN A TRENCH CONDITION IN ACCORDANCE WITH THE UTILITY TRENCHING DETAIL, THIS SET.
 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS A MINIMUM OF 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED FROM APPROPRIATE UTILITY COMPANIES AND CONTRACTOR HAS BEEN NOTIFIED.
 3. SANITARY SEWER PIPE MATERIAL SHALL BE IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
 4. WATER LINE PIPE MATERIAL SHALL BE IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
 5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
 6. ALL UTILITIES SHALL BE KEPT TEN (10') APART (PARALLEL) OR, WHEN CROSSING, 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
 7. CONTRACTOR SHALL MAINTAIN MINIMUM BURIAL DEPTHS AS REQUIRED BY THE UTILITY PROVIDER AND THE PROJECT SPECIFICATIONS.
 8. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE, MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
 9. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
 10. TOPS OF EXISTING STRUCTURES (VALVES, MANHOLES, HANDHOLES, PULL BOXES, ETC.) SHALL BE ADJUSTED AS NECESSARY TO BE FLUSH WITH FINAL GRADE.
 11. THE GENERAL CONTRACTOR SHALL COORDINATE PROJECT PHASING AND STORAGE OF MATERIALS WITH THE FUELING STATION CONSTRUCTION MANAGER.
 12. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
 13. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION ON UTILITY ENTRIES.
 14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
 15. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ANY UTILITY COMPANY WHICH MAINTAINS A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE START OF CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY FOR ANY DAMAGE, INCURRED BY ANY UTILITY COMPANY, TO THEIR LINES AS A RESULT OF HIS ACTIVITIES, WHETHER THESE LINES ARE SHOWN ON THE CONSTRUCTION PLANS OR NOT.
 16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
 17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. ALL UTILITY CONSTRUCTION SHALL CONFORM WITH THE MOST STRINGENT REQUIREMENTS OF THE UTILITY COMPANY OR THE SAM'S CLUB SPECIFICATIONS.
 18. 4" SANITARY SEWER SERVICE ENTRY.
 19. CONTRACTOR SHALL VERIFY AS-BUILT INVERT ELEVATION AND ADVISE ENGINEER OF ANY DISCREPANCIES.
 20. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE COUNTY UNLESS DULY AUTHORIZED TO DO SO BY THE COUNTY. ANY ADVERSE CONSEQUENCES OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR.
 21. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CONDUIT FOR UNDERGROUND UTILITIES AS PER THE UTILITY COMPANY REQUIREMENTS.
 22. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING PIPE BOLLARD PROTECTION AROUND UTILITY ENTRANCES AND METER LOCATIONS. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR EXACT REQUIREMENTS.
 23. UNDERGROUND VENT PIPING FROM UNDERGROUND STORAGE TANKS, REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
 24. SEE SURVEY FOR DESCRIPTION OF EXISTING EASEMENTS.
 25. REFER TO UTILITY ENTRY DETAIL, THIS SET, FOR ADDITIONAL INFORMATION.
 26. EXISTING PEDESTALS, VALVE BOXES, VAULTS, UTILITY MARKERS, PULLBOXES, ETC TO REMAIN SHALL BE RAISED/LOWERED TO MATCH PROPOSED GRADES. COORDINATE ACTIVITIES WITH RESPECTIVE UTILITY WHERE APPLICABLE.
 27. 1" DOMESTIC WATER ENTRY W/ METER INSIDE BUILDING.
 28. ELECTRIC TRANSFORMER. REFER TO MEP PLANS FOR ADDITIONAL INFORMATION.
 29. H-20 LOAD RATED FIBER OPTIC PULL BOX. REFER TO ARCHITECTURAL PLANS FOR CONTINUATION OF FIBER OPTICS AND TELEPHONE CONDUITS/CABLES.
 30. YCO & BACKWATER VALVE. REFER TO MEP PLANS FOR ADDITIONAL INFORMATION.
 31. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.



FIBER OPTIC CABLE AND TELEPHONE LINE CONDUIT REQUIREMENTS

CONDUIT
THE CONDUIT DIAMETER SHALL BE AS FOLLOWS:
FIBER OPTIC CABLE AND TELEPHONE LINE CONDUIT - ALL LOCATIONS - TWO (2) 2" CONDUITS, THE CONDUITS SHALL BE 2" DIAMETER CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR OR 2" SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR POLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS IN EACH CONDUIT. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED FIBER OPTIC CABLE" WORDING, 12" ABOVE THE TRENCHED CONDUITS.

BENDS
ALL CHANGES IN DIRECTION OF THE FIBER OPTIC CONDUIT WILL REQUIRE LONG FACTORY SWEEPS (NOT STANDARD SWEEPS) WITH RADIUS NOT LESS THAN 10 TIMES THE DIAMETER OF THE CONDUIT. NO MORE THAN TWO (2) 90 DEGREE BENDS WILL BE ALLOWED BETWEEN PULLING POINTS, OR A TOTAL OF 180 DEGREES COMBINED IN SEVERAL BENDS. BOXES SHALL BE LOCATED EVERY 450' FOR FIBER OPTIC CONDUIT UNLESS THE COMBINED TOTAL OF BENDS REQUIRES ADDITIONAL BOXES. CONDUIT SHALL ENTER AND EXIT THE PULL BOXES 180 DEGREES APART.

PULL BOXES
ALL PULL BOXES LOCATED IN PAVED AREAS SUBJECT TO TRUCK TRAFFIC SHALL BE "H-20" LOAD RATED. THE TYPICAL PULL BOX SIZE FOR FIBER OPTIC CONDUIT SHALL BE 18"x24"x24". DEEPER BOXES MAY BE REQUIRED WHEN THE CONDUIT ALIGNMENT IS AFFECTED BY OTHER UTILITIES. THE PULL BOX SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS WITH A CONCRETE COLLAR AND A MINIMUM OF 8" OF GRAVEL COMPACTED PER THE PROJECT SPECIFICATIONS. IF USING A PULL BOX TO CHANGE DIRECTION FOR THE FIBER OPTIC CONDUIT, THE MINIMUM BOX SIZE SHALL BE 48"x48"x24" PRE-CAST CONCRETE WITH A SEPARATE MANHOLE AND LID COLLAR.

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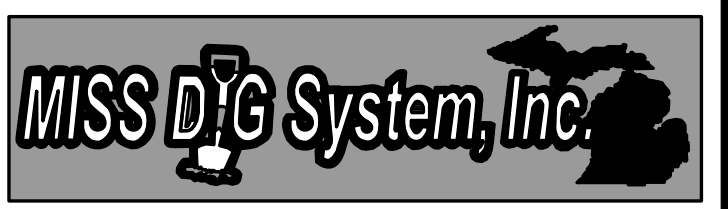
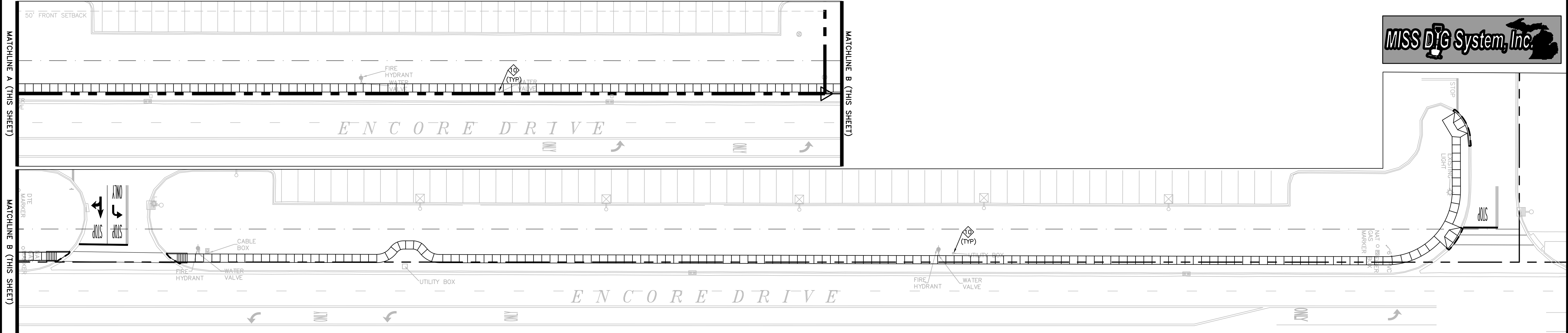
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LUMINAIRE SCHEDULE

Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Watts	Arr. Lum. Lumens	BUG Rating
□ ● □	2	D2F4_22	ROTATED OPTICS	0.864	1 - GE EVOLVE EALP035F4AF750NDD1BLCKFS1 and 1 - GE EVOLVE EALP035F4AF750NDD1BLCKFS2 19ft pole on 3ft base	208	30000	B3-U0-G3
● □	3	SF2_22	SINGLE	0.864	1 - GE EVOLVE EALP035F2AN750NDD1BLCKF 19ft pole on 3ft base	104	15100	B3-U0-G3
□ □	1	SF4_22	SINGLE	0.864	1 - GE EVOLVE EALP035F4AF750NDD1BLCKF 19ft pole on 3ft base	104	15000	B3-U0-G3

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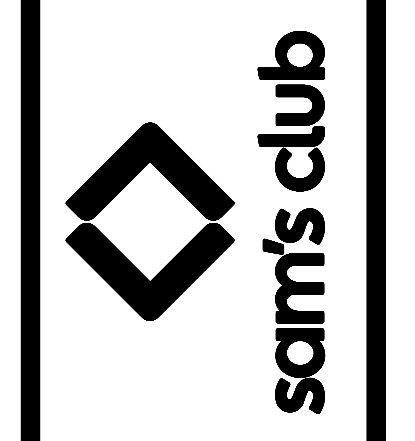
REVISIONS

NO.	DATE	DESCRIPTION	BY

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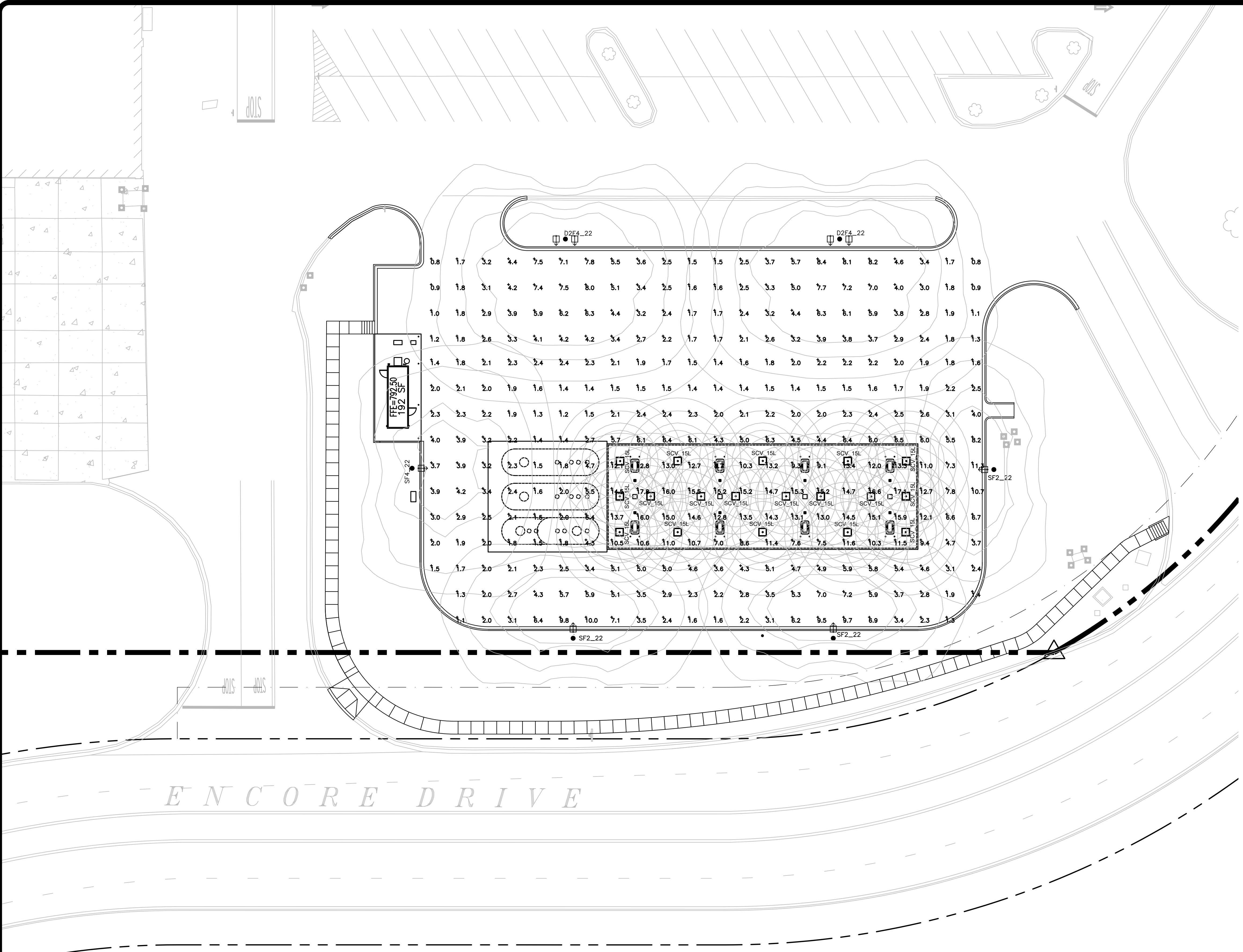
JOSEPH PARBLEY
ENGINEER
No. 6201066218
LICENSED PROFESSIONAL ENGINEER

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2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716

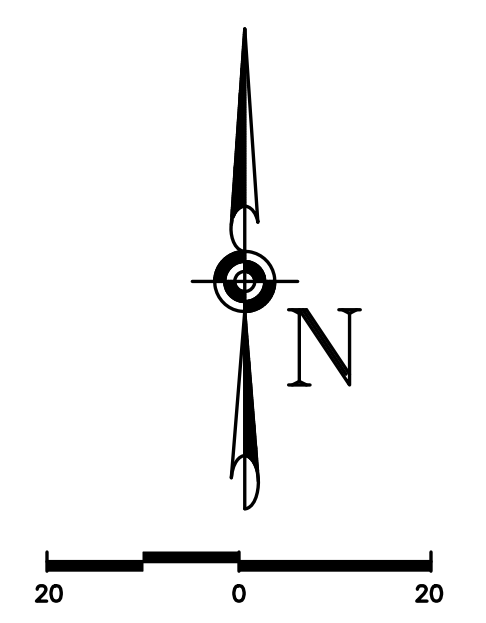


DRAWN AAS
CHECKED BKM
DATE 12/03/2020
SCALE 1"=30'
JOB No. 4982-211
SHEET 16 OF 22 SHEETS

UTILITY PLAN



NOTE:
1. ALL SITE LIGHTS TO BE MOUNTED AT 22 FT. ABOVE GRADE (3 FT. BASE AND 19 FT. POLE).

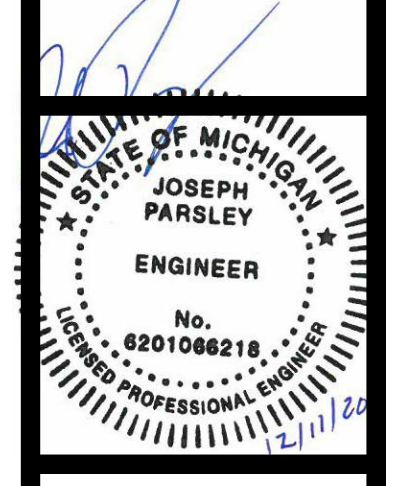


Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Watts	Arr. Lum. Lumens	BUG Rating
□ □	2	D2FA_22	ROTATED OPTICS	0.864	1 - GE EVOLVE EALP035F4AF750NDD1BLCKFS1 and 1 - GE EVOLVE EALP035F4AF750NDD1BLCKFS2 19ft pole on 3ft base	208	30000	B3-U0-G3
● □	3	SF2_22	SINGLE	0.864	1 - GE EVOLVE EALP035F2AN750NDD1BLCKF 19ft pole on 3ft base	104	15100	B3-U0-G3
● □	1	SF4_22	SINGLE	0.864	1 - GE EVOLVE EALP035F4AF750NDD1BLCKF 19ft pole on 3ft base	104	15000	B3-U0-G3
□	18	SCV_15L	SINGLE	0.320	1 - LSI SCOTTSDALE VERTEX SCV-LED-15L-SC-50 CANOPY MOUNTED	103	15410	B3-U0-G1

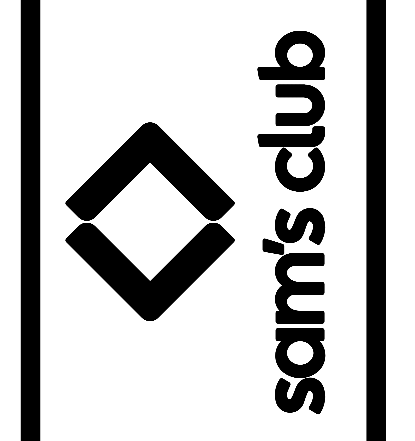
CALCULATION SUMMARY ILLUMINANCE FOOT-CANDLES					
	AVG	MAX	MIN	AVG/MIN	MAX/MIN
BEYOND FUEL AREA	3.68	8.4	0.8	4.60	10.50
FUEL AREA	5.41	17.8	1.1	4.92	16.18

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
 7088 LEDGESTONE COMMONS
 PH. (901) 384-0404 • FX. (901) 384-0710

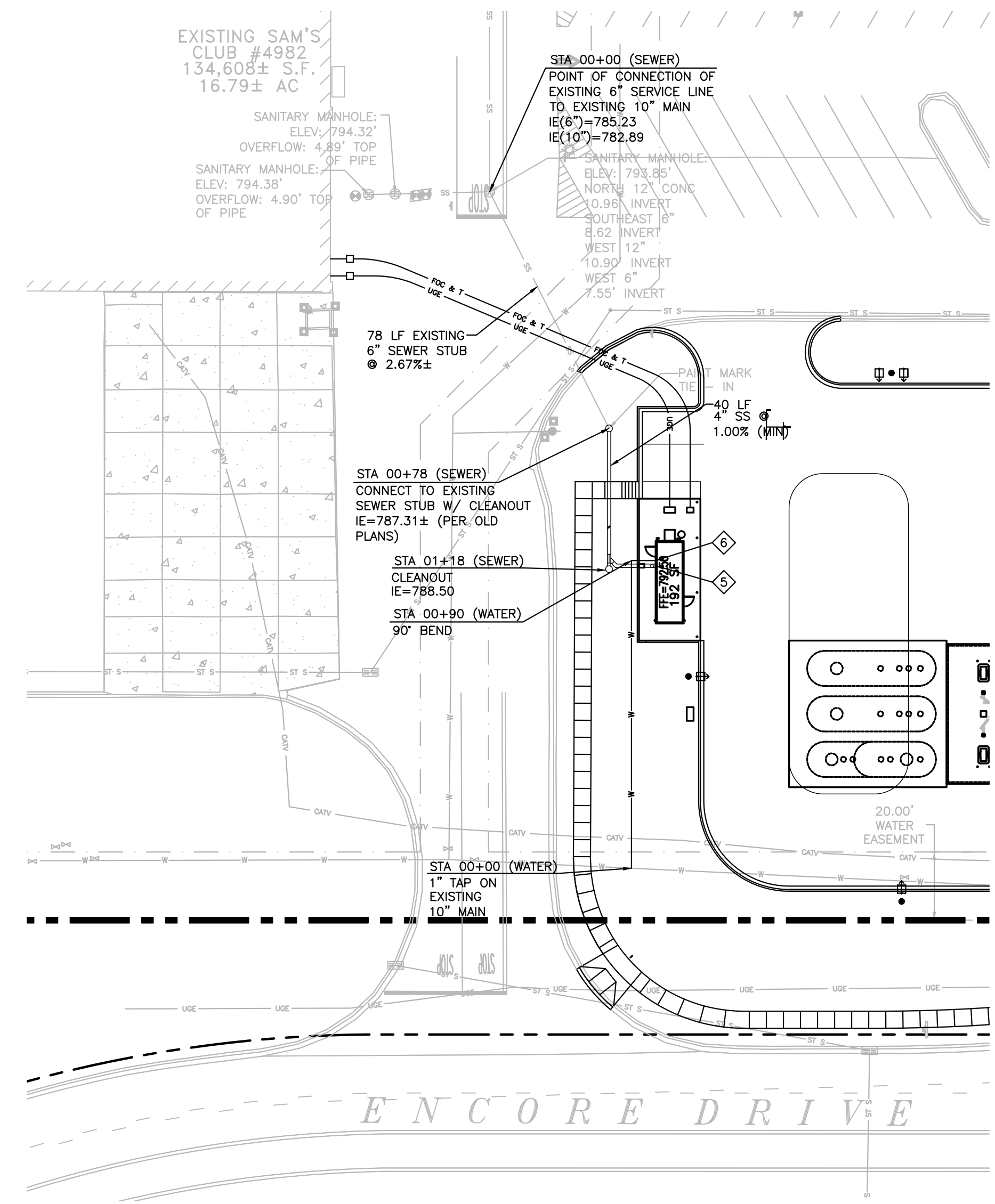


SAM'S CLUB #4982-211
 MT. PLEASANT, MICHIGAN
 SAM'S REAL ESTATE BUSINESS TRUST
 2101 SE SIMPLE SAVINGS DRIVE
 BENTONVILLE, AR 72716

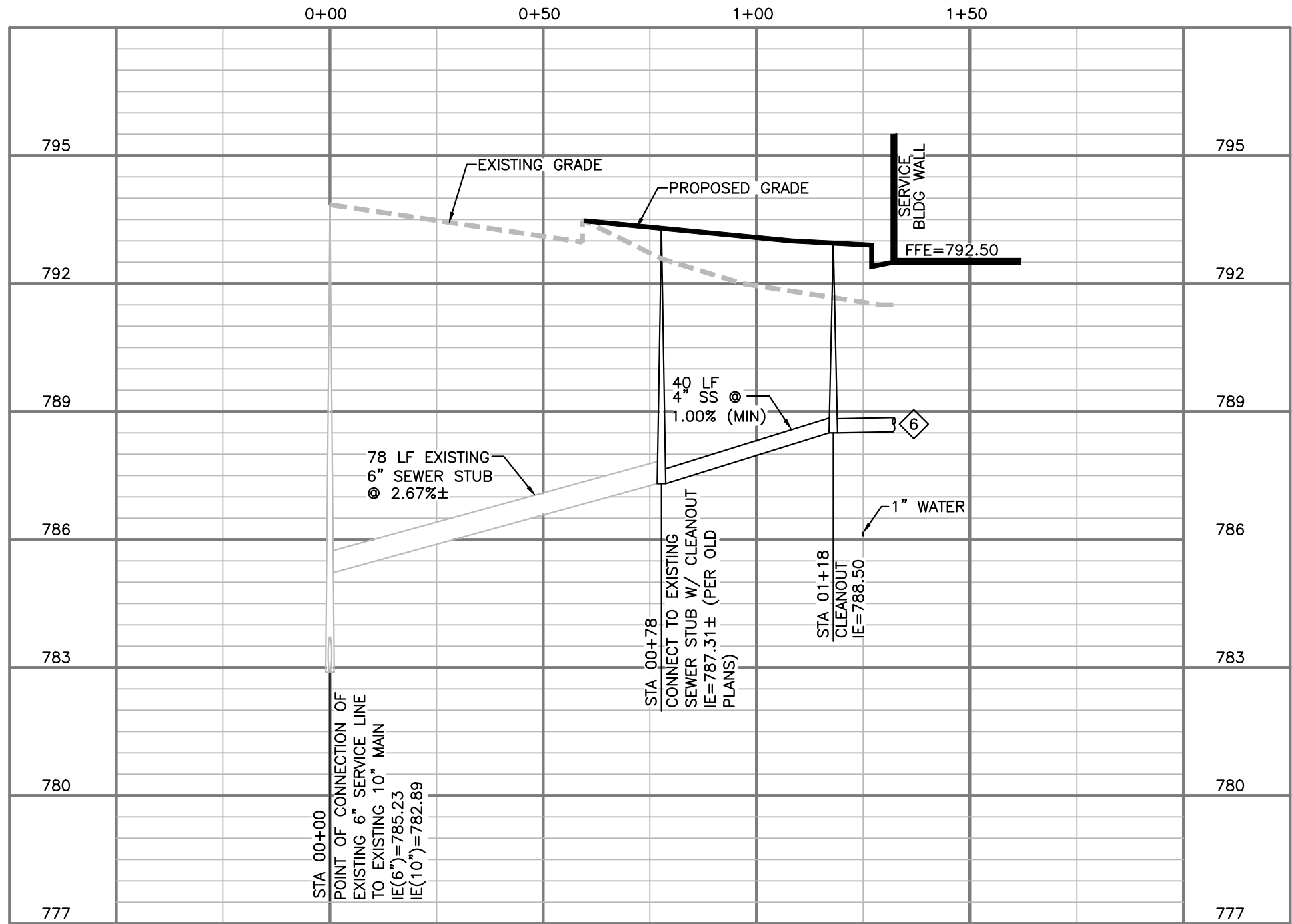
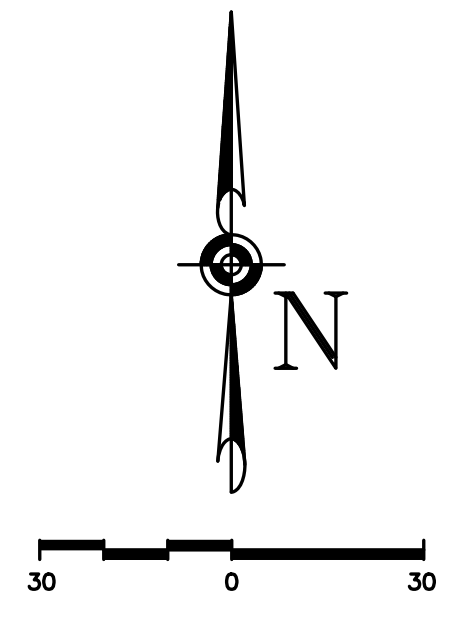


DRAWN AAS
 CHECKED BKM
 DATE 12/03/2020
 SCALE 1"=20'
 JOB No. 4982-211
 SHEET 17 OF 22 SHEETS

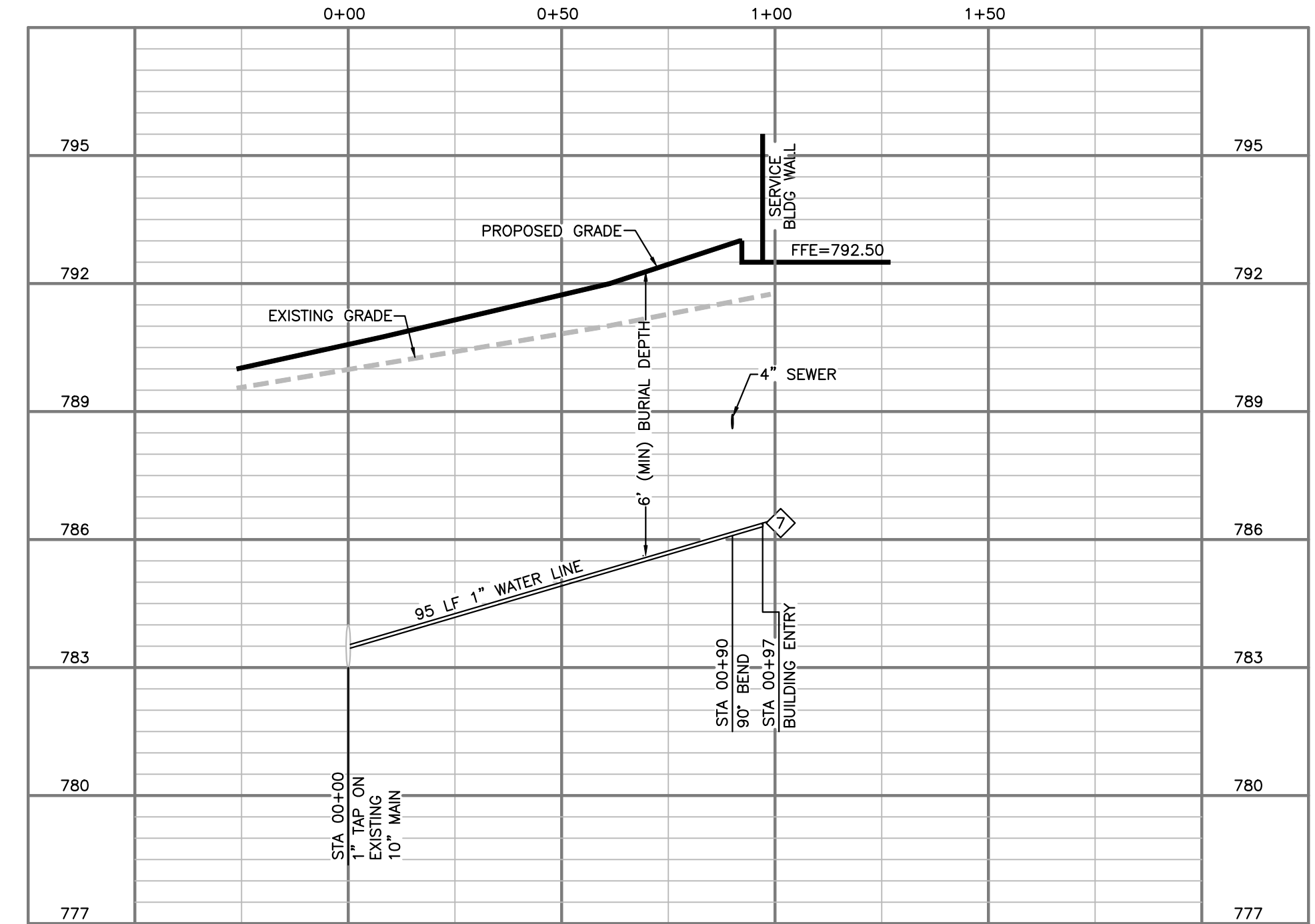
PHOTOMETRICS PLAN



- NOTES**
1. ALL DESIGN CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE TOWNSHIP'S CURRENT STANDARDS, SPECIFICATIONS, AND DETAILS.
 2. ALL ELEVATIONS SHALL BE BASED UPON USGS OR NGVD DATUM.
 3. NO CONNECTION RECEIVING STORM WATER OR GROUNDWATER SHALL BE MADE TO SANITARY SEWER.
 4. THE CONTRACTOR MUST HAVE WRITTEN APPROVAL FROM THE TOWNSHIP AND THE PROJECT ENGINEER BEFORE ANY CHANGE IN DESIGN IS MADE.
 5. MAINTAIN A MINIMUM 10' HORIZONTAL AND 18" VERTICAL SEPARATION AT ALL WATER AND SEWER CROSSINGS.
 6. 4" SANITARY SEWER SERVICE ENTRY.
 7. 1" DOMESTIC WATER ENTRY W/ METER INSIDE BUILDING.
 8. SEWER SERVICE LINES SHALL BE SCHEDULE 40 PVC.
 9. WATER SERVICE LINES SHALL BE PVC, 200 PSI AQUA JET TUBING.



SANITARY SEWER SERVICE LINE
 HORIZ: 1" = 30'
 VERT: 1" = 3'

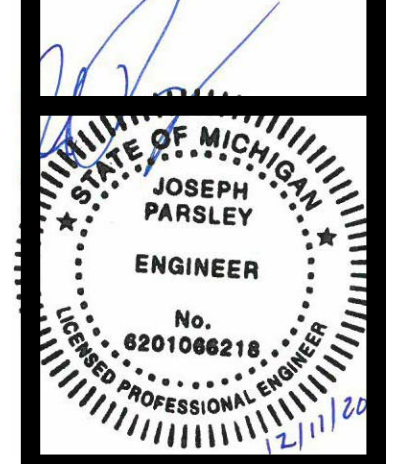


WATER SERVICE LINE
 HORIZ: 1" = 30'
 VERT: 1" = 3'

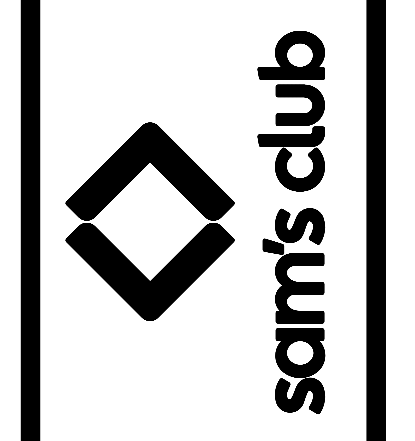
CAUTION - NOTICE TO CONTRACTOR
 THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, APPURTENANCES AND IMPROVEMENTS WHICH CONFLICT WITH THE IMPROVEMENTS SHOWN BY THESE PLANS.

REVISIONS	BY

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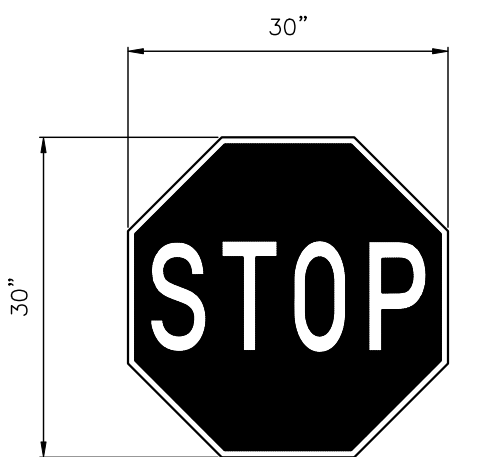


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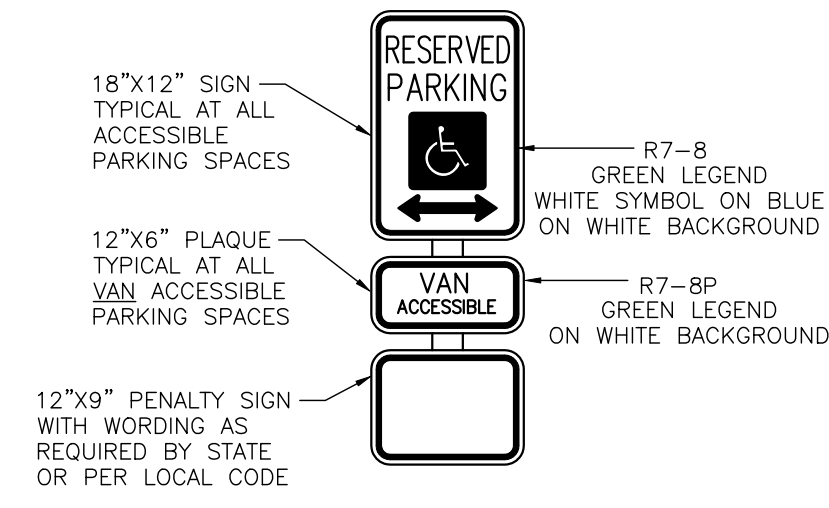


DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	AS NOTED
JOB No.	4982-211
SHEET	18 OF 22 SHEETS

SEWER AND WATER SERVICE LINES PLAN & PROFILE

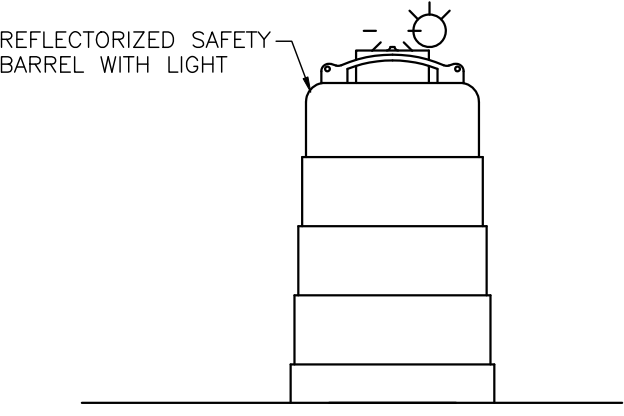


R1-1
30"x30"
"STOP" SIGN
NTS

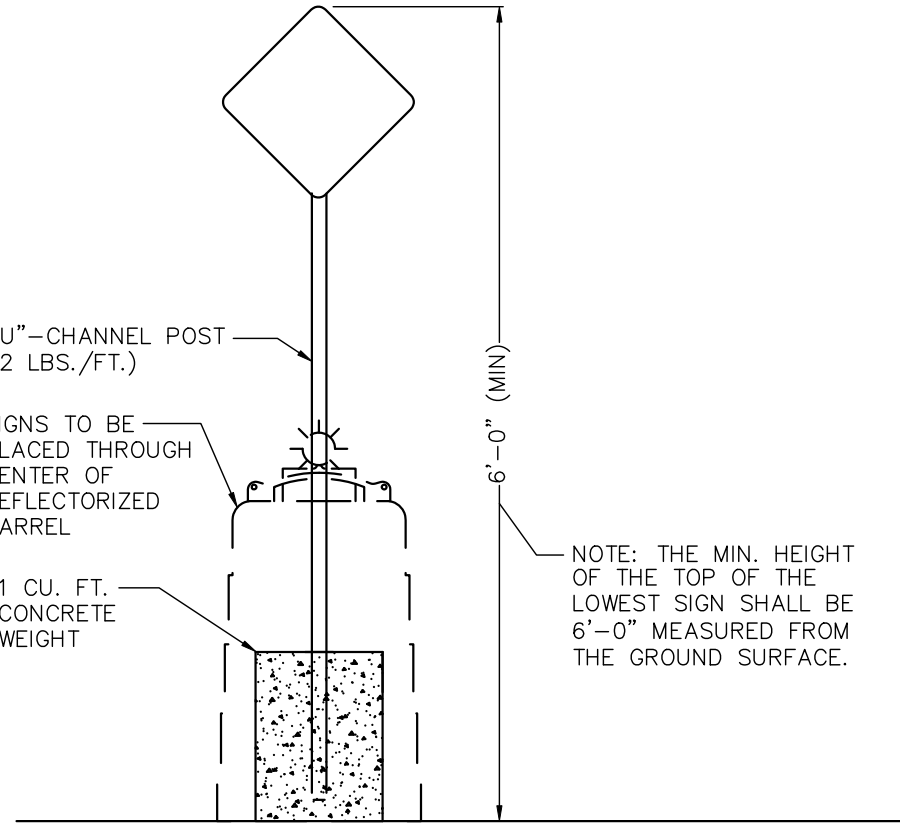


ACCESSIBLE PARKING SIGN
NTS

NOTES:
1. REFER TO PLANS FOR PLACEMENT OF TEMPORARY SIGNS AND BARRELS.
2. ALL BARRELS SHALL BE EQUIPPED WITH REFLECTIVE BANDS AND FLASHING LIGHTS.

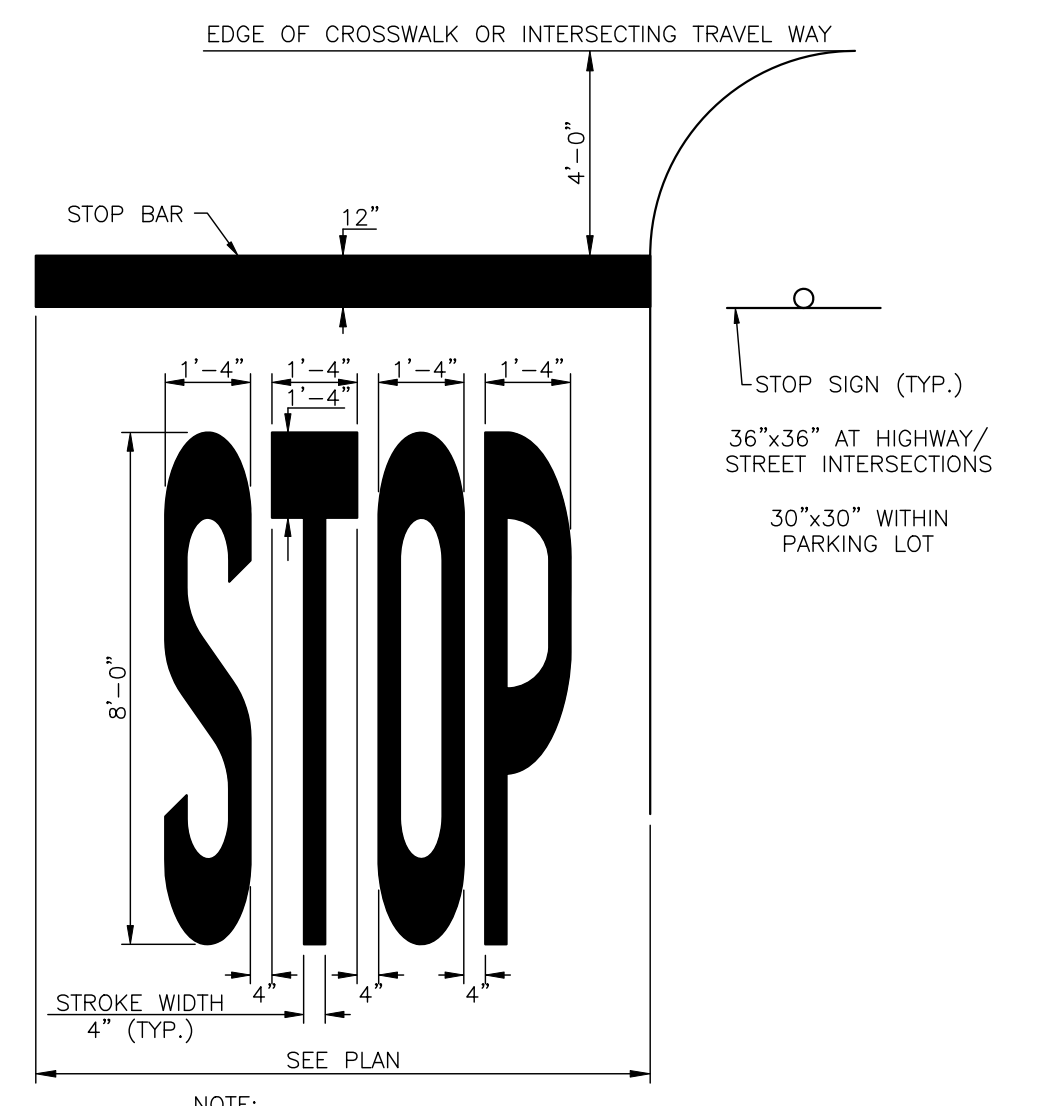


REFLECTORIZED BARREL
NTS



TEMPORARY SIGN BASE
NTS

NOTES:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. TEMPORARY BASE SHOWN REPRESENTS MINIMUM REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL MEASURES REQUIRED TO STABILIZE TEMPORARY SIGNS. CONTRACTOR IS PROHIBITED FROM USING MEASURES THAT POSE TRIP/FALL HAZARDS.
3. TEMPORARY SIGN BASE SHALL NOT BE CAST IN OR OTHERWISE SECURED TO THE PAVEMENT.
4. REFER TO PLANS FOR PLACEMENT OF TEMPORARY SIGNS AND BARRELS.
5. ALL BARRELS SHALL BE EQUIPPED WITH REFLECTIVE BANDS AND FLASHING LIGHTS.



NOTE:
1. WORDS AND BARS SHALL BE APPLIED IN ACCORDANCE WITH SECTIONS 3B.16 AND 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED RETROREFLECTIVE WHITE.

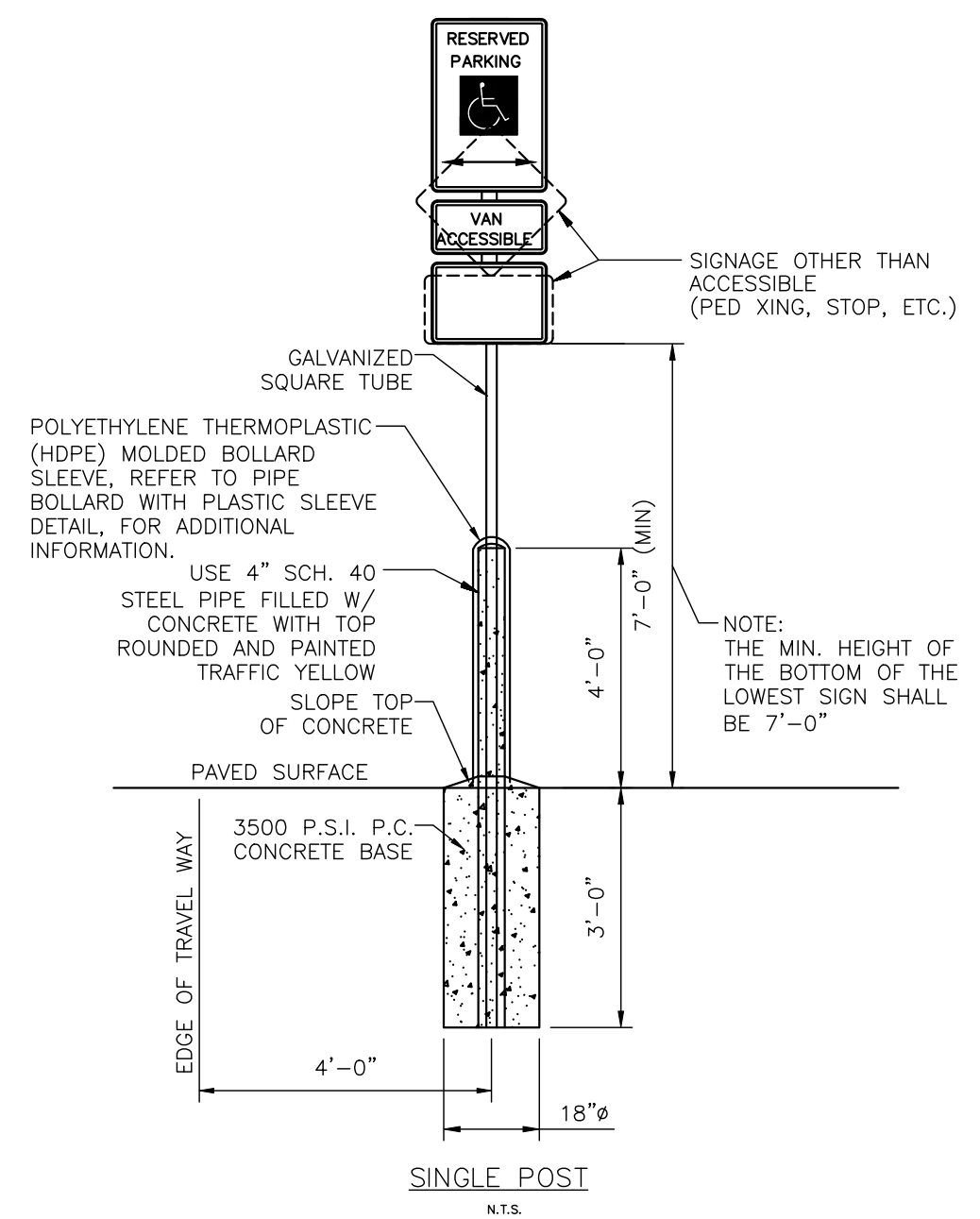
STOP SIGNAGE AND MARKING
N.T.S.

SIGNAGE

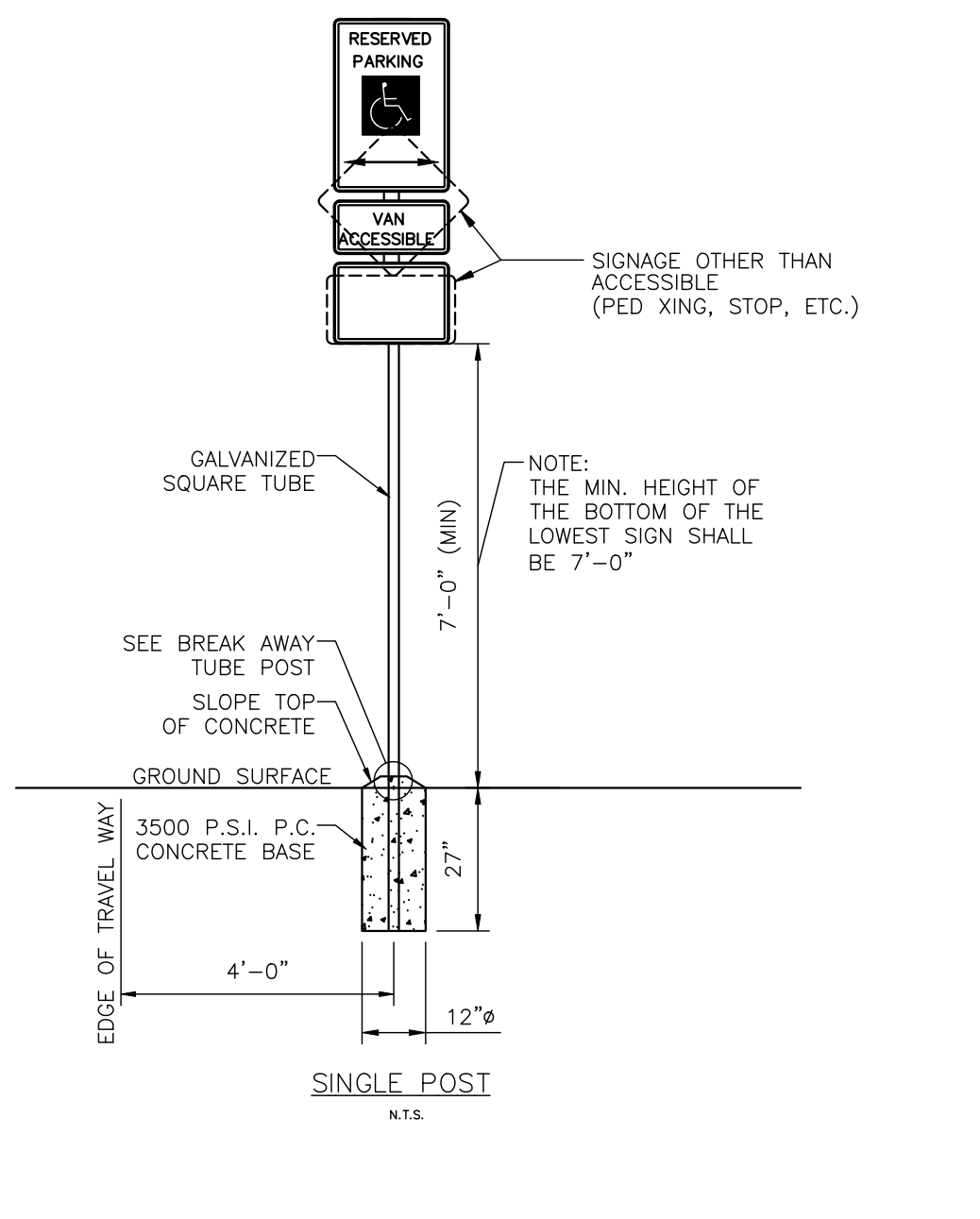
REFLECTORIZED BARREL

TEMPORARY SIGN BASE

STOP BAR



SINGLE POST
N.T.S.



SINGLE POST
N.T.S.

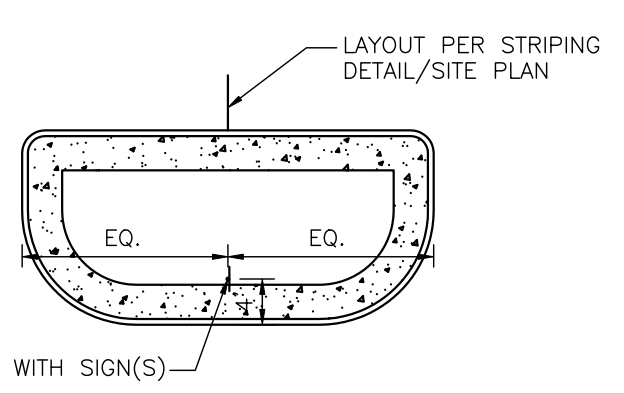
NOTES:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. GALVANIZED SQUARE TUBE
POST TUBES - 2"x2"x3/16" 12ga
POST TUBE SHALL MEET ASTM A1011 GRADE 50.
POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

NOTES:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. GALVANIZED SQUARE TUBE
POST TUBES - 2"x2"x3/16" 12ga
POST TUBE SHALL MEET ASTM A1011 GRADE 50.
POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

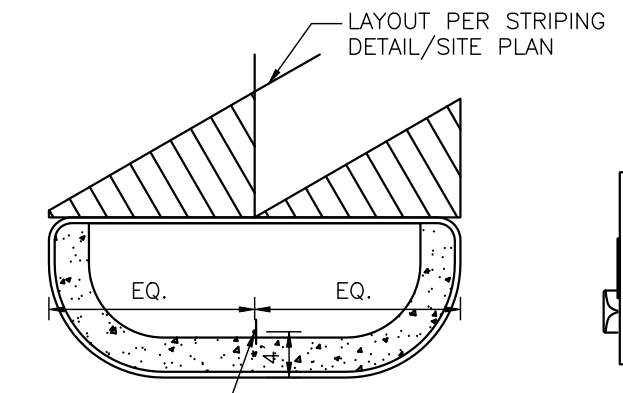
ANCHOR TUBE - 2-1/4"x2-1/4"x3/16" 12ga
HEAVY DUTY ANCHOR TUBE SHALL MEET ASTM A500 GRADE B. STRUCTURAL TUBE AND STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123.
THE UPPER SIGN POST SHALL TELESCOPE INSIDE THE ANCHOR TUBE A MINIMUM OF 12". THE ANCHOR TUBE SHALL BE A MINIMUM 27" DEEP WITH 3" MIN. 4" MAX. EXPOSED ABOVE FINISH GRADE.

SIGN MOUNTING AND BASE WITH BOLLARD
(USE WHERE SIGN IS NOT WITHIN CURBED ISLAND)
N.T.S.

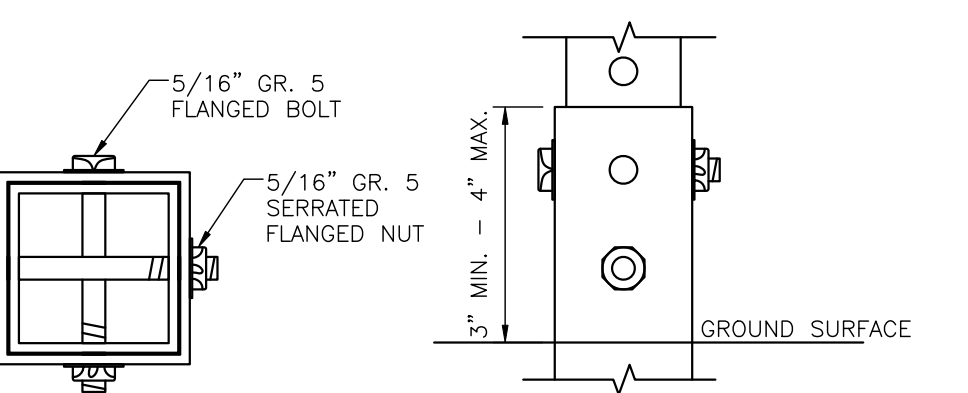
SIGN MOUNTING AND BASE WITHOUT BOLLARD
(USE WHERE SIGN IS WITHIN CURBED ISLAND)
N.T.S.



CURBED ISLAND - 90°
SIGN LOCATIONS - 90° PARKING



CURBED ISLAND - 60°
SIGN LOCATIONS - 60° PARKING

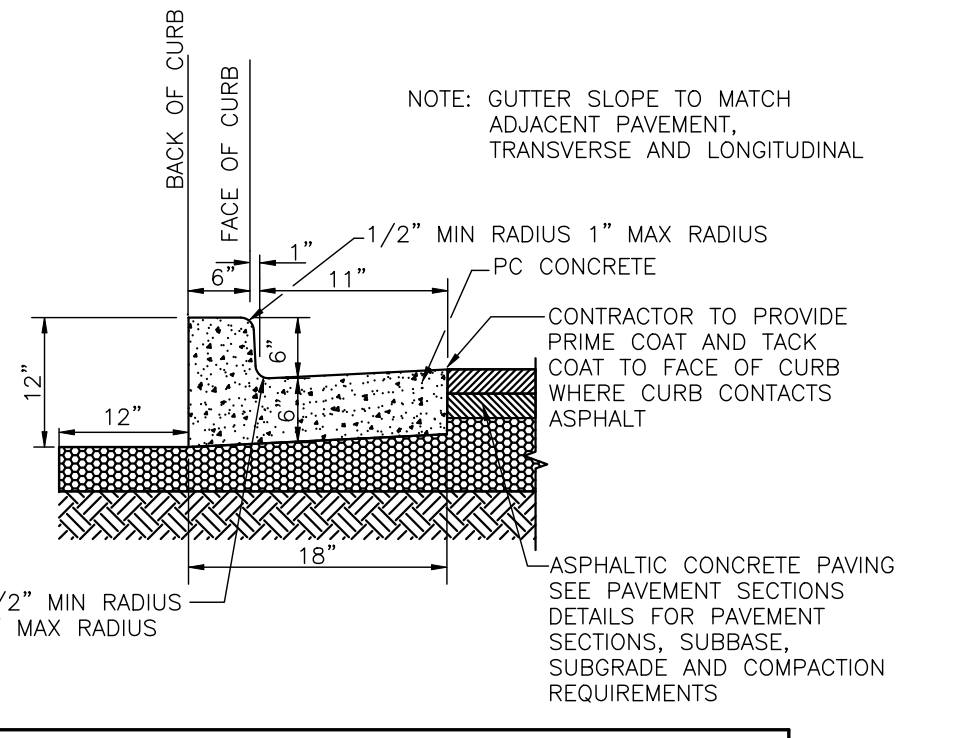


SQUARE TUBE BREAK AWAY POST
N.T.S.

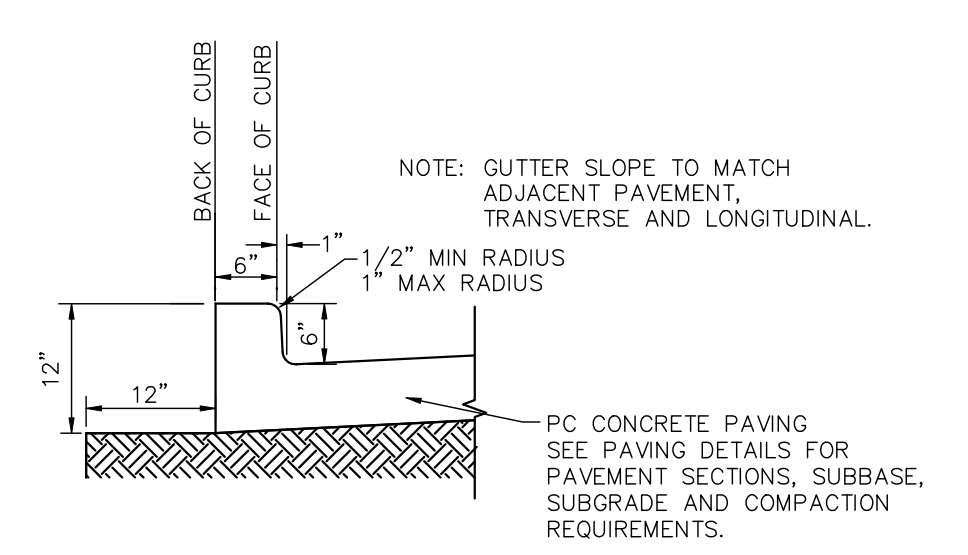
SIGN MOUNTING AND BASE
N.T.S.

SIGN BASE DETAILS

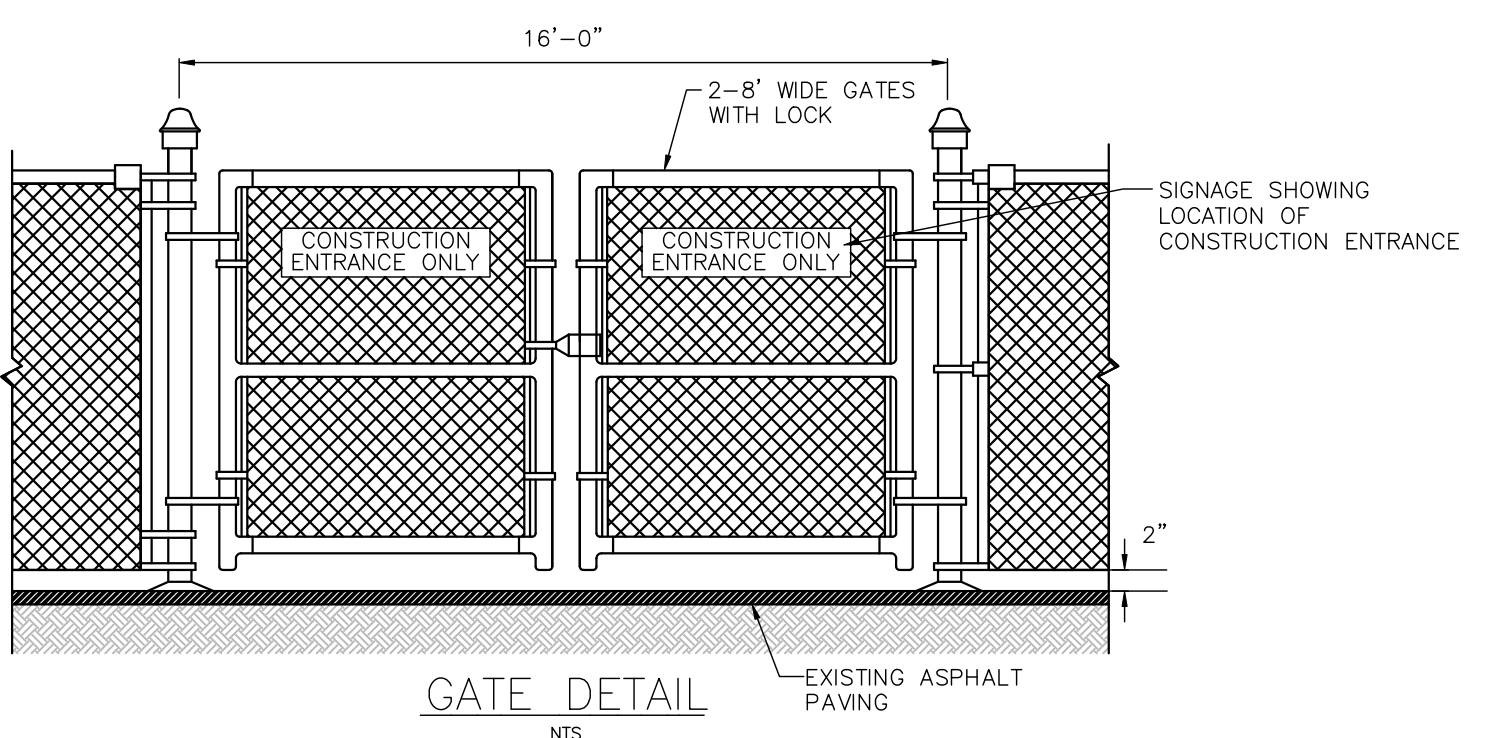
TEMPORARY CONSTRUCTION FENCE



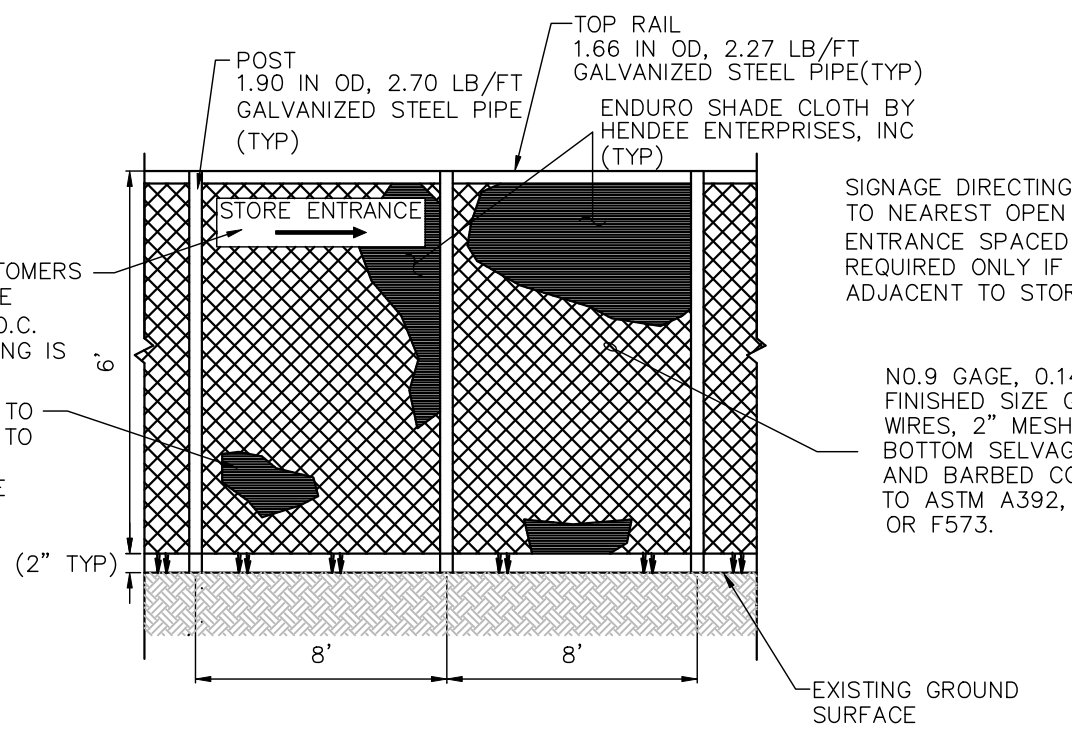
TYPE "A" CURB & GUTTER



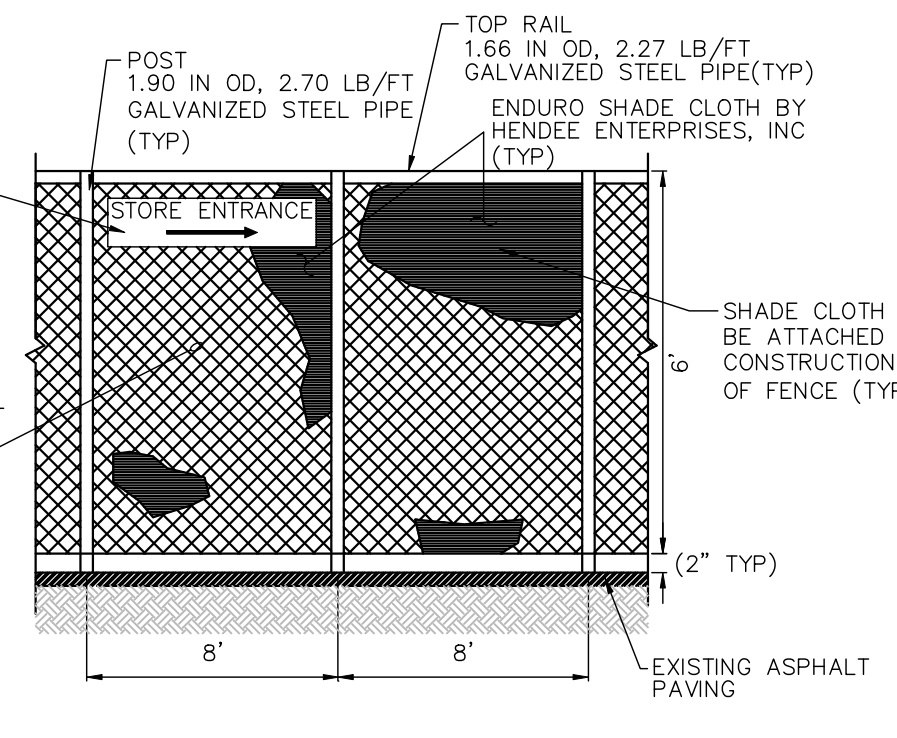
TYPE "B" CURB & GUTTER



GATE DETAIL
N.T.S.

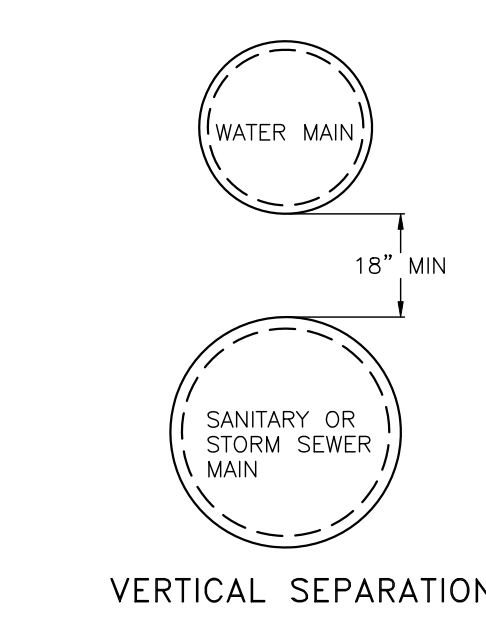


TEMPORARY SHADE FENCE IN GRASS DETAIL
N.T.S.

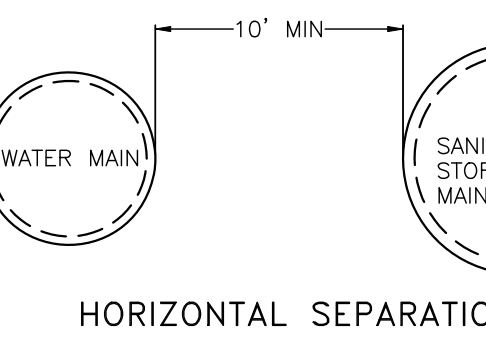


TEMPORARY SHADE FENCE IN PAVED AREAS DETAIL
N.T.S.

TEMPORARY CONSTRUCTION FENCE



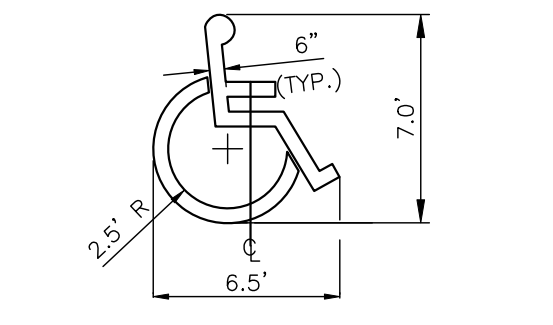
VERTICAL SEPARATION



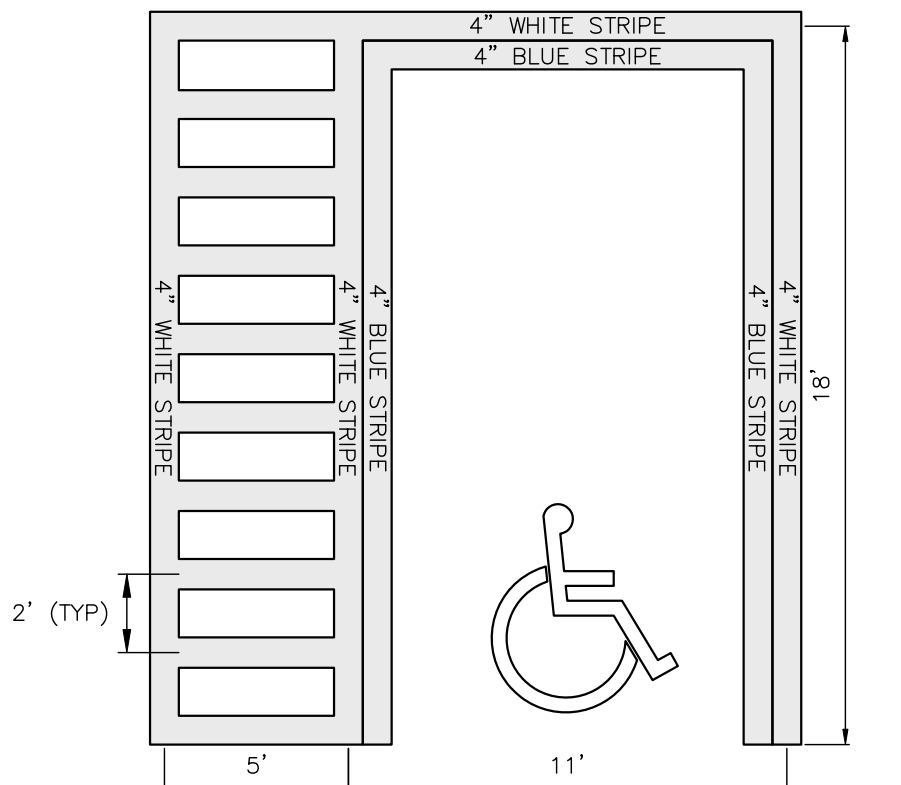
HORIZONTAL SEPARATION

SEWER WATER CROSSING

NOTES:
1. SEE SITE PLAN FOR TOTAL LAYOUT.
2. THESE DETAILS ARE FOR REFERENCE AND DIMENSION CONTROL ONLY.
3. ALL DIMENSIONS ARE TO C. OF WHITE STRIPE UNLESS OTHERWISE INDICATED.
4. ALL COLORS AS SHOWN OR AS SPECIFIED BY LOCAL CODES.
5. ALL SYMBOLS SHALL BE APPLIED USING TEMPLATE.



ACCESSIBLE PARKING SYMBOL



TYPICAL ACCESSIBLE STALL STRIPING

ACCESSIBLE STALLS PARKING STRIPING
N.T.S.

ACCESSIBLE PARKING STALL

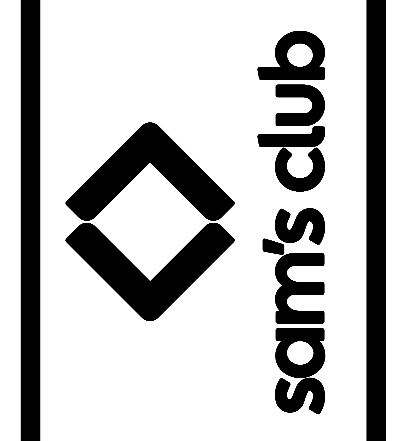
DETAILS

REVISIONS	BY

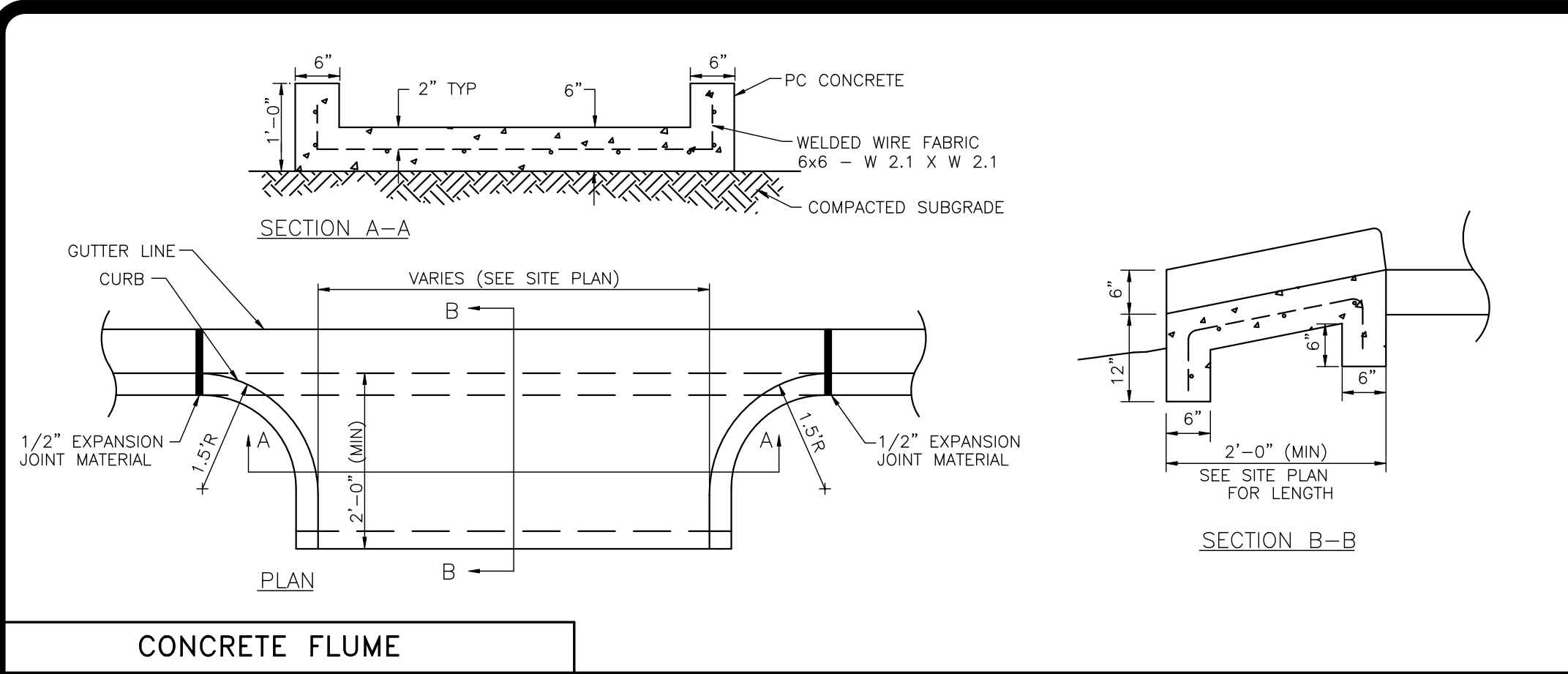
CARLSON CONSULTING ENGINEERS, INC.
7088 LEICESTER COMMONS
PH. (901) 384-0404 • FX. (901) 384-0710

STATE OF MICHIGAN
JOSEPH PARSLY
ENGINEER
No. 6201066218
LICENSED PROFESSIONAL ENGINEER

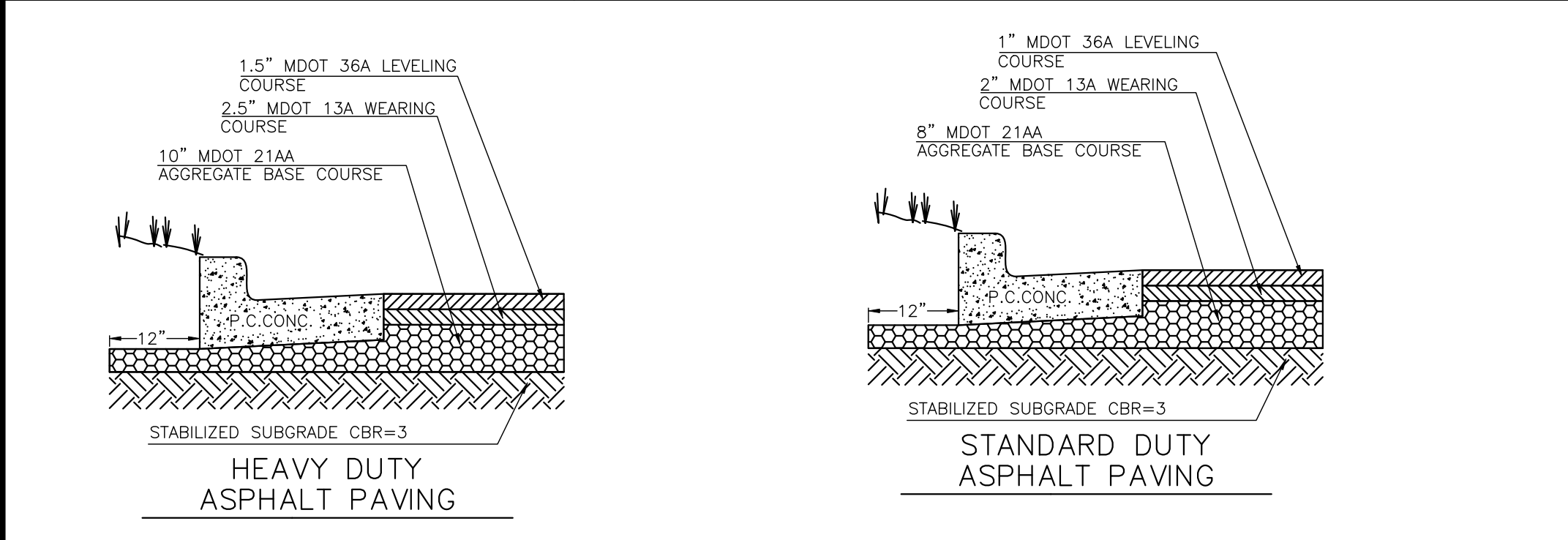
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SHEET	19 OF 22 SHEETS



CONCRETE FLUME

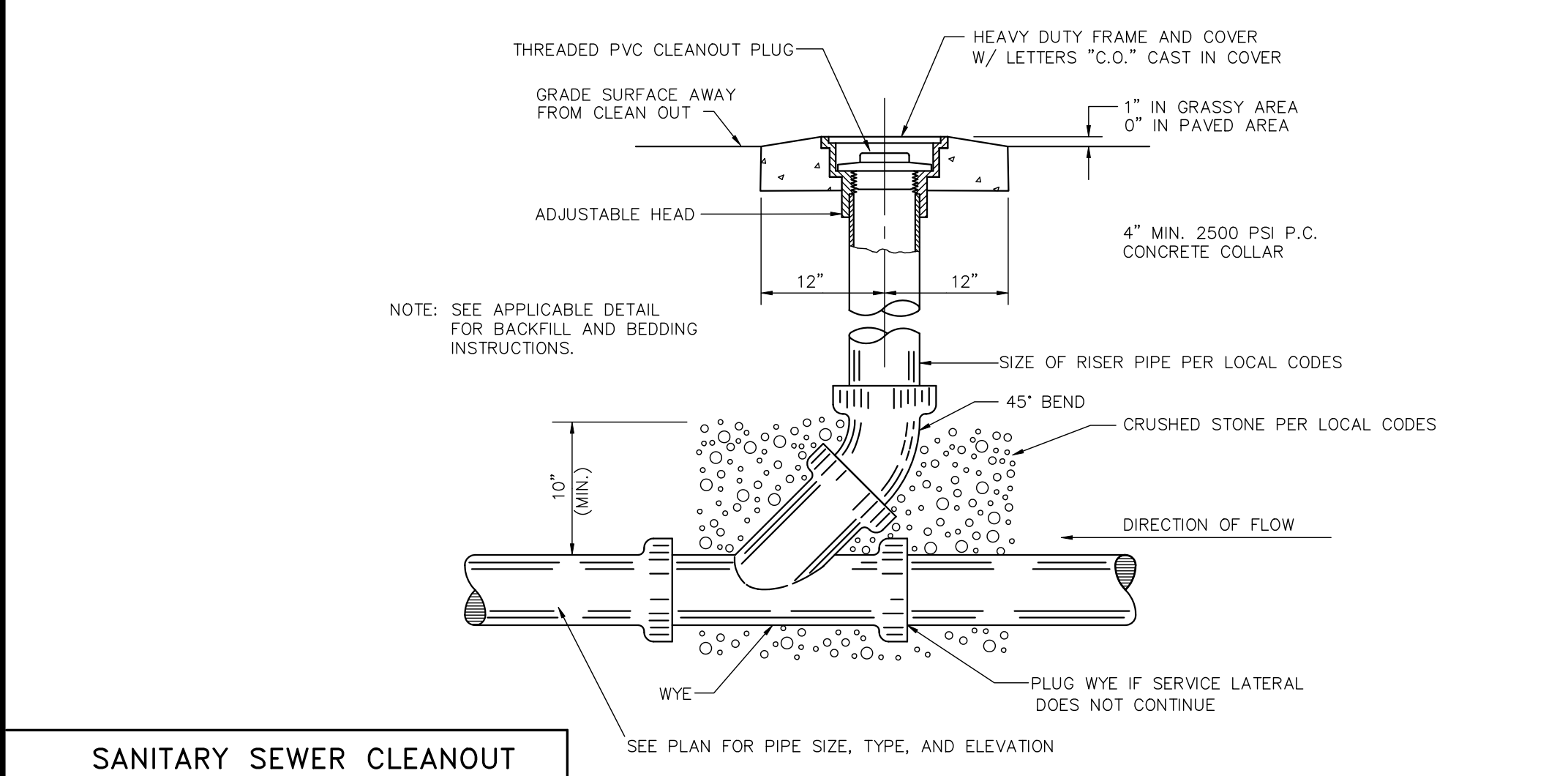


HEAVY DUTY ASPHALT PAVING

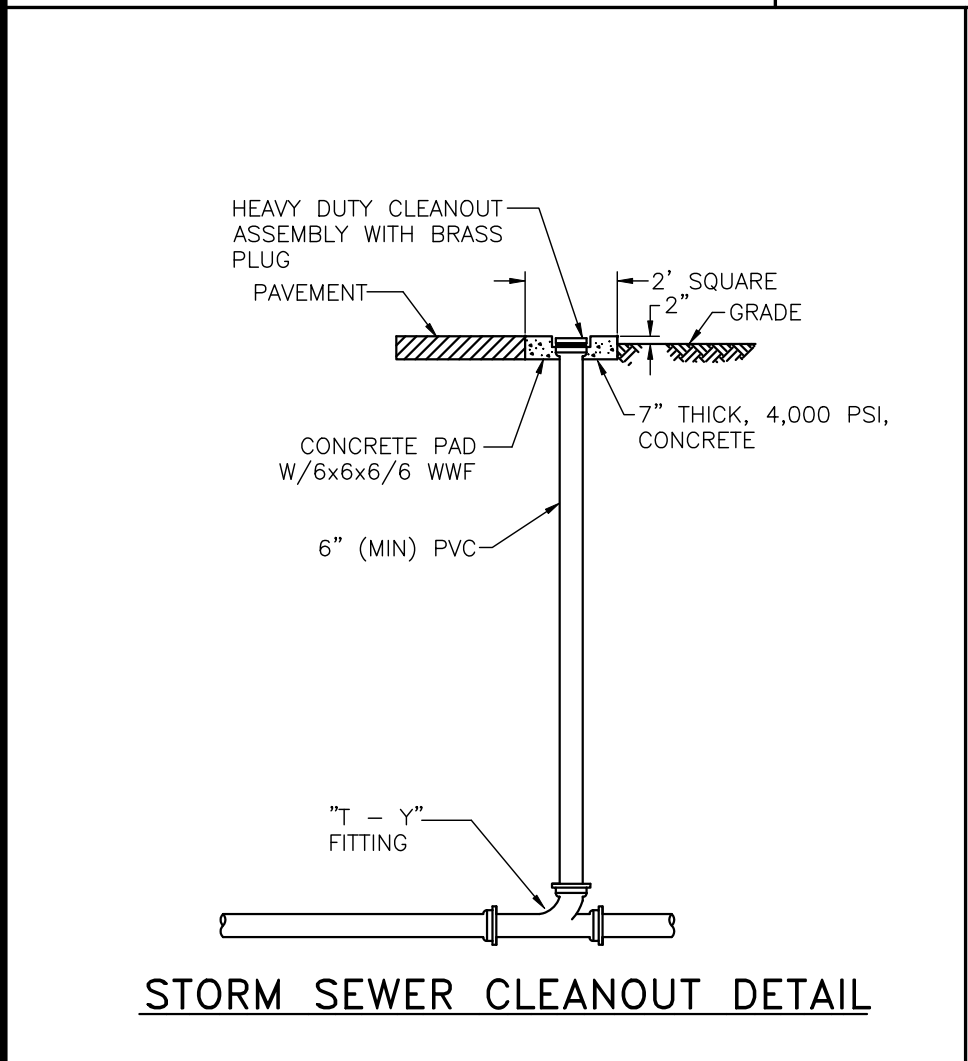
STANDARD DUTY ASPHALT PAVING

- FOR PREPARATION OF PAVEMENT SUBGRADE, FILL SHALL BE PLACED IN ACCORDANCE WITH SECTION 02300 OF THE SITWORK SPECIFICATIONS.
- AGGREGATE BASE COURSE SHALL CONFORM TO THE REQUIREMENTS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2012 EDITION, COMPACTED TO 100% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR).
- ASPHALTIC WEARING AND LEVELING COURSE MIXTURES SHALL BE IN ACCORDANCE WITH THE TYPE CALLED OUT ABOVE AND REFERENCED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS CONSTRUCTION, 2012 EDITION.
- SOURCE: GEOTECHNICAL ENGINEERING REPORT PREPARED BY PSI AND DATED JUNE 4, 2020.

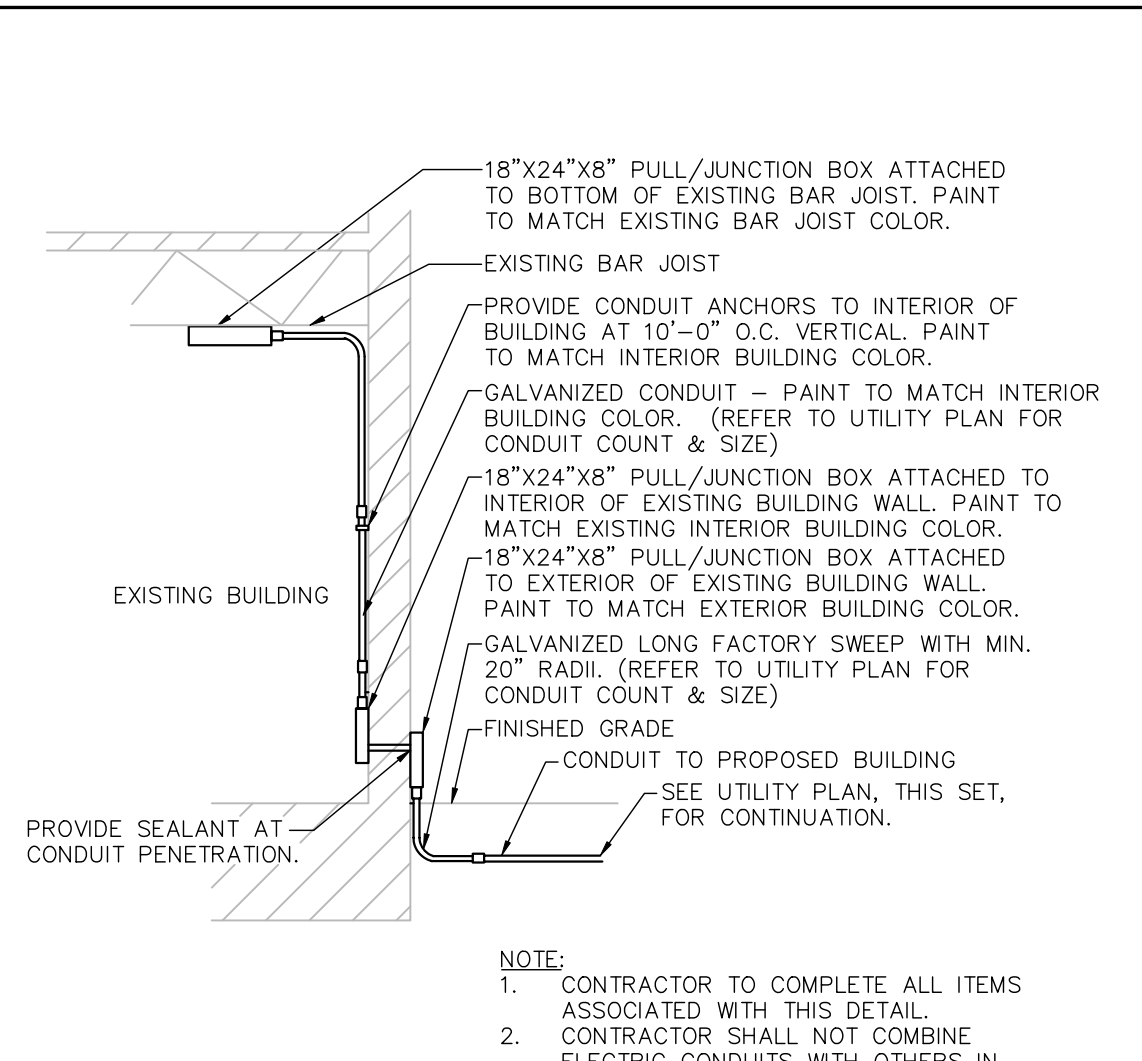
PAVING SECTIONS



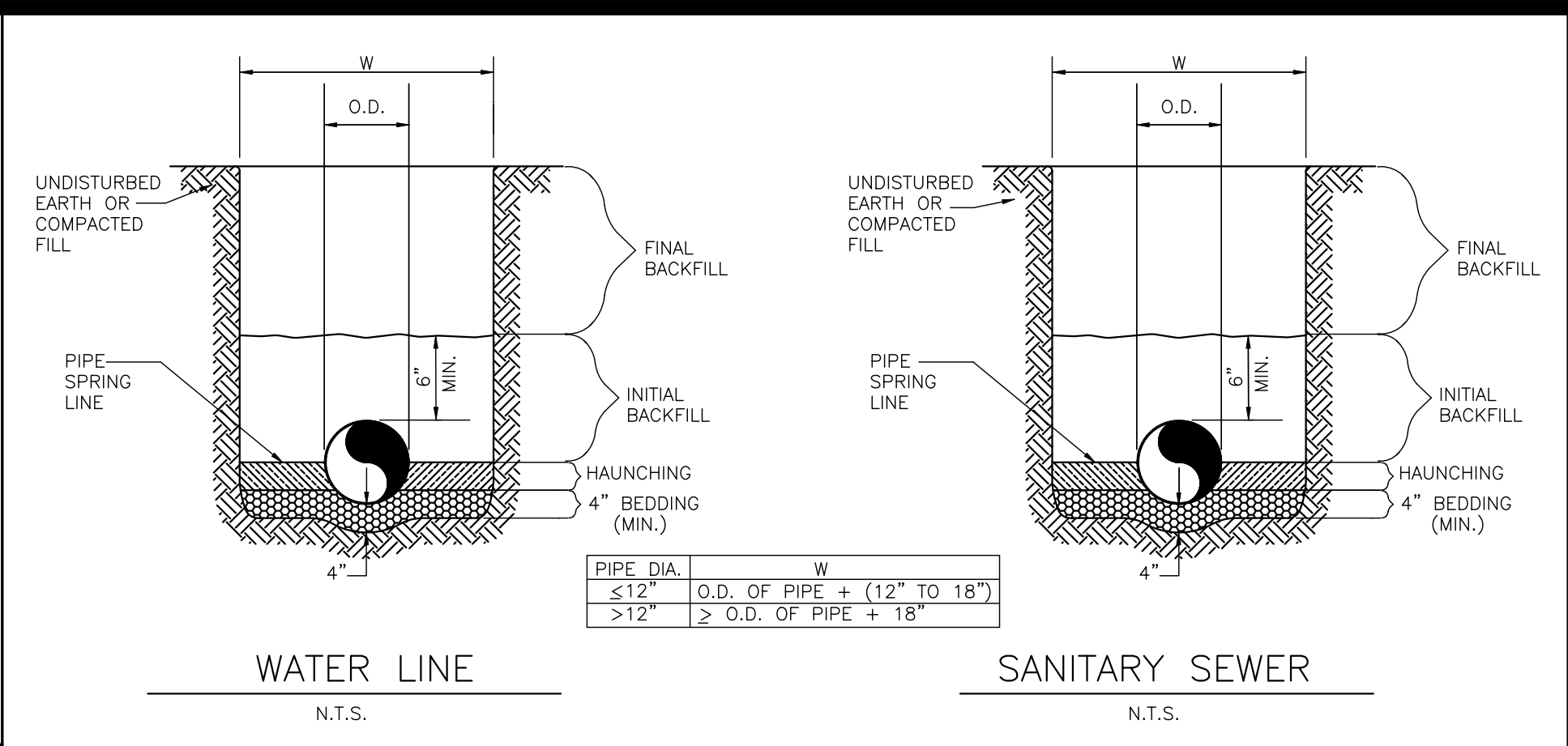
SANITARY SEWER CLEANOUT



STORM SEWER CLEANOUT DETAIL



UTILITY ENTRY



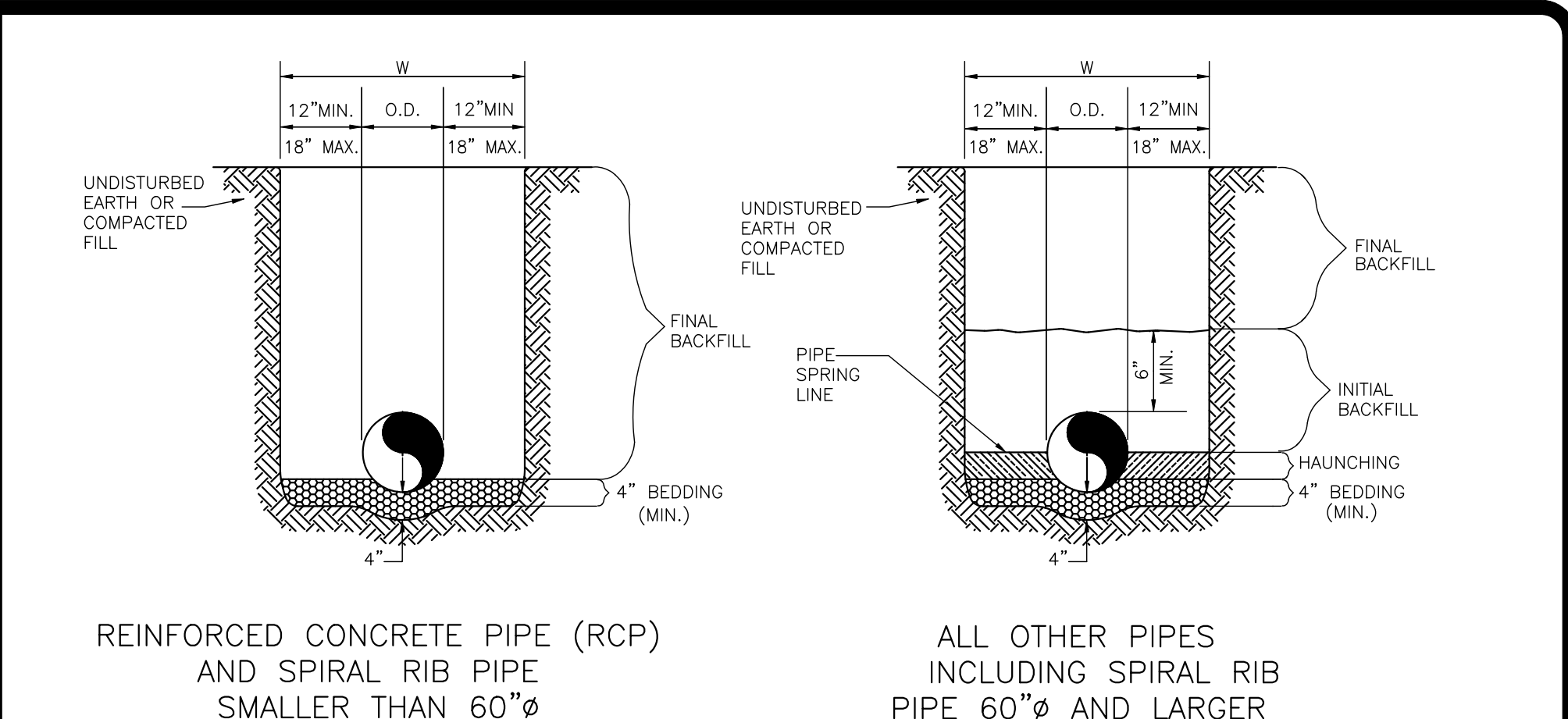
WATER LINE

SANITARY SEWER

GENERAL NOTES

- BEDDING SHALL BE CLASS I WORKED BY HAND OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
- HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I OR CLASS II COMPACTED TO 85% PROCTOR.
- INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
- FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3 AND 4.
- FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV COMPACTED TO 95% STANDARD PROCTOR.
- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-11.
- ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698, CLASS III AND IV MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
- FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
- ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)
- ANY OPEN-GRADED MATERIAL MEETING THE REQUIREMENTS OF ASTM D 2321-11 MAY BE USED ONLY IF THE MATERIAL IS WRAPPED IN AN APPROVED FILTER OR DRAINAGE FABRIC (REFER TO SPECIFICATION SECTION 02300 FOR TYPE) AND WITH WRITTEN PERMISSION FROM THE CEC.
- THE UPPER 18 INCHES OF FINAL BACKFILL FOR ALL TRENCHES IN NON-PAVEMENT AREAS SHALL BE A LOW PLASTICITY COHESIVE FILL. REFER TO SITWORK SPECIFICATION SECTION 02300 FOR ALLOWABLE "SATISFACTORY MATERIALS" AND COMPACTION REQUIREMENTS.

UTILITY TRENCH & BEDDING



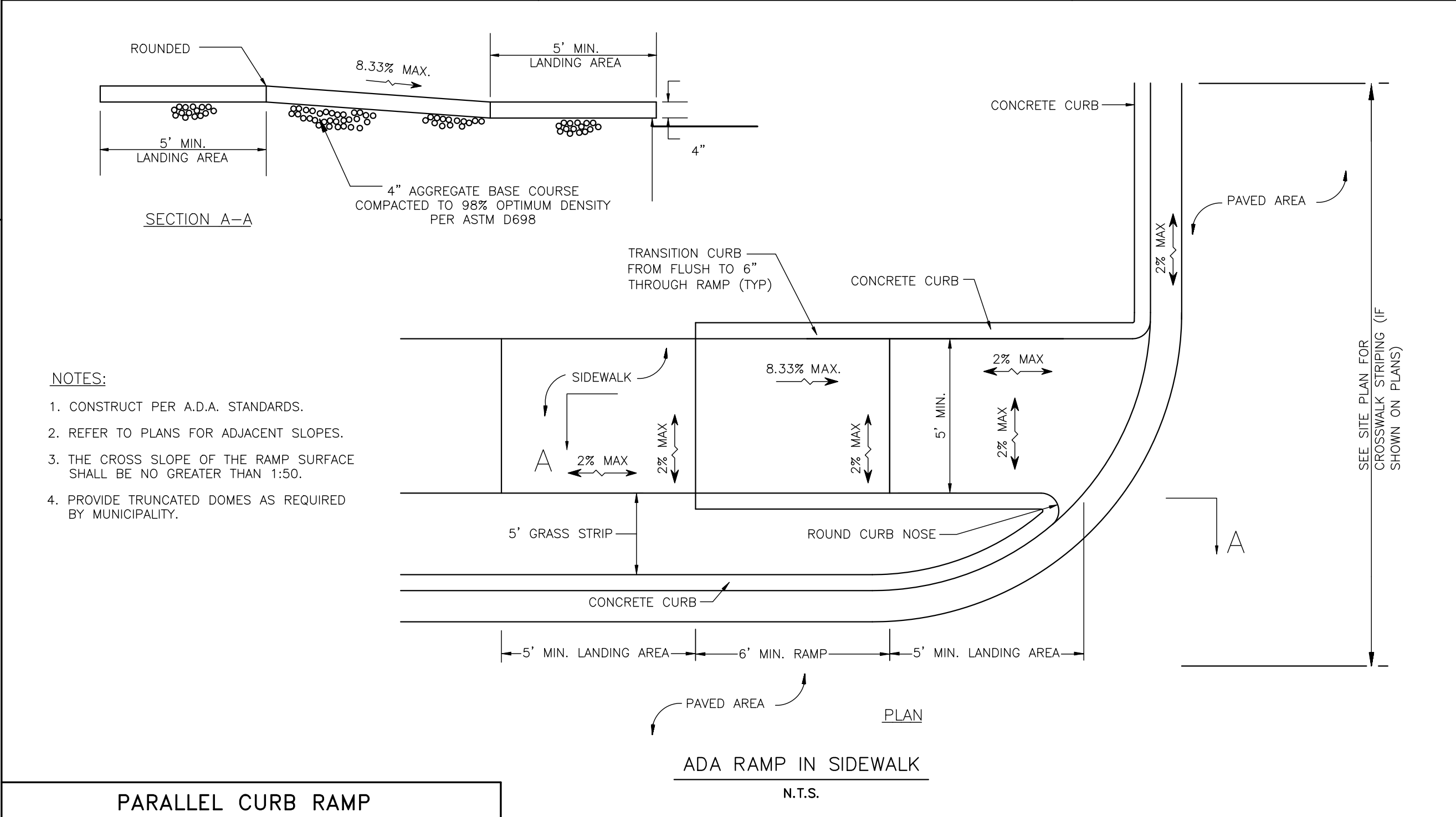
REINFORCED CONCRETE PIPE (RCP) AND SPIRAL RIB PIPE SMALLER THAN 60 inch

ALL OTHER PIPES INCLUDING SPIRAL RIB PIPE 60 inch AND LARGER

GENERAL NOTES

- BEDDING SHALL BE CLASS I WORKED BY HAND OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
- HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I OR CLASS II COMPACTED TO 85% PROCTOR.
- INITIAL BACKFILL SHALL BE CLASS I WORKED BY HAND OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
- INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
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- THE UPPER 18" OF FINAL BACKFILL FOR ALL TRENCHES IN NON-PAVEMENT AREAS SHALL BE A LOW PLASTICITY COHESIVE FILL. REFER TO SITWORK SPECIFICATION SECTION 02300 FOR ALLOWABLE "SATISFACTORY MATERIALS" AND COMPACTION REQUIREMENTS.
- BEDDING, HAUNCHING, AND INITIAL AND FINAL BACKFILL MATERIALS USED IN CONJUNCTION WITH ANY PIPES WHICH PENETRATE A LEVEE OR ROAD EMBANKMENT, SHALL BE A LOW PERMEABILITY, COHESIVE SOIL. SOILS EXHIBITING HIGH SHRINK/SWELL POTENTIAL OR CONTAINING GREATER THAN 5% ORGANICS SHALL NOT BE USED.

STORM SEWER TRENCH & BEDDING

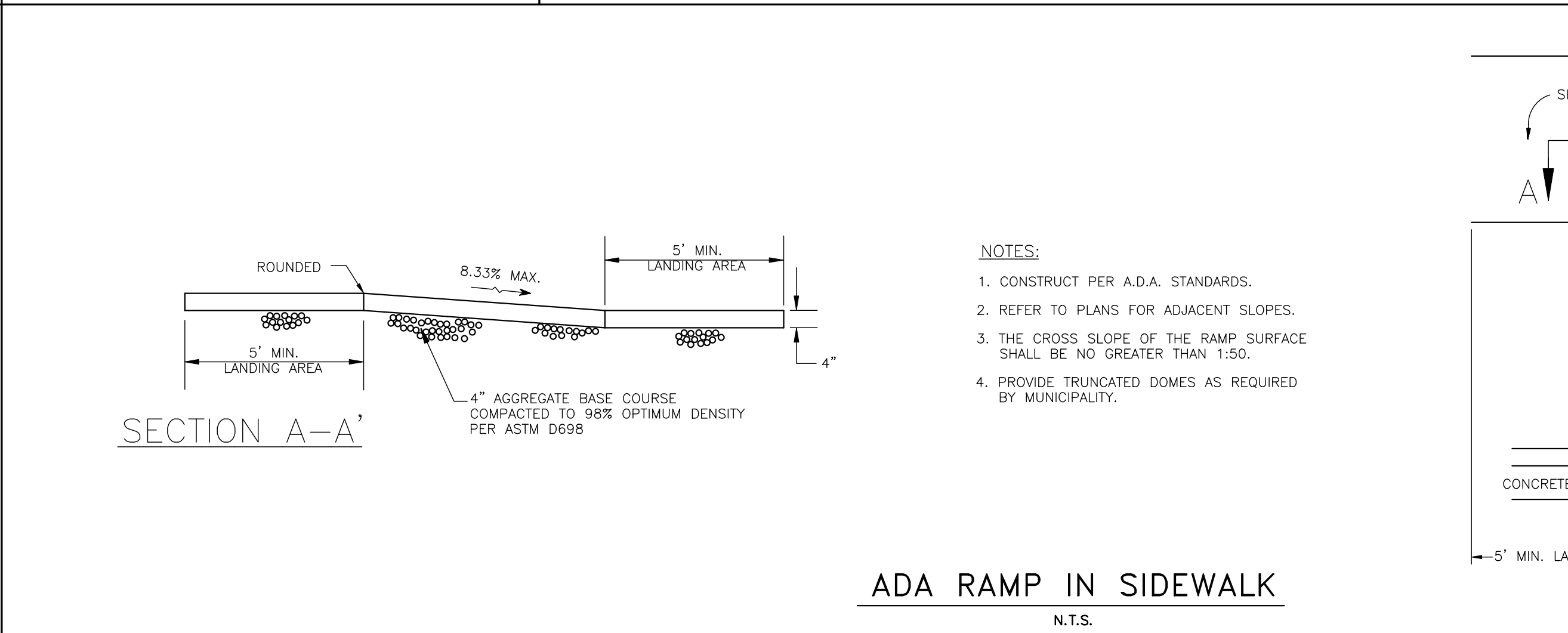


PARALLEL CURB RAMP

ADA RAMP IN SIDEWALK

NOTES:

- CONSTRUCT PER A.D.A. STANDARDS.
- REFER TO PLANS FOR ADJACENT SLOPES.
- THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1:50.
- PROVIDE TRUNCATED DOMES AS REQUIRED BY MUNICIPALITY.



PERPENDICULAR CURB RAMP

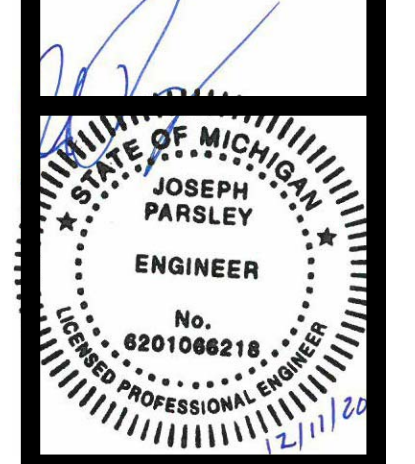
ADA RAMP IN SIDEWALK

NOTES:

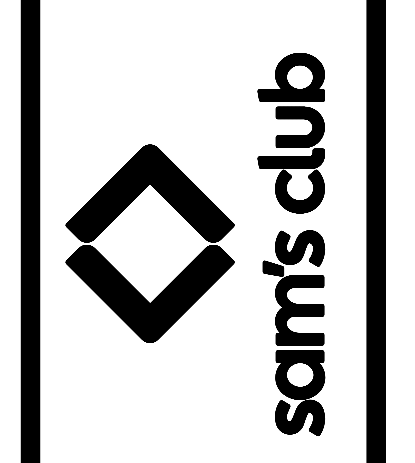
- CONSTRUCT PER A.D.A. STANDARDS.
- REFER TO PLANS FOR ADJACENT SLOPES.
- THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1:50.
- PROVIDE TRUNCATED DOMES AS REQUIRED BY MUNICIPALITY.

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
 7085 LEECHSORE CIRCLE
 PH: (901) 354-0404 • FX: (901) 354-0710

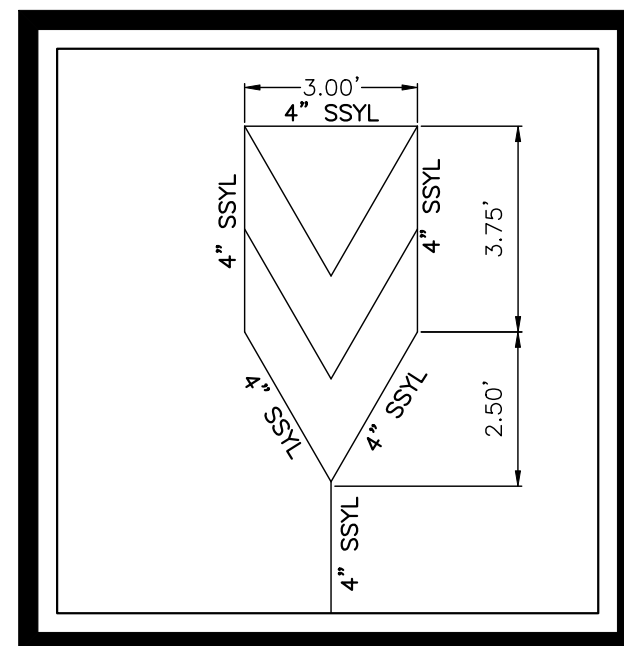


SAM'S CLUB #4982-211
 MT. PLEASANT, MICHIGAN
 SAM'S REAL ESTATE BUSINESS TRUST
 2101 SE SIMPLE SAVINGS DRIVE
 BENTONVILLE, AR 72716

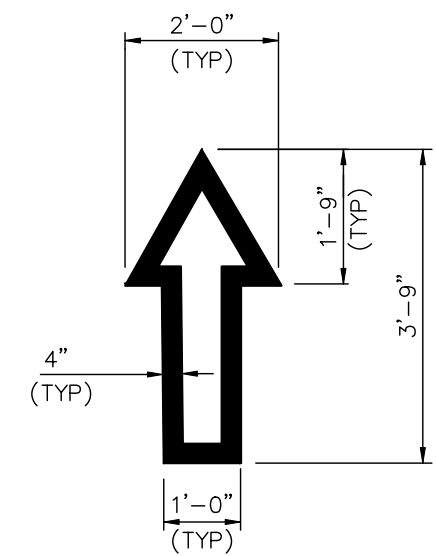


DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	NTS
JOB No.	4982-211
SHEET	20 OF 22 SHEETS

DETAILS



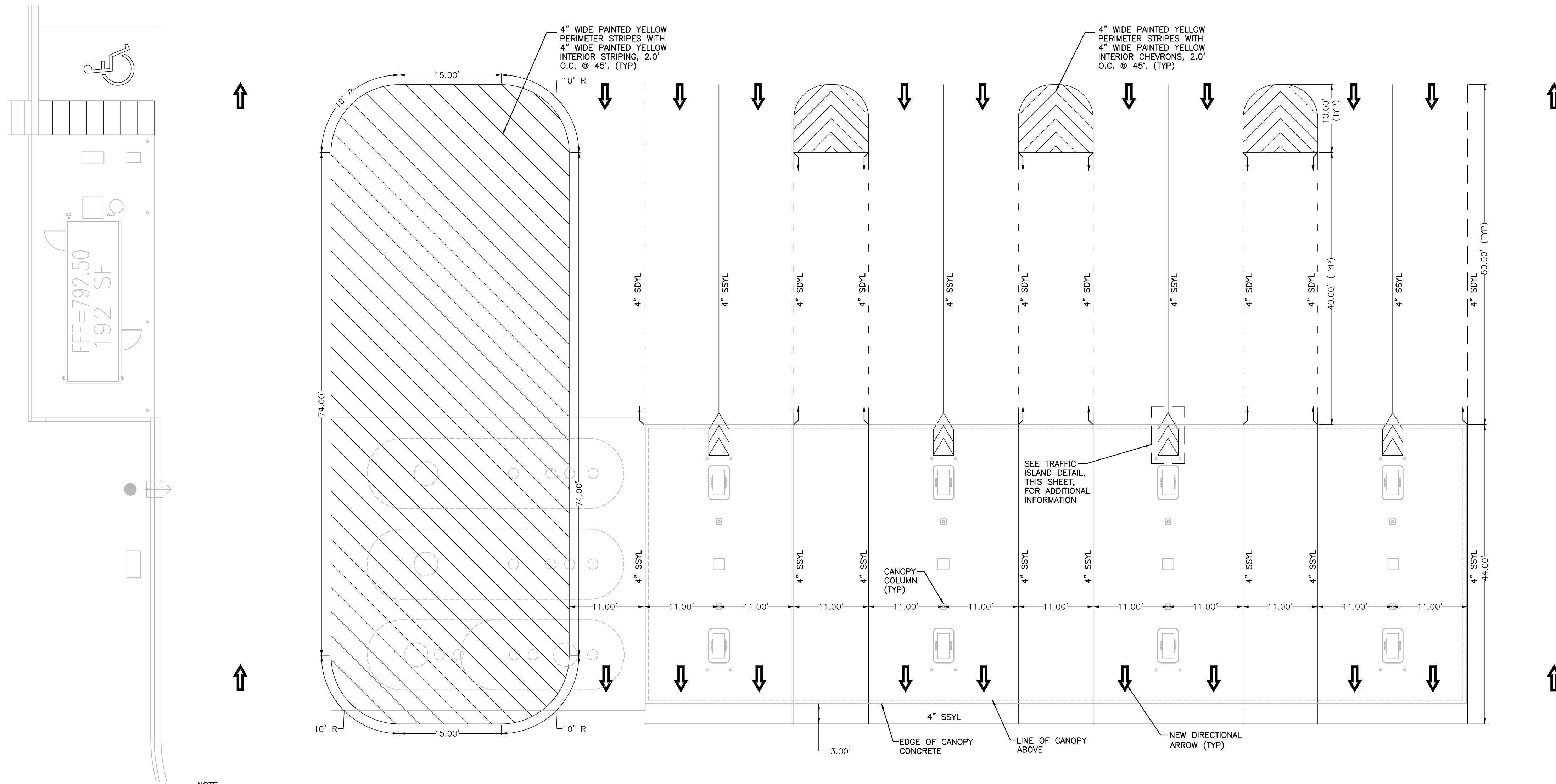
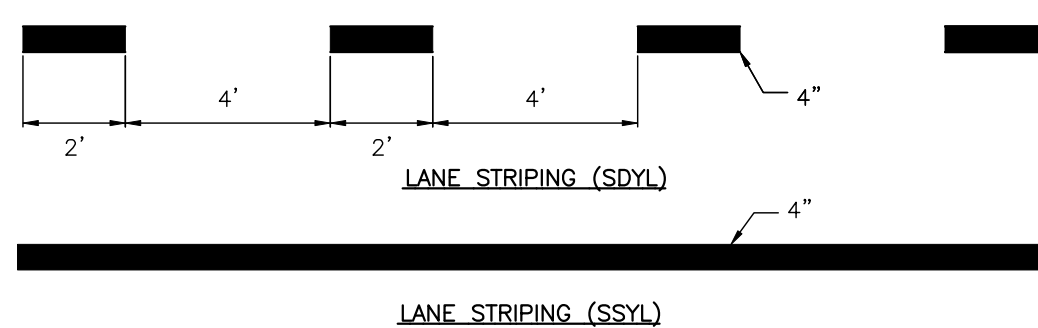
TRAFFIC ISLAND DETAIL
N.T.S.



NOTE: ALL TRAFFIC FLOW ARROWS TO BE REFLECTIVE WHITE PAINT PER SPECS.

OPEN ARROW MARKINGS USED IN THE FUELING STATION AREA

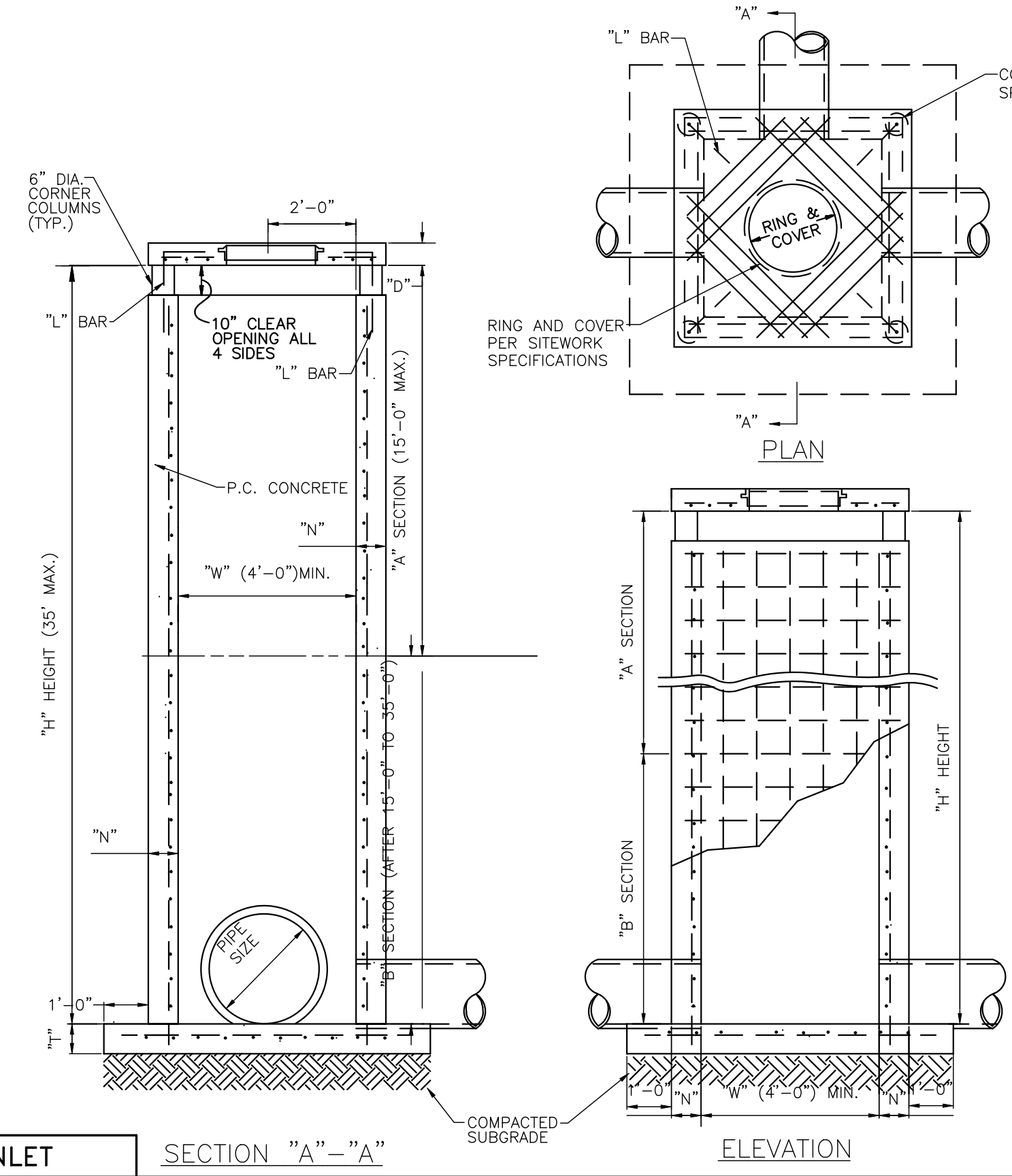
MARKING ABBREVIATIONS
SDYL=4" SINGLE DASHED YELLOW LINE
SSYL=4" SINGLE SOLID YELLOW LINE



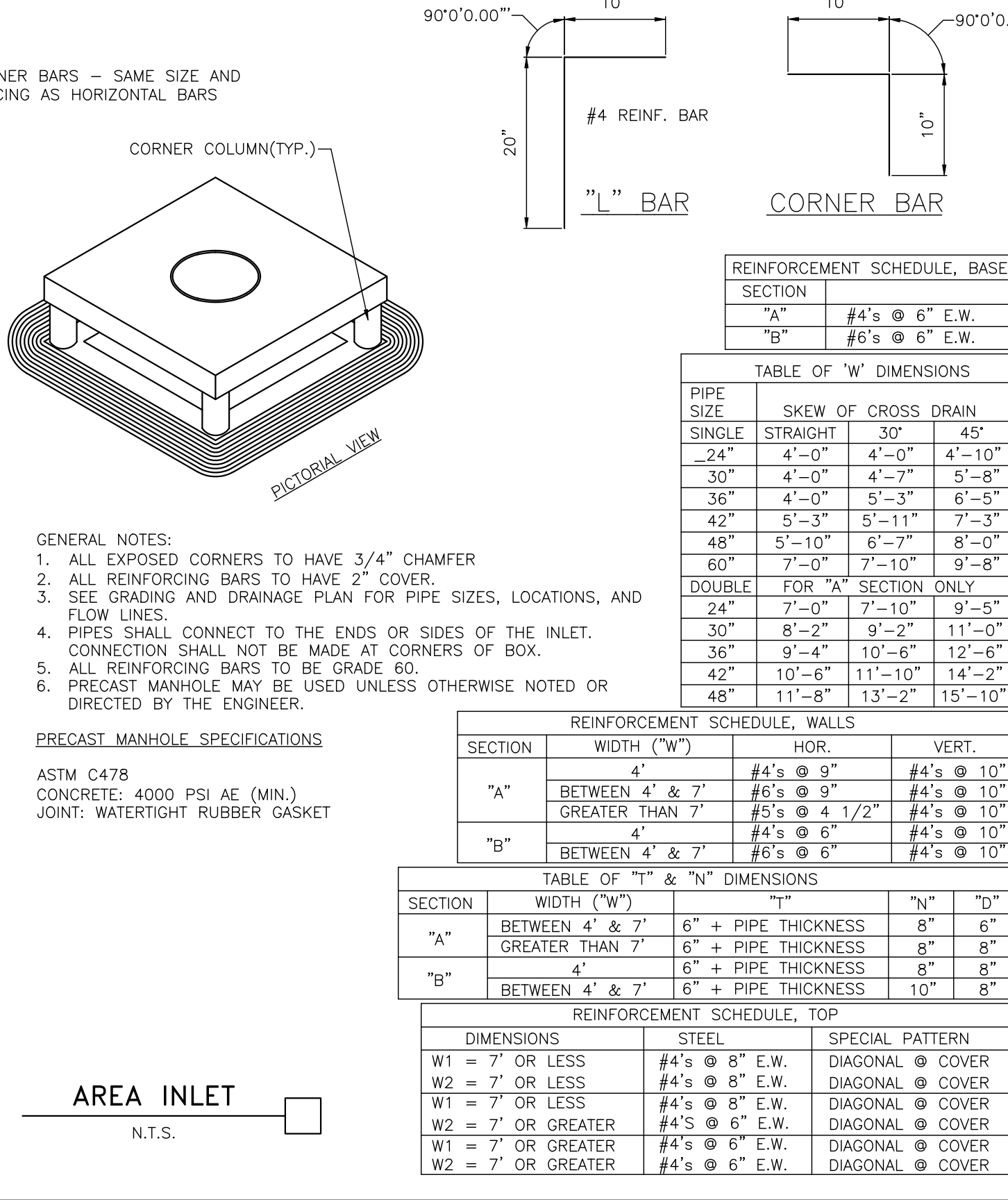
NOTE:
1. ALL DELTA ANGLES ARE 90° UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE TO CENTER OF STRIPE UNLESS NOTED OTHERWISE.

KIOSK AND FUEL ISLAND STRIPING PLAN
1"=10'

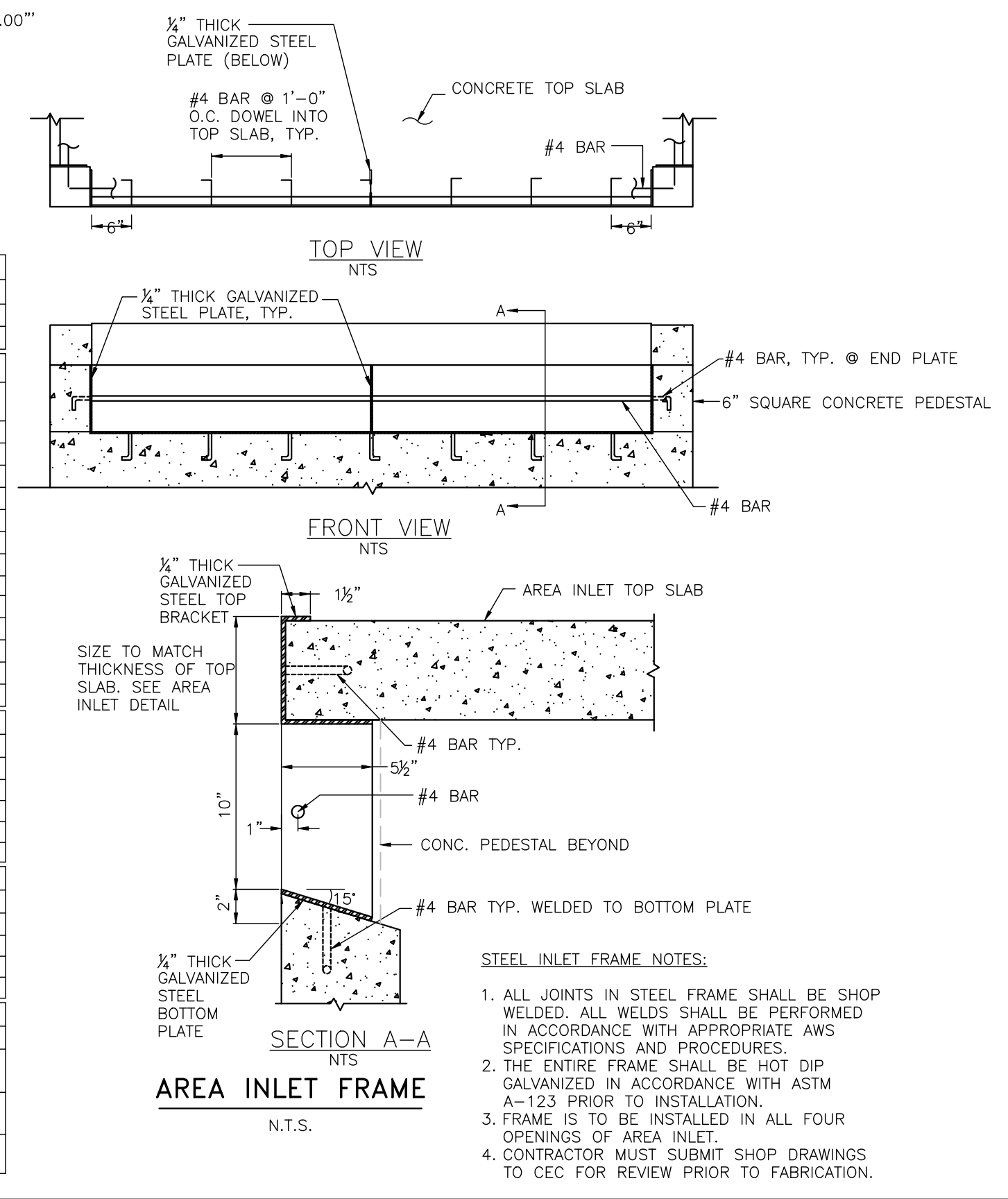
FUEL STATION LANE STRIPING AND PAVEMENT MARKINGS



AREA INLET SECTION "A" - "A"



ELEVATION



AREA INLET FRAME

GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
2. ALL REINFORCING BARS TO HAVE 2" COVER
3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
4. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF BOX.
5. ALL REINFORCING BARS TO BE GRADE 60.
6. PRECAST MANHOLE MAY BE USED UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

PRECAST MANHOLE SPECIFICATIONS
ASTM C478
CONCRETE: 4000 PSI AE (MIN.)
JOINT: WATERTIGHT RUBBER GASKET

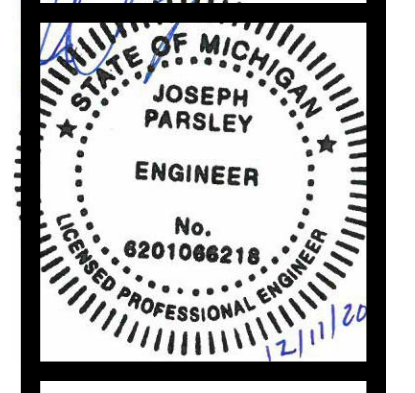
SECTION	WIDTH ("W")	HOR.	VERT.
"A"	BETWEEN 4' & 7'	#4's @ 9"	#4's @ 10"
"A"	GREATER THAN 7'	#5's @ 9"	#4's @ 10"
"B"	BETWEEN 4' & 7'	#5's @ 4 1/2"	#4's @ 10"
"B"	GREATER THAN 7'	#4's @ 6"	#4's @ 10"

SECTION	WIDTH ("W")	"T"	"N"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
"A"	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"B"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	8"
"B"	GREATER THAN 7'	6" + PIPE THICKNESS	10"	8"

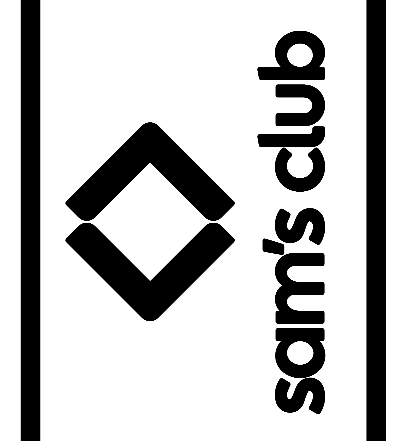
DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7" OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7" OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W1 = 7" OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7" OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W1 = 7" OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7" OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER

REVISIONS	BY

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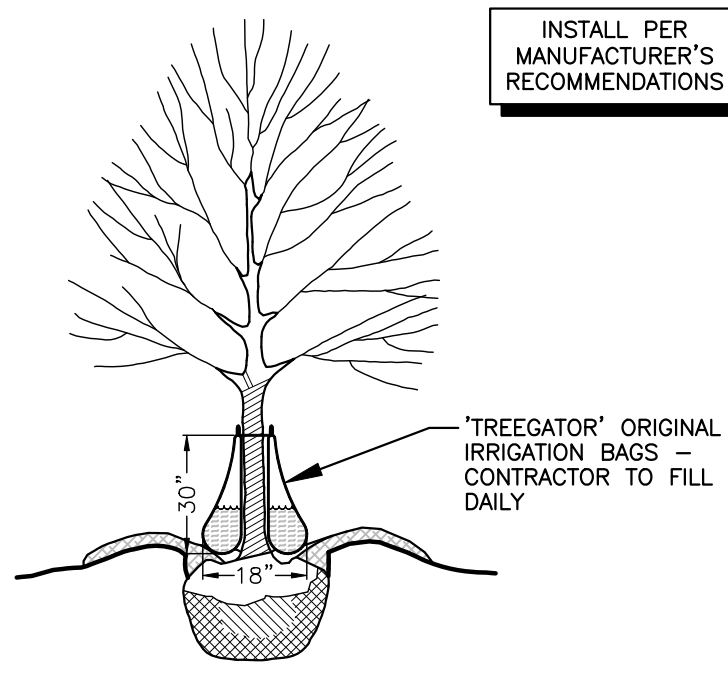


SAM'S CLUB #4982-211
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DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	AS NOTED
JOB NO.	4982-211
SHEET	21 OF 22 SHEETS

DETAILS

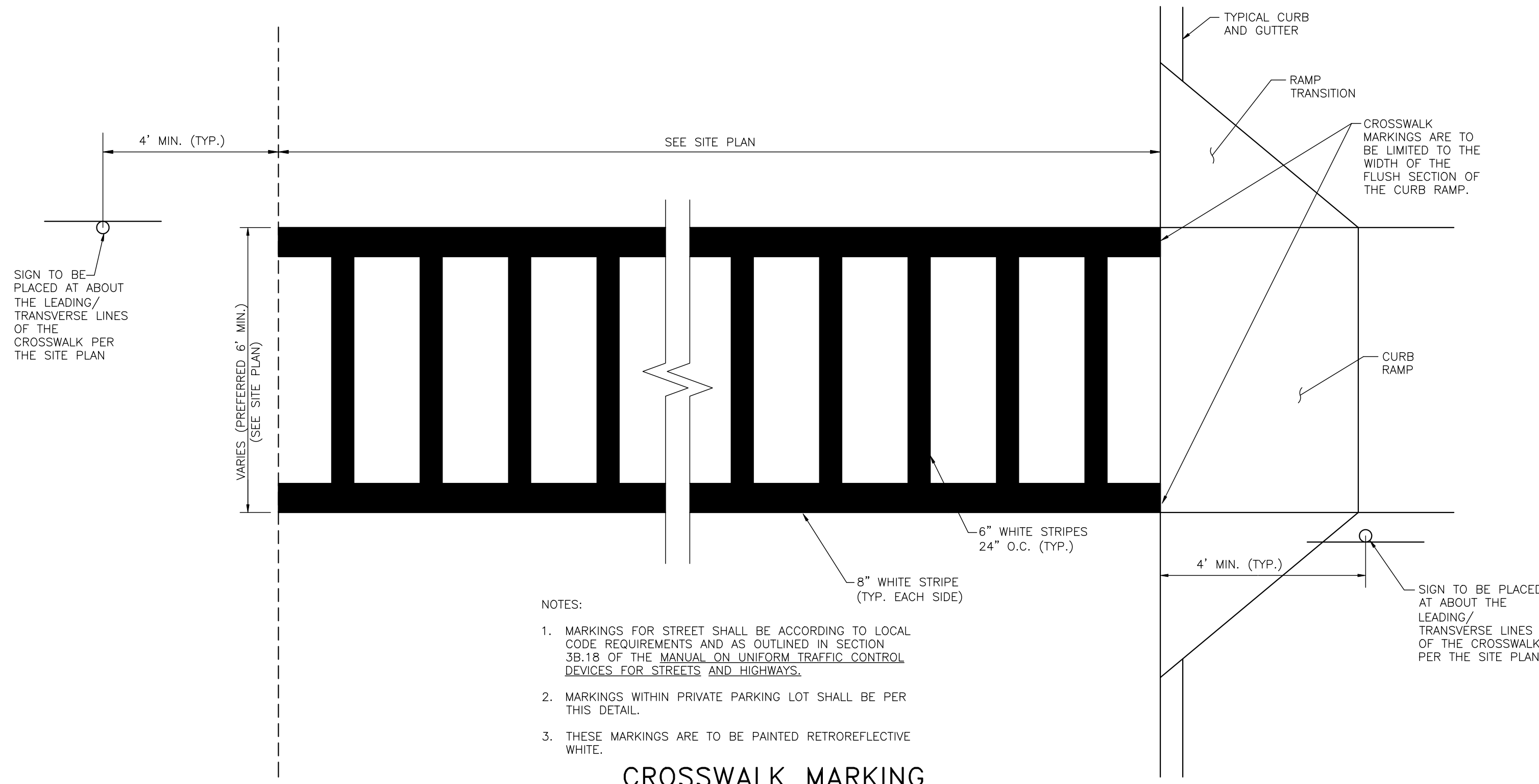


NOTICE TO CONTRACTOR
DO NOT ATTEMPT TO MOVE BAG WHEN FULL.
ALWAYS USE BOTH HANDLES WHEN LIFTING.
DO NOT SUSPEND/HANG BAG FROM BLACK STRAPS/HANDLES.

WATERING CAPACITY / FREQUENCY CHART:

Treegator® Original Bag Setup	Trunk Caliper (diameter)	Approx. Water Capacity (per single bag)	Recommended Fills per Week
Single Bag Setup	1 to 2 inch (3 to 5 cm)	15 gallons (56.78 liters)	1 Fill per Week
	2 to 3 inch (5 to 8 cm)	14.75 to 14.25 gallons (55.94 to 53.94 liters)	2 Fills per Week
Double Bag Setup* (2 single bags)	0.00 inch (stand-alone)	25 gallons (94.63 liters)	Varies based on application
	4 to 5 inch (10 to 13 cm)	23.50 gallons (89.53 liters)	1 Fill per Week
	5 to 8 inch (13 to 20 cm)	22.75 to 21.5 gallons (86.11 to 81.38 liters)	2 Fills per Week

*Double Bag setup is two (2) single Treegator® Original bags taped together back-to-back.
*When watering older established trees with fully developed root systems, a Double Bag setup can also be used as a stand-alone watering solution (i.e. not wrapped around a trunk).

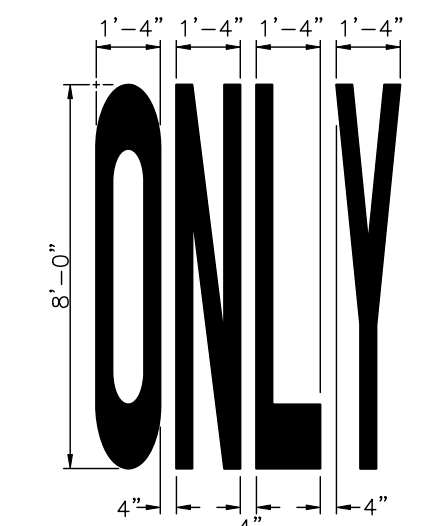


- NOTES:
- MARKINGS FOR STREET SHALL BE ACCORDING TO LOCAL CODE REQUIREMENTS AND AS OUTLINED IN SECTION 3B.18 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
 - MARKINGS WITHIN PRIVATE PARKING LOT SHALL BE PER THIS DETAIL.
 - THESE MARKINGS ARE TO BE PAINTED RETROREFLECTIVE WHITE.

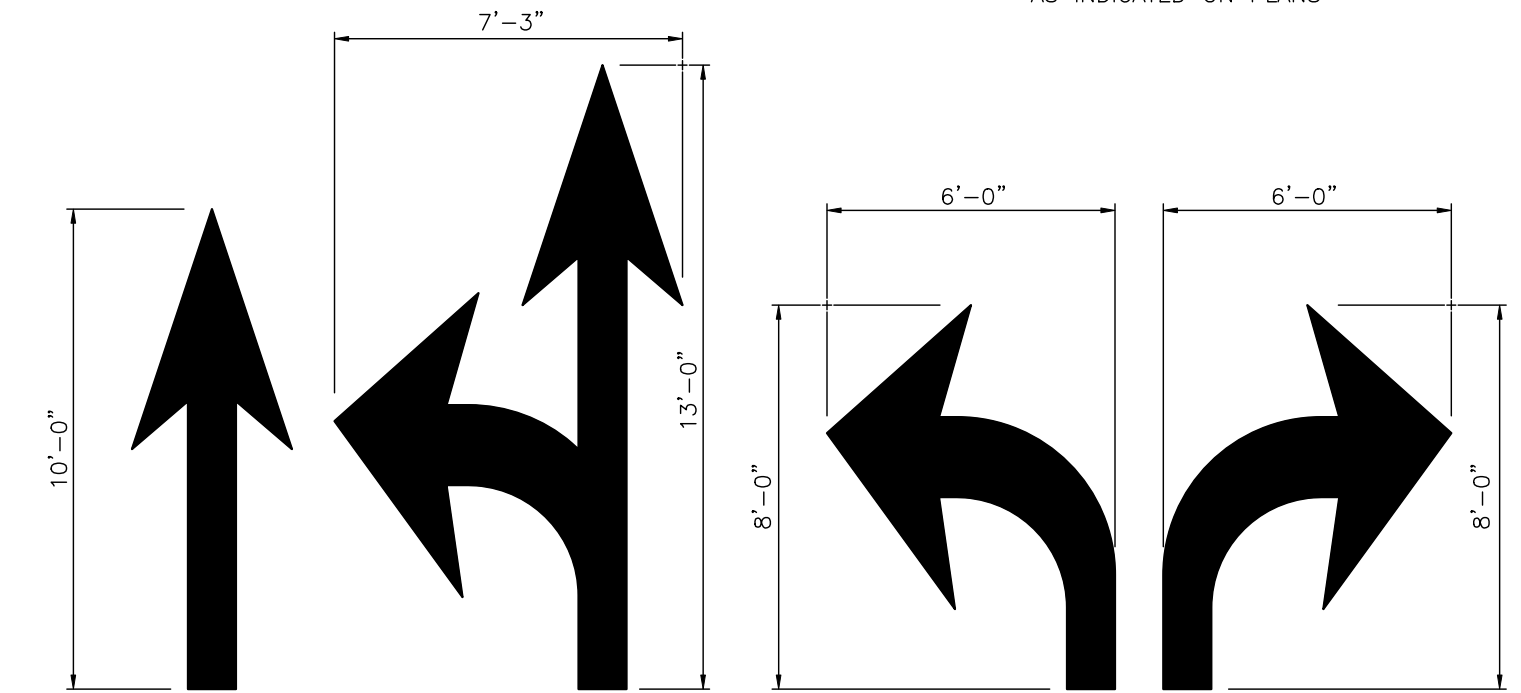
CROSSWALK MARKING W/ LONGITUDINAL STRIPES
N.T.S.

NOTES:

- WORDS AND ARROWS SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- THESE WORDS ARE TO BE PAINTED "RETROREFLECTIVE WHITE WITH GLASS BEADS", PER SPECIFICATIONS, WHEN AT EXITS FROM PARKING LOT TO PUBLIC STREETS.



"ONLY" PAVEMENT MARKING AS INDICATED ON PLANS



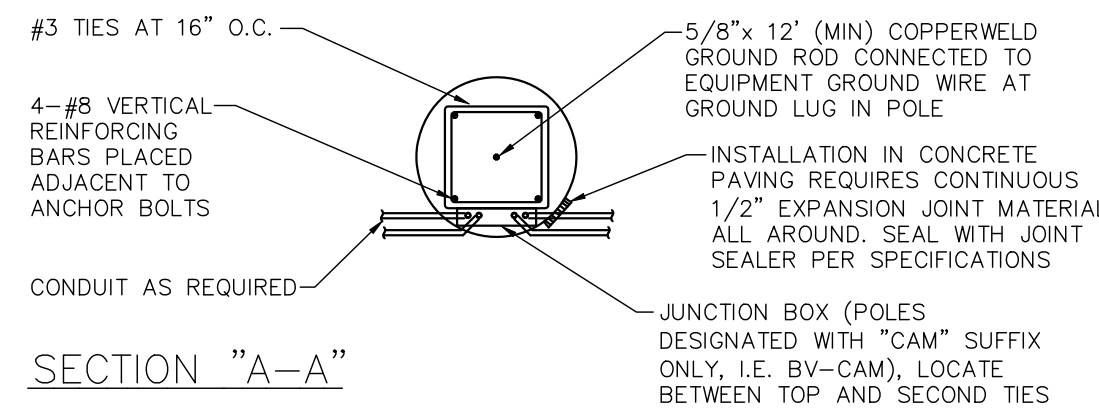
SOLID ARROW MARKINGS AS INDICATED ON PLANS PAINTED "RETROREFLECTIVE WHITE"

SOLID ARROW PAVEMENT MARKINGS
N.T.S.

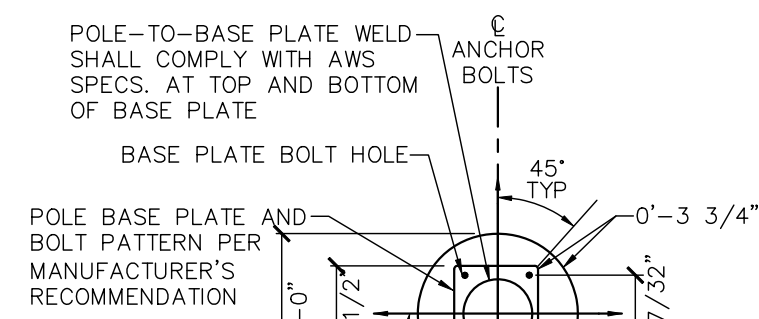
"TREEGATOR" ORIGINAL WATERING BAG

CROSSWALK

PAVEMENT MARKINGS

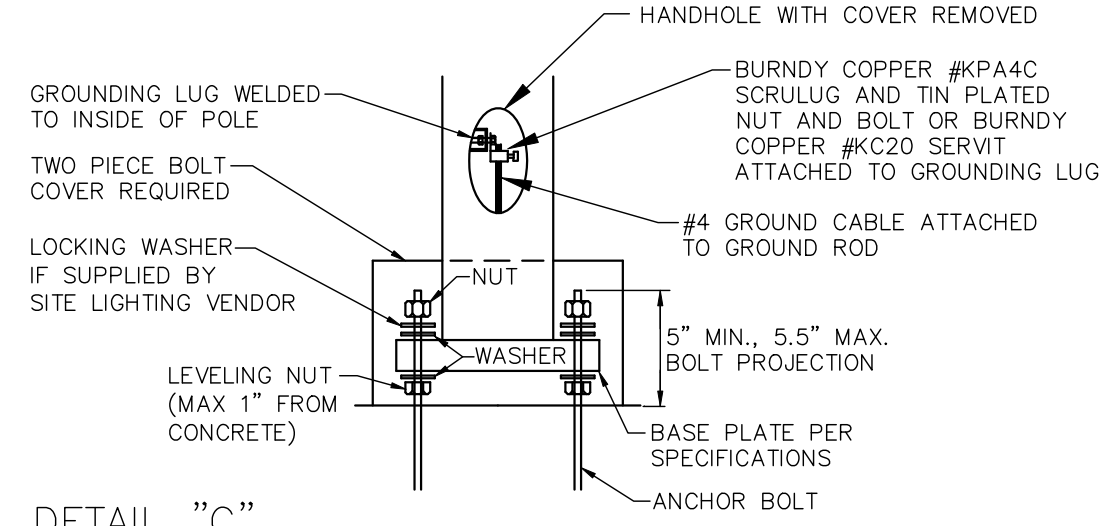


SECTION "A-A"

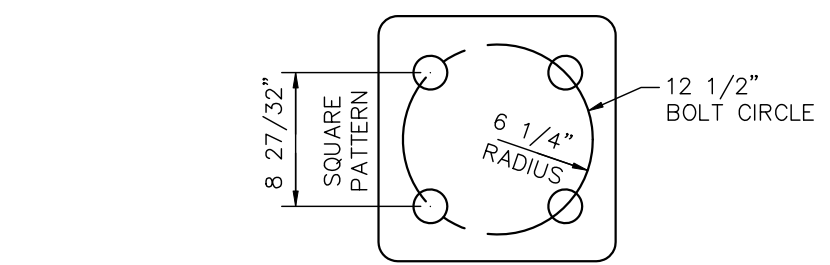


SECTION "B-B"

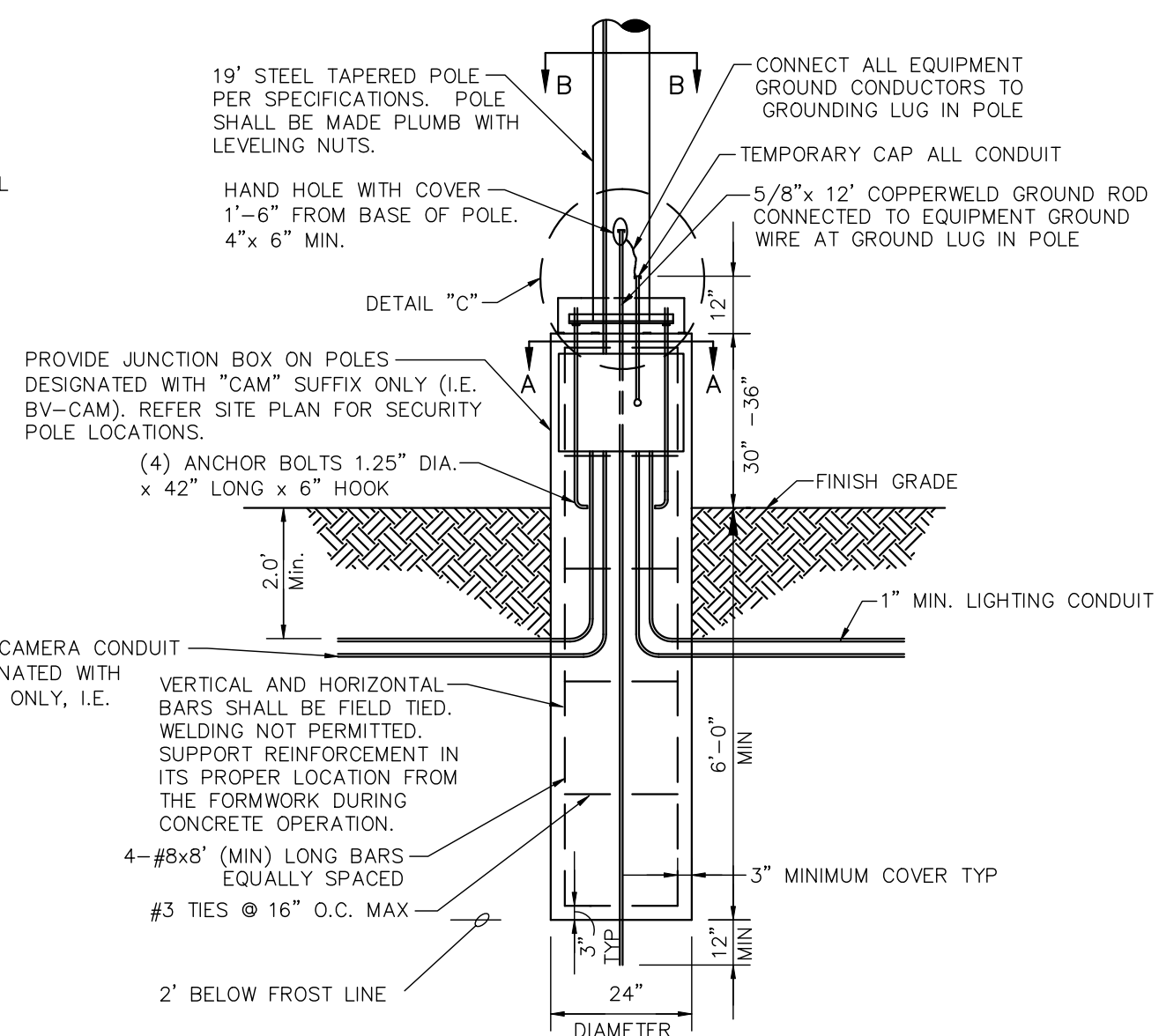
DETAIL "C"



DETAIL "C"

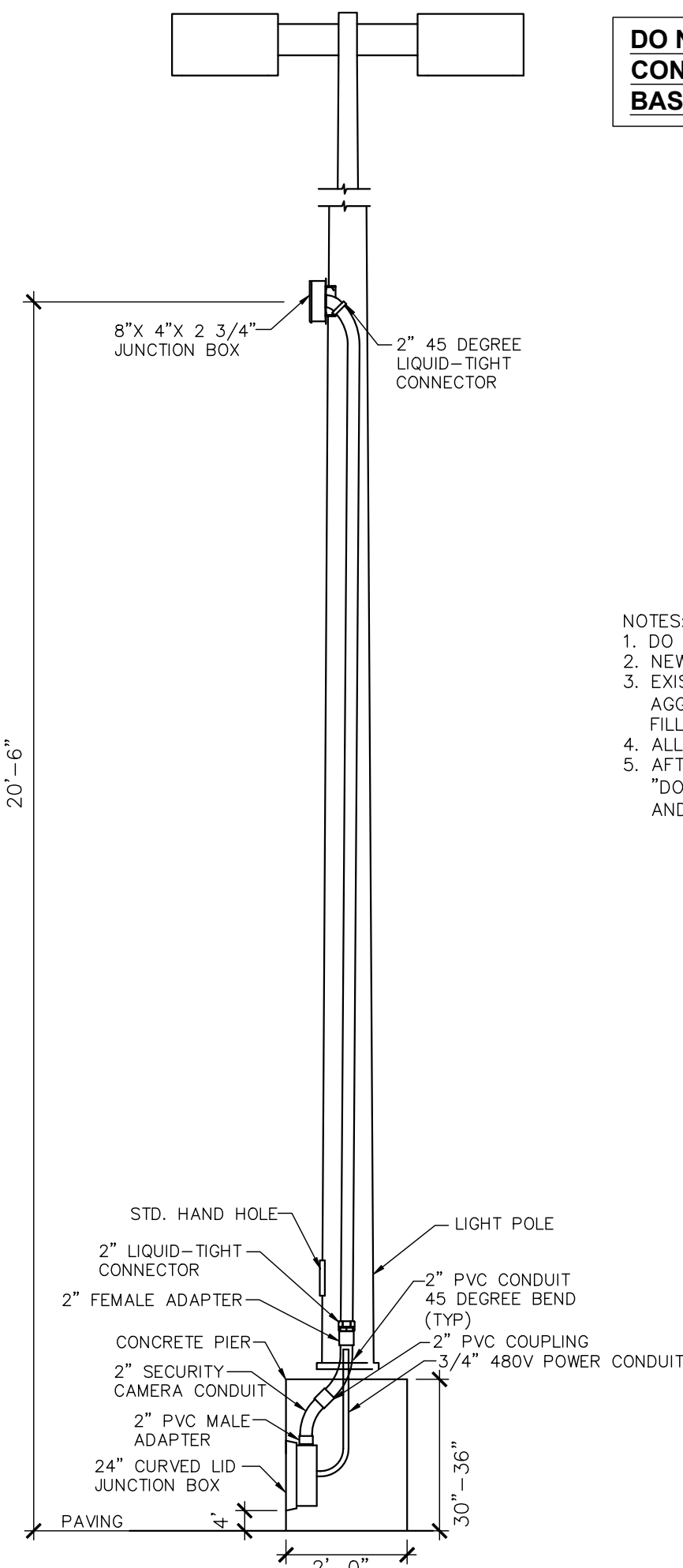


TYPICAL ANCHOR BOLT SPACING
N.T.S.



- NOTES:
- 3500 PSI MIN. 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH GRADE 60 REINFORCING STEEL
 - IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE.
 - FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS.
 - FOUNDATION SHALL HAVE A MINIMUM ALLOWABLE END BEARING OF 2000 PSF.
 - FOUNDATION HAS BEEN DESIGNED FOR A COHESIVE SOIL BASED ON A MINIMUM COHESIVE VALUE OF 1000 PSF.
 - FOUNDATION HAS BEEN DESIGNED FOR A GRANULAR SOIL BASED ON A MINIMUM LATERAL SOIL PRESSURE OF 1000 PSF, UTILIZING AASHTO FIGURE 1.8.2C(4) OF "EMBEDMENT OF POSTS WITH OVERTURNING LOADS"
 - DETAIL FOR 19" POLE WITH MAX. FIXTURE EPA 4.6 SQ.FT.
 - ALL LIGHT POLE BASE FOUNDATIONS SHALL BE CAST-IN-PLACE. PRE-CAST LIGHT POLE BASE FOUNDATIONS ARE NOT ACCEPTABLE.

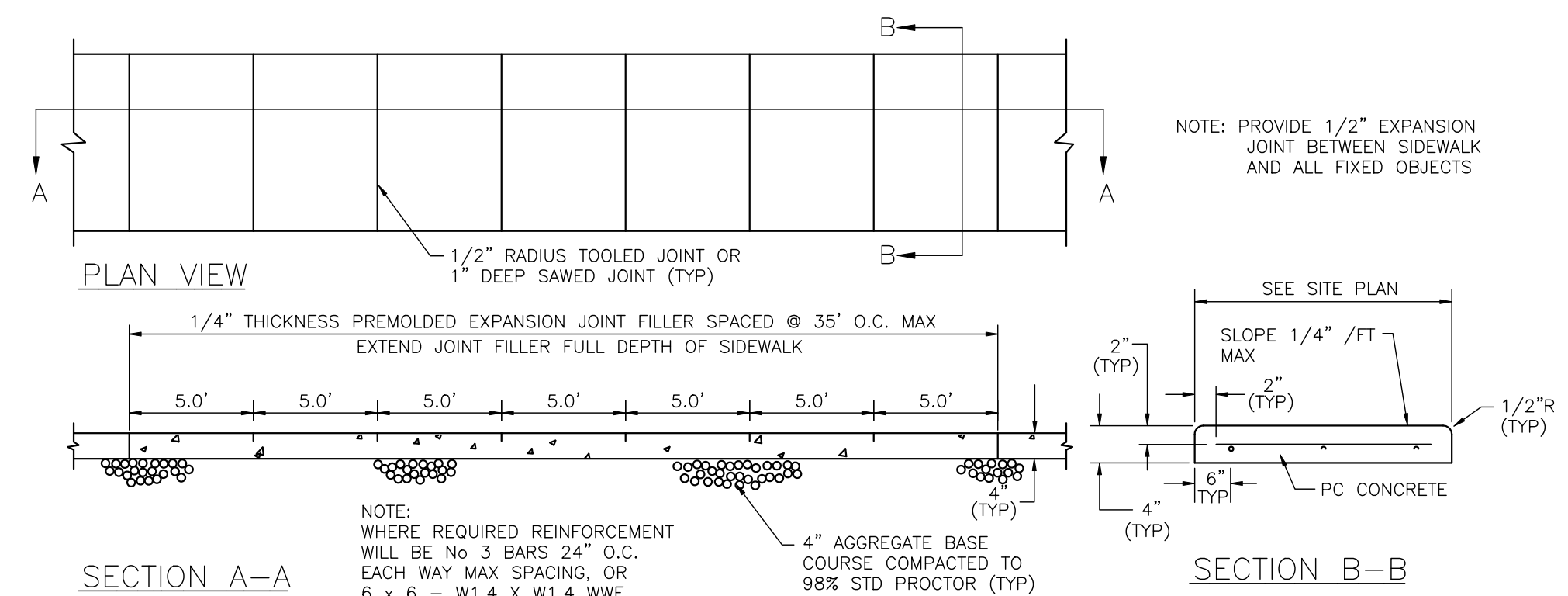
TYPICAL LIGHTING POLE BASE DETAIL
N.T.S.



DO NOT PAINT THE CONCRETE LIGHT POLE BASE

- NOTES:
- DO NOT PAINT POLE BASE.
 - NEW POLE BASES ARE TO RECEIVE HAND RUBBED FINISH ON NEW CONCRETE.
 - EXISTING POLE BASES ARE TO HAVE ALL PAINT REMOVED BY AGGREGATE BLASTING. AFTER AGGREGATE BLASTING POLE BASES ARE TO BE COATED WITH A PORTLAND/SAND MIXTURE TO FILL ANY VOIDS IN CONCRETE AND PROVIDE POLE BASES WITH HAND RUBBED FINISH.
 - ALL POLE BASES ARE TO BE SEALED USING CLEAR CONCRETE SEALANT.
 - AFTER SEALANT HAS DRIED APPLY REFLECTIVE TAPE. THE REFLECTIVE TAPE SHALL BE "DOT C2 APPROVED" ALTERNATING RED/WHITE WITH EACH COLOR AT A MINIMUM 2" HIGH AND 6" TO 18" LONG. ONE COLOR CANNOT EXCEED 2/3 OF THE TOTAL SEGMENT.

POLE BASE FINISHING DETAIL
N.T.S.



SECTION A-A

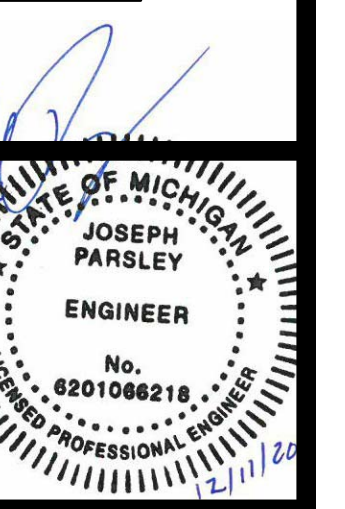
SECTION B-B

SIDEWALK

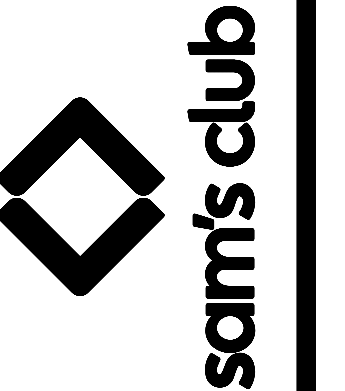
DETAILS

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7088 LEDSTONE COMMONS
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SAM'S CLUB #4982-211
MT. PLEASANT, MICHIGAN
SAM'S REAL ESTATE BUSINESS TRUST
2101 SE SIMPLE SAVINGS DRIVE
BENTONVILLE, AR 72716



DRAWN	AAS
CHECKED	BKM
DATE	12/03/2020
SCALE	AS NOTED
JOB No.	4982-211
SHEET	22 OF 22 SHEETS

Draft Motions: PSPR 20-02 Sam's Club Filling Station
Preliminary Site Plan Review Application

MOTION TO APPROVE:

Motion by _____, supported by _____, to approve the PSPR 20-02 preliminary site plan from Carlson Consulting Engineers for the construction of a new Sam's Club filling station on parcel number 14-026-30-001-07, located on approximately 16.8 acres west and north of Encore Drive in the southwest quarter of Section 26 and in the B-5 (Highway Business) zoning district, finding that the December 3, 2020 site plan fully complies with the applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval).

MOTION TO APPROVE WITH CONDITIONS:

Motion by _____, supported by _____, to approve the PSPR 20-02 preliminary site plan from Carlson Consulting Engineers for the construction of a new Sam's Club filling station on parcel number 14-026-30-001-07, located on approximately 16.8 acres west and north of Encore Drive in the southwest quarter of Section 26 and in the B-5 (Highway Business) zoning district, finding that the December 3, 2020 site plan can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Provide the missing items of required information on the final site plan per Section 14.2.P.
2. Update the parking, exterior lighting, sidewalk easement, and landscaping details on the final site plan to conform to Zoning Ordinance requirements.
3. As part of the final site plan submittal, provide the completed hazardous substance reporting form and EGLE permit checklist form from the application materials and documentation of compliance with State of Michigan requirements for underground fuel tanks located less than 2,000 feet from municipal water wells.

MOTION TO POSTPONE ACTION:

Motion by _____, supported by _____, to postpone action on the PSPR 20-02 preliminary site plan from Carlson Consulting Engineers for the construction of a new Sam's Club filling station on parcel number 14-026-30-001-07 until _____, 2021 for the following reasons: _____

MOTION TO DENY:

Motion by _____, supported by _____, to deny the PSPR 20-02 preliminary site plan from Carlson Consulting Engineers for the construction of a new Sam's Club filling station on parcel number 14-026-30-001-07, located on approximately 16.8 acres west and north of Encore Drive in the southwest quarter of Section 26 and in the B-5 (Highway Business) zoning district, finding that the December 3, 2020 site plan does not comply with applicable Zoning Ordinance requirements, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), for the following reasons:

SITE PLAN REPORT

TO:	Planning Commission	DATE:	January 11, 2021
FROM:	Peter Gallinat, Zoning Administrator	ZONING:	B-5 Highway Business District
PROJECT:	PSPR 20-19 Preliminary Site Plan Approval application for The Den on Broomfield.		
PARCEL(S):	PID 14-103-00-001-00, 14-103-00-02-00, 14-103-00-006-00		
OWNER(S):	BSP Enterprises LLC		
LOCATION:	Approximately 3.37 acres located at the southwest corner of E. Broomfield Rd. and Sweeney Rd Road in the NE 1/4 of Section 26.		
EXISTING USE:	Vacant Property	ADJ. ZONING:	B-5, B-4, R-3A and CD-4, <i>Student Dwelling (City)</i>
FUTURE LAND USE DESIGNATION:	<i>Bluegrass Center Area.</i> While currently more auto-centric, this area has the potential to transition into a more walkable, vibrant center. Future uses should be integrated to include multi-story, mixed-use buildings; first floor retail and office uses; public use and spaces; entertainment and restaurant venues; and additional attached housing types such as townhouses. Both vehicular and pedestrian cross connections should be promoted between sites, providing for future connections through easements, and should collectively promote a vibrant, livable center to the neighboring university population.		
ACTION REQUESTED:	To review and take action to approve, deny, or approve with conditions the PSPR 20-19 preliminary site plan for The Den on Broomfield dated December 23, 2020 for two (2) mixed-use commercial-residential buildings located at the southwest corner of E. Broomfield Rd. and Sweeney Rd. in the NE 1/4 of Section 26 and in the B-5 (Highway Business) zoning district.		

Site Plan Approval Process

Per Section 14.2.C. of the Zoning Ordinance, both preliminary site plan approval and final site plan approval are required for this project. Per Section 14.2.J., approval of a preliminary site plan by the Planning Commission “shall indicate its general acceptance of the proposed layout of buildings, streets, drives, parking areas, and other facilities and areas.” Planning Commission approval of a final site plan “constitutes the final zoning approval for the project and allows for issuance of a building permit to begin site work or construction, provided all other construction and engineering requirements have been met” (Section 14.2.L.). Documentation of applicable outside agency permits and approvals will be required as part of a final site plan application.

Preliminary Site Plan Review Comments

The following comments are based on the standards for preliminary site plan approval and specific elements of the proposed site plan:

1. **Section 14.2.P. (Required Site Plan Information).** The following items of required information are missing, but the site plan is sufficiently complete for Planning Commission review and action. **The following details** (and all other items of required final site plan information per Section 14.2.P. of the Zoning Ordinance) **will need to be addressed by the applicant as part of the final site plan submittal:**

Missing Preliminary Site Plan Information	
Add a description to the site plan of applicant's intentions regarding selling or leasing of all or portions of land, dwelling units or building spaces.	<input type="checkbox"/>
Add the gross and net dwelling unit density, lot area per dwelling unit, and a schedule of the number, sizes (bedrooms, floor areas), and types of dwellings to the site plan.	<input type="checkbox"/>
Add the existing zoning classifications for the surrounding parcels, including across road rights-of-way.	<input type="checkbox"/>
Add the owners' names, addresses, and existing uses on the surrounding parcels across the road rights-of-way from the subject parcels.	<input type="checkbox"/>
Add the required yard setback dimensions to sheets 3 & 4 and correct the inaccurately depicted setbacks on the survey sheet.	<input type="checkbox"/>
Identify the general location and area of each development phase and list the planned construction program and schedule for each development phase on the site plan.	<input type="checkbox"/>
Add the proposed outdoor waste receptacle enclosure height to the site plan detail.	<input type="checkbox"/>
Add the number of floors and gross and net floor area of proposed principal buildings to the site plan.	<input type="checkbox"/>
Correct the measurement of the separation distance between the adjacent buildings to reference the closest points between the buildings.	<input type="checkbox"/>
Incorporate the detailed exterior building façade elevation drawings for the proposed buildings into the final site plan set, rather than as a separate document.	<input type="checkbox"/>
A general layout of proposed landscaping is missing from the preliminary site plan.	<input type="checkbox"/>

2. **Section 8 (Environmental Performance Standards).** **The following details will need to be addressed by the applicant as part of the final site plan submittal:**

- Application is missing the completed hazardous substance reporting form and EGLE permit checklist form included in the application materials. These completed forms will be required as part of the final site plan submittal.

3. **Section 9 (Off-Street Parking).** The parking calculations on the site plan do not match the applicable parking requirements of Zoning Ordinance and may be greater than required. Bicycle parking and a loading space are also required. **The following details will need to be addressed by the applicant as part of the final site plan submittal:**

- Add a location of at least 1 loading space at least 10 feet wide by 50 feet in length with a 15-foot vertical clearance. This space should be located as conveniently as possible both for commercial uses and for residents of the development.
- 40 Secured/Sheltered bicycle spaces and 2 Open Short-Term Bicycle parking spaces shall be required based on residential use.
- For every 5,000 square feet of usable non-residential floor area an additional 1 Open

Short -Term bicycle space shall be provided.

- Per Section 6.24.E., a minimum of one (1) parking space per dwelling unit is required to be reserved for the occupants by use of signage, with details noted on the plan.
 - Correct and update the parking calculations to reference the:
 - Section 9.2(D) requirements for multiple family residential (minimum 0.7 spaces per bedroom);
 - Section 9.2(F) requirements for general retail sales (minimum 1 space per 200 square feet of usable non-residential floor area) and/or other specific parking standards based on the planned land uses; and
 - Shared parking provisions in Section 9.2.B.5.
 - Provide an as-recorded copy of the “40-foot service drive” easement documentation to show that a portion of the parking lot access improvements can be lawfully constructed on parcel 14-103-00-005-00, which is not owned by the applicant.
 - Add a cross-access connection to parcel 14-026-20-004-00 and a separate cross-access connection within the “40-foot service drive” to parcel 14-103-00-107-00 consistent with the requirements of Section 9.2.B.6. and the applicable commercial development policies of the Master Plan.
4. **Section 7.10 (Sidewalks and Pathways).** Applicant has provided sidewalks along E. Broomfield road and a portion of Sweeney Road. The proposed sidewalk is 5 feet in width and the design is consistent with the Sidewalks and Pathways Ordinance requirements. **The following sidewalk detail will need to be addressed by the applicant as part of the final site plan submittal:**
- Add the missing section of required sidewalk along the Sweeney Road frontage of parcel 14-103-006-00.
5. **Section 6.24 (Mixed-Use Buildings).** The proposed buildings conform to the 35-foot maximum height requirement (Section 6.24.B.). Although some required items of information are missing, it is the determination of staff that the project can conform to all applicable requirements of Section 6.24, provided that **the following details are addressed by the applicant as part of the final site plan submittal:**
- Add a detailed use statement to the site plan describing proposed uses, including land or building areas for each use, number of units, number of anticipated residents and employees, and hours of operation for commercial uses. For this project, the statement will also need to specifically demonstrate compliance with the use-related provisions of Sections 6.24.C. & 6.24.D.
 - Include floor plans for all levels of the building in the final site plan set that demonstrate compliance with provisions of Sections 6.24.C., 6.24.D., and 6.24.F.
6. **Consistency with the Master Plan.** Mixed-use buildings are precisely the type of development intended for the Bluegrass Center Area, as detailed in the Master Plan.

Additional Comments for Preparation of the Final Site Plan

7. **Outside agency approvals.** The applicant shall be responsible for obtaining all necessary permits or approvals from applicable outside agencies, prior to final site plan approval. These approvals include the Mt. Pleasant Fire Department, Isabella County Road Commission, and Storm Water approval from the Isabella County Drain office Isabella County Transportation Commission, and the Township Public Services Department.

Objective

The Planning Commission shall review the application materials and site plan, together with any reports and recommendations. The Planning Commission shall identify and evaluate all relevant factors and shall then take action by motion to approve the site plan, to approve the site plan with conditions, to deny the site plan application, or to postpone further consideration of the site plan to a date certain in accordance with Section 14.2.H. of the Zoning Ordinance.

Key Findings

1. The site plan is missing several items of required preliminary site plan information but is sufficiently complete for Planning Commission review.
2. If updated consistent with the details noted in this report, the preliminary site plan can fully conform to Section 14.2.S. (Standards for Site Plan Approval).
3. The proposed mixed-use buildings can fully conform to all applicable requirements of Section 6.24 (Mixed-Use Buildings), provided the missing details are provided as part of the site plan submittal.
4. The proposed buildings are the first project since the adoption of the new Master Plan that achieves the desired mixed-use development for the Bluegrass Center Area.

Recommendations

Based on the above findings, I would ask that the Planning Commission consider taking action to approve the PSPR 20-19 preliminary site plan for The Den on Broomfield, subject to the following conditions:

1. Provide the missing items of required application and site plan information as part of the final site plan submittal, including documentation of compliance with Section 6.24 (Mixed-Use Buildings) and Section 14.2.P. (Required Site Plan Information).
2. Revise the off-street parking, cross-access, loading area, and sidewalk details on the final site plan as necessary for compliance with Zoning Ordinance requirements.
3. All final site plan information shall be provided in a consolidated set without separate attachments or addendums, and with all sheets referenced on the cover sheet.
4. All three (3) parcels shall be combined into one (1) new development parcel prior to issuance of a building permit for the project.

Please contact me at (989) 772-4600 ext. 241, or via email at pgallinat@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Peter Gallinat, Zoning Administrator

Community and Economic Development Department

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

Minor Site Plan
 Preliminary Site Plan
 Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project		THE DEN OF BROOMFIELD	
Common Description of Property & Address (if issued)		TBD E. BROOMFIELD ROAD, MT. PLEASANT, MI 48858	
Applicant's Name(s)		BSP ENTERPRISES	
Phone/Fax numbers	(906) 225-1360	Email	Anupmgh@yahoo.com
Address	430 S. FIRST STREET	City:	CARSON CITY
		Zip:	48811

Legal Description:	Attached	<input checked="" type="checkbox"/> Included on Site Plan	Tax Parcel ID Number(s):	14-103-00-002-00, 14-103-00-001-00 14-103-00-006-00	
Existing Zoning:	B-5	Land Acreage:	3.35	Existing Use(s):	AGRICULTURE / VACANT LAND
<input checked="" type="checkbox"/> ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)					

Firm(s) or Individuals(s) who prepared site plan(s)	1. Name: CENTRAL MI SURVEYING & DEVELOPMENT CO. INC. Phone: 989-775-0756 Email: tbebee@cms-d.com 2. Address: 2257 E. BROOMFIELD ROAD City: MT. PLEASANT State: MI Zip: 48858 Contact Person: TIMOTHY E BEBEE Phone: 989-775-0756
Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.	1. Name: BSP ENTERPRISES LLC Phone: 906-225-1360 Address: 430 S. FIRST STREET City: CARSON CITY State: MI Zip: 48811 Signature: <i>A. P. Bhimatti</i> Interest in Property: _____ 2. Name: <i>Anjali Bhimatti</i> Phone: _____ Address: <i>430 S. First St.</i> City: <i>Carson city</i> State: <i>MI</i> Zip: <i>48811</i> Signature: _____ Interest in Property: _____

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

A. P. Bhimatti

Signature of Applicant

10/6/2020

Date

Office Use Only

Application Received By: _____ Fee Paid: \$ _____

Date Received: _____ Escrow Deposit Paid: \$ _____



EAST ELEVATION



NORTH ELEVATION



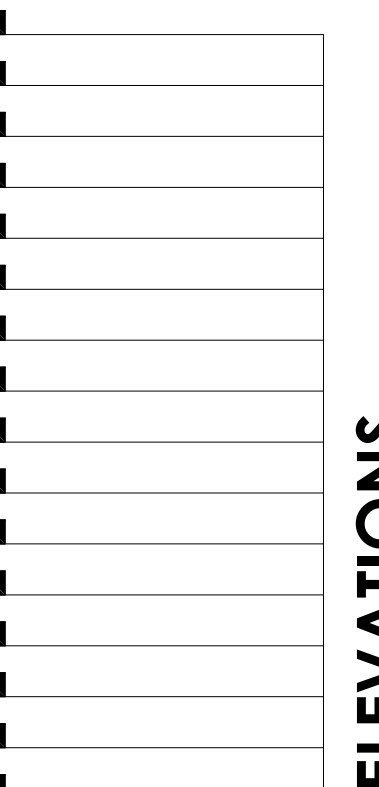
WEST ELEVATION



SOUTH ELEVATION

THE DEN ON BROOMFIELD

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A2.0

EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

Scale: 1/8" = 1'-0"

1
A2.0

THE DEN ON BROOMFIELD



PART OF THE NORTHEAST 1/4, SECTION 26, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN
LOCATION MAP
NOT TO SCALE

B-5 ZONE	
MINIMUM FRONT YARD SETBACK	50 FT (A,B)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (A,B)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	16,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	30%

- A. THE DEPTH OF THE LOT SHALL NOT EXCEED FOUR TIMES THE LOT WIDTH, MEASURED AT THE FRONT BUILDING LINE.
- B. NO BUILDING OR STRUCTURE SHALL EXCEED A HEIGHT OF TWO AND ONE-HALF STORIES OF THIRTY-FIVE FEET, EXCEPT, THAT SILOS, ELEVATORS, BARNES AND OTHER STRUCTURES CUSTOMARILY NECESSARY TO FARMING SHALL HAVE A MAXIMUM HEIGHT OF NINETY-NINE FEET, PROVIDED THAT ANY REQUIRED SETBACK SHALL BE INCREASED BY ONE FOOT FOR EACH FOOT THAT THE STRUCTURE EXCEEDS THIRTY-FIVE FEET.
- C. SIDE YARDS FACING A STREET SHALL COMPLY WITH FRONT YARD SETBACK REQUIREMENTS.

MISS DIG:

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-282-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND SYMBOLS

○ BOLLARD	☐ GAS RISER	● SOIL BORING
☐ CATCH BASIN (CURB INLET)	☐ GUY ANCHOR	⊙ STORM SEWER MANHOLE
⊙ CATCH BASIN (ROUND)	☒ HYDRANT - EXISTING	☐ TELEPHONE RISER
☐ CATCH BASIN (SQUARE)	☒ HYDRANT - PROPOSED	● TREE - CONIFEROUS
⊙ CLEAN OUT	☆ LIGHT POLE	● TREE - DECIDUOUS
→ DRAINAGE FLOW	☐ MAILBOX	☐ UTILITY POLE
☐ ELECTRICAL BOX	⊙ MONITORING WELL	☒ WATER MAIN VALVE
● FOUND CONC. MONUMENT	⊙ SANITARY SEWER MANHOLE	☒ WATER SHUT-OFF
○ FOUND IRON	● SET IRON	⊙ WATER WELL
☒ GAS MAIN VALVE	☒ SIGN	☐ WOOD STAKE

LINETYPES

—ELEC—	BURIED ELECTRICAL CABLE
—PHONE—	BURIED TELEPHONE CABLE
-DITCH-CL-	CENTERLINE OF DITCH
—FM—	FORCE MAIN
—GAS—	GAS MAIN
—RD-CL—	ROAD CENTERLINE
—8" SAN—	SANITARY SEWER
—12" SS—	STORM SEWER
—EX-TOS—	TOE OF SLOPE
—EX-TOB—	TOP OF BANK
—OHE—	UTILITIES - OVERHEAD
—UTIL—	UTILITIES - UNDERGROUND
—12" WM—	WATER MAIN

HATCH PATTERNS

[Hatched Pattern]	ASPHALT - EXISTING
[Hatched Pattern]	ASPHALT - PROPOSED
[Hatched Pattern]	CONCRETE
[Hatched Pattern]	GRAVEL
[Hatched Pattern]	LANDSCAPING
[Hatched Pattern]	RIP-RAP

DESCRIPTIONS PROVIDED: (TITLE POLICY NO. 5011400-220507)

UNITS 1, 2 AND 6 OF TALLGRASS COMMONS CONDOMINIUM, A COMMERCIAL SITE CONDOMINIUM ACCORDING TO THE MASTER DEED THEREOF RECORDED IN LIBER 1439, PAGES 451-520, INCLUSIVE, AND FIRST AMENDMENT RECORDED NOVEMBER 3, 2009 IN LIBER 1499, PAGES 887-894 INCLUSIVE, AND SECOND AMENDMENT RECORDED MARCH 24, 2010 IN LIBER 1511, PAGES 824-830 INCLUSIVE, AND DESIGNATED AS ISABELLA COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 54, WITH RIGHTS IN GENERAL COMMON ELEMENTS AND LIMITED COMMON ELEMENTS, AS SET FORTH IN SAID MASTER DEED AND AMENDMENTS AND AS DESIGNATED IN ACT 459 OF THE PUBLIC ACTS OF MICHIGAN OF 1978 AS AMENDED.

SHEET INDEX	
1.	COVER SHEET
2.	EXISTING TOPOGRAPHY
3.	HORIZONTAL LAYOUT PLAN NORTH
4.	HORIZONTAL LAYOUT PLAN SOUTH
5.	HORIZONTAL DETAILS
6.	GRADING DETAILS
7.	GRADING PLAN NORTH
8.	GRADING PLAN SOUTH
9.	DETENTION AREA DETAIL
10.	STORMWATER PLAN
11.	SITE UTILITY PLAN
12.	SOIL EROSION PLAN
13.	WATERMAIN PLAN & PROFILE
14.	SANITARY SEWER PLAN & PROFILE
15.	WATERMAIN DETAILS
16.	CONSTRUCTION DETAILS

BEARING BASIS:
PER GEODETIC OBSERVATION WGS-84 THE BEARING BETWEEN THE NORTH 1/4 CORNER AND THE NORTHEAST CORNER OF SECTION 26, T14N-R4W WAS DETERMINED TO BE N89°55'-22"E.

SITE:	NORTHWEST CORNER OF THE INTERSECTION OF BROOMFIELD AND SWEENEY STREET. MT. PLEASANT, MI 48858
CLIENT:	THE DEN ON BROOMFIELD B.S.P. ENTERPRISES, LLC 430 S. FIRST STREET CARSON CITY, MI 48811 CONTACT: ANUPKUMAR K. PATEL PHONE: (906) 225-1360 EMAIL: Anupmgh@yahoo.com
CONSULTANT:	CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC. 2257 EAST BROOMFIELD ROAD MT. PLEASANT, MI 48858 CONTACT PERSON: TIMOTHY E BEEBE PHONE: (989) 775-0756 FAX: (989) 775-5012 EMAIL: info@cms-d.com

CHARTER COMMUNICATIONS 915 E. BROOMFIELD ROAD MT. PLEASANT, MI 48858 (989) 621-4932 RANDY BUNKER rbunker@chartercom.com	CHARTER TOWNSHIP OF UNION PUBLIC WATER/PUBLIC SEWER 2010 N. LINCOLN ROAD MT. PLEASANT, MI 48858 (989) 772-4600 EXT 24 KIM SMITH ksmith@uniontownshipmi.com
CONSUMERS ENERGY 1325 WRIGHT AVENUE ALMA, MI 48801 (989) 466-4282 KIM STUDDT kimberly.studdt@cmsenergy.com	CHARTER TOWNSHIP OF UNION PLANNING & ZONING 2010 NORTH LINCOLN ROAD MT. PLEASANT, MI 48858 (989) 772-0911 PETER GALLINAT pgallinat@uniontownshipmi.com
FRONTIER 345 PINE STREET ALMA, MI 48801 (989) 463-0392 MARK A. MARSHALL Mark.Marshall@tr.com	DRAIN COMMISSIONERS OFFICE ISABELLA COUNTY BUILDING 200 NORTH MAIN STREET ROOM 140 MT. PLEASANT, MI 48858 (989) 772-0911 ROBERT WILLOUGHBY drain@isabellacounty.org
DTE ENERGY 4420 44TH ST., S.E., SUITE B KENTWOOD, MI 49512 (616) 954-4623 MARY JO WICKERSIE mckersiem@dteenergy.com	ISABELLA COUNTY ROAD COMMISSION 2261 EAST REMUS ROAD MT. PLEASANT, MI 48858 (989) 773-7131 EXT 115 PATRICK GAFFNEY PGaffney@isabellaroads.com
MT. PLEASANT FIRE DEPARTMENT 804 EAST HIGH STREET MT. PLEASANT, MI 48858 (989) 779-5100 EXT 5122 SGT. RANDY KEELER rkeeler@mt-pleasant.org	

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2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com



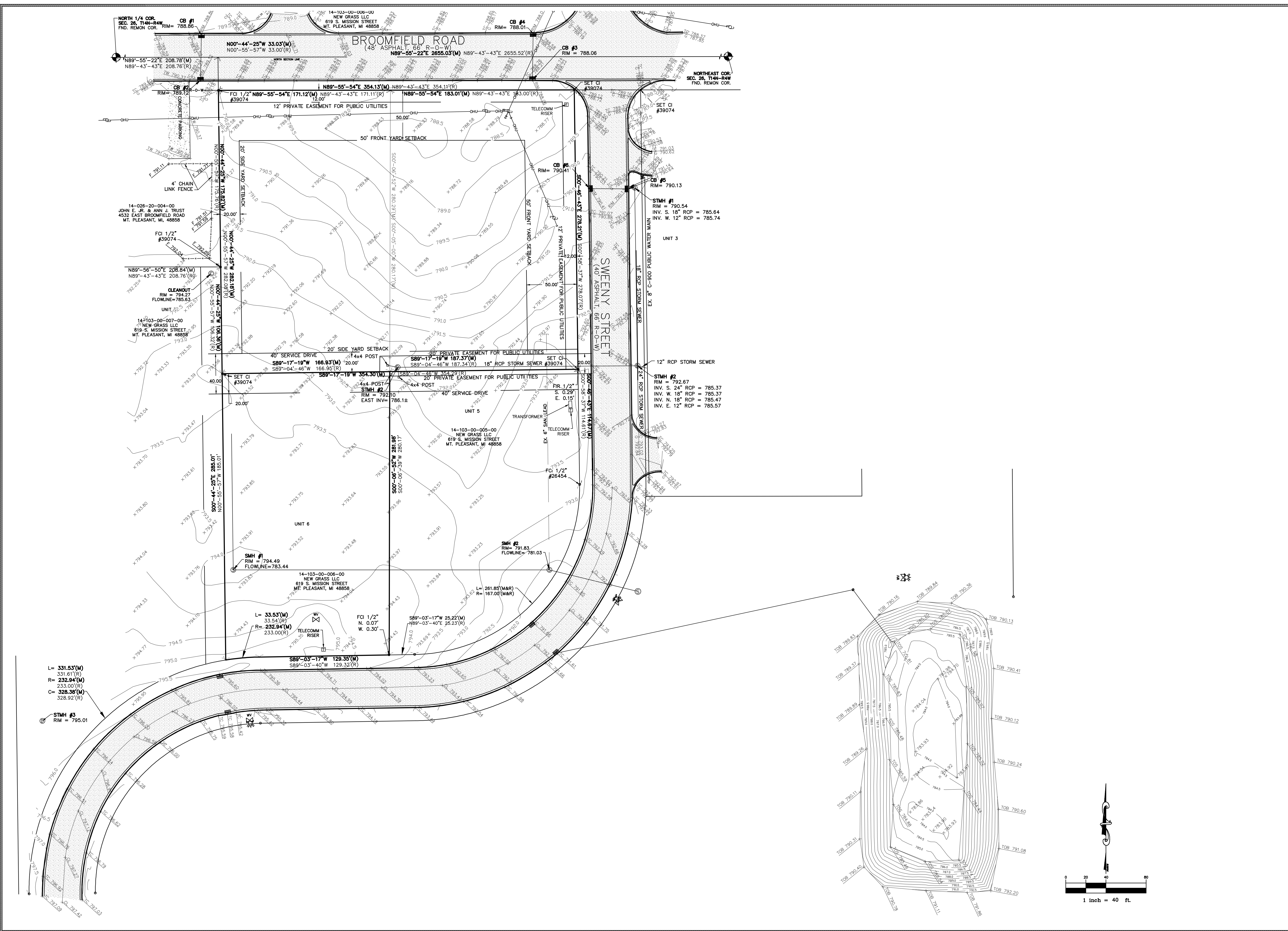
COVER SHEET
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:
1810-109
DRAWN BY:
BTM
DESIGNED BY:
N/A
CHECKED BY:
TELB

SCALE:
N/A
SHEET NUMBER:
1 OF 16



EXISTING TOPOGRAPHY
 THE DEN ON BROOMFIELD
 UNITS 1 AND 2 OF TALLGRASS COMMONS
 SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
 OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

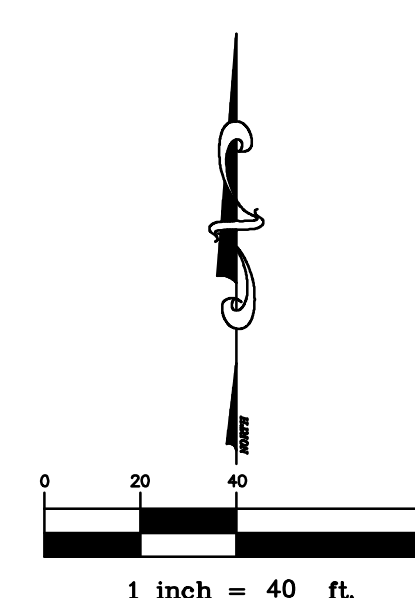
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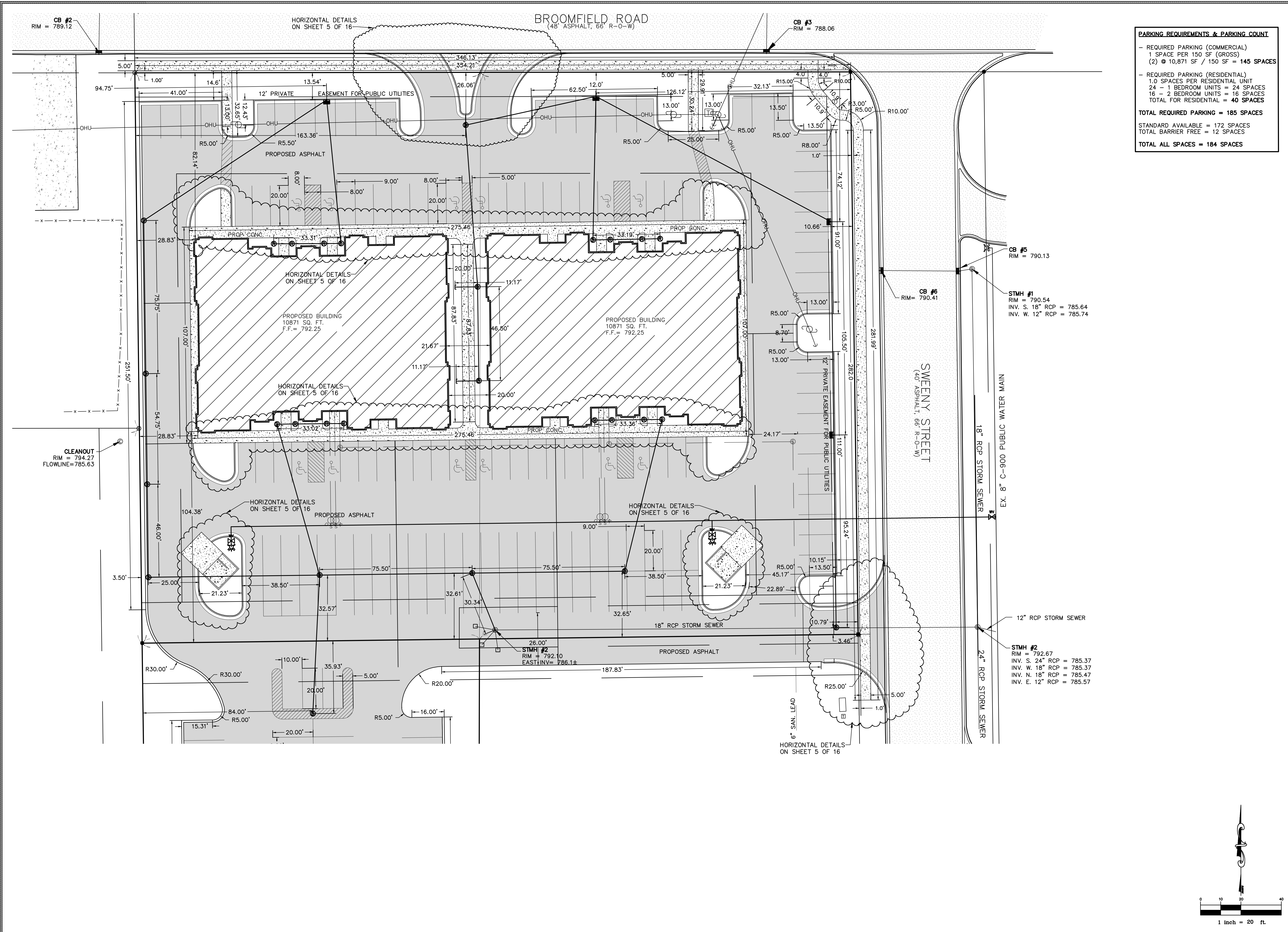
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:

SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

SCALE	JOB NUMBER:
1" = 40'	1810-109
SHEET NUMBER	DRAWN BY:
2 of 16	BTM
	DESIGNED BY:
	N/A
	CHECKED BY:
	TELB





PARKING REQUIREMENTS & PARKING COUNT	
- REQUIRED PARKING (COMMERCIAL)	1 SPACE PER 150 SF (GROSS)
(2) @ 10,871 SF / 150 SF =	145 SPACES
- REQUIRED PARKING (RESIDENTIAL)	1.0 SPACES PER RESIDENTIAL UNIT
24 - 1 BEDROOM UNITS =	24 SPACES
16 - 2 BEDROOM UNITS =	16 SPACES
TOTAL FOR RESIDENTIAL =	40 SPACES
TOTAL REQUIRED PARKING =	185 SPACES
STANDARD AVAILABLE =	172 SPACES
TOTAL BARRIER FREE =	12 SPACES
TOTAL ALL SPACES =	184 SPACES

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 SURVEYING / ENGINEERING
 2257 E. BROOMFIELD RD.
 MT. PLEASANT, MICHIGAN 48858
 PHONE: (989) 775-0756
 FAX: (989) 775-5012
 EMAIL: info@cms-d.com



HORIZONTAL PLAN NORTH
THE DEN ON BROOMFIELD
 UNITS 1 AND 2 OF TALLGRASS COMMONS
 SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
 OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
 COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
 SUBMITTAL TO CLIENT 02-23-20
 SUBMITTAL TO CLIENT 02-23-20
 SUBMITTAL TO UNION TOWNSHIP
 PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:
1810-109

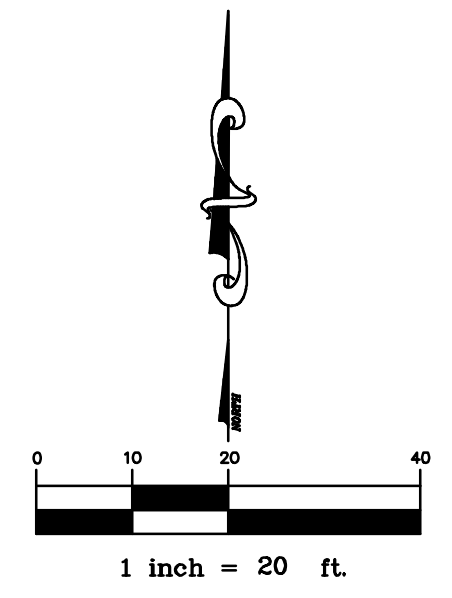
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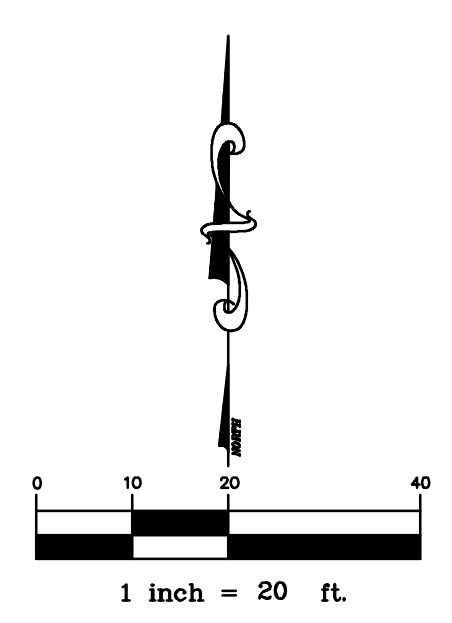
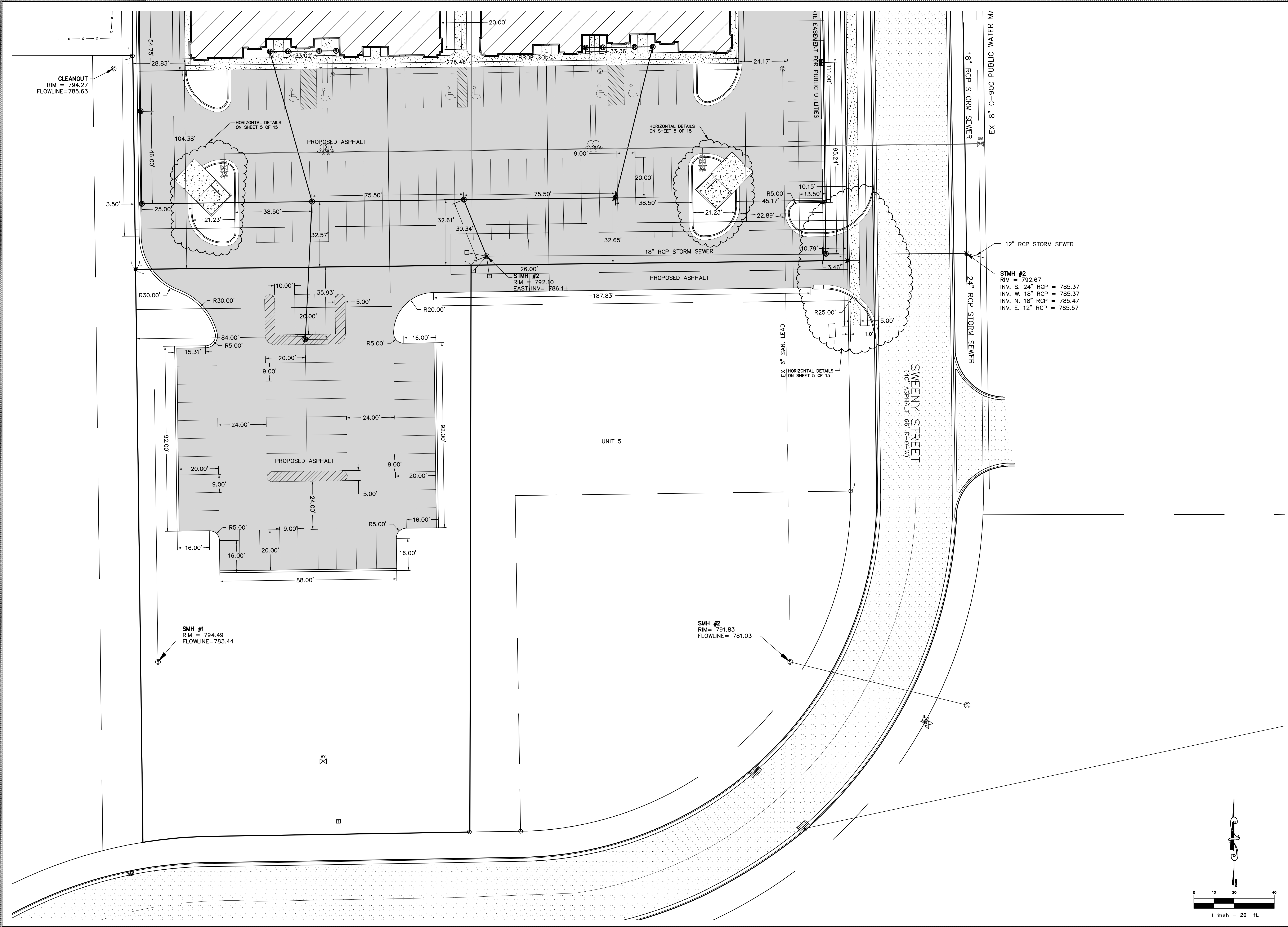
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BTM

DESIGNED BY:
TELB

CHECKED BY:
TELB

SHEET NUMBER:
3 OF 16





REVISIONS:

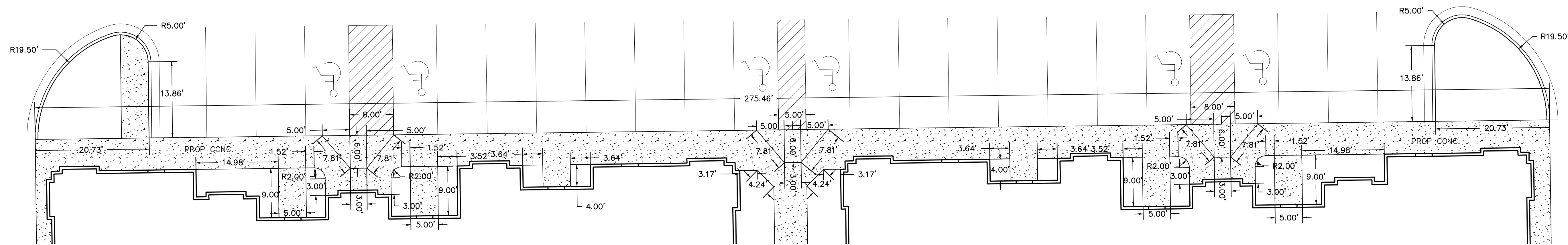
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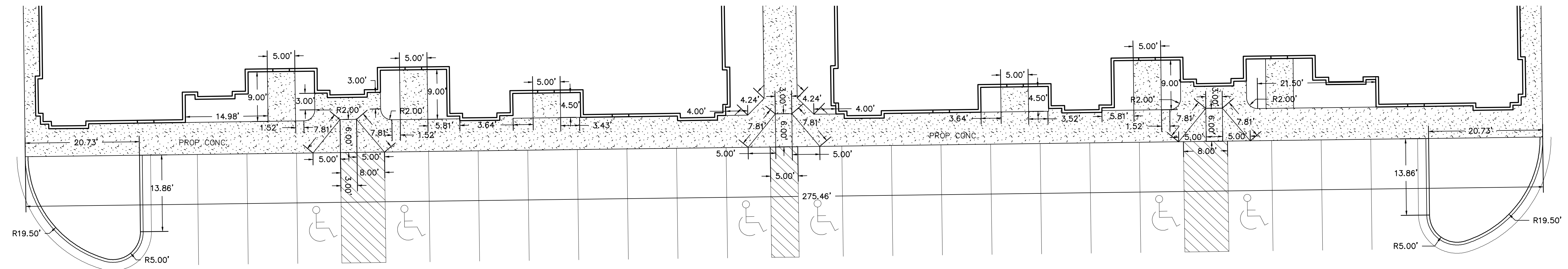
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SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20

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DRAWN BY: BTM	SHEET NUMBER: 4 OF 16
DESIGNED BY: TELB	CHECKED BY: TELB

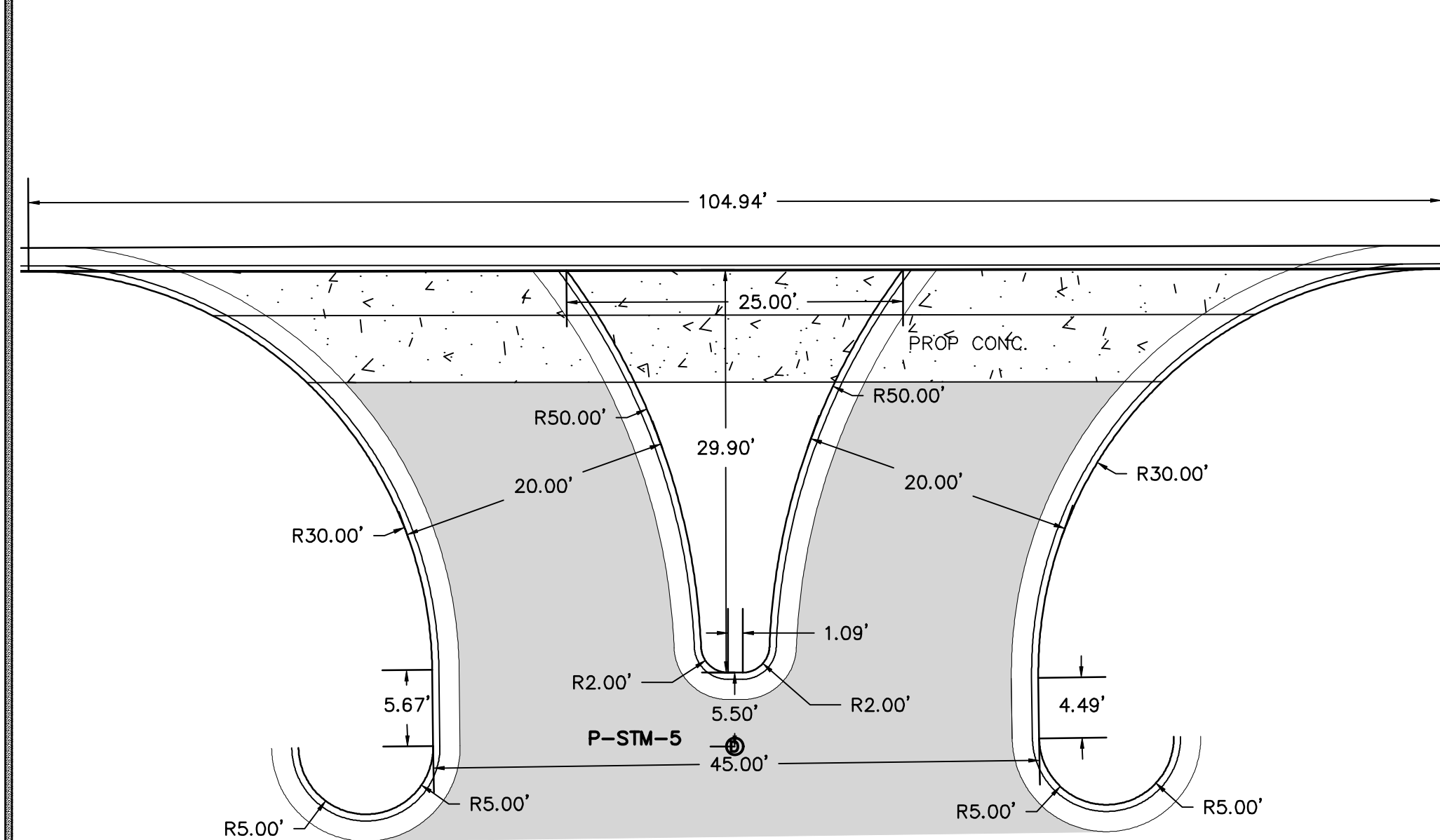
NORTH SIDEWALK DETAIL
SCALE: 1" = 10'



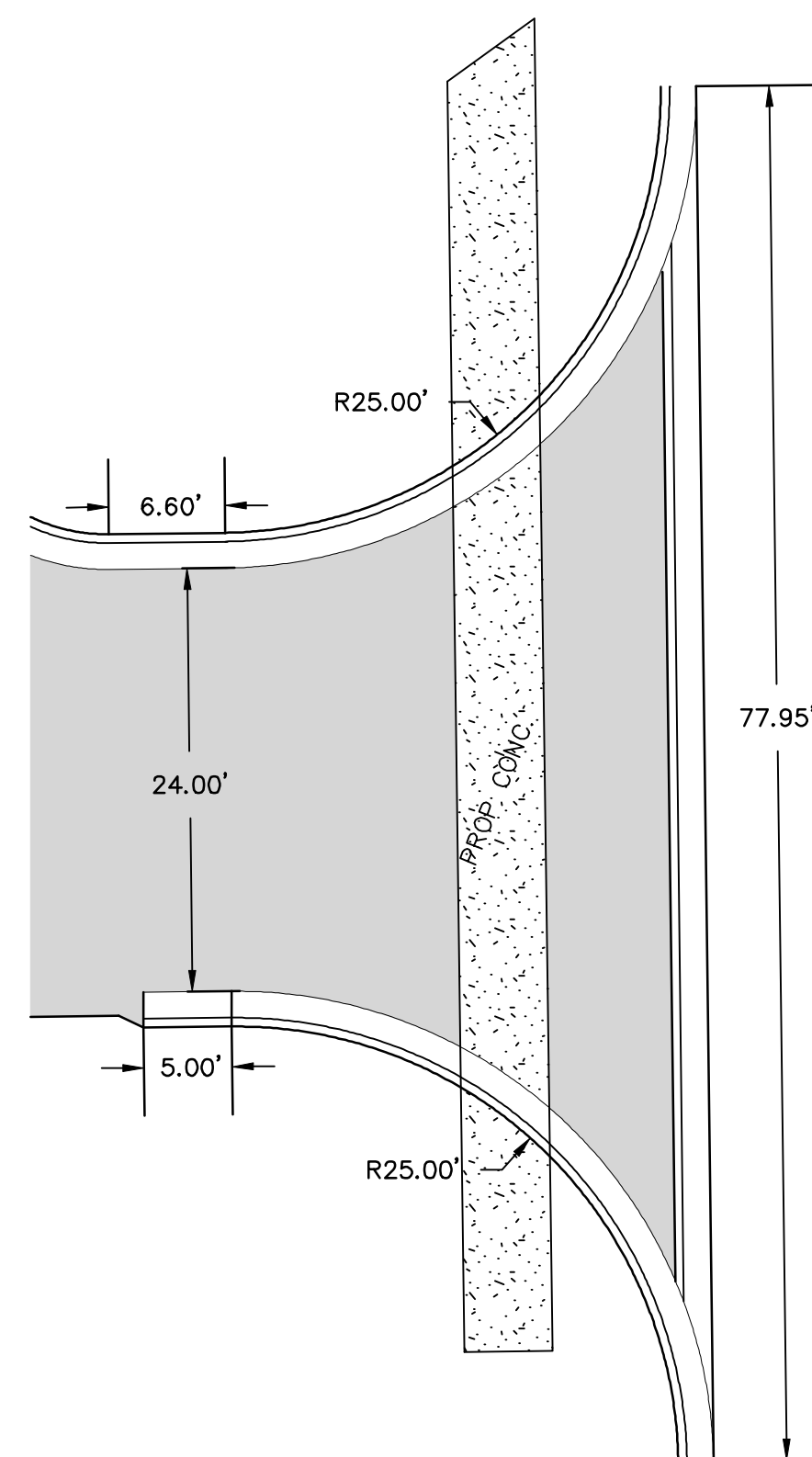
SOUTH SIDEWALK DETAIL
SCALE: 1" = 10'



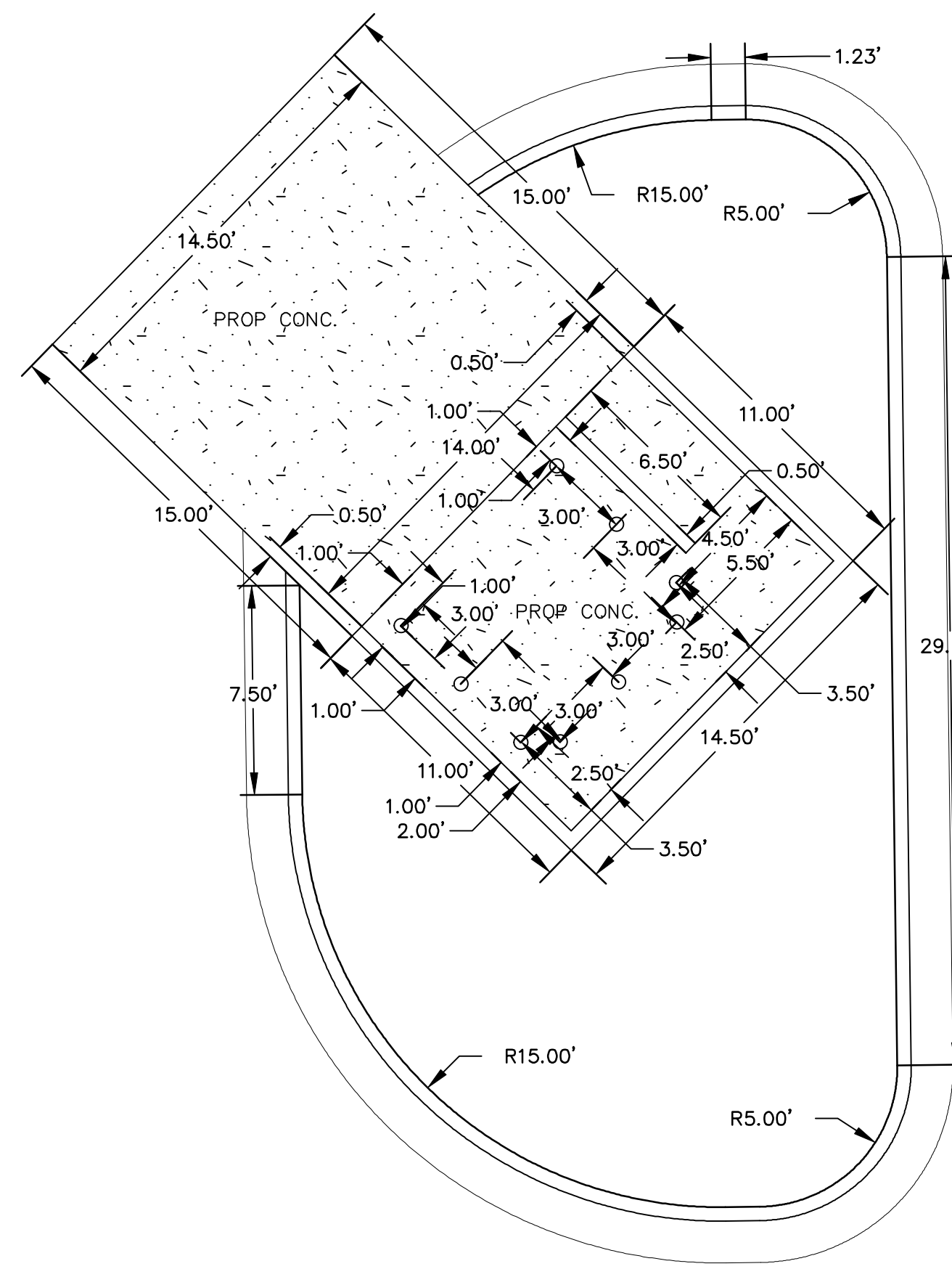
NORTH SIDE DRIVE ENTRANCE DETAIL
SCALE: 1" = 10'



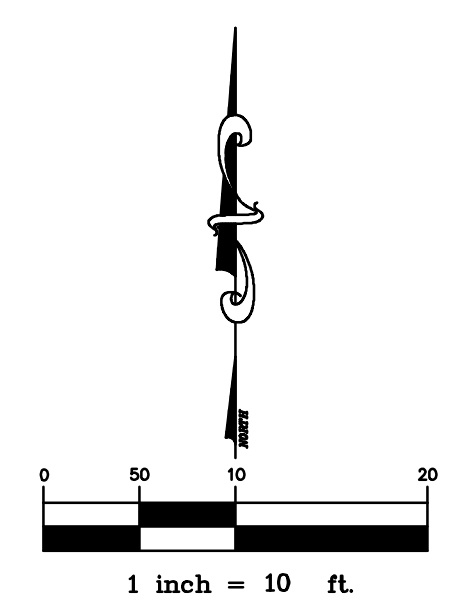
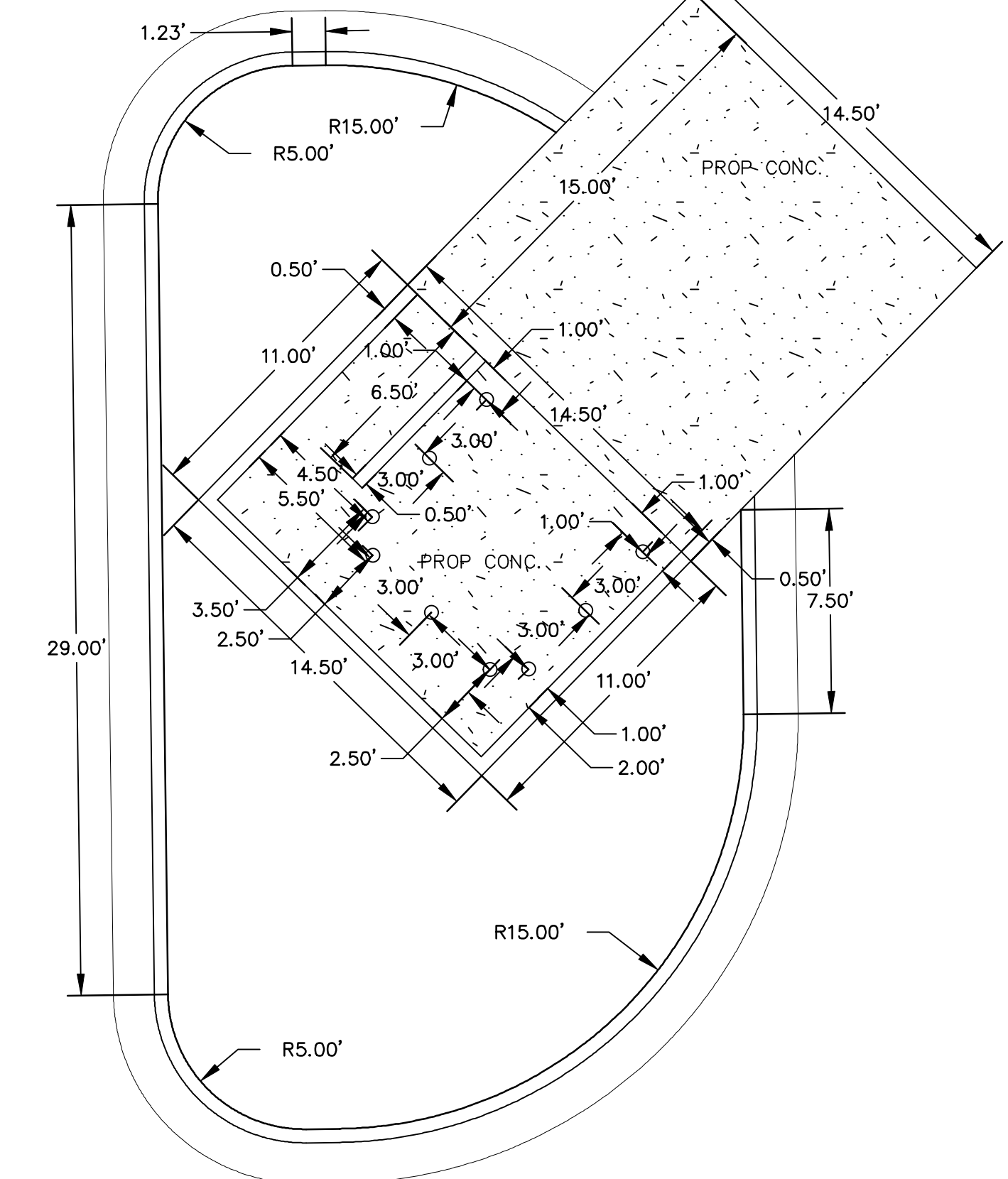
EAST SIDE DRIVE ENTRANCE DETAIL
SCALE: 1" = 10'



WEST DUMPSTER PAD DETAIL
SCALE: 1" = 5'



EAST DUMPSTER PAD DETAIL
SCALE: 1" = 5'

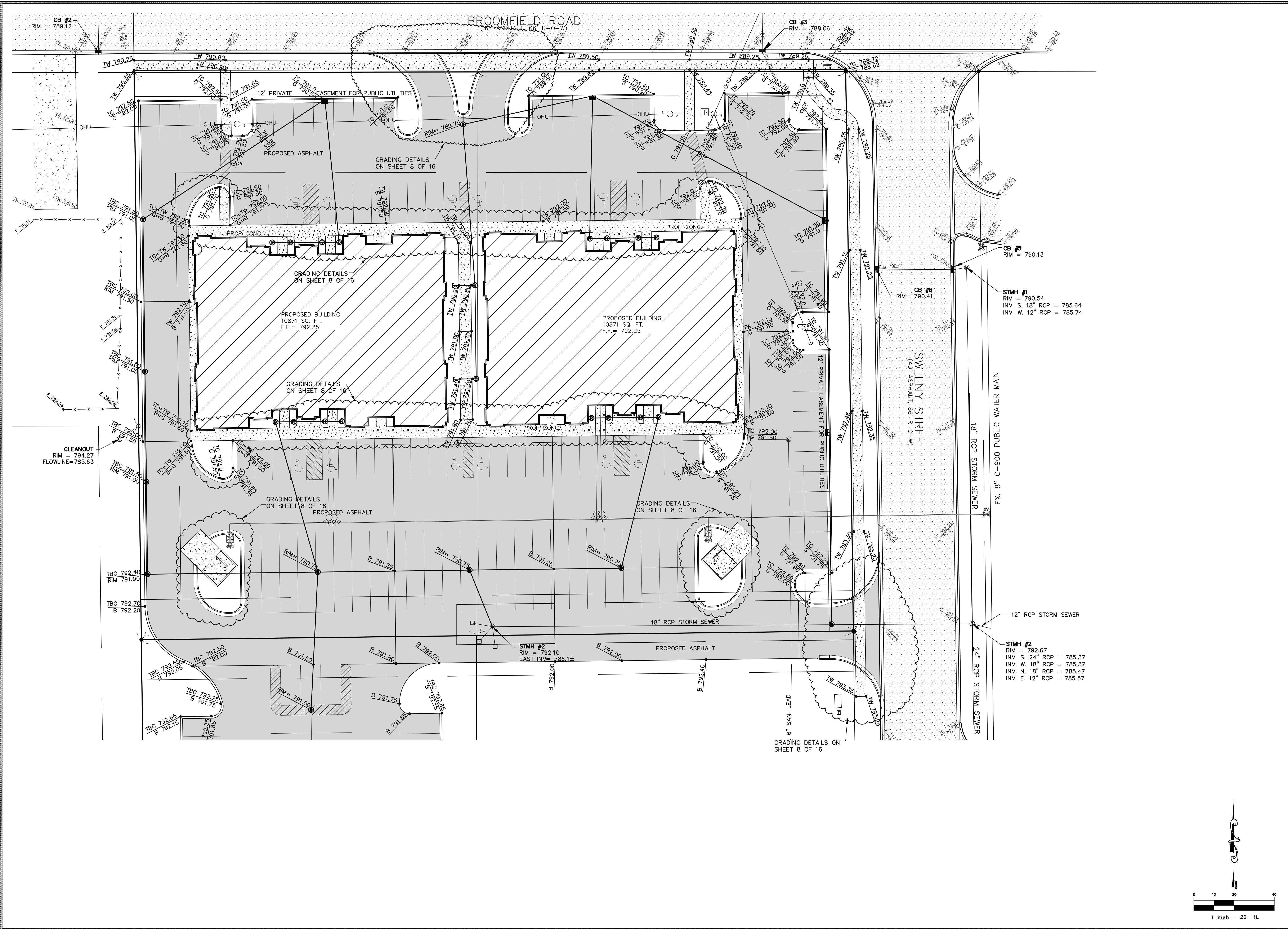


REVISIONS:
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:
1810-109
DRAWN BY:
BTM
DESIGNED BY:
TELB
CHECKED BY:
TELB

SCALE:
1" = 10'
SHEET NUMBER:
5 OF 16



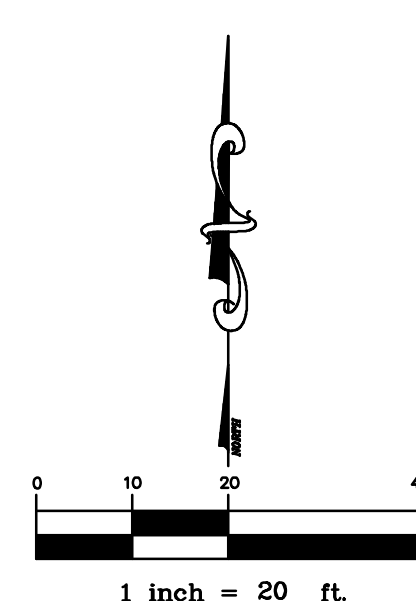
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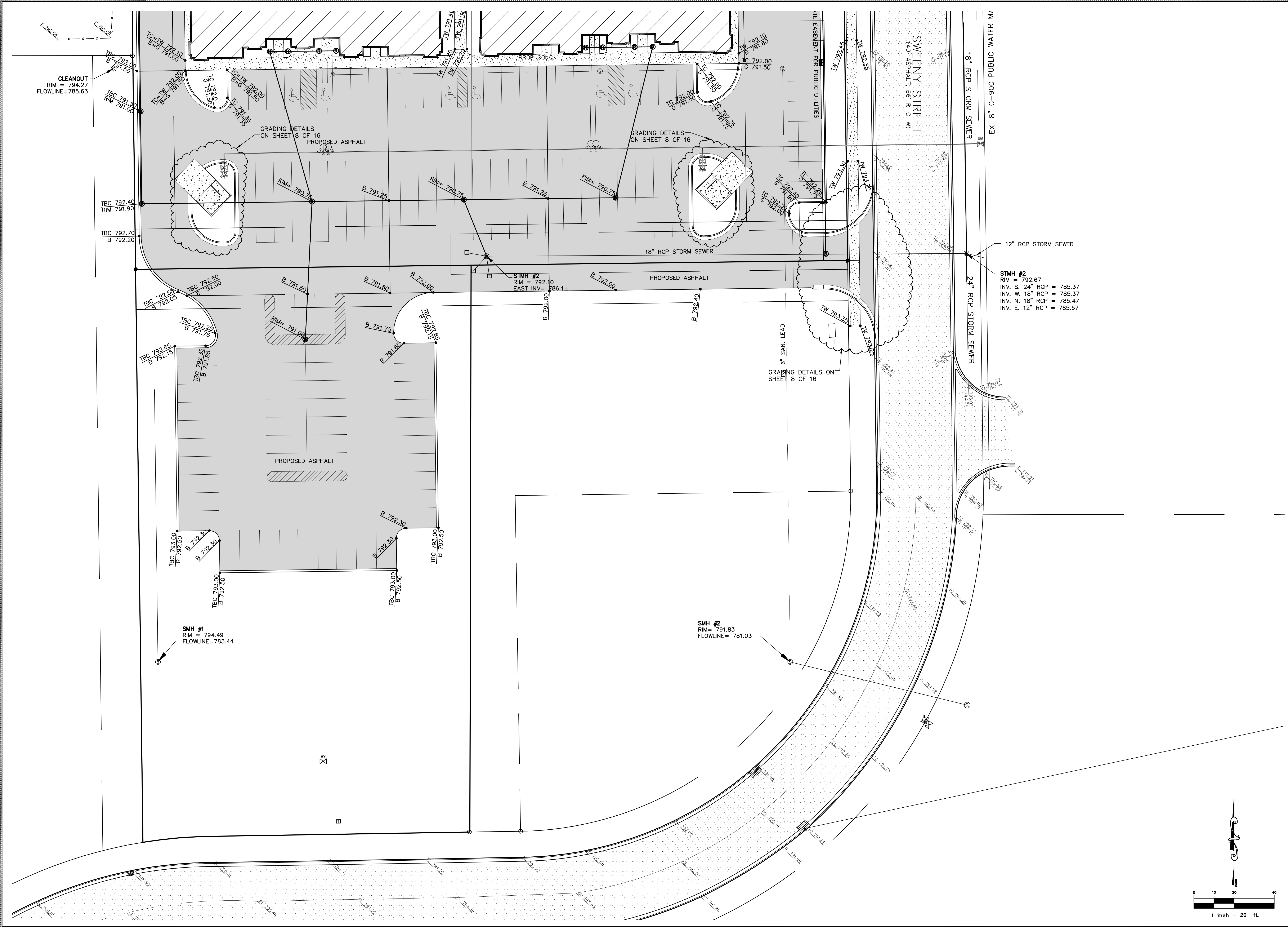
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:

SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER: 1810-109	SCALE: 1" = 20'
DRAWN BY: BTM	SHEET NUMBER: 6 OF 16
DESIGNED BY: TELB	CHECKED BY: TELB





GRADING PLAN SOUTH
THE DEN ON BROOMFIELD
 UNITS 1 AND 2 OF TALLGRASS COMMONS
 SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
 OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

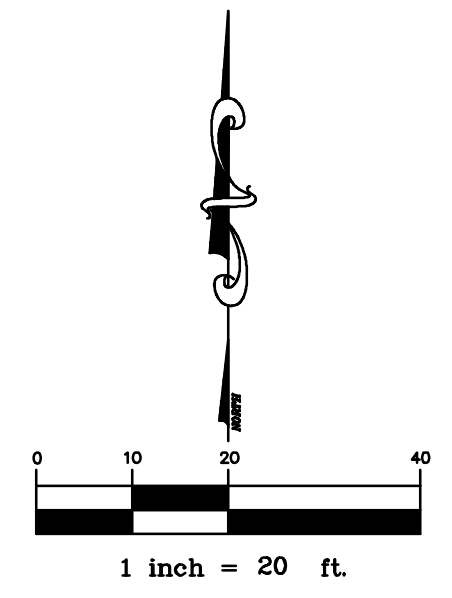
REVISIONS:

COMMENTS FROM CLIENT 02-23-20

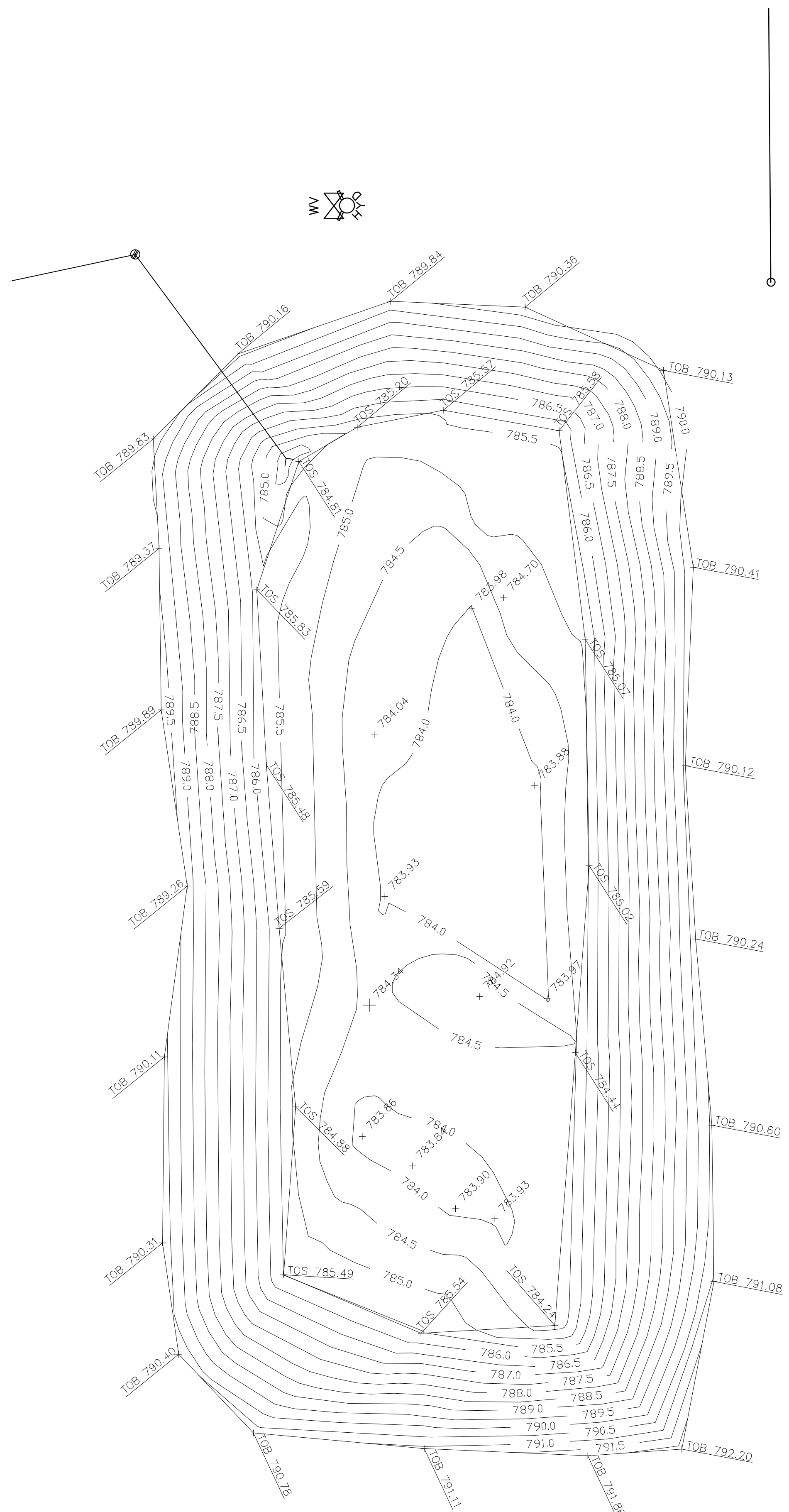
SUBMITTALS:

SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

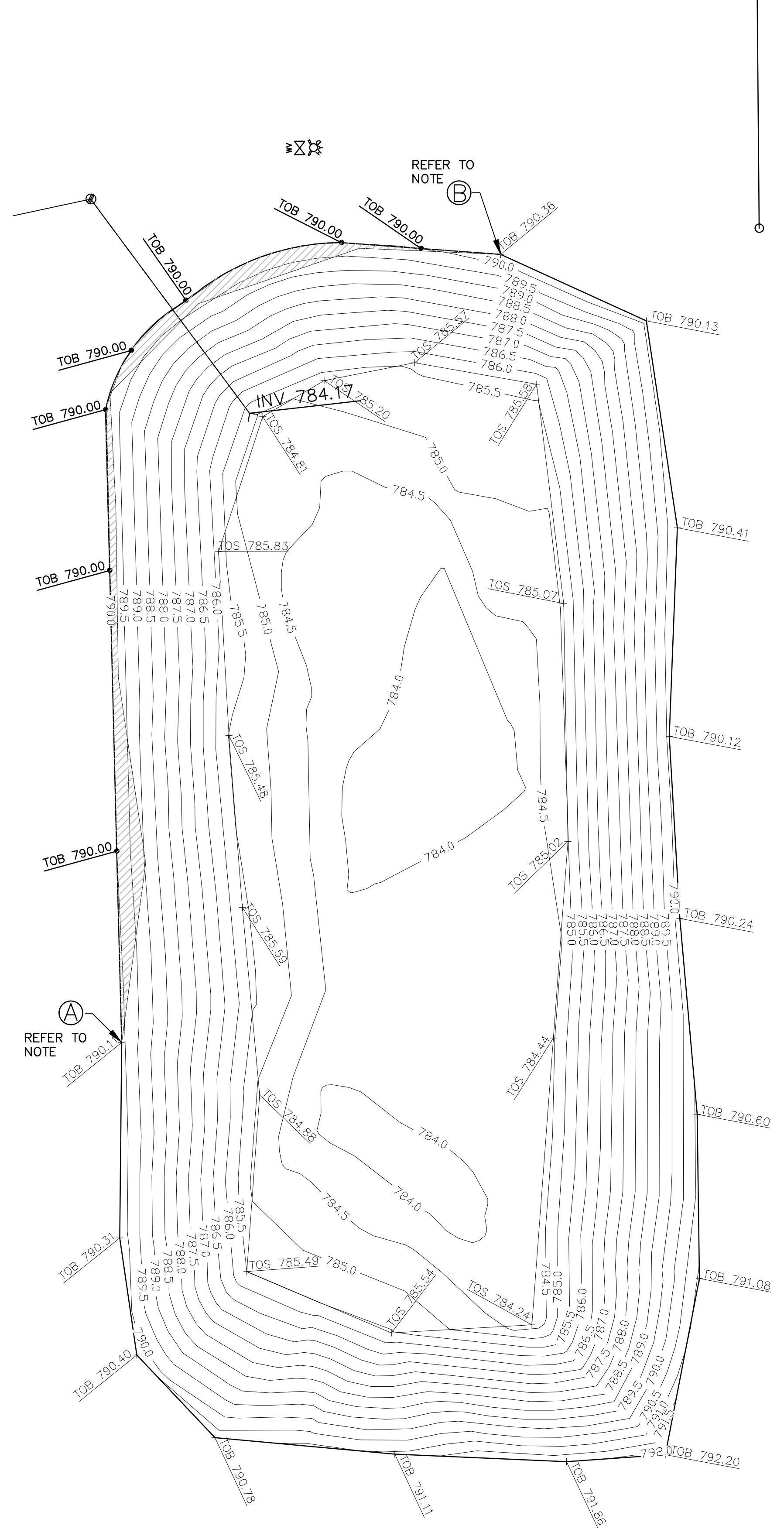
JOB NUMBER: 1810-109	SCALE: 1" = 20'
DRAWN BY: BTM	SHEET NUMBER: 7
DESIGNED BY: TELB	OF 16
CHECKED BY: TELB	



EXISTING DETENTION AREA

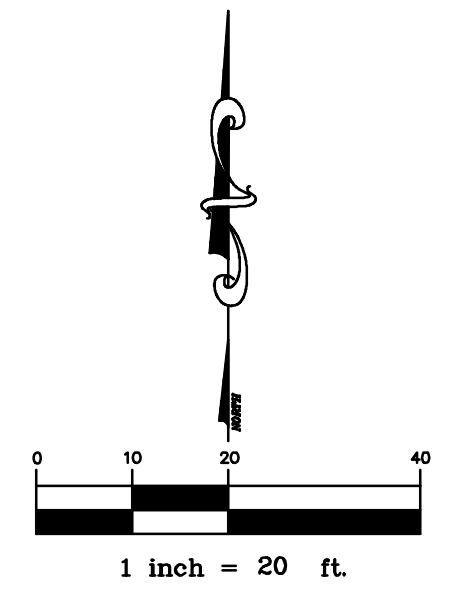


PROPOSED DETENTION AREA



NOTE:
IN HATCHED AREA BETWEEN POINTS "A"
AND "B" THE TOP OF BERM IS TO BE
RECONSTRUCTED TO TO AN ELEVATION OF
790.0.

784.0 CONTOUR=	2507.84 SQ. FT
784.5 CONTOUR=	10206.73 SQ. FT
785.0 CONTOUR=	14364.29 SQ. FT
785.5 CONTOUR=	17804.94 SQ. FT
786.0 CONTOUR=	19740.97 SQ. FT
786.5 CONTOUR=	21554.85 SQ. FT
787.0 CONTOUR=	23406.61 SQ. FT
787.5 CONTOUR=	25327.24 SQ. FT
788.0 CONTOUR=	27290.33 SQ. FT
788.5 CONTOUR=	29315.36 SQ. FT
789.0 CONTOUR=	31375.37 SQ. FT
789.5 CONTOUR=	33500.49 SQ. FT
790.0 CONTOUR=	35662.24 SQ. FT
790.5 CONTOUR=	5817.47 SQ. FT
791.0 CONTOUR=	1990.11 SQ. FT
791.5 CONTOUR=	288.66 SQ. FT
792.0 CONTOUR=	18.53 SQ. FT
IMPERVIOUS AREA NORTH 2 PARCELS=	86467.98 SQ. FT
PERVIOUS AREA NORTH 2 PARCELS=	12778.18 SQ. FT
IMPERVIOUS AREA SOUTH PARCEL=	18278.15 SQ. FT
PERVIOUS AREA SOUTH PARCEL=	16938.77 SQ. FT
SOUTH 1/2 ENTRY DRIVE=	2525.12 SQ. FT
VOLUME AT OVERFLOW 790.0=	5455.75 CU. FT
VOLUME AT 1 FT FREEBOARD 789.0=	4190.50 CU. FT



CMS & D
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PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

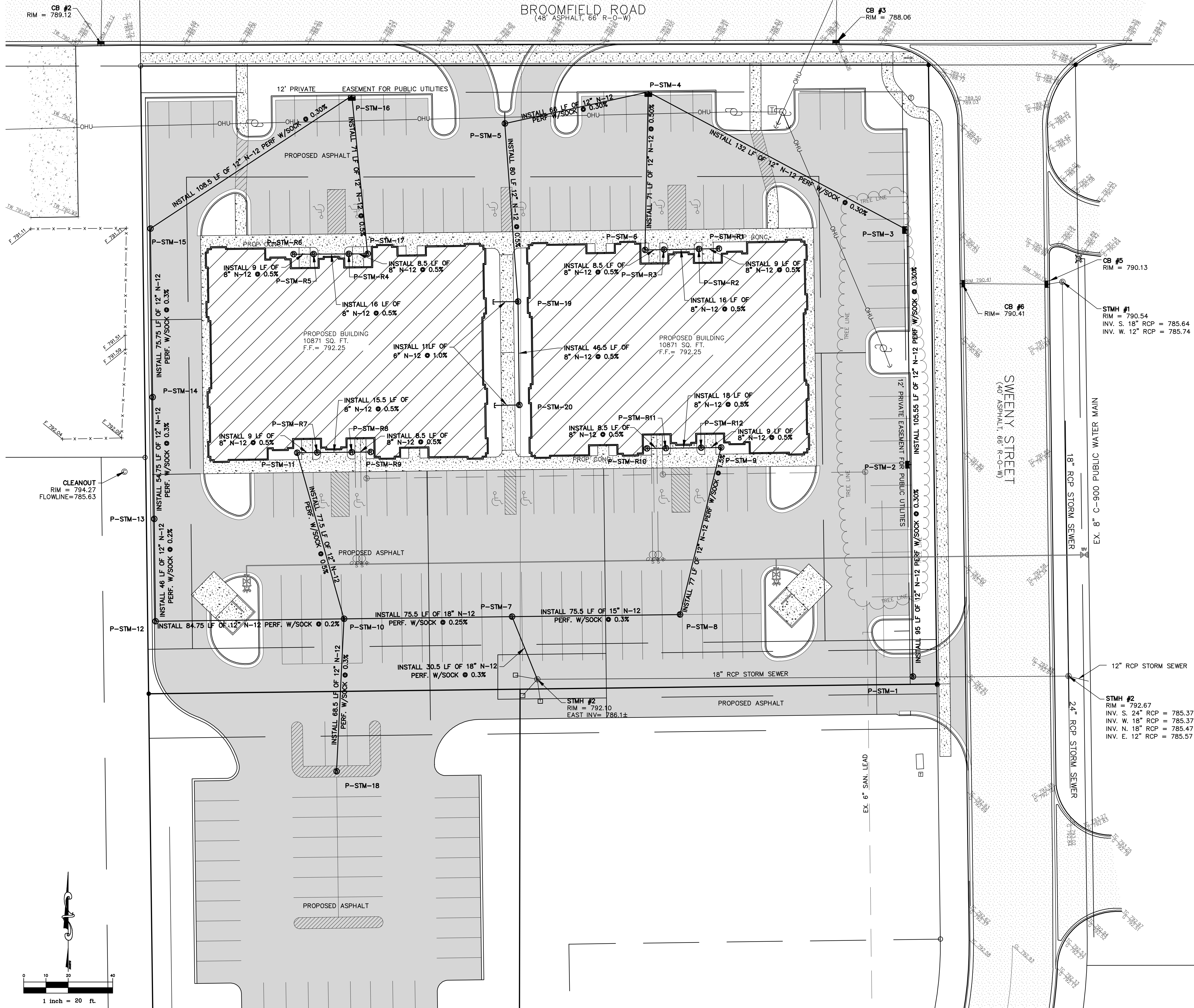
DETENTION AREA DETAIL
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:	COMMENTS FROM CLIENT 02-23-20
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SUBMITTALS:	SUBMITTAL TO CLIENT 02-23-20
	SUBMITTAL TO CLIENT 02-23-20
	SUBMITTAL TO UNION TOWNSHIP
	PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:	1810-109
DRAWN BY:	BTM
DESIGNED BY:	TELB
CHECKED BY:	TELB
SCALE:	1" = 20'
SHEET NUMBER:	9 OF 16

BROOMFIELD ROAD
(48" ASPHALT, 66" R-O-W)



PROPOSED STORM STRUCTURE TABLE	
P-STM #1 RIM = 792.73 4" DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE NORTH INV= 785.6± 18" RCP EAST INV= 785.6± 18" RCP WEST INV= 785.6± 18" RCP	P-STM #2 RIM = 791.00 4" DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE NORTH INV= 786.04 15" N-12 PERF W/SOCK SOUTH INV= 786.04 15" N-12 PERF W/SOCK
P-STM #3 RIM = 791.00 4" DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE NORTHWEST INV= 786.36 15" N-12 PERF W/SOCK SOUTH INV= 786.36 15" N-12 PERF W/SOCK	P-STM #4 RIM = 790.30 4" DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE SOUTHEAST INV= 786.76 12" N-12 PERF W/SOCK SOUTH INV= 786.76 12" N-12 PERF W/SOCK WEST INV= 786.76 12" N-12 PERF W/SOCK
P-STM #5 RIM = 789.75 3" DIA STR. W/ 6" CONC. LID E.J.I.W. 1040 W/ TYPE M-1 GRATE EAST INV= 786.96 12" N-12 PERF W/SOCK	P-STM #6 RIM = 791.85 6" FLAT TOP E.J.I.W. 1040 W/TYPE O2 GRATE NORTH INV= 787.12 12" N-12 PERF W/SOCK EAST INV= 787.22 8" N-12 PERF W/SOCK
P-STM #7 RIM = 790.75 5" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE WEST INV= 786.34 18" N-12 PERF W/SOCK SOUTHEAST INV= 786.34 18" N-12 PERF W/SOCK EAST INV= 786.34 15" N-12 PERF W/SOCK	P-STM #8 RIM = 790.75 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE NORTHEAST INV= 787.50 12" N-12 PERF W/SOCK WEST INV= 786.57 15" N-12 PERF W/SOCK
P-STM #9 RIM = 791.85 6" FLAT TOP E.J.I.W. 1040 W/TYPE O2 GRATE WEST INV= 788.76 8" N-12 PERF W/SOCK SOUTHWEST INV= 788.66 12" N-12 PERF W/SOCK	P-STM #10 RIM = 791.95 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE EAST INV= 786.53 18" N-12 PERF W/SOCK NORTH-NORTHWEST INV= 786.53 12" N-12 PERF W/SOCK SOUTH INV= 786.53 12" N-12 PERF W/SOCK WEST INV= 786.53 18" N-12 PERF W/SOCK
P-STM #11 RIM = 791.85 3" DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE O2 GRATE EAST INV= 787.02 8" N-12 PERF W/SOCK SOUTH-SOUTHEAST INV= 786.92 12" N-12 PERF W/SOCK	P-STM #12 RIM = 791.90 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE NORTH INV= 786.70 18" N-12 PERF W/SOCK EAST INV= 786.70 18" N-12 PERF W/SOCK
P-STM #13 RIM = 791.00 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE EAST INV= 786.79 18" N-12 PERF W/SOCK NORTH INV= 786.79 15" N-12 PERF W/SOCK	P-STM #14 RIM = 791.00 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE SOUTH INV= 786.95 12" N-12 PERF W/SOCK NORTH INV= 786.95 12" N-12 PERF W/SOCK
P-STM #15 RIM = 791.00 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE NORTHEAST INV= 787.18 12" N-12 PERF W/SOCK SOUTH INV= 787.18 15" N-12 PERF W/SOCK	P-STM #16 RIM = 790.30 3" DIA STR. W/ 6" CONC. LID E.J.I.W. 1040 W/ TYPE M-2 GRATE SOUTHWEST INV= 787.51 12" N-12 PERF W/SOCK SOUTH INV= 787.51 12" N-12 PERF W/SOCK
P-STM #17 RIM = 791.85 3" DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE O2 GRATE NORTH INV= 787.93 12" N-12 PERF W/SOCK WEST INV= 788.03 8" N-12 PERF W/SOCK	P-STM #18 RIM = 791.95 4" DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE NORTH INV= 786.74 12" N-12 PERF W/SOCK
P-STM #19 RIM = 790.55 3" DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE O1 GRATE NORTH INV= 787.55 N. N. 18" RCP = 785.37 SOUTH INV= 787.36 8" N-12 PERF W/SOCK WEST INV= 787.46 6" N-12	P-STM #20 RIM = 791.00 3" DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE O1 GRATE NORTH INV= 787.59 8" N-12 WEST INV= 797.70 6" N-12

PROPOSED STORM RISER TABLE	
P-STM R#1 RIM = 791.85 WEST INV= 787.38 8" N-12	P-STM R#8 RIM = 791.85 WEST INV= 787.15 8" N-12 EAST INV= 787.15 8" N-12
P-STM R#2 RIM = 791.85 WEST INV= 787.34 8" N-12 EAST INV= 787.34 8" N-12	P-STM R#9 RIM = 791.85 WEST INV= 787.19 8" N-12
P-STM R#3 RIM = 791.85 WEST INV= 787.26 8" N-12 EAST INV= 787.26 8" N-12	P-STM R#10 RIM = 791.85 WEST INV= 788.94 8" N-12
P-STM R#4 RIM = 791.85 EAST INV= 788.07 8" N-12 WEST INV= 788.07 8" N-12	P-STM R#11 RIM = 791.85 WEST INV= 788.90 8" N-12 EAST INV= 788.90 8" N-12
P-STM R#5 RIM = 791.85 EAST INV= 788.15 8" N-12 WEST INV= 788.15 8" N-12	P-STM R#12 RIM = 791.85 WEST INV= 788.80 8" N-12 EAST INV= 788.80 8" N-12
P-STM R#6 RIM = 791.85 EAST INV= 788.20 8" N-12	
P-STM R#7 RIM = 791.85 WEST INV= 787.07 8" N-12 EAST INV= 787.07 8" N-12	

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2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

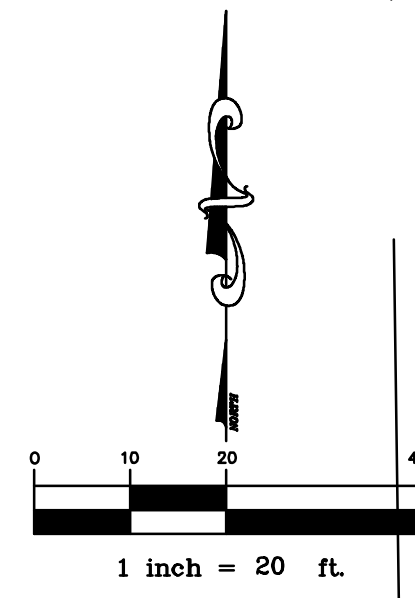


STORMWATER PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:
1810-109
DRAWN BY:
BTM
DESIGNED BY:
TELB
CHECKED BY:
TELB
SCALE:
1" = 20'
SHEET NUMBER:
10 OF 16



BROOMFIELD ROAD
(48' ASPHALT, 66' R-O-W)

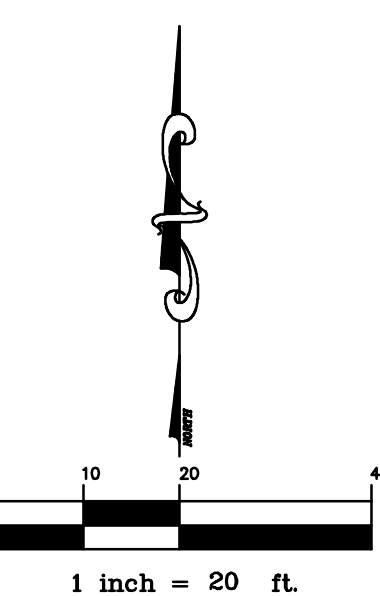
CB #2
RIM = 789.12

CB #3
RIM = 788.06

14-026-20-004-00
JOHN E. JR. & ANN J. TRUST
4532 EAST BROOMFIELD ROAD
MT. PLEASANT, MI, 48858

14-103-00-007-00
NEW GRASS LLC
619 S. MISSION STREET
MT. PLEASANT, MI 48858

14-103-00-005-00
NEW GRASS LLC
619 S. MISSION STREET
MT. PLEASANT, MI 48858



SITE UTILITY PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

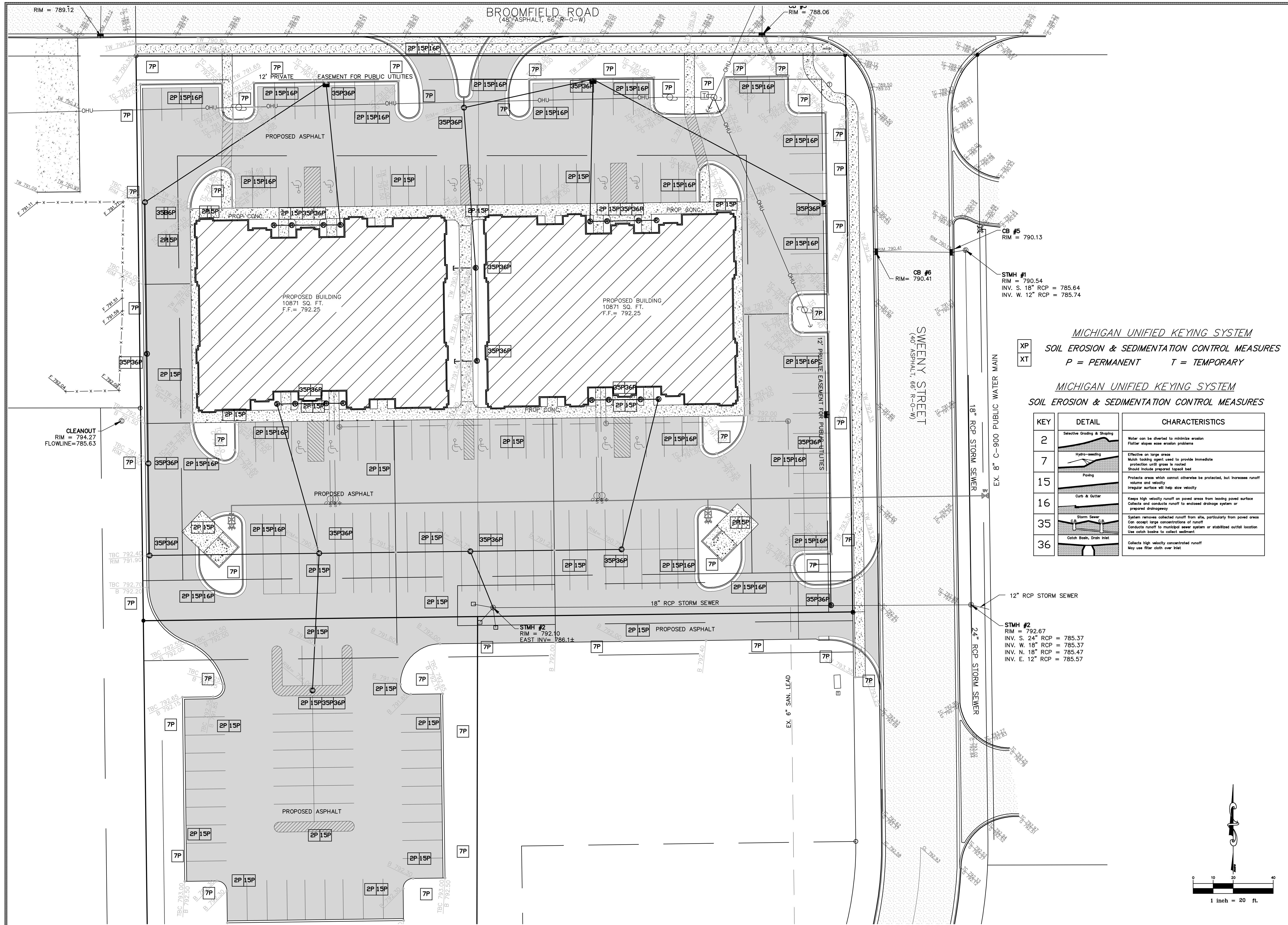
REVISIONS:

COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:

SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20

SCALE	JOB NUMBER
1" = 20'	1810-109
SHEET NUMBER	DRAWN BY:
11 OF 16	BTM
	DESIGNED BY:
	N/A
	CHECKED BY:
	TELB



MICHIGAN UNIFIED KEYING SYSTEM
SOIL EROSION & SEDIMENTATION CONTROL MEASURES
 P = PERMANENT T = TEMPORARY

MICHIGAN UNIFIED KEYING SYSTEM
SOIL EROSION & SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
2	Selective Grading & Shaping 	Water can be diverted to minimize erosion Flatter slopes ease erosion problems
7	Hydro-seeding 	Effective on large areas Mulch feeding agent used to provide immediate protection until grass is rooted Should include prepared topsoil bed
15	Paving 	Protects areas which cannot otherwise be protected, but increases runoff volume and velocity Irregular surfaces will help slow velocity
16	Curb & Gutter 	Keeps high velocity runoff on paved areas from leaving paved surface Collects and conducts runoff to enclosed drainage system or prepared driveway
35	Storm Sewer 	System removes collected runoff from site, particularly from paved areas Can accept large concentrations of runoff Conducts runoff to municipal sewer system or stabilized outfall location Use catch basins to collect sediment
36	Catch Basin, Drain Inlet 	Collects high velocity concentrated runoff May use filter cloth over inlet



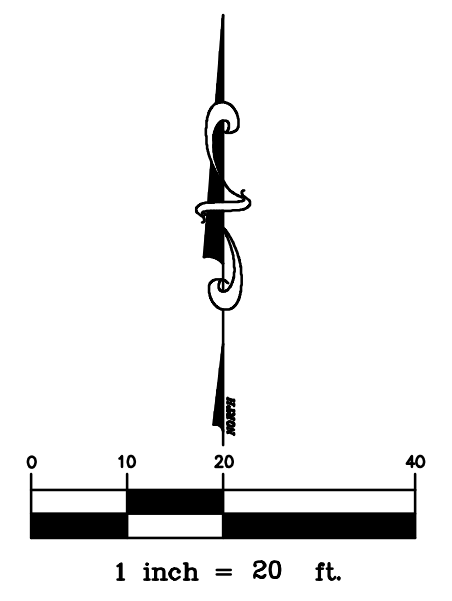
SOIL EROSION PLAN
THE DEN ON BROOMFIELD
 THE DEN ON BROOMFIELD
 UNITS 1 AND 2 OF TALLGRASS COMMONS
 SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
 OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

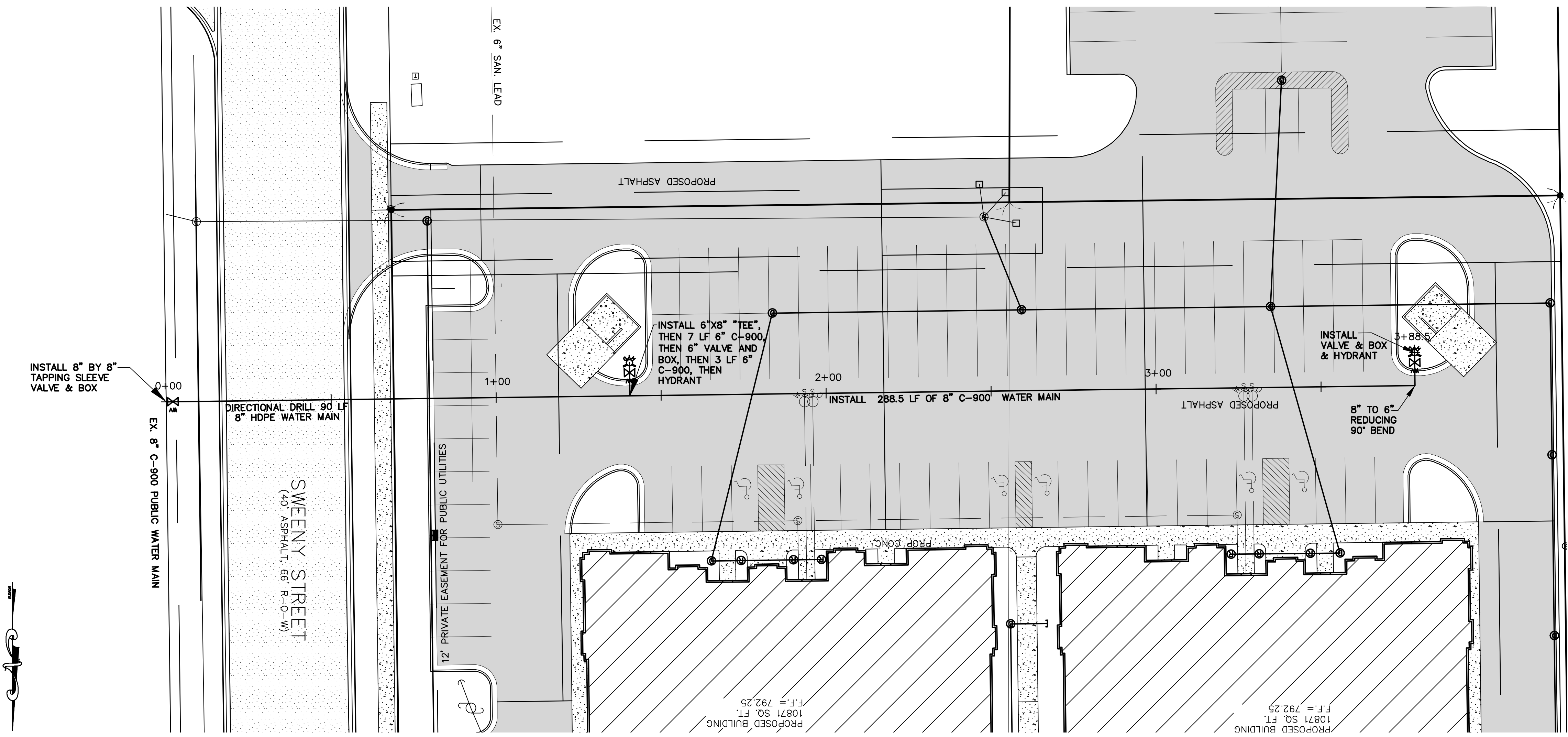
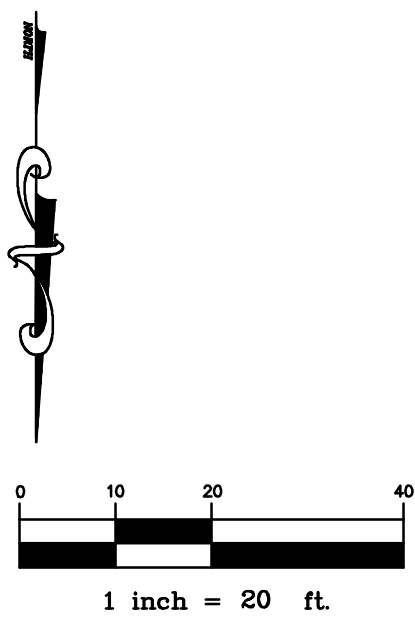
REVISIONS:
 COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
 SUBMITTAL TO CLIENT 02-23-20
 SUBMITTAL TO CLIENT 02-23-20
 SUBMITTAL TO UNION TOWNSHIP
 PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:
1810-109
 DRAWN BY:
BTM
 DESIGNED BY:
TELB
 CHECKED BY:
TELB

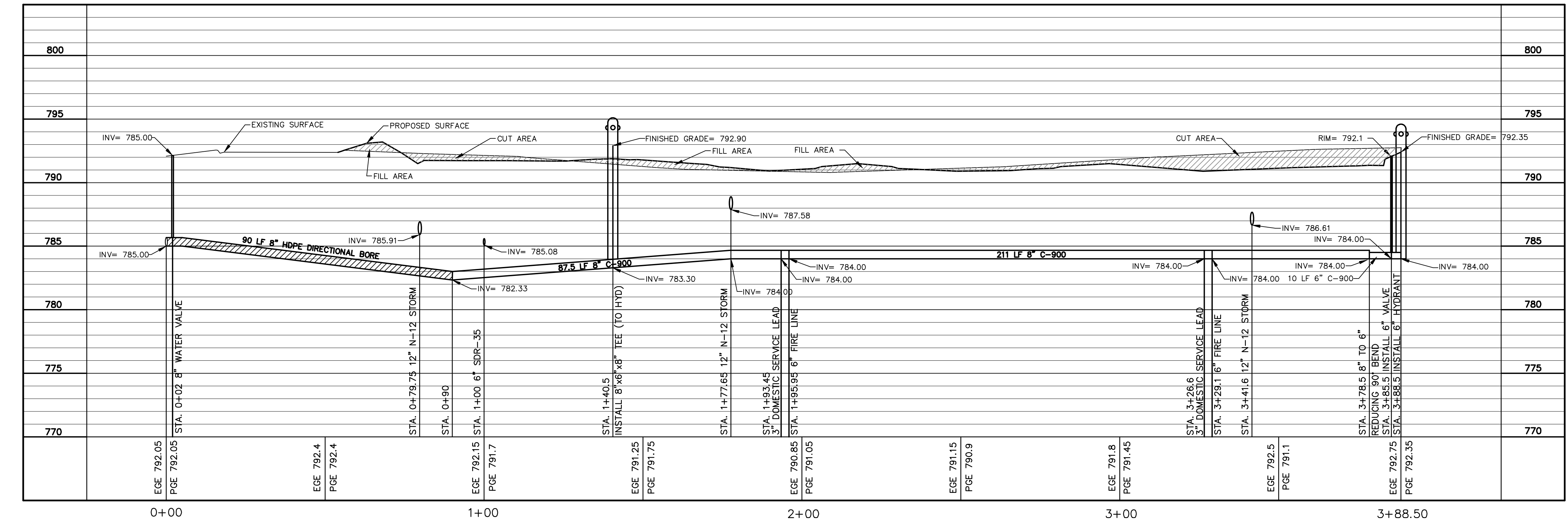
SCALE
1" = 20'
 SHEET NUMBER
12 OF 16





PROFILE SCALE: 1" = 20' HORIZONTAL
 1" = 5' VERTICAL

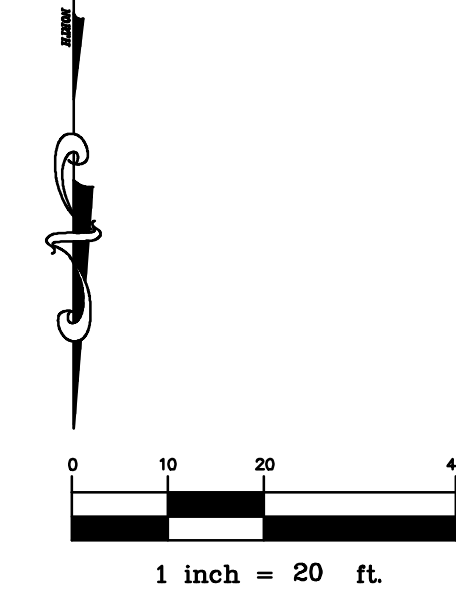
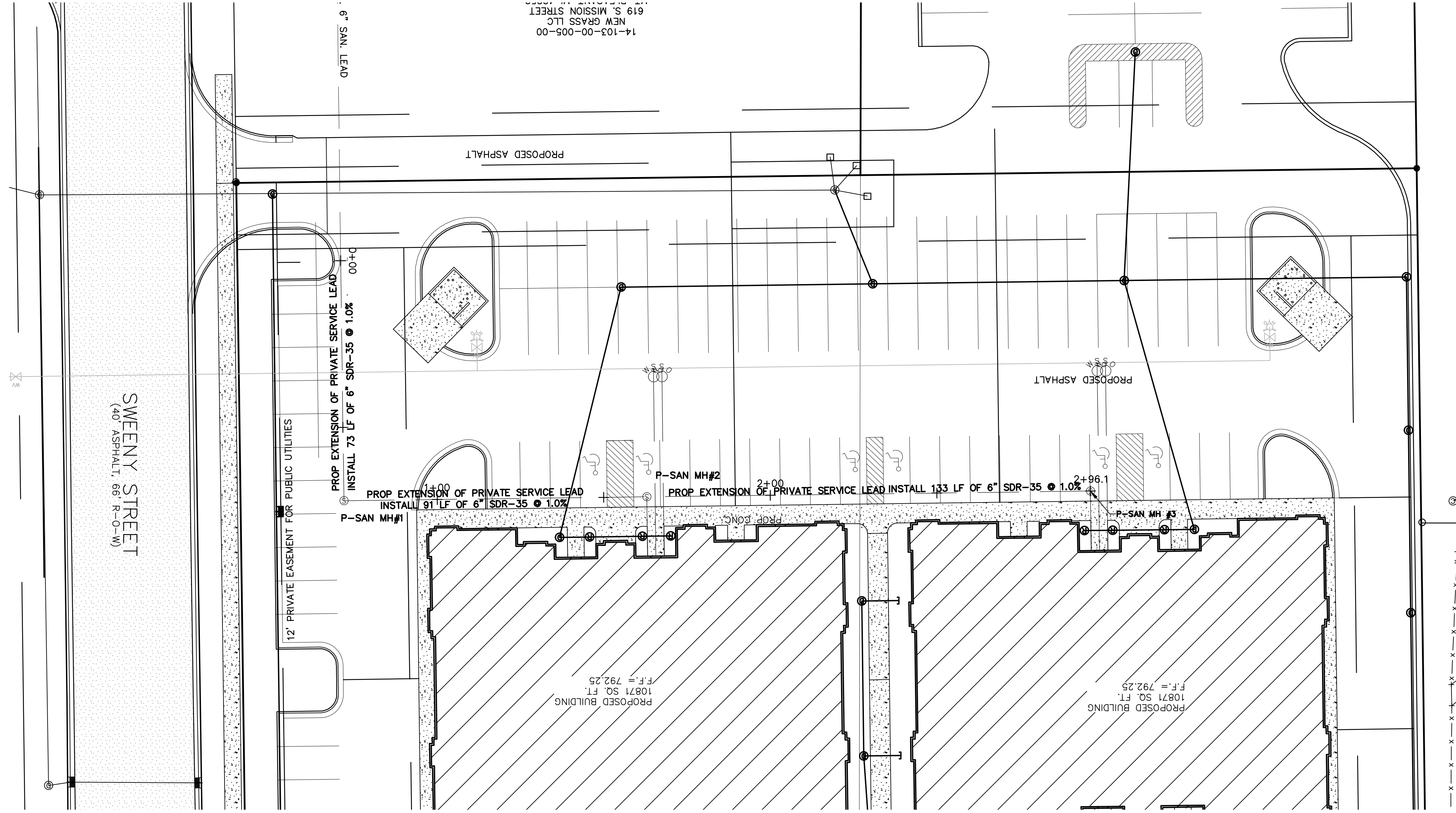
E 0.23'



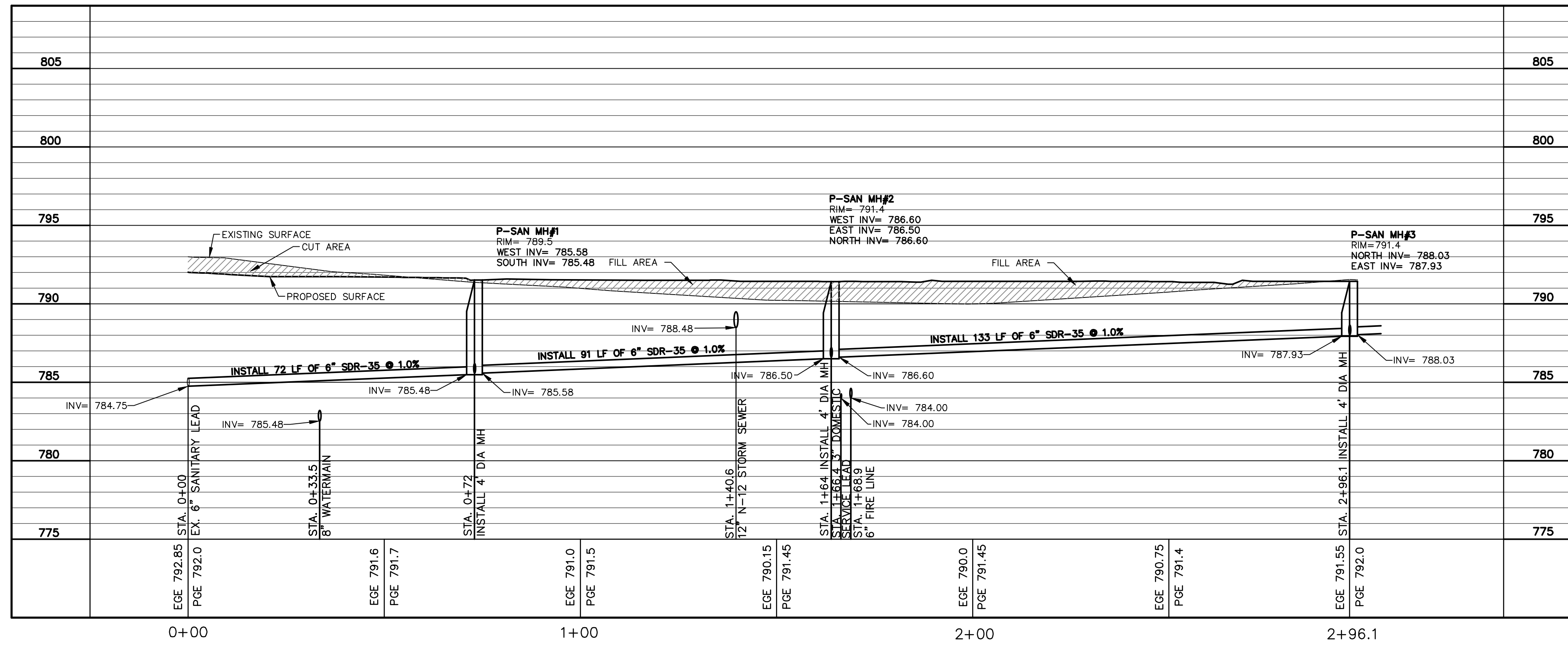
WATERMAIN PLAN & PROFILE
 THE DEN ON BROOMFIELD
 UNITS 1 AND 2 OF TALLGRASS COMMONS
 SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
 OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

SCALE	1" = 20'
JOB NUMBER:	1810-109
DRAWN BY:	BTM
DESIGNED BY:	TELB
CHECKED BY:	TELB
SHEET NUMBER	13 of 16
REVISIONS:	COMMENTS FROM CLIENT 02-23-20
SUBMITTALS:	SUBMITTAL TO CLIENT 02-23-20 SUBMITTAL TO CLIENT 02-23-20 SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20

14-1
NEW
619 S
FL
MT.



PROFILE SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL



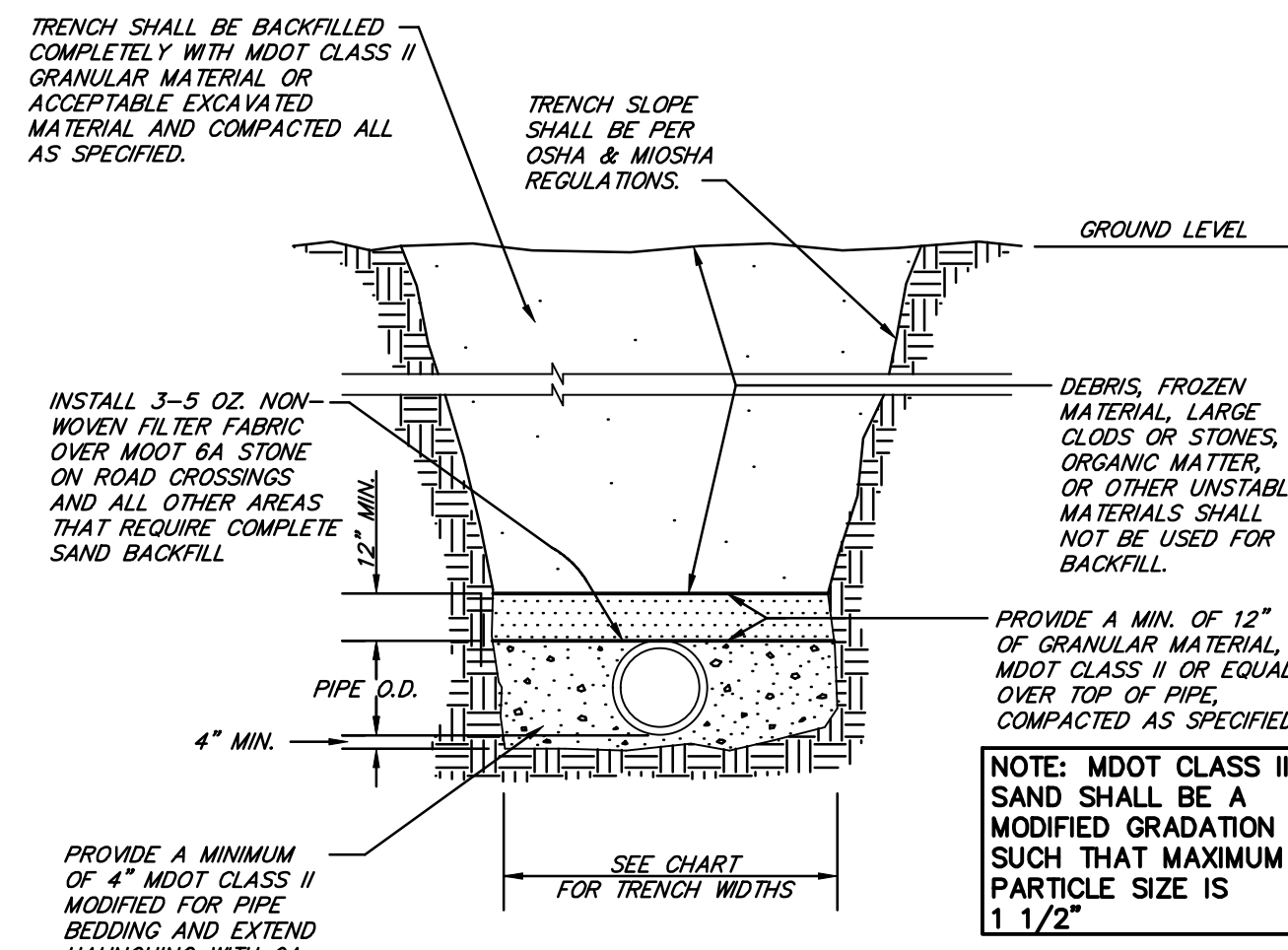
SANITARY SEWER PLAN & PROFILE
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER:
1810-109
DRAWN BY:
BTM
DESIGNED BY:
TELB
CHECKED BY:
TELB

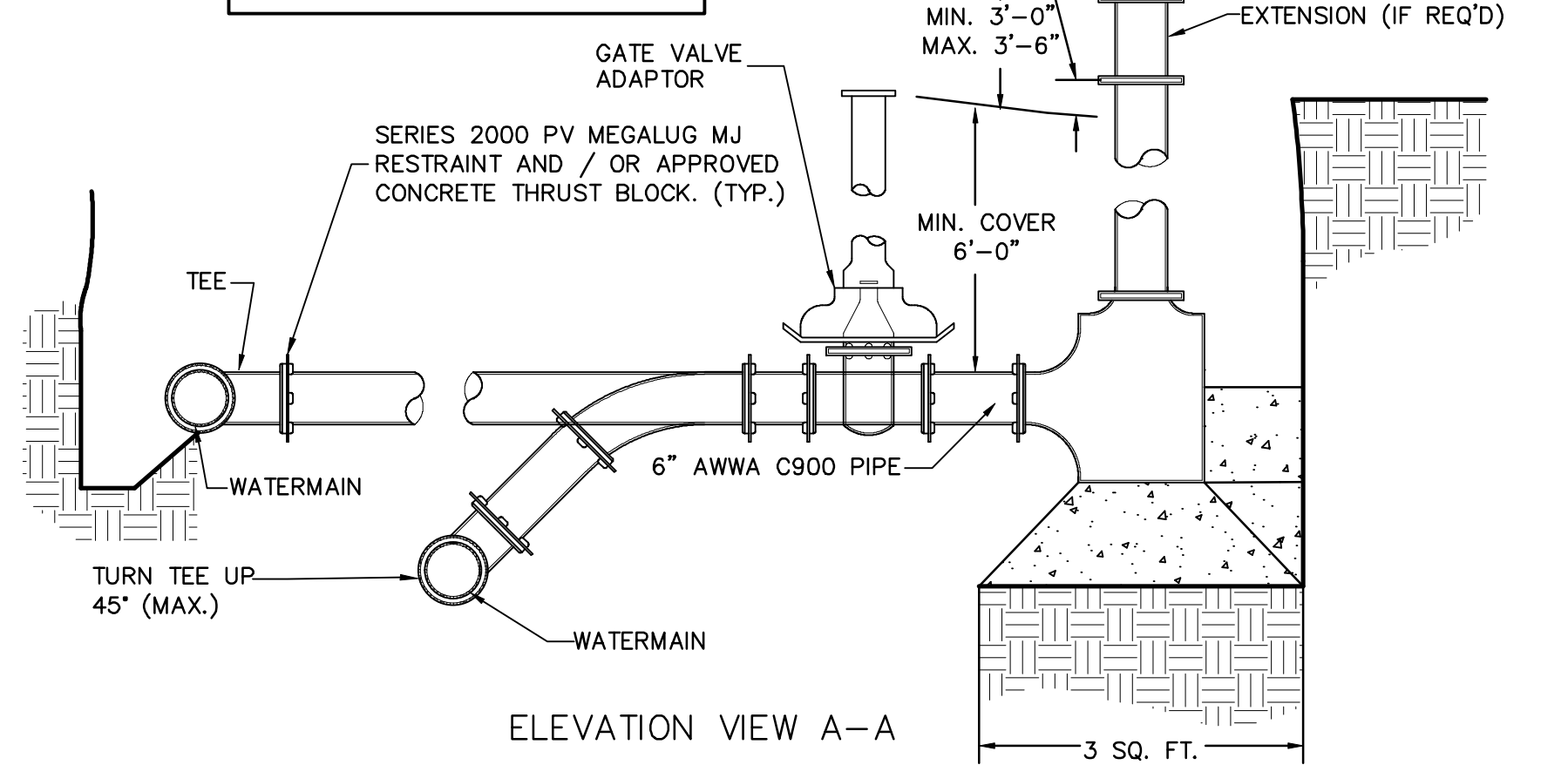
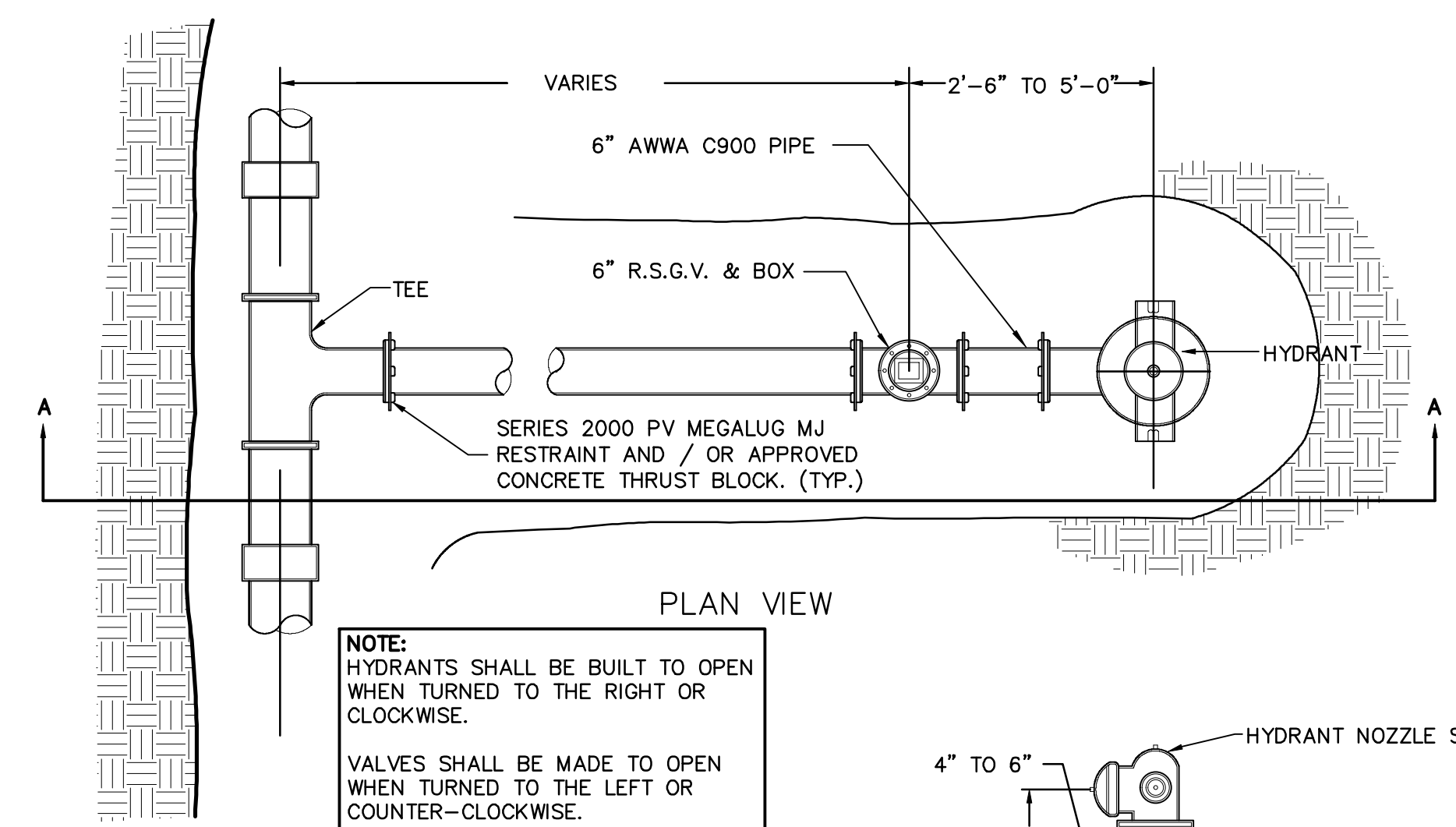
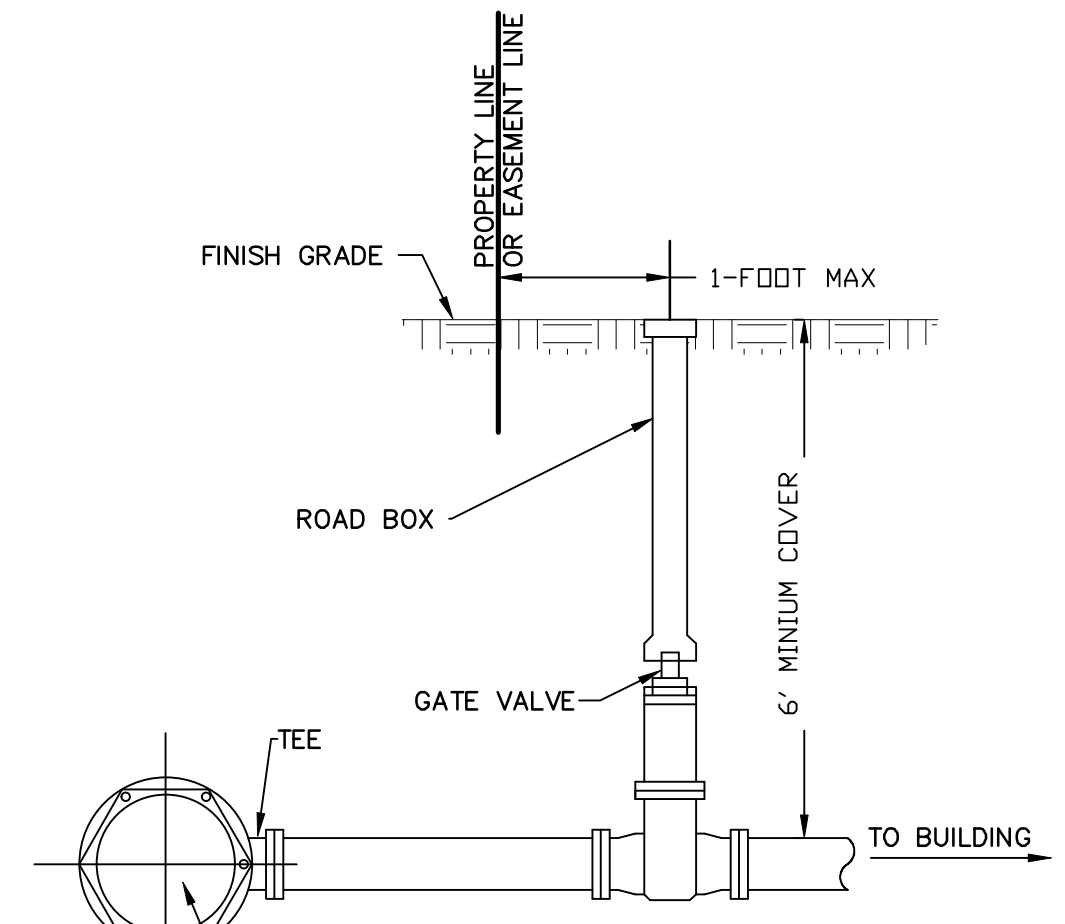
SCALE:
1" = 20'
SHEET NUMBER:
14 OF 16



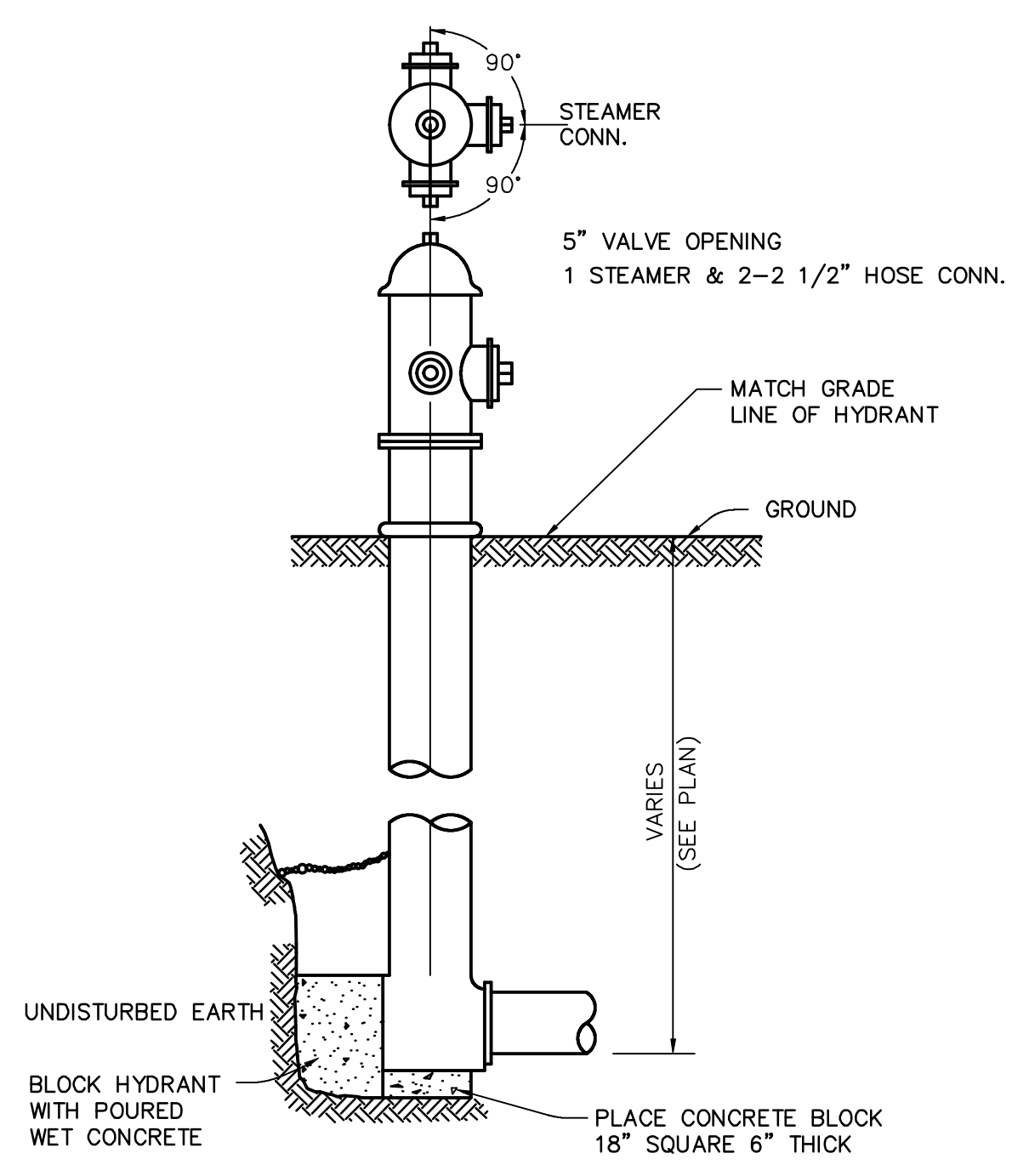
P.V.C. PIPE TRENCH DETAIL
NOT TO SCALE

TRENCH WIDTH CHART

PIPE SIZE	MINIMUM	MAXIMUM
8" & 10"	24"	30"
12" & 15"	30"	36"
18"	34"	40"
21"	38"	42"
24"	42"	46"
27"	45"	49"
30"	49"	53"
36"	56"	60"
LARGER THAN 36"	I.D. +20"	I.D. +24"

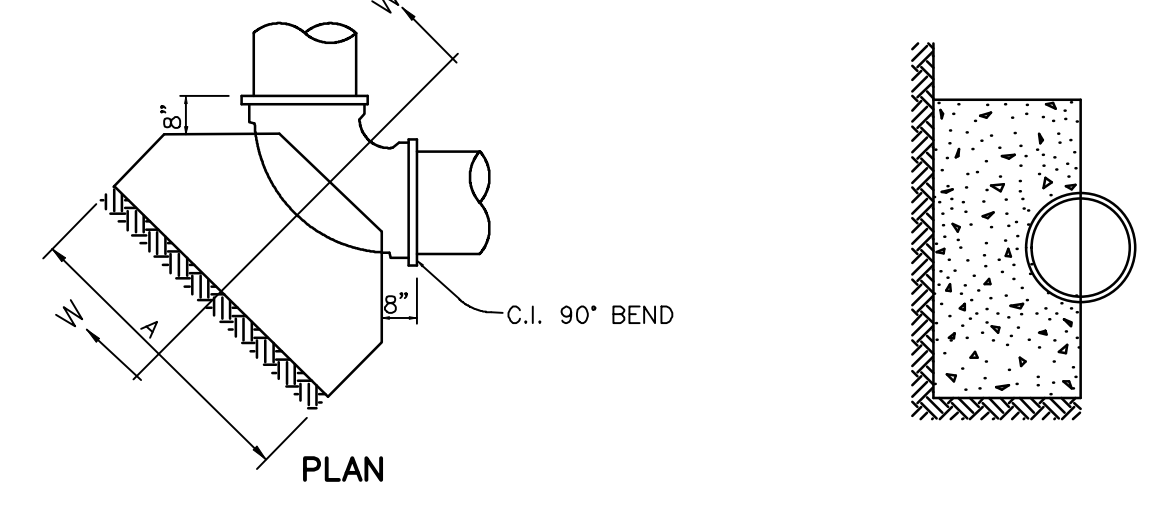


TYPICAL HYDRANT CONNECTION
NOT TO SCALE



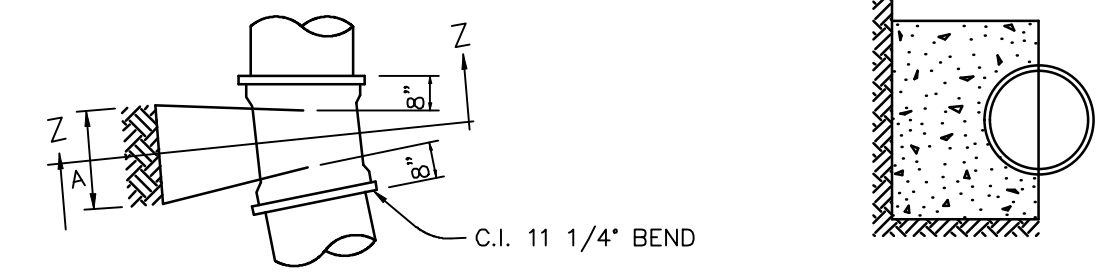
DETAIL OF SETTING HYDRANT
NOT TO SCALE

PIPE SIZE	90° BEND OR TEE				45° BEND				22 1/2° BEND				11 1/4° BEND				PLUG			
	A	B	C	Q	A	B	C	Q	A	B	C	Q	A	B	C	Q	A	B	C	Q
6", 8" & 10"	3'-0"	2'-0"	1'-3"	0.3	2'-0"	1'-6"	1'-3"	0.1	1'-6"	1'-0"	1'-3"	0.1	1'-0"	1'-0"	1'-3"	0.1	2'-0"	2'-0"	1'-6"	0.2
12"	3'-0"	2'-6"	1'-6"	0.4	2'-0"	2'-0"	1'-6"	0.2	2'-0"	1'-0"	1'-6"	0.1	1'-0"	1'-0"	1'-6"	0.1	2'-0"	2'-6"	1'-6"	0.3



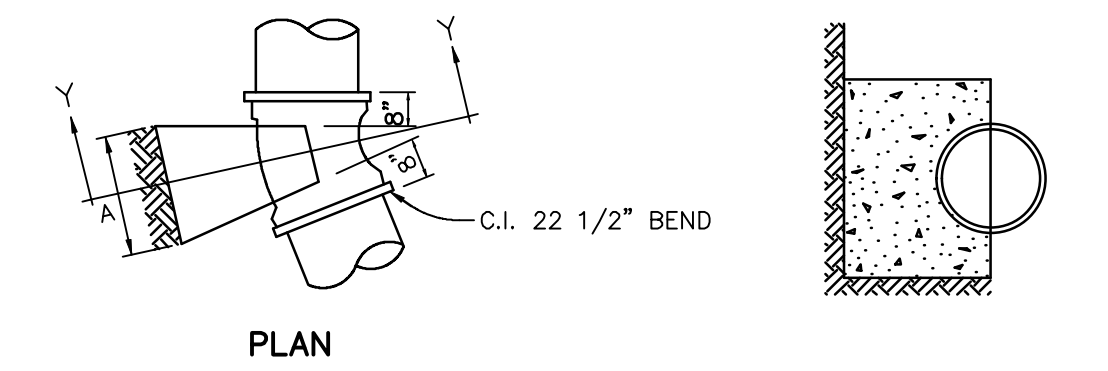
DETAIL OF BLOCK FOR 90° BEND OR TEE

Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE



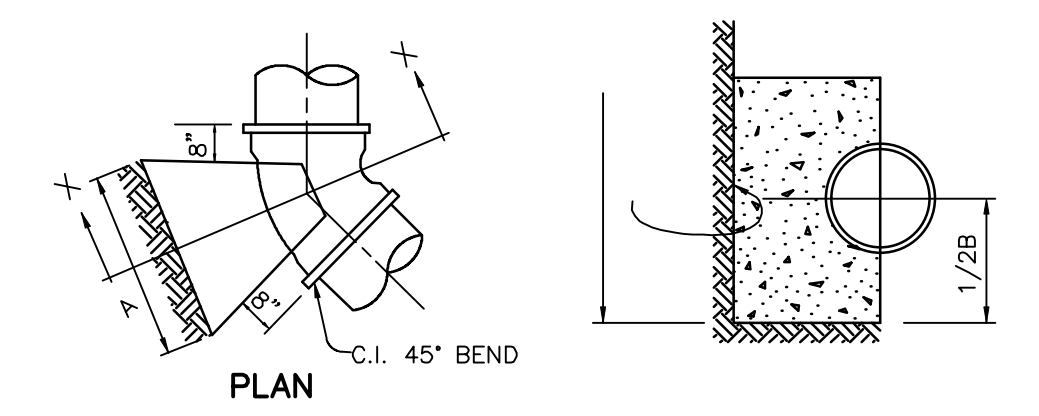
DETAIL OF BLOCK FOR 11 1/4° BEND

Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE



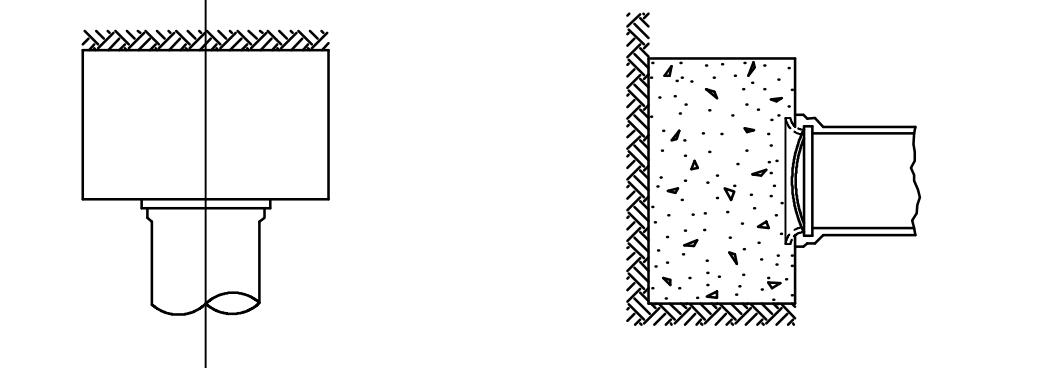
DETAIL OF BLOCK FOR 22 1/2° BEND

Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE



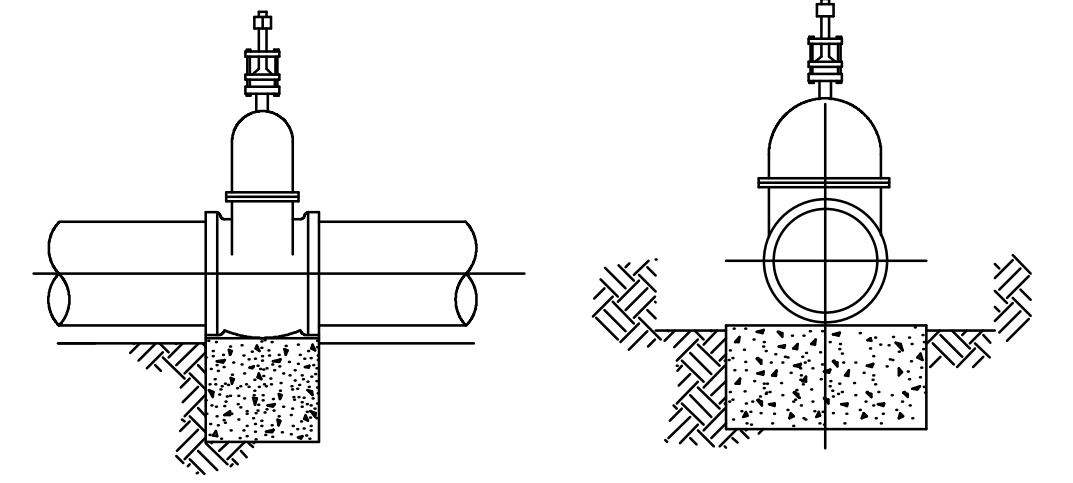
DETAIL OF BLOCK FOR 45° BEND

Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE



DETAIL OF BLOCK FOR GATE VALVES

Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE



DETAIL OF BLOCK FOR 11 1/4° BEND

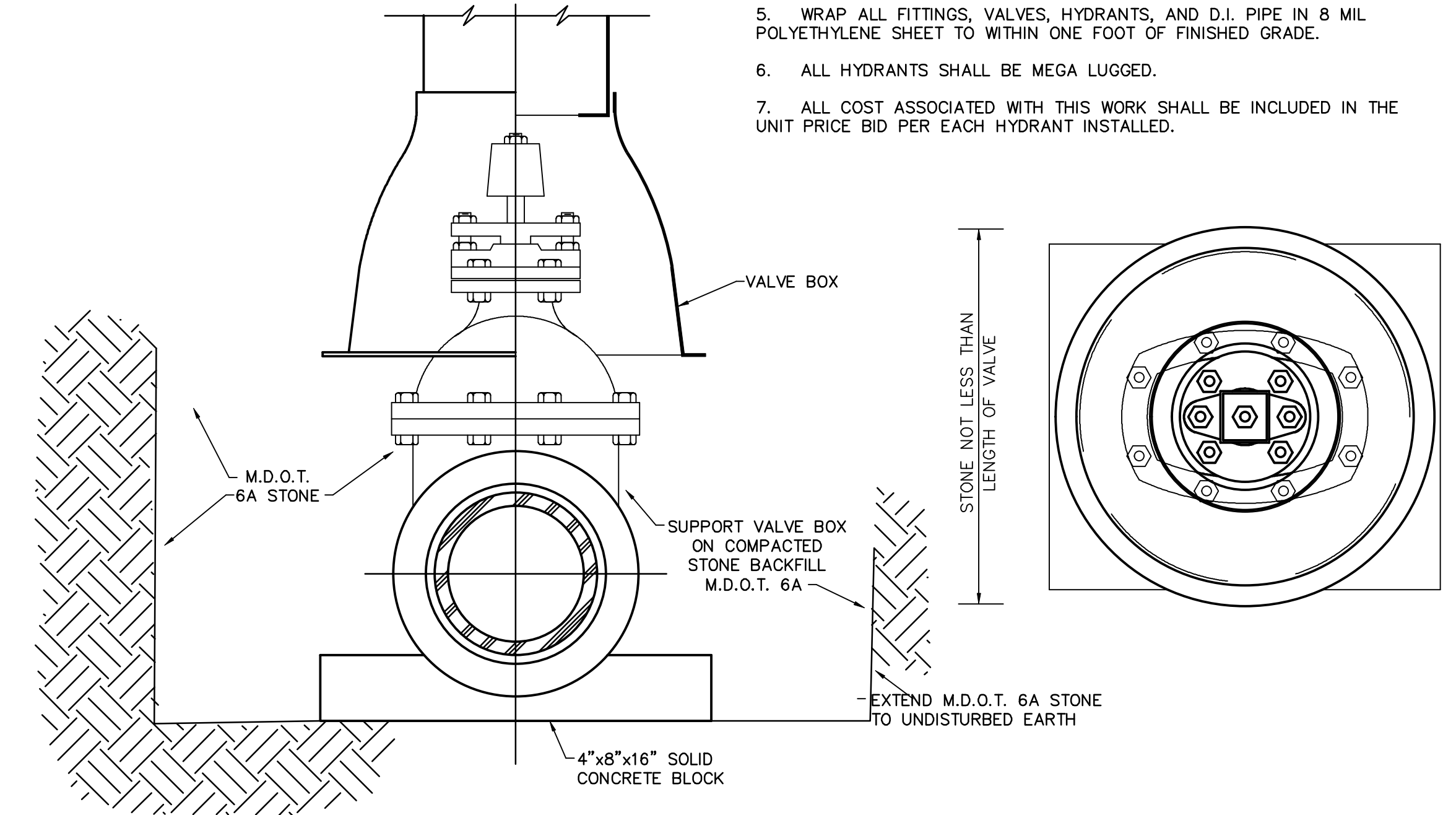
Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE

DETAIL OF BLOCK FOR 22 1/2° BEND

Q - MIN. CU. YD. CONCRETE PER BLOCK NOT TO SCALE

NOTES:

- THE CONCRETE USED FOR BLOCKING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
- THE CONTRACTOR SHALL SECURE ALL VERTICAL BENDS WITH A MINIMUM OF 2/3/4" ANCHOR RODS FITTING EITHER CONCRETE BLOCK, WELDED STEEL PIPE SLEEVE OR COLLARS. METHOD USED SHALL BE DETERMINED BY THE ENGINEER.
- ALL BENDS SHALL BE MECHANICAL JOINT.
- ALL FERROUS PARTS SHALL RECEIVE A 10 MIL (DMT) COATING OF COAL TAR EPOXY.
- WRAP ALL FITTINGS, VALVES, HYDRANTS, AND D.I. PIPE IN 8 MIL POLYETHYLENE SHEET TO WITHIN ONE FOOT OF FINISHED GRADE.
- ALL HYDRANTS SHALL BE MEGA LUGGED.
- ALL COST ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH HYDRANT INSTALLED.

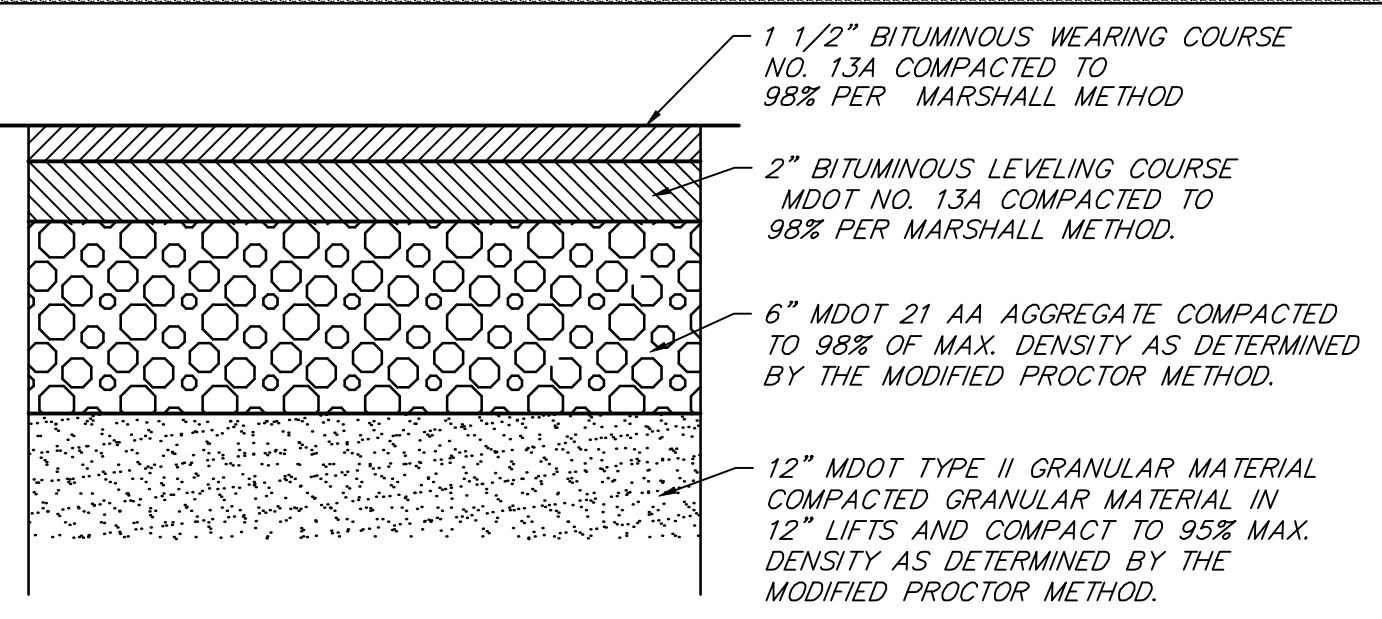


DETAIL OF SETTING OF VALVE BOXES
NOT TO SCALE

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PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

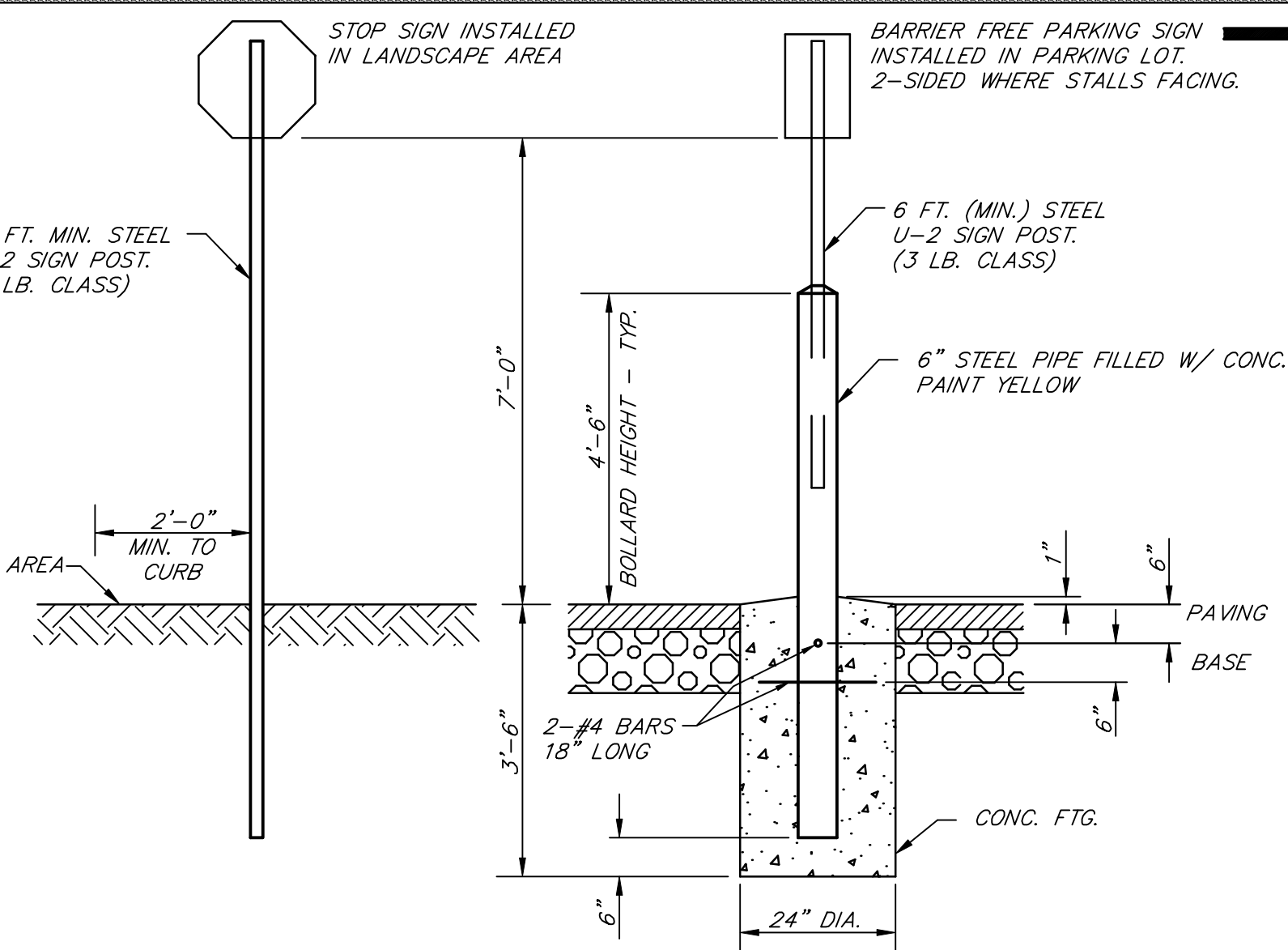
WATERMAIN DETAILS
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:	COMMENTS FROM CLIENT 02-23-20
SUBMITTALS:	SUBMITTAL TO CLIENT 02-23-20 SUBMITTAL TO CLIENT 02-23-20 SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20
JOB NUMBER:	1810-109
DRAWN BY:	BTM
DESIGNED BY:	N/A
CHECKED BY:	TELB
SCALE:	N/A
SHEET NUMBER:	15 OF 16

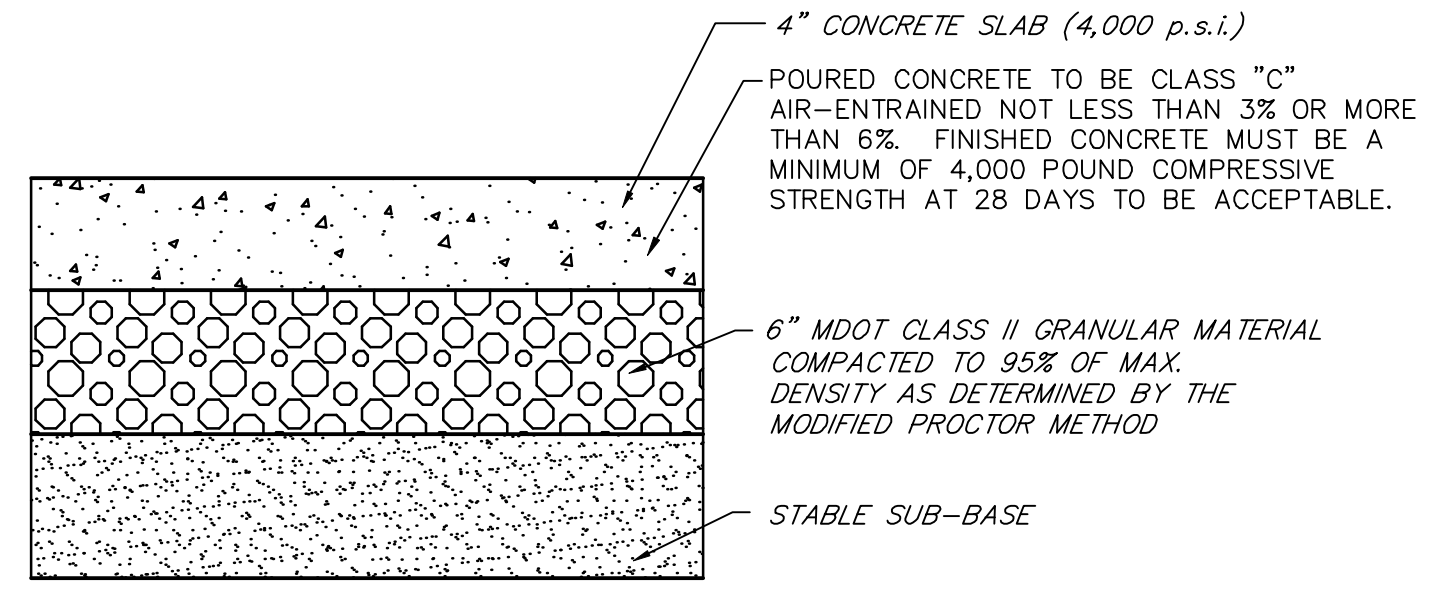


NOTE: COMPACTION TESTS ARE REQUIRED. RESULTS SHALL BE SUBMITTED TO OWNER PRIOR TO FINAL ACCEPTANCE OF SUB-BASE, BASE AND ASPHALT MATERIALS.

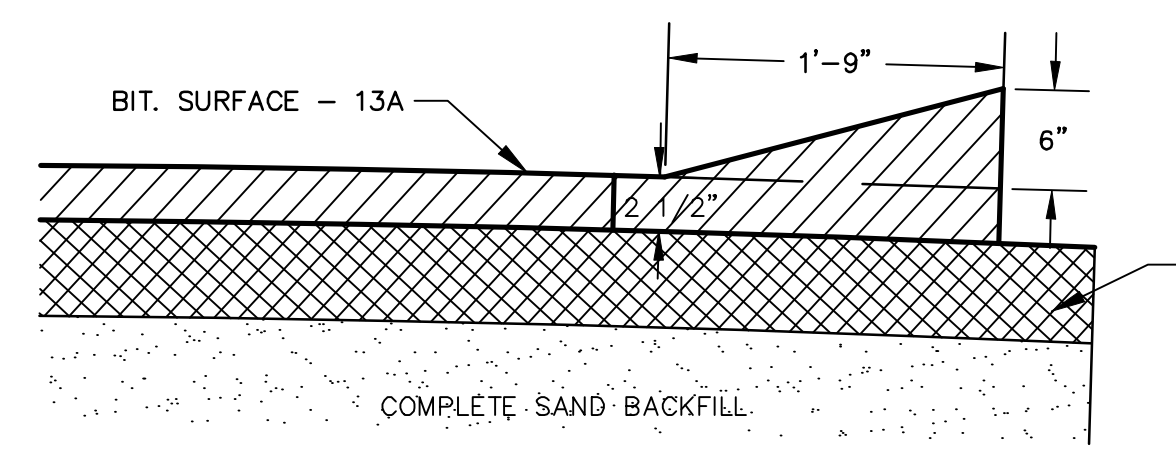
PARKING LOT ASPHALT PAVEMENT CROSS-SECTION
NOT TO SCALE



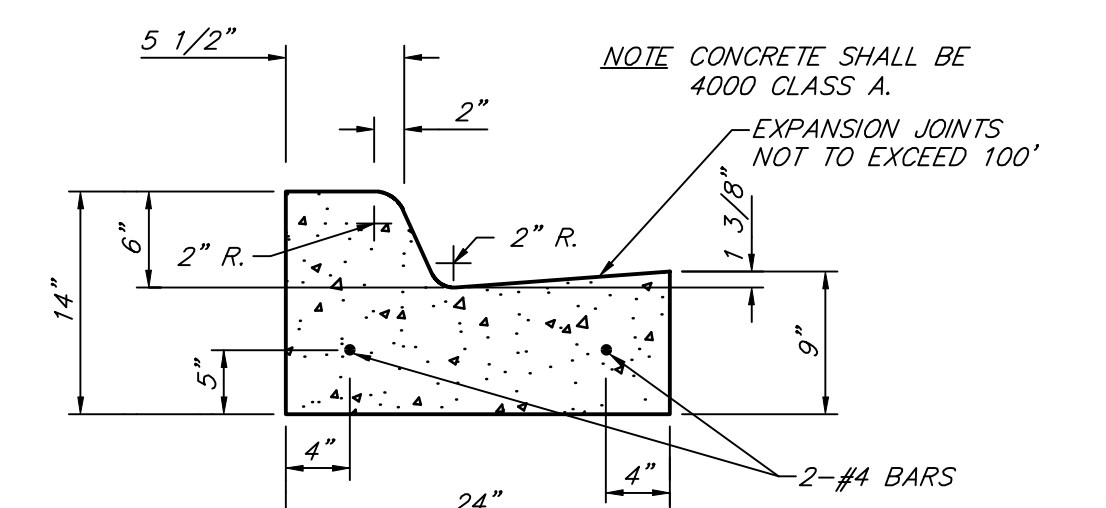
PARKING LOT SIGN POST DETAILS
NOT TO SCALE



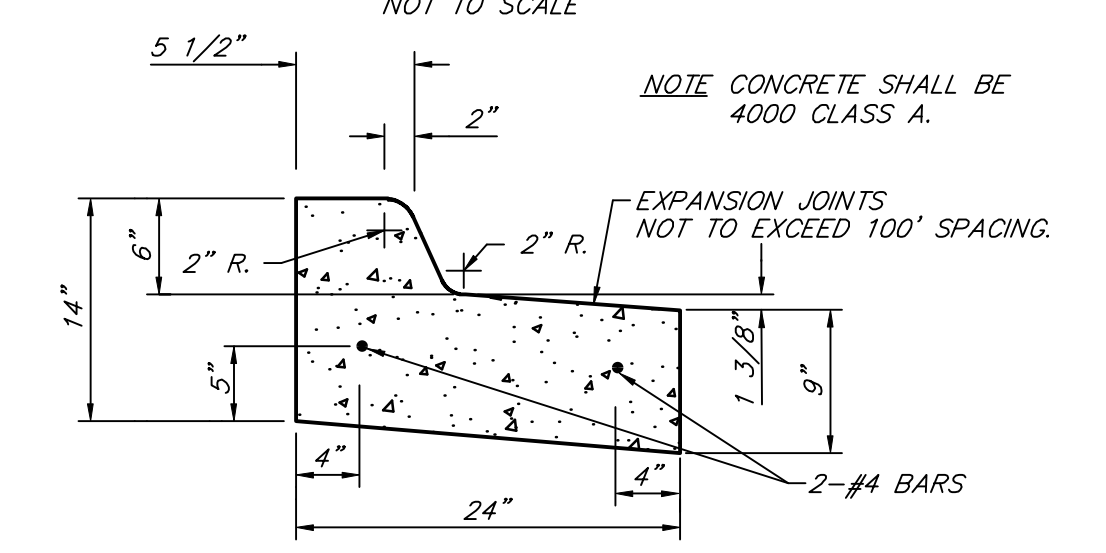
CONCRETE SIDEWALK CROSS-SECTION
NOT TO SCALE



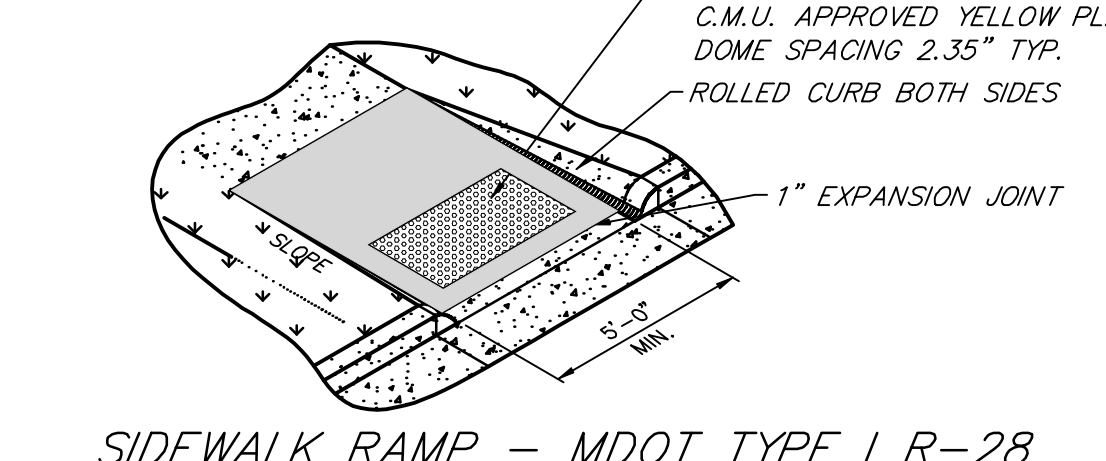
PROPOSED ASPHALT CURB DETAIL
NOT TO SCALE



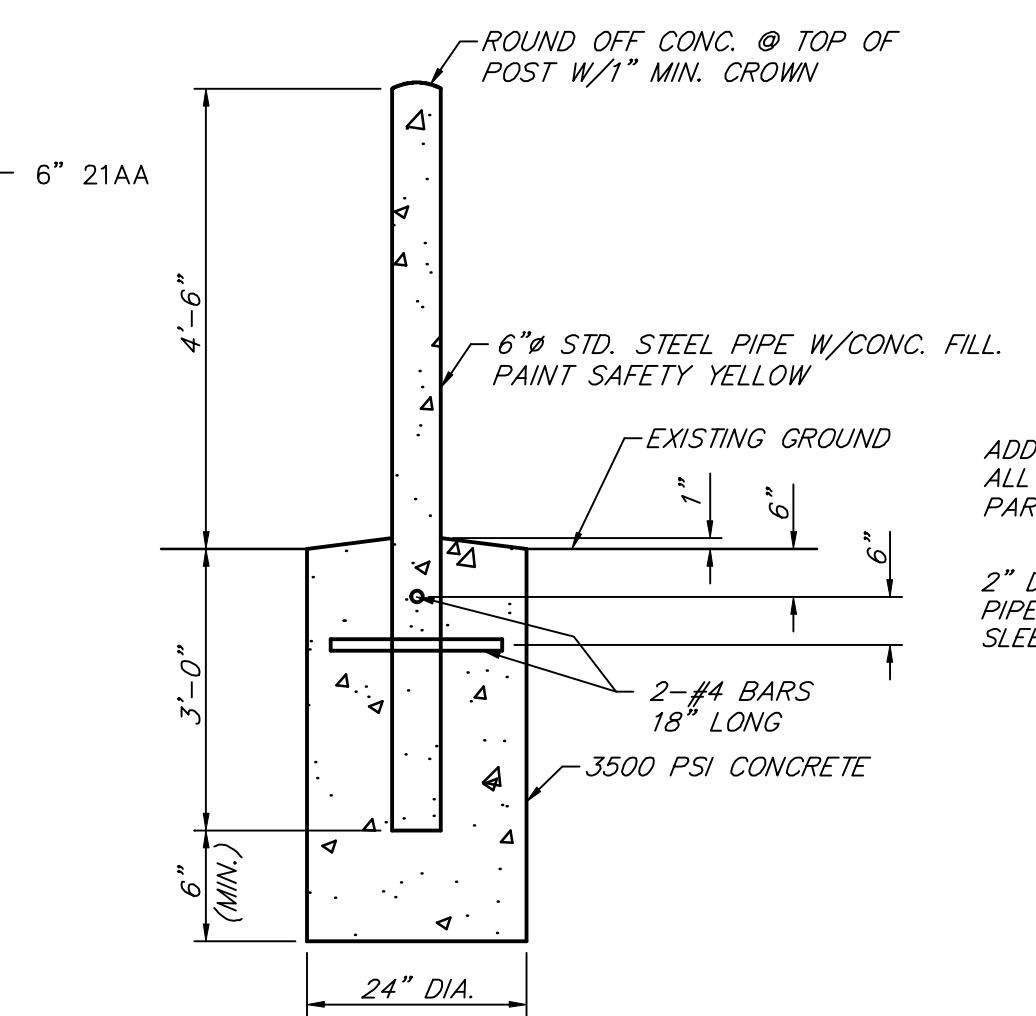
CONCRETE F4 CURB AND GUTTER DETAIL
REGULAR PAN
NOT TO SCALE



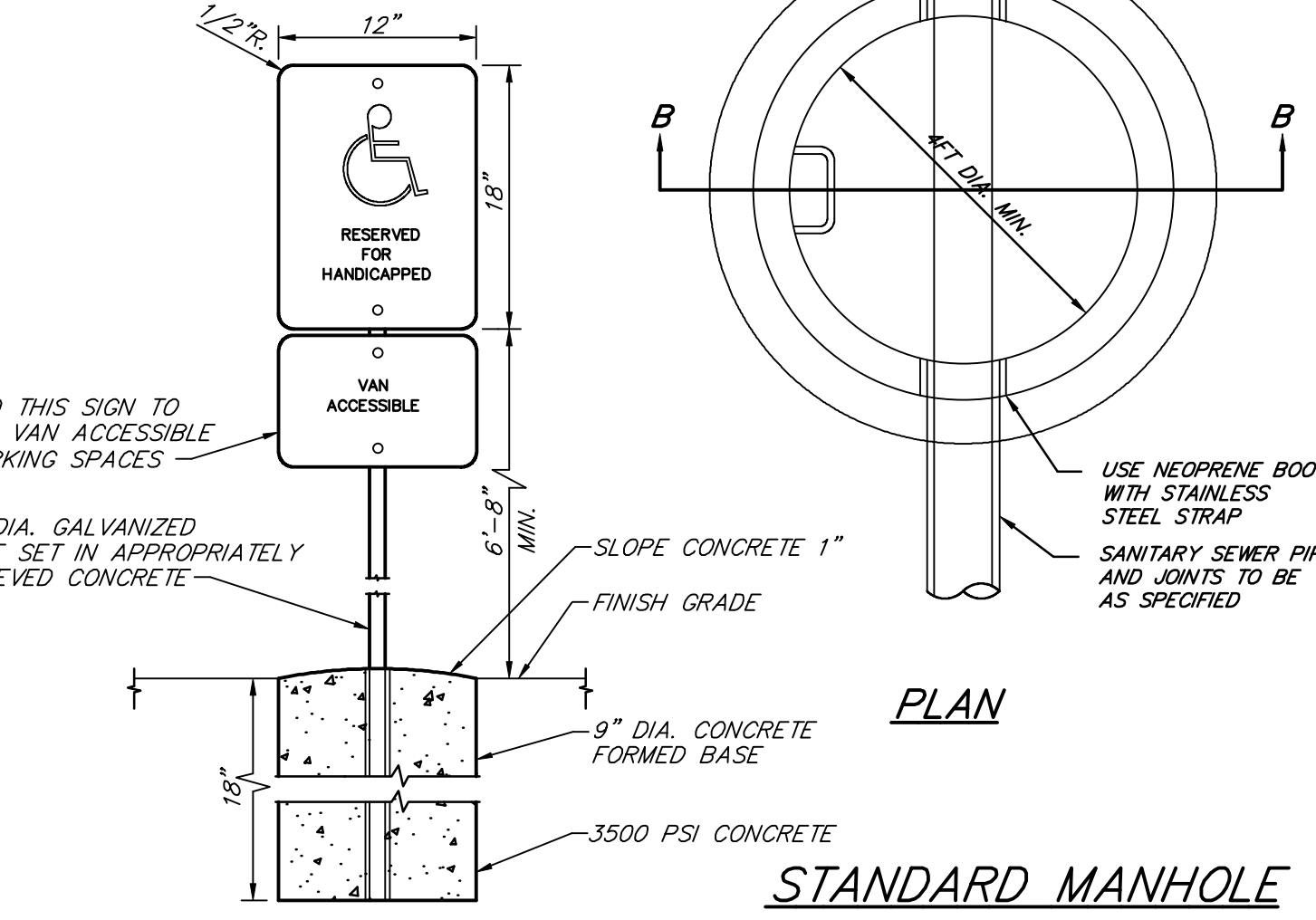
CONCRETE F4 CURB AND GUTTER DETAIL
REVERSE PAN
NOT TO SCALE



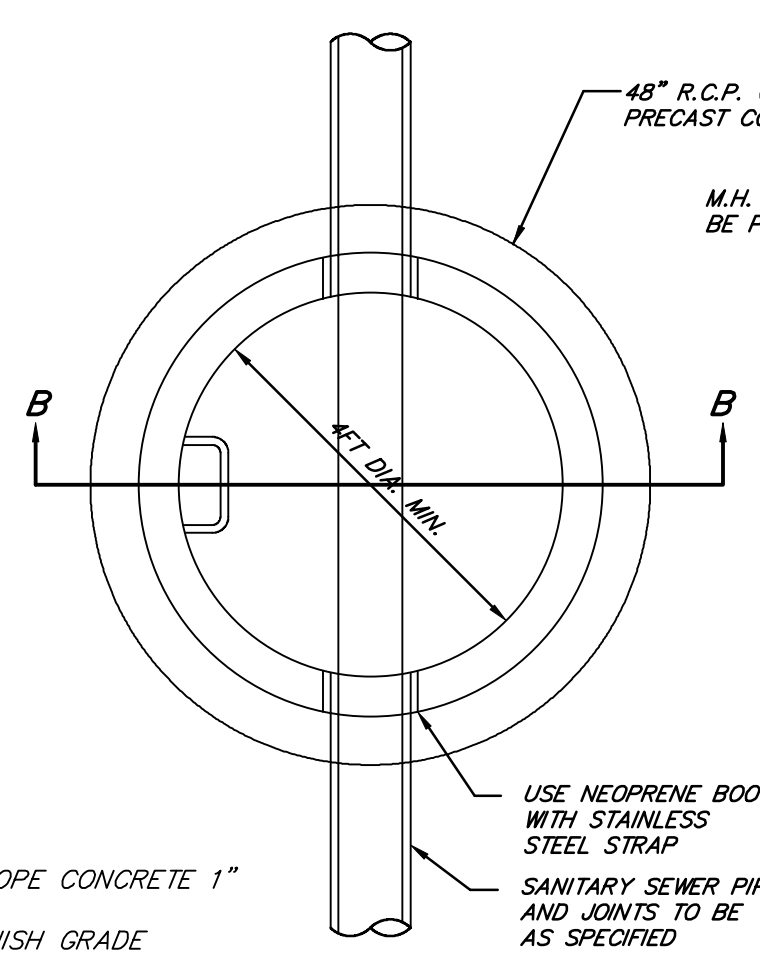
SIDEWALK RAMP - MDOT TYPE I R-28
NOT TO SCALE



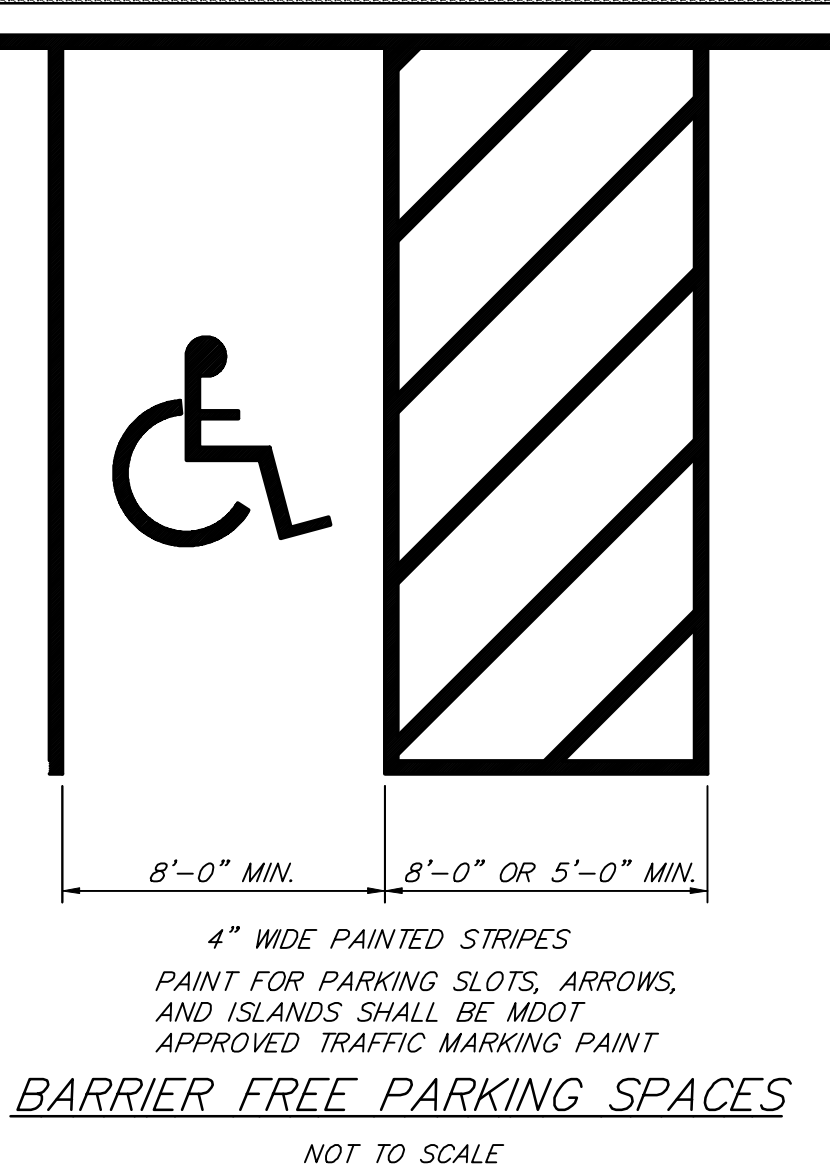
BOLLARD DETAIL
NOT TO SCALE



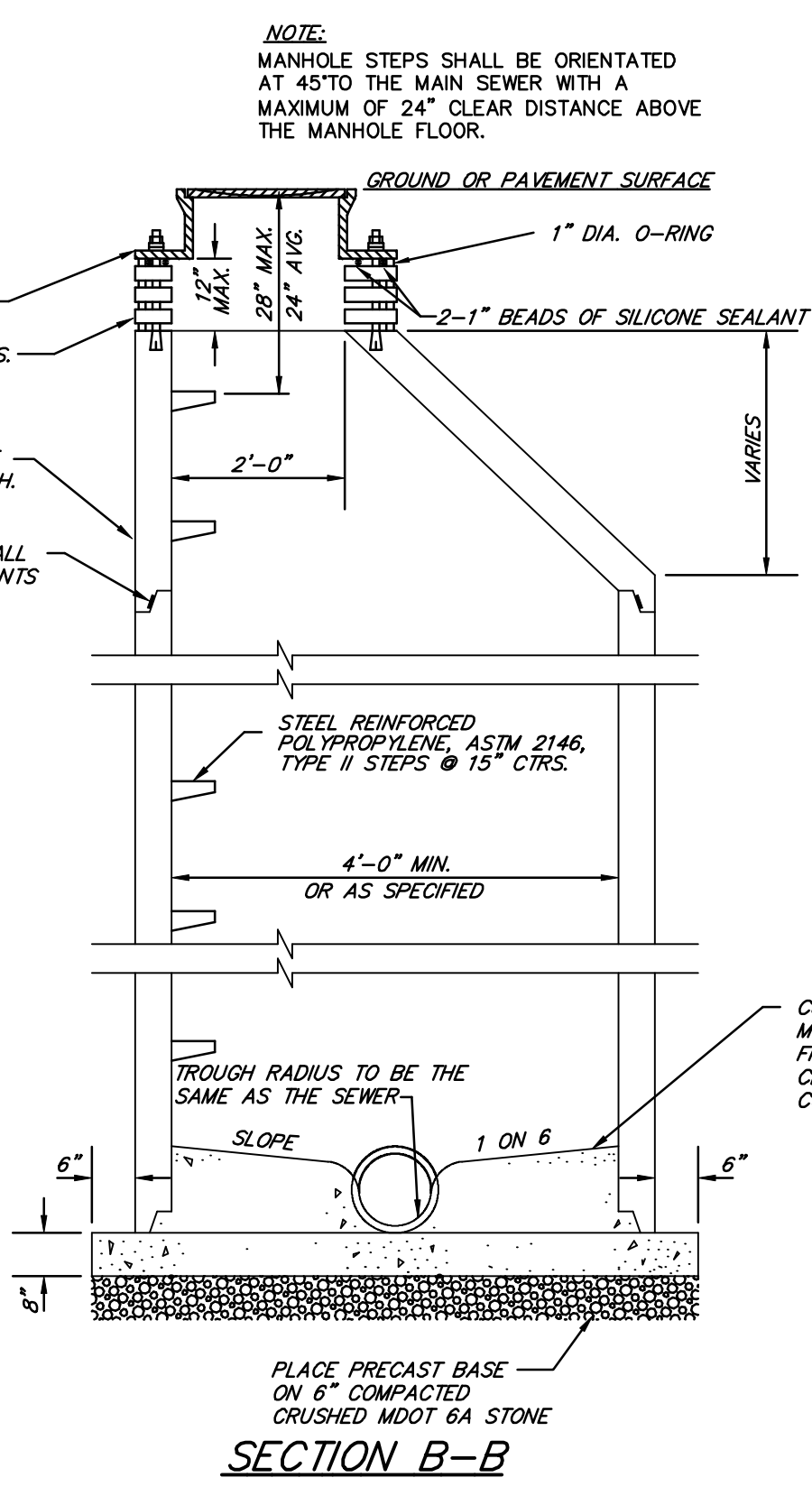
TYP. BARRIER FREE PARKING SIGN
NOT TO SCALE



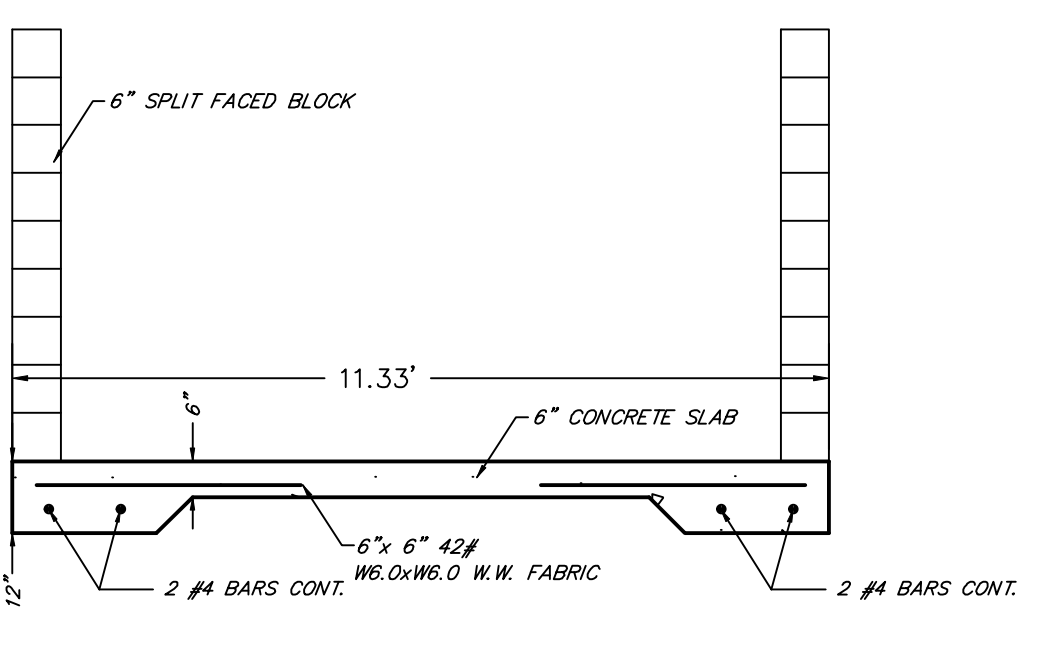
STANDARD MANHOLE
NOT TO SCALE



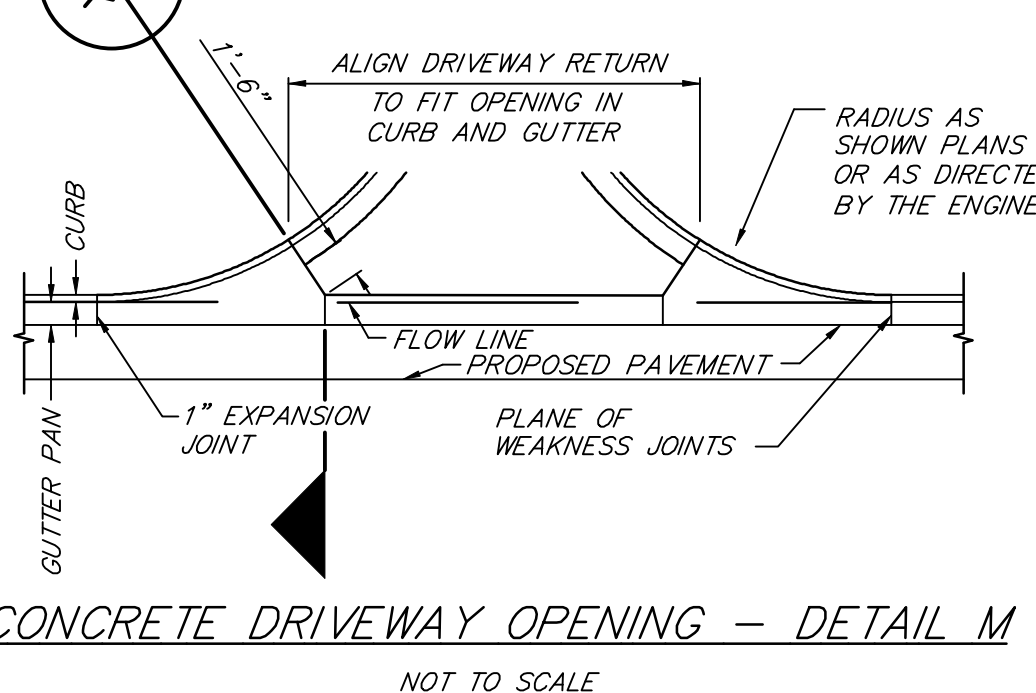
BARRIER FREE PARKING SPACES
NOT TO SCALE



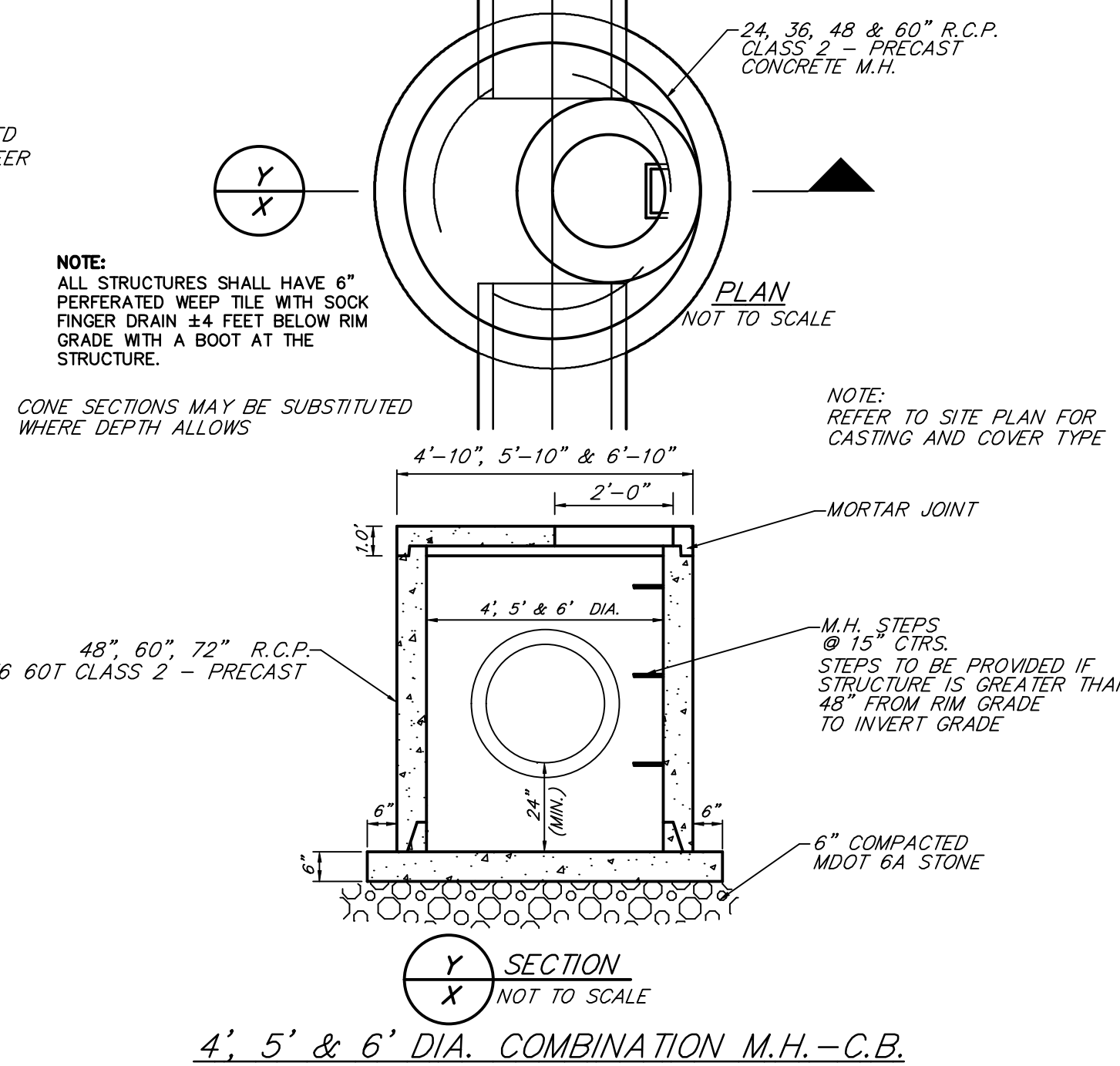
SECTION B-B
NOT TO SCALE



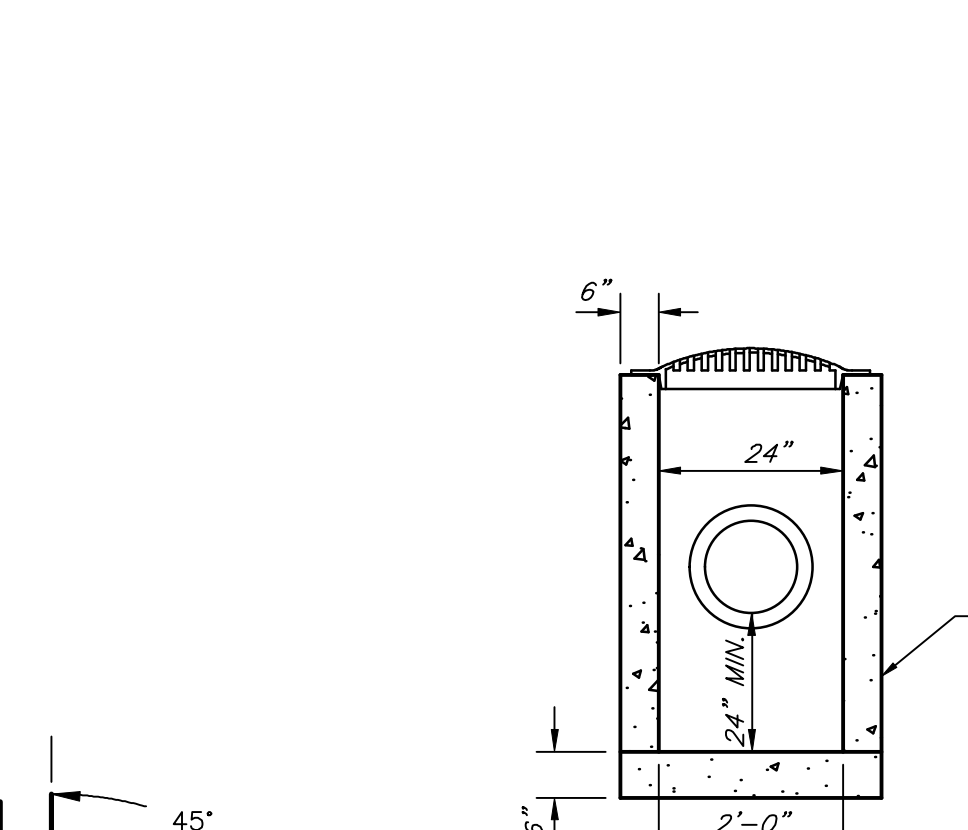
DUMPSTER DETAIL
NOT TO SCALE



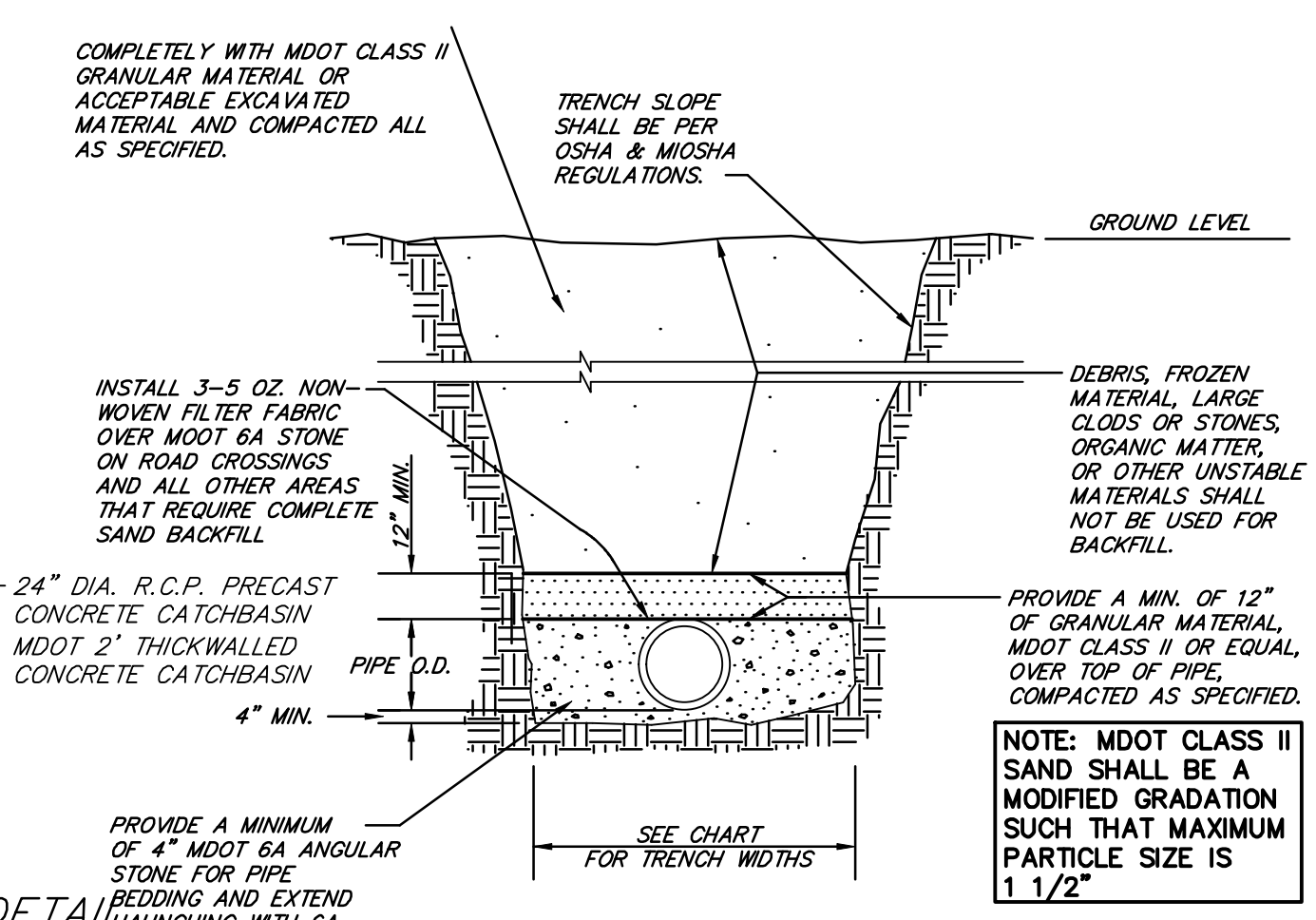
CONCRETE DRIVEWAY OPENING - DETAIL M
NOT TO SCALE



4, 5 & 6 DIA. COMBINATION M.H.-C.B.
NOT TO SCALE



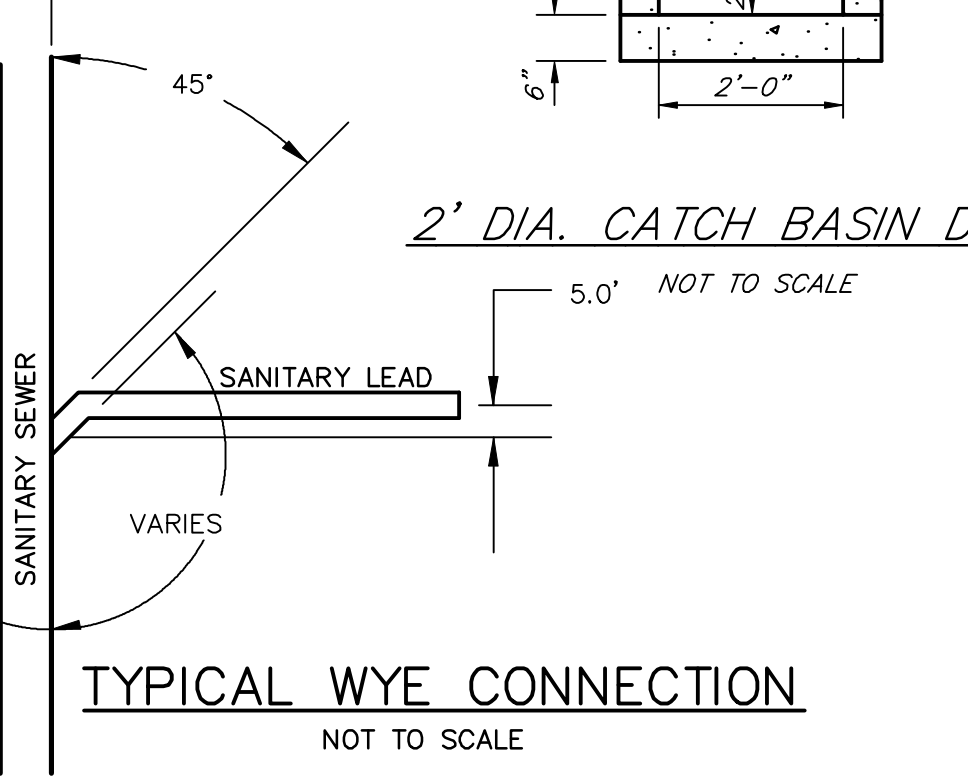
2 DIA. CATCH BASIN DETAIL
NOT TO SCALE



P.V.C. PIPE TRENCH DETAIL
NOT TO SCALE

TRENCH WIDTH CHART

PIPE SIZE	MINIMUM	MAXIMUM
8" & 10"	24"	30"
12" & 15"	30"	36"
18"	34"	40"
21"	38"	42"
24"	42"	48"
30"	48"	54"
36"	54"	60"
LARGER THAN 36"	I.D. +20"	I.D. +24"



TYPICAL WYE CONNECTION
NOT TO SCALE

PLACE M.H. FRAME AND COVER WITH HEAVY DUTY SOLID LID, EAST JORDAN 1040 PT OR NEENAH R-1916-F. CONNECT FRAMES AND COVERS TO CONE SECTION WITH 4-4" CADMIUM COATED THREADED STUDS WITH WASHERS AND NUTS SEALED WITH A 1" BEAD OF SILICONE SEALANT. FRAMES COVERS SHALL BE WATER TIGHT. RIM ELEVATION OF THE FRAME SHALL BE ADJUSTED BEFORE FINAL COMPLETION TO MATCH THE FINAL GROUND OR PAVEMENT SURFACE ELEVATION.

NOTE: MANHOLE STEPS SHALL BE ORIENTATED AT 45° TO THE MAIN SEWER WITH A MAXIMUM OF 24" CLEAR DISTANCE ABOVE THE MANHOLE FLOOR.

NOTE: REFER TO SHEETS 5 & 9 FOR DUMPSTER PAD HORIZONTAL AND GRADING DETAILS



REVISIONS:
COMMENTS FROM CLIENT 02-23-20

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRELIMINARY SITE PLAN 12-23-20

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE: N/A
SHEET NUMBER: 16 OF 16

Draft Motions: PSPR 20-19 The Den on Broomfield
Preliminary Site Plan Review Application

MOTION TO APPROVE:

Motion by _____, supported by _____, to approve the PSPR 20-19 preliminary site plan from B.S.P. Enterprises LLC for The Den on Broomfield mixed-use commercial-residential buildings located at the southwest corner of E. Broomfield Road and Sweeney Road in the northeast quarter of Section 26 and in theB-5 (Highway Business) zoning district, finding that the December 23, 2020 site plan fully complies with the applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval).

MOTION TO APPROVE WITH CONDITIONS:

Motion by _____, supported by _____, to approve the PSPR 20-19 preliminary site plan from B.S.P. Enterprises LLC for The Den on Broomfield mixed-use commercial-residential buildings located at the southwest corner of E. Broomfield Road and Sweeney Road in the northeast quarter of Section 26 and in theB-5 (Highway Business) zoning district, finding that the December 23, 2020 site plan can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Provide the missing items of required application and site plan information as part of the final site plan submittal, including documentation of compliance with Section 6.24 (Mixed-Use Buildings) and Section 14.2.P. (Required Site Plan Information).
2. Revise the off-street parking, cross-access, loading area, and sidewalk details on the final site plan as necessary for compliance with Zoning Ordinance requirements.
3. All final site plan information shall be provided in a consolidated set without separate attachments or addendums, and with all sheets referenced on the cover sheet.
4. All three (3) parcels shall be combined into one (1) new development parcel prior to issuance of a building permit for the project.

MOTION TO POSTPONE ACTION:

Motion by _____, supported by _____, to postpone action on the PSPR 20-19 preliminary site plan from B.S.P. Enterprises LLC for The Den on Broomfield mixed-use commercial-residential buildings until _____, 2021 for the following reasons:

MOTION TO DENY:

Motion by _____, supported by _____, to deny the PSPR 20-19 preliminary site plan from B.S.P. Enterprises LLC for The Den on Broomfield mixed-use commercial-residential buildings located at the southwest corner of E. Broomfield Road and Sweeney Road in the northeast quarter of Section 26 and in theB-5 (Highway Business) zoning district, finding that the December 23, 2020 site plan does not comply with applicable Zoning Ordinance requirements, including Sections 14.2.P. (Required Site Plan information) and 14.2.S. (Standards for Site Plan Approval), for the following reasons:

PARKS AND RECREATION MASTER PLAN UPDATE

TO:	Planning Commission	DATE:	January 12, 2020
FROM:	Rodney C. Nanney, AICP. Community and Economic Development Director		
PROJECT:	Updates needed to the Township's 2010 "Master Plan for Parks and Recreation"		

Background Information

A five-year Parks and Recreation Master Plan is a tool to direct the acquisition, funding, development, and improvement of Township-maintained recreational facilities, and is one of the important "planning documents," along with the Township's Master Plan for Future Land Use, that guide development activity in the Township. If prepared and adopted in accordance with the "Guidelines for the Development of Community Park, Recreation, Open Space and Greenway Plans" established by the Michigan Department of Natural Resources (MDNR), an up-to-date Parks and Recreation Plan also ensures that the Township is eligible for state recreation grants.

In accordance with state guidelines, a local parks and recreation master plan is valid for grant funding eligibility for a period of five (5) years from adoption. The Township's current plan is out-of-date, as it was adopted on December 8, 2010. A copy of the document is included in the mailed meeting packet for your review and is also available on the Township's website under [Charter Township of Union > Community Information > Parks \(uniontownshipmi.com\)](http://uniontownshipmi.com).

The Board of Trustees included funds in the FY2021 budget to update the document. The previous (2010) document was developed by Prof. Al Ellard from Central Michigan University under the guidance of a special appointed "Recreation Committee." Dr. Ellard has since retired and the university's Department of Recreation, Parks and Leisure Services Administration no longer participates in these types of projects.

Updates to the 2010 plan are proposed to be developed by the Community and Economic Development Director under the guidance of the Planning Commission, and with input from the public and from Public Services Department staff members with responsibility over the Township's park facilities.

Summary of the Parks and Recreation Plan Update Project

The Parks and Recreation Master Plan includes an inventory of existing recreational facilities, identification of deficiencies, establishment of Township recreation goals and objectives, recommendations for improvements, and identification of potential funding sources and an administrative structure to serve the recreational needs of Township residents. The plan should

also include consideration of opportunities to partner with regional organizations and adjacent jurisdictions. The following is a summary of the anticipated elements of this project:

Parks and Recreation Master Plan Update Project
Project Initiation by Staff
Prepare a tentative project schedule
Prepare Community Profile
Inventory Recreation Facilities
Evaluate Existing Recreation Resources
Identify/Describe/Analyze Deficiencies
Public Participation Elements
Public meetings of the Planning Commission
Survey? (online and/or by mail)
Recreation Planning Workshop? (electronic meeting or in-person)
Public display/availability of updated Parks and Recreation Master Plan documents for review (on the Township’s website and at the Township Hall)
Planning Commission and Board of Trustees public hearings on the updated Parks and Recreation Master Plan
Plan Preparation
Describe Administration and Funding
Identify/Describe Outside Funding Sources
Establish Recreation Goals
Staff preparation of updated Parks and Recreation Master Plan materials
Planning Commission review of draft plan elements, with revisions as needed by staff
Preparation of an updated draft plan for public review and comment and public hearings
Adoption
Publication of a Notice of Availability and public display of the updated Parks and Recreation Master Plan on the Township website and at the Township Hall (minimum 30-day “display period”)
Planning Commission recommendation of the updated Parks and Recreation Master Plan to the Board of Trustees (after a public hearing)
Board of Trustees review of the updated Parks and Recreation Master Plan and Planning Commission recommendations
Board of Trustees consideration and adoption of the updated Parks and Recreation Master Plan by resolution (after a second public hearing)
Filing of the adopted Parks and Recreation Master Plan with the Michigan Dept. of Natural Resources (MDNR) for grant funding eligibility, and with other outside agencies consistent with MDNR guidelines

The project is anticipated to take eight to eleven months to complete, including provisions for public participation, hearings, and the final MDNR review.