



**Planning Commission
Council Chambers
July 19, 2022 – 6:00 p.m.
233 South Main Street, Monroe, Ohio**

Call to Order

Roll Call

Approval of the Minutes – May 17, 2022

Old Business

New Business

Public Hearing

Case No. 2022-7-6. Consideration of a Conditional Use Application for Duke Energy

Case No. 2022-7-7. Consideration of Site Plan Application for a Medical Marijuana Dispensary on Brooks Drive

Case No. 2022-7-8. Consideration of Site Plan Application for a Medical Marijuana dispensary on Clarence F Warner Drive.

Administrative Reports

Adjournment



**Planning Commission Minutes
May 17, 2022 – 6:00 p.m.
233 South Main Street, Monroe, Ohio**

Call to Order

Mr. Kirkpatrick, Chair, called the meeting to order at 6:00 p.m.

Roll Call

Planning Commission members present: David Kirkpatrick, Christina McElfresh, Lyndsey Pyron, and Matt Frye. Member absent: Brian Richards.

Staff members present: Tom Smith, Director of Development; Kameryn Jones, Assistant Director of Development; Angela S. Wasson, Assistant to the City Manager/Clerk of Council; Jameson Cole, Planner; Michelle Layman, Planning and Zoning Specialist.

Approval of the Minutes

Mr. Richards moved to approve the minutes of the March 15, 2022 meeting; Motion made by Mr. Pyron; seconded by Mrs. McElfresh. Voice vote. Motion carried.

Business

I. Case No. 2022-5-4. Consideration of Site Plan Application for Four Seasons Car Wash.

Mr. Cole stated that Christian Stone, on behalf of Cincinnati Commercial Contracting, has submitted a site plan application for the Four Seasons Car Wash. The applicant is proposing a 4,572 square foot car wash. The car wash is a 125 FT long single wash bay capable of washing five to six cars at one time. The site is approximately 1.07 acres currently zoned C-2 General Commercial. The applicant anticipates starting construction in July and completing by January 2023. Mr. Cole reviewed access management regulations siting:

- Access management regulations would state drives should be lined up across from one another when possible, and that access points should be spaced appropriately.
 - The proposed access for this site of Clarence F. Warner Dr does not line up with the recently approved access of the CCC North site on the north side.
 - As proposed, the current site would be split from the remaining acreage to the west, which would either necessitate shared access or a new access point for this undeveloped lot with limited space to do so.
 - Engineering will continue to work with the developer on access as it relates to future development on Clarence F. Warner.



Mr. Cole reviewed rules regarding sidewalks:

- Minimum 5-foot walk is required along both private and public streets as well as a sidewalk connection to the building/use.
 - A 5-foot walk has been shown along Clarence F Warner, but none is shown along State Route 63
 - No walkway connection to the building itself has been proposed.

Mr. Cole reviewed access regarding parking:

- Access drives must be a minimum of 20 Ft wide.
 - The access drive does not meet the minimum width in select areas. These areas are points of ingress and egress from the stacking lanes.

Mr. Cole reviewed landscaping regulations:

- Street trees shall be required every 40 feet on center at all new sites along all private and public streets located 40' on center.
 - This requirement has not been met on State Route 63 where the length is approximately 230 FT, requiring 5 trees. Perimeter landscape trees cannot count towards meeting the street tree requirement along SR 63.
- The access drive landscaping quantities and the physical plants do not match on the landscape plan.

Mr. Cole reviewed screening regulations:

- As a reminder, screening walls may not be constructed of unfinished concrete or cinder block.

In regards to department comments, Mr. Cole advised:

- Fire Department: No comment. Reserves right to comment during plans review.
- Police Department: No comment.
- Engineering/Public Works Department: Engineering review ongoing

Mr. Cole reviewed the staff recommendations:

- Discussion and decision on waiver of the required 5-foot sidewalk along State Route 63.
- Discussion and decision on the street tree requirement along State Route 63.
- The landscaping plan be revised to correct the quantities and physical planting on the plan.
- As a reminder, all landscaping must meet all minimum species and size requirements and be detailed appropriately on the plan.
- As a reminder, all ground mounted, and rooftop equipment must be appropriately screened as approved by Staff.
- All Engineering review comments be addressed.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.



- Digital files of final plans compatible with City GIS be submitted.
- All other Staff comments be met.

Mr. Kirkpatrick asked if Christian Stone could give a background on what they plan to do to make the widths of the drives proper. Mr. Stone states they are placed at a certain width due to safety concerns. Mr. Stone states the way they are currently planned is the safest way to go about this. Mr. Kirkpatrick states he is concerned about the roof top equipment being screened properly. Mr. Stone asked the architect to come up to speak about this. He states the plans show an adequate height to cover the equipment regardless of the direction. He states they met the 20 FT height requirement and have raised the central portion. Effort to screen the equipment has been taken.

Mrs. Pyron asked if the city had any comments regarding the widths of the drives. Mrs. Jones states the city and fire have been in meetings and that all agree the proposed widths are okay.

Mr. Pyron asked if there are any sidewalks in front of Speedway on 63. There are none currently. Mrs. McElfresh states this is the only waiver given on sidewalks.

Mrs. McElfresh asked Mrs. Jones if Clarence F Warner has been dedicated yet. Mrs. Jones states it hasn't and that it would be up to the property owner/developer. Mrs. McElfresh is concerned about Clarence F Warner not being a dedicated public road. Mr. Stone states he believes the plan is to eventually dedicate it as a public drive. Mrs. McElfresh asked if this could happen before the opening. Mr. Stone states no. Mrs. Jones states if this is done to retain the flexibility without the front yard set back becoming an issue.

Mr. Frye asked if there was a dumpster on site. Mrs. Jones verified there is.

Mr. Kirkpatrick asked for a motion to approve Case No. 2022-5-4.

Mr. Pyron made a motion to approve Case No. 2022-5-4 with the following conditions:

- Discussion and decision on waiver of the required 5-foot sidewalk along State Route 63.
- Discussion and decision on the street tree requirement along State Route 63.
- The landscaping plan be revised to correct the quantities and physical planting on the plan.
- As a reminder, all landscaping must meet all minimum species and size requirements and be detailed appropriately on the plan.
- As a reminder, all ground mounted, and rooftop equipment must be appropriately screened as approved by Staff.
- All Engineering review comments be addressed.



- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- Digital files of final plans compatible with City GIS be submitted.
- All other Staff comments be met.

Mr. Frye seconded the motion to approve Case No. 2022-5-4.

Mr. Kirkpatrick states we have a second motion to approve Case No. 2022-5-4 with the following conditions:

- Discussion and decision on waiver of the required 5-foot sidewalk along State Route 63.
- Discussion and decision on the street tree requirement along State Route 63.
- The landscaping plan be revised to correct the quantities and physical planting on the plan.
- As a reminder, all landscaping must meet all minimum species and size requirements and be detailed appropriately on the plan.
- As a reminder, all ground mounted, and rooftop equipment must be appropriately screened as approved by Staff.
- All Engineering review comments be addressed.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- Digital files of final plans compatible with City GIS be submitted.
- All other Staff comments be met.

Mr. Kirkpatrick asked for a roll call vote:

Mr. Frye: yes

Mr. Kirkpatrick: yes

Mrs. McElfresh: yes

Mr. Pyron: yes

Motion carried and approved

2. Case No. 2022-5-5. Consideration of Site Plan Application for Gateway Tire

Mrs. Jones states Marshall Construction Company, LLC has submitted a site plan application for an expansion to the existing Gateway Tire building located at 100 Corridor Park Dr. The expansion will be 128,360 SF of additional warehousing space. The existing space is 173,674 SF comprised of administrative office area and warehousing. The



property is approximately 22 acres zoned L-1 Light Industrial. The applicant anticipates a construction start date this summer and completion near the end of this year. Mrs. Jones reviewed images of the property location. Mrs. Jones shared and reviewed the site plan. Mrs. Jones shared and reviewed the building plans. Mrs. Jones shared and reviewed the landscaping plans.

Mrs. Jones reviewed rules regarding sidewalks:

- In new developments, a 5-foot sidewalk is required to be constructed in the public right-of-way along Corridor Park Drive. A sidewalk connection from the public walk to the site is also required.
- The applicant has requested waiver of the 5-foot walk and associated walkway connection to the site.

Mrs. Jones reviewed parking:

- For a storage/warehousing use, 1 per 1,250 SF required. The code permits the applicant by right to reduce or increase the parking count by 10%. Based on 128,360 square feet, 103 spaces are required. 10% waiver by right would require an absolute minimum of 93 parking spaces
 - 20 parking spaces are provided to be installed with the building expansion with 74 shadow parking spaces shown for future needs
- Code may permit up to 50% reduction in parking spaces with remaining required amount shown in shared and/or shadow parking.
 - The applicant has shown the remaining required parking via shadow parking in two separate areas along the southwest and southeast portions of the site.

Mrs. Jones reviewed landscaping:

- Street trees (canopy tree with minimum 40 FT mature height) are required every 40 FT on center in the public right-of-way along Corridor Park Drive.
 - Canopy trees have been provided but do not appear to be placed in the public right-of-way.

Mrs. Jones reviewed plans for screening:

- Buffer Type B required along south, east, and west sides of the property (expansion portion of site only) as all sides of the expansion area are surrounded by commercially zoned property, focusing on the south and west sides of the expansion area.
 - The applicant has chosen option 2 or Buffer Type B.
 - Along the west side, 5 canopy trees are required with 7 proposed, 35 understory trees and required with 24 proposed and 174 shrubs are required with 155 shrubs proposed.
 - Along the south side (approximately 732 linear feet), a significant portion of the property is restricted by a 180-foot wide electrical easement for



overhead utilities. Therefore, the applicant proposed buffering approximately 400 feet of the south side, a 174 linear foot area and 220 linear foot area, outside of that easement area.

- Based on these two proposed areas only, the buffer is deficient by 10 understory trees. Staff suggest placing these 10 remaining trees as well as the remaining 19 shrubs and 9 understory trees devicient along the west side buffer in the area shows in blue below. Staff would accept evergreen trees, canopy trees, or a combination as an alternative to understory trees in this area.

Mrs. Jones reviewed photometric plans:

- The lighting plan submitted appears to show the site is under-lit in two small areas along the access drive and parking areas where the minimum required is 0.3 fc. Please revise.

Mrs. Jones reviewed department comments:

- Fire Department:
 - Radio survey study for coverage within building.
 - Fire reserves the right to comment during plan review.
- Police Department: No comment.
- Public Works/Engineering: Engineering under review.

Mrs. Jones reviewed the staff recommendation:

- Discussion and decision on the waiver request regarding the sidewalk required a long Corridor Park Drive.
- Discussion and decision on the placement of required street trees outside of the right-of-way along Corridor Park Drive.
- The landscape plan be revised based on staff comments.
- The lighting plan be revised to address staff comments.
- As a reminder, minimum size and species requirements related to landscaping must be met.
- As a reminder, if ground mounted or rooftop equipment becomes necessary in the future, screening will be required.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- All other Staff comments to be met and any future Engineering review requirements.
- A GIS compatible file of finalized plans be submitted.

Mr. Kirkpatrick asked to review the plan again. Mr. Kirkpatrick questioned if they required a sidewalk, would it have to run around existing property too. Mrs. Jones states it would



just run around the new area. Mr. Kirkpatrick states it would look odd to put a sidewalk in.

The developers explained the way Gateway Tire operates. They stated they don't have many employees as most duties are run via machines.

David Cain, project engineer, discussed street trees. He states the issue with some of the trees being put at 9 FT would be that they would grow into the existing utility lines.

Mr. Pyron states they can work with the City on the placement of the trees.

Mrs. Jones states she is okay with the trees being setback.

Mr. Cain states they will also look at the landscape plan regarding the 19 shrubs. They will look at putting them up as additional screening.

Mrs. McElfresh asked with the new addition, how many more employees do they plan on hiring for the new wing. The developer states he isn't in charge of hiring employees but in his experience, they haven't brought in many more employees. He said the office staff would remain the same. Most work will be run via machines. Mrs. McElfresh asked about overhead lighting. Mr. Cain states they will be putting additional lighting up.

Mr. Kirkpatrick asked for a motion to approve Case No. 2022-5-5.

Mr. Frye made a motion to approve Case No. 2022-5-5 with the following conditions:

- Discussion and decision on the placement of required street trees outside of the right-of-way along Corridor Park Drive.
- The landscape plan be revised based on staff comments.
- The lighting plan be revised to address staff comments.
- As a reminder, minimum size and species requirements related to landscaping must be met.
- As a reminder, if ground mounted or rooftop equipment becomes necessary in the future, screening will be required.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- All other Staff comments to be met and any future Engineering review requirements.
- A GIS compatible file of finalized plans be submitted.

Mrs. McElfresh seconded the motion to approve Case No. 2022-5-5.



Mr. Kirkpatrick states we have a second motion to approve Case No. 2022-5-5 with the following conditions:

- Discussion and decision on the placement of required street trees outside of the right-of-way along Corridor Park Drive.
- The landscape plan be revised based on staff comments.
- The lighting plan be revised to address staff comments.
- As a reminder, minimum size and species requirements related to landscaping must be met.
- As a reminder, if ground mounted or rooftop equipment becomes necessary in the future, screening will be required.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- All other Staff comments to be met and any future Engineering review requirements.
- A GIS compatible file of finalized plans be submitted.

Mr. Kirkpatrick asked for a roll call vote:

Mr. Kirkpatrick: yes

Mrs. McElfresh: yes

Mr. Pyron: yes

Mr. Frye: yes

Motion carried and approved.

New Business

Mrs. Jones welcomed Mr. Smith as the new Director of Development. Mrs. Jones said there will be a couple cases in June.

Adjournment

Mr. Pyron moved to adjourn; seconded by Mr. Frye. Voice vote. Motion carried.

The Planning Commission meeting adjourned at 6:52 p.m.

Respectfully submitted,

Michelle Layman
Planning and Zoning Specialist



CITY OF MONROE
Inter-Office Correspondence

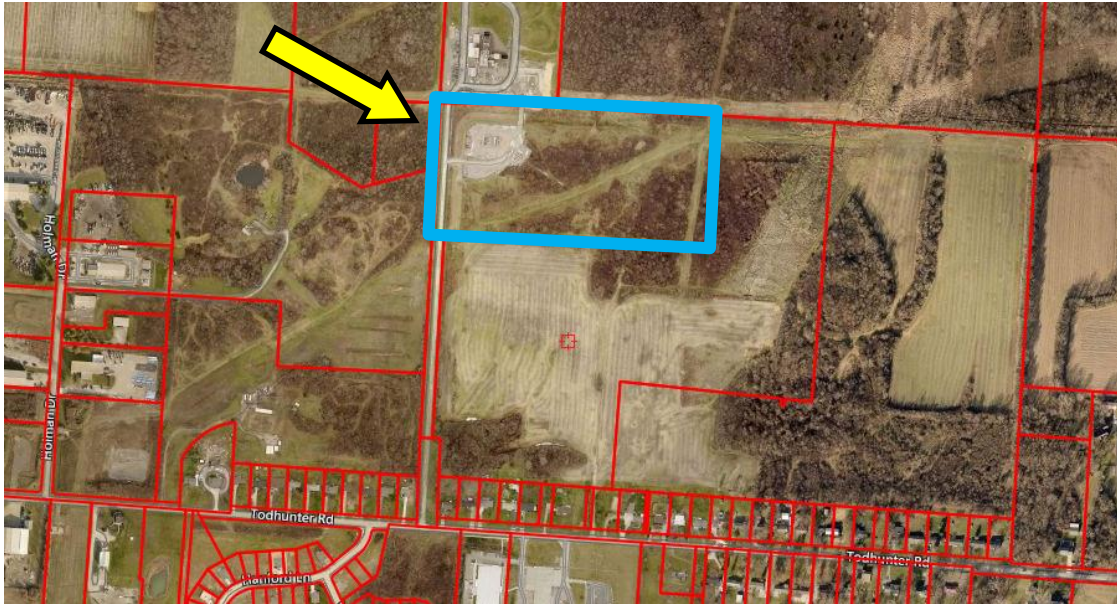
TO: Members of the Monroe Planning Commission
FROM: Kameryn Jones
Assistant Development Director

DATE: July 19, 2022
RE: Information Packet for July 19, 2022 Planning Commission Meeting at 6:00 p.m.

I. Case No. 2022-7-6— Consideration of Conditional Use Application for Duke Energy

A. Background

- Nathan Meyer, on behalf of Duke Energy, has submitted a conditional use permit application regarding a new public utility communication structure to be located at 602 Todhunter Road.
- The applicant is proposing a 300-foot tall communication structure at their existing property off Todhunter Road. The structure is proposed to be used only for internal communication purposes for Duke Energy.
- The site is approximately 20 acres currently zoned A-1 Large Scale Agriculture.



Overhead View of Property



Zoning Map of Proposed Site and Surrounding Properties



At Entrance on Todhunter Road



Northbound on Access Drive



Facing North on Access Drive



Facing North on Todhunter Road

B. Staff Comments

- Wireless Telecommunications Facilities (cell towers) as defined in the Code are regulated under 1204.04(C)(8).
- Within that section, noncommercial facilities are exempted from a conditional use permit except when the height of the facility/structure is below the height restriction of 140 FT.
- While the applicant's use for the structure is considered to be noncommercial as it is only intended for Duke Energy's private use, the new facility must still be conditionally approved by Planning Commission to allow the structure at 300 FT tall, which exceeds the maximum height restriction of 140 FT for new cell towers.
- Relevant Code sections are below:

f) Exceptions from a Conditional Use Permit

- i) Notwithstanding anything to the contrary in this section, no conditional use permit shall be required for those non-commercial exceptions noted in the definition of wireless telecommunications facilities.
- ii) All wireless telecommunications facilities existing on or before the effective date of this chapter shall be allowed to continue as they presently exist, provided however, that any visible modification of an existing wireless telecommunications facility must comply with this section.

Wireless Telecommunications Facilities

Wireless telecommunication facilities may include a "telecommunications tower" and "tower" and "telecommunications site" and "personal wireless facility" and means a structure, facility or location designed, or intended to be used as, or used to support, antennas or other transmitting or receiving devices. This includes, without limit, towers of all types and kinds and structures that employ camouflage technology, including but not limited to structures such as a multi-story building, church steeple, silo, water tower, sign or other structures that can be used to mitigate the visual impact of an antenna or the functional equivalent of such, including all related facilities such as cabling, equipment shelters and other structures associated with the site. It is a structure and facility intended for transmitting and/or receiving radio, television, cellular, paging, 911, personal telecommunications services, commercial satellite services, microwave services and services not licensed by the FCC, but not expressly exempt from the City's siting, building and permitting authority, excluding those used exclusively for the City's fire or police or exclusively for private, noncommercial radio and television reception, private citizen's bands, amateur radio and other similar noncommercial telecommunications where the height of the facility is below the height limits set forth in this chapter.

k) Height

- i) The applicant shall submit documentation justifying the total height of any tower, facility and/or antenna and the basis therefore. Such documentation will be analyzed in the context of the justification of the height needed to provide service primarily and essentially within the City, to the extent practicable, unless good cause is shown.
- ii) The maximum permitted height of a new tower shall be 140 feet unless varied due to siting constraints or other site factors (i.e. limiting the number of new towers) as conditionally approved by Planning Commission.

In reviewing a conditional use application, Planning Commission shall consider whether there is adequate evidence that the proposed conditionally permitted use is consistent with the following standards:

(1) The conditional use is consistent with the spirit, purpose and intent of the comprehensive plan, will not substantially or permanently injure the appropriate use of neighboring property and will serve the public convenience and welfare.

The majority of the parcels immediately surrounding the site of the proposed structure are either owned by Duke Energy or Cleveland Cliffs. The only exception is 860 Holman Avenue, which is undeveloped but was recently rezoned for Light Industrial.

The applicant states the comprehensive plan identifies Duke Energy as the electric provider to the City of Monroe and approval of the proposed facility will allow Duke Energy to better service the City of Monroe and its residents, businesses and public facilities by giving Duke the ability to improve its internal communications.

(2) The proposed use will be harmonious with the existing or intended character of the general vicinity, and that such use will not change the essential character of the same area.

The proposed structure will be harmonious with the existing surrounding uses of the property. The surrounding properties to the north, south, and east are all utility related uses. The property to the west is undeveloped but zoned industrial. There is an existing tower adjacent to the proposed location of the tower part of this application.

(3) The proposed conditional use is to be located in a district wherein such use may be permitted, subject to the requirements of this chapter.

The proposed use is conditionally permitted in the A-1 zoning district.

(4) The use complies with all use-specific provisions established in Section 1204.04 Use-Specific Standards.

The proposed use is exempted from the use-specific provisions because it is a noncommercial utility use.

(5) The proposed use shall be adequately served by essential public facilities and services such as, but not limited to, roads, public safety forces, storm water facilities, water, sanitary sewer, refuse, and schools or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately any such services.

The proposed structure will be adequately accessed and serviced.

(6) In the interest of public safety, as a matter of policy, all points of ingress/egress shall be located as far as possible from the intersection of two or more streets.

The proposed structure is located off an access drive a significant distance from its public ingress/egress off Todhunter Road.

(7) The proposed use will comply with all applicable development standards, except as specifically altered by the Planning Commission in the approved conditional use.

The proposed structure will comply with applicable development standards with requested exceptions noted in their application. The exceptions are related to screening requirements, requirements for a balloon test, and the height limitation of 140 feet. As this is a private, noncommercial structure, there are certain commercial use related requirements that are not applicable.

(8) The use will not be hazardous to or have a negative impact on existing or future surrounding uses.

The uses immediately surrounding the proposed structure will not be negatively impacted. They are similar utility or energy related uses.

(9) The proposed use will not be detrimental to the economic welfare of the community.

This parcel has been owned by a utility and functioned with an existing tower for a number of years. While there is residential further south towards Todhunter, the proposed structure does not appear to be detrimental to the economic welfare of the community.

(10) The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operations, including, but not limited to, hours of operation, that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, odor or other characteristic not comparable to the uses permitted in the base zoning district.

The applicant states the structure is unmanned and does not produce excessive noise, smoke, fumes, glare, or odor not comparable to other uses permitted in the zoning district. Trips are typically no more than 1-2 per month unless in the event of an emergency.

(11) The proposed use will not be detrimental to property values in the immediate vicinity.

As previously stated, this parcel has been owned by a utility and functioned with an existing tower for a number of years. The proposed structure may not be detrimental to the properties immediately surrounding the use as they are industry and/or utility related uses.

(12) The proposed use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The proposed use will not impede development of surrounding properties.

C. Department Comments

- **Fire Department:** No comment. Reserves right to comment during any applicable plans review.
- **Police Department:** No comment.
- **Engineering/Public Works Department:** No comment.

D. Staff Recommendation

- Planning Commission shall either approve, approve with conditions, deny, or table the request for a conditional use permit. The Planning Commission, by a majority vote of the members present at the meeting, may extend the period of review.
- If the conditional use permit is denied, the Planning Commission shall make a finding, in writing, justifying the denial of the conditional use permit and provide a copy of the findings to the applicant.
- In granting approval, the Planning Commission may prescribe appropriate conditions and safeguards in conformance with the intent and purposes of this code for the protection of nearby property and the public health, safety and general welfare. The Planning Commission shall authorize the Code Enforcement Officer to issue the conditional use permit with notation of conditions thereon or attached thereto.

Staff recommends approval of the conditional use application with any conditions as specified by Planning Commission.

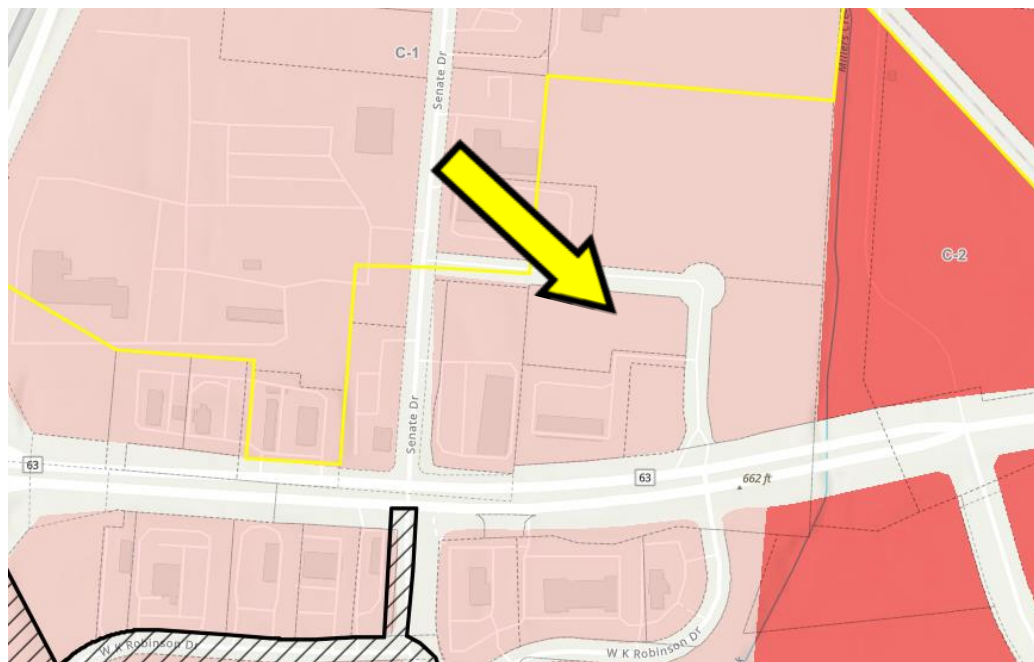
II. Case No. 2022-7-7. Consideration of Site Plan Application for a Medical Marijuana Dispensary on Brooks Drive

A. Background

- Christian Stone, on behalf of Cincinnati Commercial Contracting, has submitted a site plan application for a new medical marijuana dispensary.
- The applicant is proposing a 6,000 square foot building on 0.82 acres of property located at the corner of Orton Drive and Brooks Drive.
- The property is currently zoned C-1 Highway Commercial.
- The applicant anticipates starting construction in August and completing by February 2023.



Overhead View of Property



Zoning Map of Proposed Site and Surrounding Properties



Eastbound on Orton Drive



Facing Northwest at Private Drive



Facing Northwest at the corner of State Route 63 and Brooks Drive

B. Staff Comments

- **Parking:**
 - Staff acknowledges future potential for drive thru window. If/when that is installed, code requirements will apply.
 - Because the only access to the site will be from the private drive to the south, the applicant acknowledges access agreement language will need to be in place so that the user of this site can maintain access their property.
- **Landscaping:**
 - As a reminder, all ground mounted and roof mounted mechanical equipment must be screened.
 - As a reminder, size and species minimum standards must be met.
- **Architectural:**
 - The base-body-cap requirement appears to be met across the building with exception of areas where the windows go to the floor. Typically, Planning Commission has approved this option.
 - As a reminder, spandrel glass only permitted up to 20% of window area.

C. Department Comments

- **Fire Department:**
 - Fire reserves the right to comment during plans review.
- **Police Department:**
 - No comment.
- **Public Works/Engineering:**
 - Engineering review ongoing.

D. Staff Recommendation

Staff recommends Planning Commission approve the site plan application based on the following conditions:

- The applicant understands minimum size and species requirements related to landscaping must be met.
- The applicant understands ground mounted or rooftop equipment must be screened according to code requirements.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- All Engineering review comments be addressed.
- All other Staff comments to be met and any future Engineering review requirements be met.
- A GIS compatible file of finalized plans be submitted.

III. Case No. 2022-7-8. Consideration of Site Plan Application for a Medical Marijuana Dispensary on Clarence F Warner Drive

A. Background

- Christian Stone, on behalf of Cincinnati Commercial Contracting, has submitted a site plan application for a medical marijuana dispensary.
- The applicant is proposing a 4,500 square foot building on 0.99 acres of property located at the corner of Clarence F Warner and American Way.
- The property is currently zoned C-1 Highway Commercial.
- The applicant anticipates starting construction in August and completing by February 2023.



Overhead View of Property



Zoning Map of Proposed Site and Surrounding Properties



Southbound on American Way



Facing northeast at the corner of American Way and Clarence F. Warner Drive



Westbound on Clarence F. Warner Drive

B. Staff Comments

- **General:**
 - The lot line as shown would create a landlocked parcel to the east, where the recently approved CCC North building will be located.
 - To avoid creation of a landlocked parcel, which is prohibited by Code, the applicant must either create a panhandle lot to provide frontage to the CCC north parcel or dedicate (turn from private to public road) this portion of Clarence F. Warner Drive.
 - It is Staff's understanding at this time that the applicant will be creating a panhandle lot in order to allow construction of both developments.
- **Landscaping:**
 - As a reminder, all ground mounted and roof mounted mechanical equipment must be screened.
 - As a reminder, size and species minimum standards must be met.
- **Architectural:**
 - Base-body-cap appears to be met across the building with exception of areas where the windows go to the floor. Typically, Planning Commission has approved this option.
 - As a reminder, spandrel glass only permitted up to 20% of window area.

C. Department Comments

- **Fire Department:**
 - Fire reserves the right to comment during plans review.
- **Police Department:**
 - No comment.
- **Public Works/Engineering:**
 - Engineering review ongoing.

D. Staff Recommendation

Staff recommends of the site plan application with the following conditions:

- The applicant must either execute a lot split to provide public frontage to the future adjacent parcel to the east or dedicate Clarence F. Warner Drive to provide the parcel public road frontage.
- The applicant understands minimum size and species requirements related to landscaping must be met.
- The applicant understands ground mounted or rooftop equipment must be screened according to code requirements.
- The applicant will be responsible for maintenance (mowing, etc.) of the right-of-way adjacent to the developed site once improvements are complete.
- All Engineering review comments be addressed.
- All other Staff comments to be met and any future Engineering review requirements be met.
- A GIS compatible file of finalized plans be submitted.



Application for a Conditional Use Permit

Monroe Development Department
233 South Main Street, Monroe, Ohio 45050
Phone: 513-539-7374
www.monroeohio.org

For Staff Use Only

Submittal Date:

Date Application Determined Complete:

Date of Planning Commission Review:

Fee Paid: \$300

Staff Initials:

Application/Case Number:

Conditional Use Permit Review Information

1. The conditional use permit review procedure and review criteria are established in Section 1203.07 of the Monroe Planning and Zoning Code.
2. Some conditional uses may be subject to use-specific standards in addition to the general review criteria for all conditional uses. Such use-specific criteria will be identified in Chapter 1204 and, more specifically, Section 1204.04.
3. If the applicant is proposing a development that will also require a site plan review, such review shall occur simultaneously and the applicant shall submit a site plan review application.
4. The Monroe Planning Commission reviews all conditional use permit applications.
5. The application fee for a conditional use is \$300, due at the time the application is submitted.

Basic Project and Site Information

Project Address: 632 Todhunter Rd., Monroe, OH 45050

County: ☒ Butler ☐ Warren Total Lot Area: 2500 SF ground space

County Tax Parcel ID: C1800002000004

Project/Development Name: Duke Energy - Dicks Creek Public Utility Communication Structure

Existing Zoning District: Large Scale Agricultural A-1

Proposed Use: ☐ Residential ☐ Commercial ☐ Office ☐ Industrial ☐ Public or Institutional Use
☐ Mixed use ☒ Other - Public Utility

Applicant Information

Applicant Name: Duke Energy

Contact Person: Nathan O. Meyer

Contact Address: 6869 Windjammer Drive, Brownsburg, IN 46112

Contact Phone Number: 317-501-9164

Contact Fax Number:

Contact E-Mail: natemeyer@pbmws.com

Property Owner Name: Cincinnati Gas & Electric Co.

The applicant may attach a separate sheet of a paper with contact information for additional people, if necessary (e.g., additional owners, registered engineer, landscape architect, etc.). The same contact information shall be provided for each contact name.

Conditional Use Permit Information

1) Will a site plan review be required with the conditional use permit review? See Section 1203.06.

☐ Yes

☐ No

Project Address or Tax Parcel ID:

Conditional Use Permit Information Continued

2) Please describe, in detail, the proposed use of the site.

See Enclosed Project Detail Statement

3) Describe how the proposed use will be harmonious with the existing or intended character of the general vicinity, and that such use will not change the essential character of the same area.

The subject property has an existing telecommunication tower, a public utility gas plant, and storage yards for Duke Energy operating on it currently. The property is immediately surrounded by undeveloped woodland. To the north sits the AK Steel property, to the east is a very large undeveloped area, to the south sits some roadside residential, the Trails of Todhunter neighborhood, and a large Duke Energy substation, and to the west is open space and an industrial park. Therefore, the proposed facility will be harmonious with the existing or intended character of the general vicinity, and will not change the essential character of the same area.

4) Describe how the proposed amendment furthers the objectives of the comprehensive plan.

The comprehensive plan identifies Duke Energy as the electric provider to the City of Monroe. Approval of the proposed facility will allow Duke Energy to better service the City of Monroe and its residents, businesses and public facilities by giving Duke the ability to improve its internal communications, especially in the event of a power outage or emergency and by automating some functions of the power grid, which will help improve electric power delivery.

Certification and Signatures

Applicant Signature - I certify that, to the best of my knowledge, the information contained in this form and within any attachments is correct and truthful. I understand that knowingly falsifying this information may be grounds for the denial or revoking of this conditional use application and any subsequent zoning permit or other review applications.

Print Name: Nathan O. Meyer

Signature:

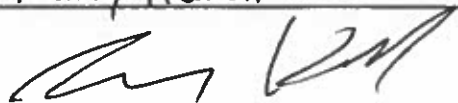


Date: 5-13-22

Property Owner Signature - If the property owner is not the named applicant on this form, the property owner shall sign the form below acknowledging that the applicant is an authorized agent of the property owner as it relates to proposed project.

Print Name: Ronny Howell

Signature:



Date: 5-16-2022

Note: A letter signed by the property owner, authorizing the applicant to act on their behalf may be submitted in lieu of the property owner's signature on this form.

Submittal Requirement Checklist	
Digital Submittal Requirements	
☒	All document applications shall be submitted in an electronic format compatible with the city's computer systems. Adobe PDF files are acceptable.
General Information	
☒	Application fee
☒	Sixteen copies of the plans and maps established below at a scale no smaller than 1 inch = 100 feet, unless otherwise noted – Eight of the copies shall be on pages with a minimum size of 24"x36" and the other eight copies shall be on pages with a minimum size of 11"x17". Additional copies may be required based on project specifics.
☐	Eight copies of the Traffic Impact Study, if required. See Section 1211.04
☒	Any additional information determined to be necessary by the Development Department
☐	Final mylars and digital files of all maps and plans will be required after approval
Note: Any addition or alteration of landscaping, lighting, or parking will require a site plan review and the applicant shall be responsible for completing the site plan review application and submitting the necessary information.	
Existing Conditions Map	
☒	All existing zoning district classifications on the site and adjacent to the site
☒	Parcel boundaries of all parcels adjacent to the site
☒	Names of all subdivisions and property owners of lots adjacent to the site
☒	Location of existing buildings, structures, curb cuts, parking and loading areas, lighting fixtures, outside trash storage facilities, , fences, outdoor display or storage, and other built or impervious surfaces.
☒	Location of existing vegetation (general location) to be maintained



The Utilities as shown on this drawing were developed from the information available. This is not implied nor intended to be the complete inventory of utilities in this area. It is the clients/contractors responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.



SITE NAME & ADDRESS
DICKS CREEK
632 TODHUNTER RD.
MONROE, OH 45050 - BUTLER COUNTY
NEW TOWER, SHELTER & GENERATOR

PROJECT DESCRIPTION

1. PROPOSED 300' SELF SUPPORT TOWER WITHIN 50'x50' FENCED COMPOUND.
2. PROPOSED DUKE ENERGY EQUIPMENT SHELTER.
3. PROPOSED DUKE ENERGY EMERGENCY GENERATOR, W/CONCRETE PAD, CONDUIT AND WIRING.
4. PROPOSED DUKE ENERGY 500 GALLON PROPANE TANK
5. PROPOSED ICE BRIDGE & SUPPORT FRAME W/GPS ANTENNA & COAX SUPPORT FRAME.
6. PROPOSED UTILITY SERVICES AND GROUNDING.
7. PROPOSED DUKE ENERGY ANTENNAS AND MICROWAVE DISHES TO BE INSTALLED ON TOWER.

NOTE:
1. PROJECT DESCRIPTION DOES NOT INCLUDE ALL
EQUIPMENT & MATERIALS FOR A COMPLETE
INSTALLATION.

PROFESSIONAL CERTIFICATION

GPS COORDINATES

LATITUDE: N39° 27' 50.26"
LONGITUDE: W-84° 22' 39.16"
ELEVATION AT GRADE: 781'

JURISDICTION INFO

JURISDICTION: BUTLER COUNTY

ZONING: C – COMM

☐ EXISTING BUILDING ☐ EXISTING TOWER

☐ EXISTING WATER TOWER ☒ RAWLAND

☐ OTHER: _____

PROJECT SUMMARY

SITE NUMBER: T.B.D.
SITE NAME: DICKS CREEK
SITE ADDRESS: 632 TODHUNTER RD.
MONROE, OH 45050
BUTLER COUNTY
CURRENT ZONING: F - LIGHT INDUSTRY
PARCEL NUMBER: C1800002000004
PROPERTY OWNER: CINCINNATI GAS & ELECTRIC CO

TOWER OWNER: DUKE ENERGY
1000 E. MAIN STREET
PLAINFIELD, IN 46168

APPLICANT: DUKE ENERGY / PBM WIRELESS SERVICES
139 EAST FOURTH STREET
CINCINNATI, OH 45202
NATHAN MEYER
(317) 501-9164

DESIGN FIRM: PBM WIRELESS SERVICES
3620 DEVELOPERS ROAD
INDIANAPOLIS, IN 46227
(847) 274-8456
JAMIE DOWNEY

UTILITIES

ELECTRICAL UTILITY CONTACT:	DUKE ENERGY (800) 343-3525
COMMUNICATIONS UTILITY CONTACT:	TBD TBD

CODE COMPLIANCE

WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE CITY OF CINCINNATI & OTHER GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

BUILDING CODE: OBC (2017) MECHANICAL CODE: OMC (2017)

FIRE CODE: 0FC (2017) PLUMBING CODE: 0PC (2017)

ELECTRICAL CODE: NFPA 70-17 (2017)

TIA/EIA-222G
OR LATEST ADOPTED EDITION

VICINITY MAP



SCALE: NONE

DRAWING INDEX

[illegible]

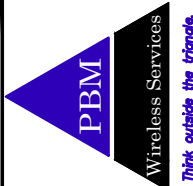
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR THE USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED AND IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

A/E DOCUMENT REVIEW STATUS

TITLE	SIGNATURE	DATE
DUKE ENERGY CONSTRUCTION MANAGER		
RF ENGINEER		
ZONING APPROVAL		
SITE ACQUISITION		
PROPERTY OWNER		

ACCEPTANCE DOES NOT CONSTITUTE APPROVAL OF DESIGN, CALCULATIONS, ANALYSIS, TEST METHODS OF MATERIALS DEVELOPED OR SELECTED BY THE SUBCONTRACTOR AND DOES NOT RELIEVE SUBCONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.



A	04/19/21	ZONING DRAWINGS
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DUKE ENERGY - DICKS CREEK

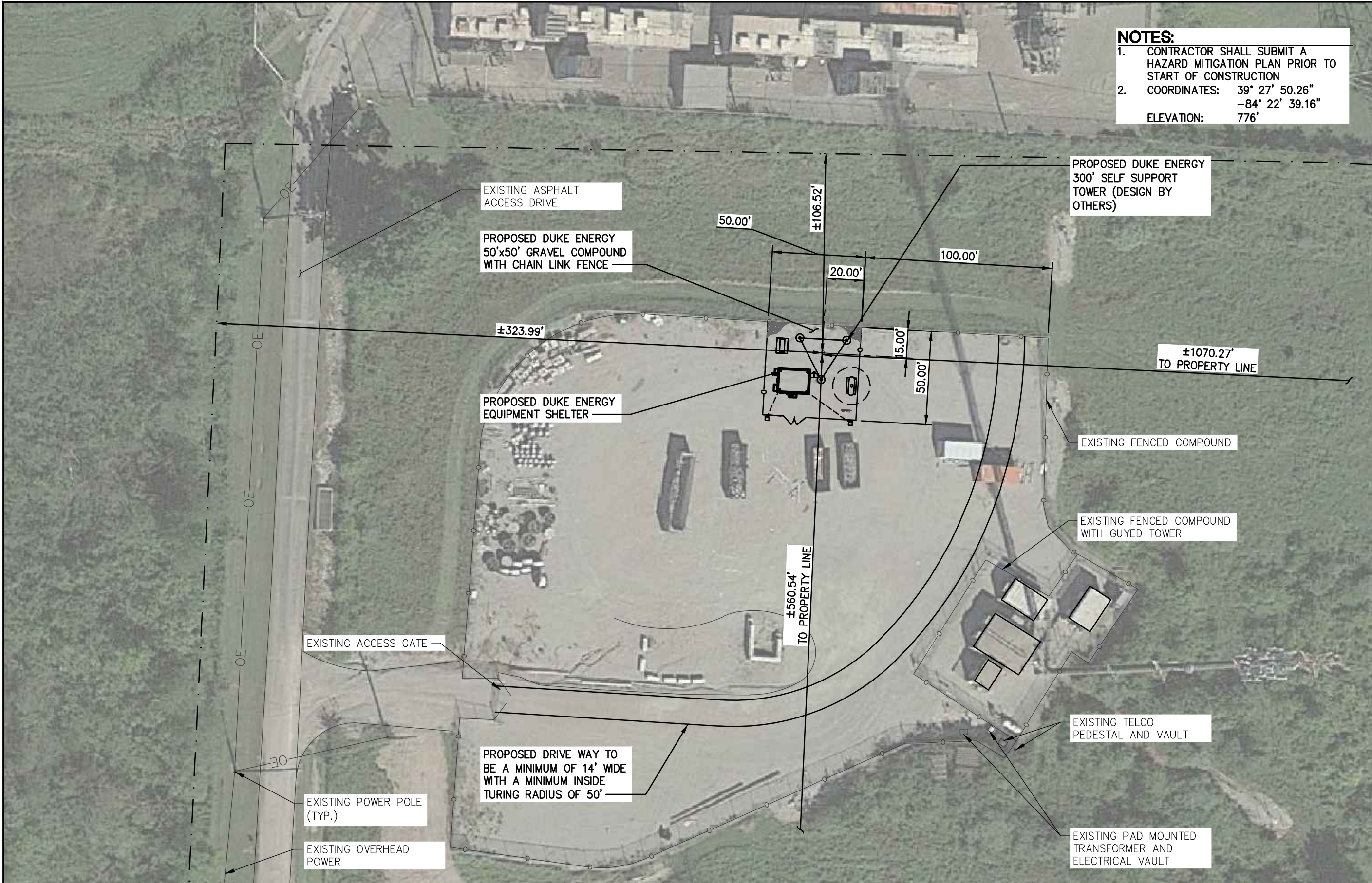
632 TODHUNTER RD.
MONROE, OH 45050 - BUTLER COUNTY
SELF-SUPPORT

CHKD BY:BMW

PROJ #: 19-17-03

SHEET TITLE
TITLE
SHEET

SHEET NUMBER
T-1



- NOTES:**
1. CONTRACTOR SHALL SUBMIT A HAZARD MITIGATION PLAN PRIOR TO START OF CONSTRUCTION
 2. COORDINATES: 39° 27' 50.26"
-84° 22' 39.16"
ELEVATION: 776'

A	04/19/21	ZONING DRAWINGS

DUKE ENERGY - DICKS CREEK

632 TODHUNTER RD.
MONROE, OH 45050 - BUTLER COUNTY
SELF-SUPPORT

PROJ #: 19-17-03

DWG BY:BMW

CHKD BY:BMW

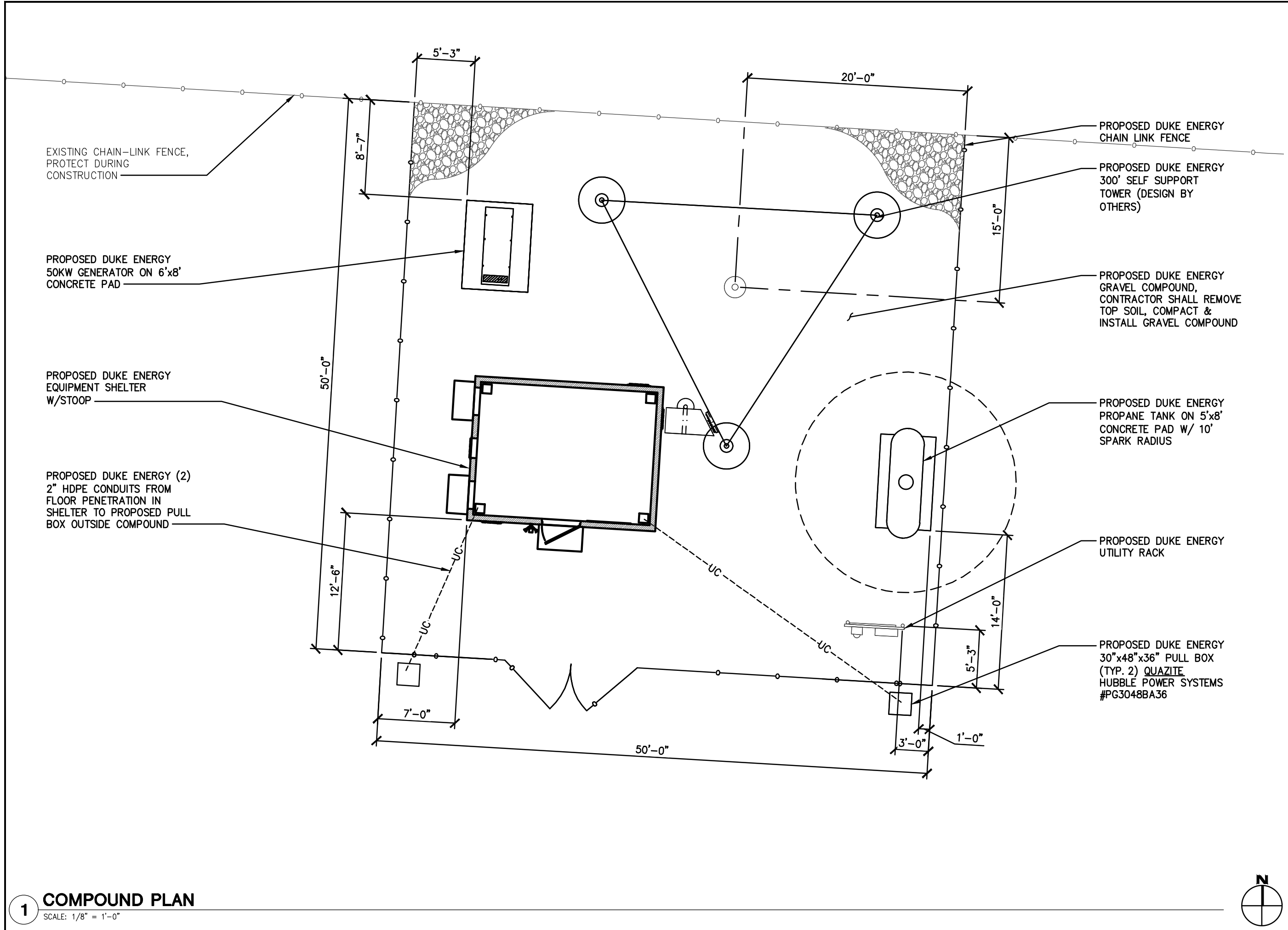
SHEET TITLE

PARTIAL
SITE PLAN

SHEET NUMBER

C-1





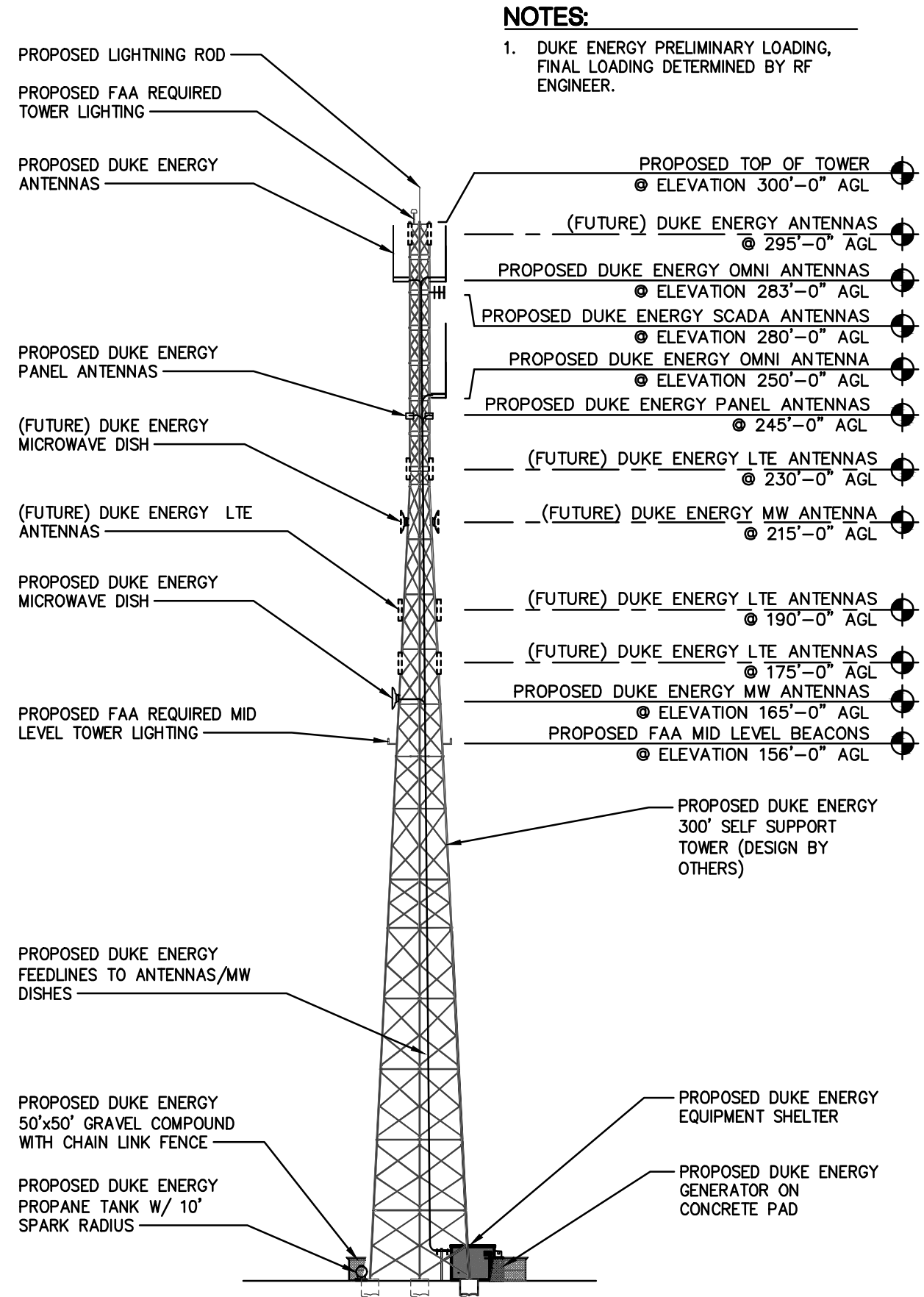
A	04/19/21	ZONING	DRAWINGS

DUKE ENERGY - DICKS CREEK		CHKD BY:BMW
632 TODHUNTER RD. MONROE, OH 45050 - BUTLER COUNTY SELF-SUPPORT		DWG BY:BMW
PROJ #: 19-17-03		

SHEET TITLE
PARTIAL
SITE PLAN

SHEET NUMBER
C-2



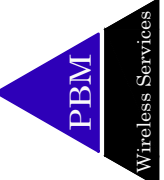


NOTES:

1. DUKE ENERGY PRELIMINARY LOADING, FINAL LOADING DETERMINED BY RF ENGINEER.

1 TOWER ELEVATION

SCALE: 1" = 40'



A	04/19/21	ZONING	DRAWINGS

DUKE ENERGY - DICKS CREEK

632 TODHUNTER RD.
MONROE, OH 45050 - BUTLER COUNTY
SELF-SUPPORT

PROJ #: 19-17-03

DWG BY:BMW

CHKD BY:BMW

SHEET TITLE

ELEVATION

SHEET NUMBER

C-3

Project Detail Statement

The purpose of this statement is to provide additional details regarding the proposed public utility communication structure at Dicks Creek. Duke Energy is in the process updating its power grid, which includes internal communications and automation.

The proposed facility is an important part of Duke Energy's day-to-day operations and is part of the fundamental physical infrastructure required to support Duke's SmartGrid, Dicks Creek communications, and other Operational Technologies.

The proposed facility enables Duke to make use of a Land Mobile Radio system, which Duke Energy's first responders use to help make repairs to critical infrastructure when restoring service to its customers. In its storm response plan, the Land Mobile Radio system provides a reliable way for its employees to communicate key messages to individuals and Duke team members during the power-restoration process. This state-of-the-art communication system supports improves customer restoration times, increased operational reliability, and provides greater safety to our employee that support your community.

The proposed facility will also improve communications to area substations and other power grid assets. The microwave system provides backhaul for Land Mobile Radio sites and connects the site to Duke Energy's private network.

Duke Energy is pleased to make this investment of over \$1.5 million in the tower and network equipment at this site. This facility supports Duke's commitment to providing its customers with safe, reliable, affordable, and increasingly clean energy in the City of Monroe and throughout Duke's service area.



Think outside the triangle.

May 16, 2022

Planning Commission
Attn: Kameryn Jones
CITY OF MONROE, OHIO
233 S Main Street
P. O. Box 330
Monroe, OH 45050-0330

RE: Duke Energy – Dicks Creek – Conditional Use Application
Site Location: 632 TODHUNTER RD., MONROE, OH 45050 - BUTLER COUNTY

Dear Kameryn:

Please accept this letter and enclosures as application for Conditional Use Permit approval to allow Duke Energy to install a Public Utility Communication Structure installation located at the above address. The scope of work that Duke Energy will perform includes installation of a Public Utility Communication Structure to include, antennas, radios, cables, backup power generator and/or related equipment at this location per the plans submitted. Please accept the following information that is enclosed regarding these applications:

- Payment in the amount of \$300.00 (Being Paid via Credit Card);
- Complete Application;
- Sixteen (16) copies of complete Application for a Conditional Use Permit;
- Sixteen (16) sets of Statement of Compliance (note: FAA Determination of No Hazard is enclosed as part of the Statement of Compliance); and
- Sixteen (16) sets of Drawings.

It is my understanding the appropriate Commission or Board will review and approve this application. Please confirm with me with the date, time and location of the next available public hearing when this matter will be heard by as I will be present to represent Duke Energy. If a fee is due, please email me at natemeyer@pbmws.com with the amount of the fee and to whom it should be made payable and I will forward payment. Please email (natemeyer@pbmws.com) the agenda and staff report(s) to Nate Meyer upon release (along with a copy of the receipt) and mail a copy to:

Nathan O. Meyer
PBM Wireless Services, LLC
6869 Windjammer Drive
Brownsburg, IN 46112

I appreciate your time and assistance with this development project. Feel free to contact me at 317-501-9164 if you require additional information or have any questions.

Sincerely,

Nathan O. Meyer

Statement of Compliance – Conditional Use Approval Request Proposed Public Utility Communication Structure

Site: Dicks Creek – Duke Energy

Address: 632 Todhunter Rd.
Monroe, OH 45050

Property Zoning Classification: Large Scale Agricultural (A-1) – See Exhibit A –
Zoning Map

Lats/Longs: 39 27 50.58, - 84 22 38.21 – See Exhibit B – Location Aerial

Statement Submitted By:

Nathan O. Meyer
Development and Zoning Manager
6869 Windjammer Drive
Brownsburg, IN 46112
Mobile: (317) 501-9164
Email: natemeyer@pbmws.com

Date: May 13, 2022

Purpose:

The purpose of the Statement of Compliance is to demonstrate to the Zoning Authority of City of Monroe, OH that Duke Energy (“Duke”) complies with applicable sections of the PLANNING AND ZONING CODE of the City of Monroe and other applicable local, state and federal laws as required and that Duke has performed the Due Diligence necessary to earn zoning approval for construction of the proposed Public Utility Communication Structure at the proposed height and proposed location.

Project Description:

Duke proposes to construct a new 300' tall Public Utility Communication Structure with antennas, radios, cables and related equipment, equipment area to be located within a new 50'x50' SF ground space within an existing Duke gravel storage yard, surrounded by landscaping and a chain link fence at 632 Todhunter Rd., Monroe, OH 45050 (the "facility").

Request for Approval:

On behalf of Duke Energy, we respectfully request zoning approval for the Public Utility Communication Structure Facility as proposed.

Statements of Compliance:

The following Statements of Compliance demonstrates compliance with the applicable requirements of **ARTICLE 15 WIRELESS TELECOMMUNICATIONS FACILITIES**, and/or other applicable sections of the Zoning Code of the City of Cincinnati (the “Code”). Responses to applicable sections are inserted below in **Underlined Bold Italics**:

(8) Wireless Telecommunication Facilities

a) Severability

Any conditional use permit issued for a wireless telecommunication facility shall be comprehensive and not severable. If part of a permit is deemed or ruled to be invalid or unenforceable in any material respect by a competent authority, or is overturned by a competent authority, the permit shall be void in total, upon determination by the City.

b) Overall Policy and Desired Goals

In order to ensure that the placement, construction, and modification of wireless telecommunications facilities protects the City's health, safety, public welfare, environmental features, the nature and character of the community and neighborhood, and other aspects of the quality of life specifically listed elsewhere in this section, the City hereby adopts an overall policy with respect to a conditional use permit for wireless telecommunications facilities for the express purpose of achieving the following goals:

- i) To establish a policy for examining a conditional use permit application for and issuing a conditional use permit for wireless telecommunications facilities that is both fair and consistent;
- ii) To establish regulations that promote and encourage, to the maximum extent feasible, the sharing and/or co-location of wireless telecommunications facilities among service providers; and
- iii) To establish regulations that promote and encourage, to the maximum extent feasible, the placement, height and quantity of wireless telecommunications facilities in such a manner, including but not limited to the use of stealth technology, to minimize adverse aesthetic and visual impacts on the land, property, buildings, and other facilities adjacent to, surrounding, and in generally the same area as the requested location of such wireless telecommunications facilities, which shall mean using the least visually and physically intrusive facility that is not technologically or commercially impracticable under the facts and circumstances.

c) Location of Wireless Telecommunication Facilities

- i) Applicants for wireless telecommunications facilities shall locate, site and erect said wireless telecommunications facilities in accordance with the following priorities, with paragraph (A) being the highest priority and paragraph (E) being the lowest priority.
 - A.** On existing towers or other structures without increasing the height of the tower or structure;
 - B.** On city-owned properties located in any zoning district;
 - C.** On properties in areas zoned for heavy industrial use;

- D. On properties in areas zoned for light industrial use; or
 - E. All other sites.
- ii) Should an applicant by-pass sites of higher priority, the applicant shall provide documentation showing substantial evidence that the higher priority option is not a commercially viable or technically feasible option.
 - iii) Notwithstanding the above, the Code Enforcement Officer or, if applicable, the Planning Commission, may approve any site located within an area in the above list of priorities, provided that it finds that the proposed site is not injurious to the best interest of the health, safety and welfare of the City and its inhabitants and will not have an adverse effect on the nature and character of the community and neighborhood.
 - iv) Notwithstanding that a potential site may be situated in an area of highest priority or highest available priority, the City may deny an application for any of the following reasons:
 - A. Conflict with safety and safety-related codes and requirements;
 - B. The use or construction of wireless telecommunications facilities which is contrary to an already stated purpose of a specific zoning district;
 - C. The placement and location of wireless telecommunications facilities which would create an unacceptable risk, or the reasonable probability of such, to residents, the public, employees and agents of the City, or employees of the service provider or other service providers; or
 - D. Conflicts with the provisions of this section.

This proposed facility is located in a remote area away from surrounding uses and is appropriate for the location of the proposed facility. Duke Energy owns the subject property which is currently being used as an existing telecommunication tower, a public utility gas plant, and storage yards for Duke Energy. The property is immediately surrounded by undeveloped woodland. To the north sits the AK Steel property, to the east is a very large undeveloped area, to the south sits some roadside residential, the Trails of Todhunter neighborhood, and a large Duke Energy substation, and to the west is open space and an industrial park.

d) Shared Use of Wireless Telecommunications Facilities and Other Structures

- i) The city prefers the location of wireless telecommunication antennas on existing towers without increasing the height, as opposed to the unneeded construction of a new tower, before issuing a conditional use permit for a new tower.
- ii) No transmittal equipment of any kind may be installed on any structure below 10 meters from the surface level without approval from the Code Enforcement Officer.
- iii) An applicant submitting an application for a co-location of an antenna on existing wireless telecommunication tower that does not increase the height of such tower shall only be required to submit an application for a zoning permit.
- iv) Any new wireless telecommunications facilities that is not a co-location as described above must be reviewed and approved through the conditional use permit procedure as established in Section [1203.07: Conditional Use Permit](#), and subject to the standards and conditions of this section.

In part to secure the power grid, the proposed facility will only be used by Duke Energy and will not be available for lease/commercial purposes; however if the City of Monroe determines the proposed facility may be useful for City services to utilize (i.e. Police, Fire, EMS, etc.). Duke is willing to, at City's request, permit public and/or governmental use/equipment on the tower in the future. This would be City paid installation but no rent.

e) Conditional Use Permit Application and Review Requirements

- i) There shall be a pre-application meeting. The purpose of the pre-application meeting is to address issues which will help to expedite the review and permitting process. A pre-application meeting shall also include a site visit if there has not been a prior site visit for the requested site. Costs of the City's consultants to prepare for and attend the pre-application meeting will be borne by the applicant.
- ii) Any and all representations made by the applicant to the City on the record during the application process, whether written or verbal, shall be deemed a part of the application and may be relied upon in good faith by the City.
- iii) An applicant shall submit to the City the number of completed applications determined to be needed during the pre-application meeting. Written notification of the application shall be provided to the legislative body of all adjacent municipalities.
- iv) The Planning Commission is the officially designated agency or body to whom applications for wireless telecommunications facilities (excluding co-location on existing facilities) must be made. Planning Commission is authorized to review, analyze, evaluate and make decisions with respect to granting or not granting, recertifying or not recertifying, or revoking conditional use permits for wireless telecommunications facilities.
- v) An application for a conditional use permit for wireless telecommunications facilities shall be signed on behalf of the applicant by the person preparing the same and with knowledge of the contents and representations made therein and attesting to the truth and completeness of the information. The landowner, if different than the applicant, shall also sign the application. At the discretion of the City, any false or misleading statement in the application may subject the applicant to denial of the application without further consideration or opportunity for correction.
- vi) Where a certification is called for, such certification shall bear the signature and seal of a professional engineer licensed in the State.
- vii) The applicant shall include a statement in writing:
 - A. That the applicant's proposed wireless telecommunications facilities shall be maintained in a safe manner, and in compliance with all conditions of the conditional use permit, without exception, unless specifically granted relief by the City in writing, as well as all applicable and permissible local codes, ordinances, and regulations, including any and all applicable city, state and federal laws, rules, and regulations; and
 - B. That the construction of the wireless telecommunications facilities is legally permissible, including, but not limited to the fact that the applicant is authorized to do business in the state.

Duke complies or will comply with the above, and agrees in writing to the above where applicable.

- C. The tower shall be structurally designed to accommodate at least five additional antenna arrays equal to those of the applicant, and located as close to the applicant's antenna as possible without causing interference. This requirement may be waived, provided that the applicant demonstrates, in writing, that the provisions of future shared usage of the tower is not technologically feasible, is commercially impracticable or creates an unnecessary and unreasonable burden, based upon:
- D. The foreseeable number of FCC licenses available for the area;

In part to secure the power grid, the proposed facility will only be used by Duke Energy and will not be available for lease/commercial purposes, therefore the above highlighted section C. and D. are Not Applicable.

- E. The kind of wireless telecommunications facilities site and structure proposed;

The proposed facility is a Self-Support structure.

- F. The number of existing and potential licenses without wireless telecommunications facilities spaces/sites; or
- G. Available space on existing and approved towers.
- viii) No tower owner or manager shall be permitted to submit an application for a conditional use permit for a tower if the tower owner does not have a signed agreement committing a commercial service provider to occupy space on the tower.
- ix) In the case of a new tower, the applicant shall be required to submit a written report demonstrating its meaningful efforts to secure shared use of existing tower(s) or the use of alternative buildings or other structures within the City. Copies of written requests and responses for shared use shall be provided to the City in the application, along with any letters of rejection, stating the reason for rejection.

In part to secure the power grid, the proposed facility will only be used by Duke Energy and will not be available for lease/commercial purposes, therefore the above highlighted sections F., G., viii) and ix) are Not Applicable.

- x) The applicant shall certify that the telecommunication facility, foundation and attachments are designed and will be constructed to meet all local, city, state and federal structural requirements for loads, including wind and ice loads.
- xi) The applicant shall certify that the wireless telecommunications facilities will be effectively grounded and bonded so as to protect persons and property, and installed with appropriate surge protectors.

Duke complies or will comply with the above, and agrees in writing to the above where applicable.

- xii) The applicant shall demonstrate and provide in writing and/or by drawing how it shall effectively screen from view the base and all related facilities and structures of the proposed wireless telecommunications facilities.

Due to the remote location as well as the fact the site is to be located inside of a Duke Energy storage yard, and because the property is immediately surrounded by undeveloped woodland See Exhibit B – Location Aerial, the proposed facility will naturally be effectively screened from view.

- xiii) The applicant will provide a written copy of an analysis, completed by a qualified individual or organization, to determine if the tower or existing structure intended to support wireless facilities requires lighting under Federal Aviation Administration Regulation Part 77. This requirement shall be for any new tower or for an existing structure or building where the application increases the height of the structure or building. If this analysis determines that the FAA must be contacted, then all filings with the FAA, all responses from the FAA, and any related correspondence shall be provided in a timely manner.

See Exhibit D – FAA Determination of No Hazard.

f) Exceptions from a Conditional Use Permit

- i) Notwithstanding anything to the contrary in this section, no conditional use permit shall be required for those non-commercial exceptions noted in the definition of wireless telecommunications facilities.
- ii) All wireless telecommunications facilities existing on or before the effective date of this chapter shall be allowed to continue as they presently exist, provided however, that any visible modification of an existing wireless telecommunications facility must comply with this section.

Duke complies or will comply with the above, where applicable.

g) Public Hearing and Notification Requirements

- i) In the case of a new telecommunication tower, the applicant shall, prior to the public hearing on the application, hold a balloon test. The applicant shall arrange to fly, or raise upon a temporary mast, a minimum of a 3-foot in diameter brightly colored balloon at the maximum height of the proposed new tower.
- ii) The dates, (including a second date, in case of poor visibility on the initial date) times and location of this balloon test shall be advertised by the applicant 7 to 14 days in advance of the first test date in a newspaper with a general circulation in the City and posted on a sign posted on the site and visible from the road (with a minimum sign area of 16 square feet). The applicant shall inform the City, in writing, of the dates and times of the test, at least 14 days in advance. The balloon shall be flown for at least four consecutive hours sometime between 7:00 a.m. and 4:00 p.m. on the dates chosen. The primary date shall be on a weekend, but in case of poor weather on the initial date, the secondary date may be on a weekday.
- ii) The applicant shall provide photographic evidence of the balloon test as part of the application prior to the hearing.

Due to the fact there is already an existing 300' tower located on this parcel that can give anyone looking in the direction of the proposed

facility a more realistic impression of what visual impact the proposed facility is expected to make, Duke respectfully requests the City waive the above requirements noted immediately above as Sections g) i) and ii).

- iv) Prior to the review and decision on any application for a conditional use permit for wireless telecommunications facilities, a public hearing before the Planning Commission shall be held by the City, notice of which shall be published in accordance with Section [1203.02\(H\): Public Notification for Public Hearings](#). So that the City may notify nearby landowners, the application shall contain the names and addresses of all landowners whose property is located within 1,500 feet of any property line of the lot or parcel on which the new wireless telecommunications facilities are proposed to be located.

Duke complies or will comply with the above, where applicable.

h) Retention of Expert Assistance and Reimbursement by Applicant

The city may hire any consultant and/or expert necessary to assist the City in reviewing and evaluating the application, including the construction and modification of the site, once permitted. Such costs shall be paid by the applicant, as needed, and shall not exceed \$2,500 unless written notice is provided to the applicant in advance with the cost of hiring the consultant or expert.

Duke complies or will comply with the above, where applicable.

i) Permit Holder Responsibilities

- i) A person who holds a conditional use permit for wireless telecommunications facilities shall construct, operate, maintain, repair, provide for removal of, modify or restore the permitted wireless telecommunications facilities in strict compliance with all current applicable technical, safety and safety-related codes adopted by the City, state, or United States, including but not limited to the most recent editions of the National Electrical Safety Code and the National Electrical Code, as well as accepted and responsible workmanlike industry practices and recommended practices of the National Association of Tower Erectors. The codes referred to are codes that include but are not limited to construction, building, electrical, fire, safety, health, and land use codes. In the event of a conflict between or among any of the preceding the more stringent shall apply.
- ii) A holder of a conditional use permit granted under this chapter shall obtain, at its own expense, all permits and licenses required by applicable law, rule, regulation or code, and must maintain the same, in full force and effect, for as long as required by the City or other governmental entity or agency having jurisdiction over the applicant.
- iii) The holder of a conditional use permit shall notify the City of any intended modification of a wireless telecommunication facility and shall apply to the City to modify, relocate or rebuild a wireless telecommunications facility.

Duke complies or will comply with the above, where applicable.

- iv) The owner of the proposed new tower, and his or her successors in interest, shall negotiate in good faith concerning future requests for shared use of the new tower by

other telecommunications providers; and allow shared use of the new tower if another telecommunications provider agrees in writing to pay reasonable charges.

In part to secure the power grid, the proposed facility will only be used by Duke Energy and will not be available for lease/commercial purposes, therefore the above highlighted section iv) is Not Applicable.

- v) Failure to abide by the conditions outlined above may be grounds for revocation of the conditional use permit for the tower.

Duke complies or will comply with the above, where applicable.

j) Minimum Standards

- i) All utilities at the proposed site shall be installed underground and in compliance with all laws, ordinances, rules and regulations of the City, including specifically, but not limited to, the National Electrical Safety Code and the National Electrical Code, where appropriate.
- ii) The wireless telecommunications facility and all accessory or associated facilities shall maximize the use of building materials, colors and textures designed to blend with the structure to which it may be affixed and/or to harmonize with the natural surroundings.
- iii) At a telecommunications site, an access road, turn-around space, and parking shall be provided to assure adequate emergency and service access. Maximum use of existing roads, whether public or private, shall be made to the extent practicable. Road construction shall at all times minimize ground disturbance and the cutting of vegetation. Road grades shall closely follow natural contours to assure minimal visual disturbance and reduce soil erosion.

Duke complies or will comply with the above, where applicable.

k) Height

- i) The applicant shall submit documentation justifying the total height of any tower, facility and/or antenna and the basis therefore. Such documentation will be analyzed in the context of the justification of the height needed to provide service primarily and essentially within the City, to the extent practicable, unless good cause is shown.
- ii) The maximum permitted height of a new tower shall be 140 feet unless varied due to siting constraints or other site factors (i.e. limiting the number of new towers) as conditionally approved by Planning Commission.

As mentioned in the enclosed Project Detail Statement, the proposed facility is an important part of Duke Energy's day-to-day operations and is part of the fundamental physical infrastructure required to support Duke's SmartGrid, Dicks Creek communications, and other Operational Technologies.

The proposed facility enables Duke to make use of a Land Mobile Radio system, which Duke Energy's first responders use to help make repairs to critical infrastructure when restoring service to its customers. In its storm response plan, the Land Mobile Radio system provides a reliable way for its employees to communicate key messages to individuals and Duke team members during the power-restoration process. This state-of-the-art communication system supports improves customer restoration times, increased operational reliability, and provides greater safety to our employee that support your community.

The proposed facility will also improve communications to area substations and other power grid assets. The microwave system provides backhaul for Land Mobile Radio sites and connects the site to Duke Energy's private network.

The proposed facility is required to be 300' in height in order have space for all of Duke's communications above and to have appropriate clearance and line of sight to its surrounding substations for operational microwave communications, some of which may be 20 or more miles away from the proposed facility.

Duke respectfully requests the City waive the 140' height requirement in order for the proposed facility to be able to operate properly.

I) Appearance and Visibility

- i) All wireless telecommunications facilities shall contain a demonstration that the facility be sited so as to be the least visually intrusive reasonably possible and thereby have the least adverse visual effect on the environment and its character, on existing vegetation, and on the residences in the area of the wireless telecommunications facility.

This proposed facility is located in a remote area away from surrounding uses and is appropriate for the location of the proposed facility. Duke Energy owns the subject property which is currently being used as an existing telecommunication tower, a public utility gas plant, and storage yards for Duke Energy. The property is

immediately surrounded by undeveloped woodland. To the north sits the AK Steel property, to the east is a very large undeveloped area, to the south sits some roadside residential, the Trails of Todhunter neighborhood, and a large Duke Energy substation, and to the west is open space and an industrial park.

ii) As part of a conditional use permit application for a new or expanded wireless telecommunication tower, the applicant shall furnish a visual impact assessment, which shall include:

A. Photographic evidence of balloon test (See Section 1204.04(C)(8)g: Public Hearing and Notification Requirements.) showing representations of before and after views from key viewpoints both inside and outside of the City, as may be appropriate, including but not limited to state highways and other major roads; state and local parks; other public lands; preserves and historic sites normally open to the public; and from any other location where the site is visible to a large number of visitors, travelers or residents. Guidance will be provided, concerning the appropriate key sites at a pre-application meeting.

Due to the fact there is already an existing 300' tower located on this parcel that can give anyone looking in the direction of the proposed facility a more realistic impression of what visual impact the proposed facility is expected to make, Duke respectfully requests the City waive the above requirements noted immediately above as Sections ii) and A.

B. A visual depiction of the tower base, guy wires and accessory buildings from abutting and adjacent properties and streets as it relates to the need or appropriateness of screening.

See Exhibit C – Visual Depiction

- iii) Wireless telecommunications facilities shall not be artificially lighted or marked, except as required by law.
- iv) Towers shall be galvanized and painted with a rust-preventive paint of a non-contrasting gray or similar color to harmonize with the surroundings and shall be maintained in accordance with the requirements of this code.
- vi) Lights, beacons, or strobes of any kinds shall not be permitted on any tower, antenna, and equipment unless required by the Federal Aviation Administration.

Duke complies or will comply with the above, where applicable.

m) Security

All wireless telecommunications facilities and antennas shall be located, fenced or otherwise secured in a manner that prevents unauthorized access. Specifically:

- i) All antennas, towers and other supporting structures, including guy wires, shall be made inaccessible to individuals and constructed or shielded in such a manner that they cannot be climbed or collided with; and
- ii) Transmitters and telecommunications control points shall be installed in such a manner that they are readily accessible only to persons authorized to operate or service them.

Duke complies or will comply with the above, where applicable.

n) Signage

Wireless telecommunications facilities shall contain a sign no smaller than two square feet and no larger than four square feet located near the base of the tower in order to provide adequate notification to persons in the immediate area of the presence of an antenna that has transmission capabilities and shall contain the name of the owner and operator of the antenna, as well as emergency phone number. The sign shall be on the equipment shelter or cabinet of the applicant and be visible from the access point of the site and must identify the equipment owner of the shelter or cabinet. The sign shall not be lighted, unless lighting is required by applicable law, rule or regulation.

Duke complies or will comply with the above, where applicable.

o) Lot Size, Setbacks and Screening Requirements

- i) All proposed towers and any other proposed wireless telecommunications facility structures shall be set back from any property line a minimum of a distance equal to the height of the proposed tower or wireless telecommunications facility structure plus 10% of the height of the tower or structure.

Duke Energy's status as a public utility grants Duke an exemption from setback requirements for public utility structures similar to the proposed facility. If applicable, Duke requests the exemption be applied for the proposed facility.

- ii) Towers and any other wireless telecommunications facility structure shall be set back a minimum of 30 feet from any other non-related buildings situated on the same site. Any accessory structure shall be located so as to comply with the applicable minimum setback requirements set forth in the applicable zoning district for the property on which it is situated.

Duke Energy's status as a public utility grants Duke an exemption from setback requirements for public utility structures similar to the proposed facility. If applicable, Duke requests the exemption be applied for the proposed facility.

- iii) All equipment related to the operation of a tower and any other wireless telecommunications facility structure located on the ground shall be fully screened with a minimum six-foot high composite material privacy fence with continuous evergreen hedge vegetation, with a minimum initial tree height of five feet. All screening shall be located behind the specified setback lines. The tower or wireless telecommunications facility structure owner/operator is responsible for installing and maintaining said screening. Existing vegetation (trees and shrubs) shall be preserved to the maximum extent possible.

Due to the remote location as well as the fact the site is to be located inside of a Duke Energy storage yard, and because the property is immediately surrounded by undeveloped woodland See Exhibit B – Location Aerial, the proposed facility will naturally be effectively

screened from view. Duke respectfully requests the City waive the above requirements noted immediately above as Section iii).

p) Performance Security

The applicant and the owner of record of any proposed wireless telecommunications facilities property site shall, at their cost and expense, be jointly required to execute and file with the City a bond, or other form of security acceptable to the City as to type of security and the form and manner of execution, in an amount of at least \$75,000.00, and with such sureties as are deemed sufficient by the City to assure the faithful performance of the terms and conditions of this chapter and conditions of any conditional use permit issued pursuant to this chapter. The full amount of the bond or security shall remain in full force and effect throughout the term of the conditional use permit and/or until any necessary site restoration is completed to restore the site to a condition comparable to that which existed prior to the issuance of the original conditional use permit.

Duke complies or will comply with the above, where applicable.

q) Indemnification

- i) Any application for wireless telecommunication facilities that is proposed for city property pursuant to this section shall contain a provision with respect to indemnification. Such provision shall require the applicant, to the extent permitted by law, to at all times defend, indemnify, protect, save, hold harmless, and exempt the City and its officers, boards, employees, committee members, attorneys, agents, and consultants from any and all penalties, damages, costs, or charges arising out of any and all claims, suits, demands, causes of action, or award of damages, whether compensatory or punitive, or expenses arising therefrom, either at law or in equity, which might arise out of, or are caused by the placement, construction, erection, modification, location, products performance, use, operation, maintenance, repair, installation, replacement, removal, or restoration of said facility, excepting, however, any portion of such claims, suits, demands, causes of action or award of damages as may be attributable to the negligent or intentional acts or omissions of the City, or its servants or agents. With respect to the penalties, damages or charges referenced herein, reasonable attorneys' fees, consultants' fees, and expert witness fees are included in those costs that are recoverable by the City.
- ii) Notwithstanding the requirements noted in division (i) of this section, an indemnification provision will not be required in those instances where the City itself applies for and secures a conditional use permit for wireless telecommunications facilities.

Duke complies or will comply with the above, where applicable.

r) Removal

- i) Under the following circumstances, the City may determine that the health, safety, and welfare interests of the City warrant and require the removal of wireless telecommunications facilities:
 - A. Wireless telecommunications facilities with a permit have been abandoned (i.e. not used as wireless telecommunications facilities) for a period exceeding 90 consecutive days or a total of 180 days in any 365-day period, except for periods caused by force majeure or Acts of God, in which case, repair or removal shall be completed within 90 days.
 - B. Permitted wireless telecommunications facilities fall into such a state of disrepair that it creates a health or safety hazard.

- C. Wireless telecommunications facilities have been located, constructed, or modified without first obtaining, or in a manner not authorized by, the required conditional use permit, or any other necessary authorization.
- ii) If the City makes such a determination as noted in division (i) of this section, then the City shall notify the holder of the conditional use permit for the wireless telecommunications facilities promptly that said wireless telecommunications facilities are to be removed, the City may approve an interim temporary use agreement/permit, such as to enable the sale of the wireless telecommunications facilities.
 - iii) The holder of the conditional use permit, or its successors or assigns, shall dismantle and remove such wireless telecommunications facilities, and all associated structures and facilities, from the site and restore the site to as close to its original condition as is possible, such restoration being limited only by physical or commercial impracticability, within 90 days of receipt of written notice from the City. However, if the owner of the property upon which the wireless telecommunications facilities are located wishes to retain any access roadway to the wireless telecommunications facilities, the owner may do so with the approval of the City.
 - iv) If wireless telecommunications facilities are not removed or substantial progress has not been made to remove the wireless telecommunications facilities within 90 days after the permit holder has received notice, then the City may order officials or representatives of the City to remove the wireless telecommunications facilities at the sole expense of the owner or conditional use permit holder.
 - v) If the City mandates the removal of a wireless telecommunication facility and the owner of the facility does not claim and remove it from the site to a lawful location within 10 days, then the City may take steps to declare the wireless telecommunications facilities abandoned, and sell them and their components.
 - vi) Notwithstanding anything in this section to the contrary, the City may approve a temporary use permit/agreement for the wireless telecommunications facilities, for no more than 90 days, during which time a suitable plan for removal, conversion, or re-location of the affected wireless telecommunications facilities shall be developed by the holder of the conditional use permit, subject to the approval of the City, and an agreement to such plan shall be executed by the holder of the conditional use permit and the City. If such a plan is not developed, approved and executed within the 90-day time period, then the City may take possession of and dispose of the affected wireless telecommunications facilities in the manner provided in this section.

Duke complies or will comply with the above, where applicable.

s) Minor Modification

Any repair, antenna modification, height modification that does not exceed the maximum permitted, ground equipment additions within the screened area as required in [1204.04\(C\)\(8\)o\)iii](#)), and minor structure additions may be approved by the Code Enforcement Officer and shall be required to submit an application for zoning permit.

Duke complies or will comply with the above, where applicable.

1203.07 Conditional Use Permit

(D) REVIEW CRITERIA

In reviewing a conditional use application, the Planning Commission shall consider whether there is adequate evidence that the proposed conditionally permitted use is consistent with the following standards:

- (1) The conditional use is consistent with the spirit, purpose and intent of the comprehensive plan, will not substantially or permanently injure the appropriate use of neighboring property and will serve the public convenience and welfare.

The comprehensive plan identifies Duke Energy as the electric provider to the City of Monroe. Approval of the proposed facility will allow Duke Energy to better service the City of Monroe and its residents, businesses and public facilities by giving Duke the ability to improve its internal communications, especially in the event of a power outage or emergency and by automating some functions of the power grid, which will help improve electric power delivery.

- (2) The proposed use will be harmonious with the existing or intended character of the general vicinity, and that such use will not change the essential character of the same area.

The proposed facility is in harmony with the existing public utility character of the area and will not change the essential character of the same area.

- (3) The proposed conditional use is to be located in a district wherein such use may be permitted, subject to the requirements of this chapter.

The proposed use is permitted within the district.

- (4) The use complies with all use-specific provisions established in Section [1204.04 Use-Specific Standards](#).

The proposed use meets or exceeds the established standards.

- (5) The proposed use shall be adequately served by essential public facilities and services such as, but not limited to, roads, public safety forces, storm water facilities, water, sanitary sewer, refuse, and schools or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately any such services.

The proposed use is adequately served.

- (6) In the interest of public safety, as a matter of policy, all points of ingress/egress shall be located as far as possible from the intersection of two or more streets.

The proposed use utilizes existing ingress/egress.

- (7) The proposed use will comply with all applicable development standards, except as specifically altered by the Planning Commission in the approved conditional use.

The proposed use will comply with all applicable development standards, except as specifically altered by the Planning Commission in the approved conditional use.

- (8) The use will not be hazardous to or have a negative impact on existing or future surrounding uses.

The proposed use will not be hazardous to or have a negative impact on existing or future surrounding uses.

- (9) The proposed use will not be detrimental to the economic welfare of the community.

The proposed use will not be detrimental to the economic welfare of the community.

- (10) The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operations, including, but not limited to, hours of operation, that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, odor or other characteristic not comparable to the uses permitted in the base zoning district.

The proposed use is unmanned, and does not produce any excessive traffic, noise, smoke, fumes, glare, odor or other characteristic not comparable to the uses permitted in the base zoning district. Trips to the site are very limited to typically 1-2 a month, unless an outage or emergency maintenance event occurs.

- (11) The proposed use will not be detrimental to property values in the immediate vicinity.

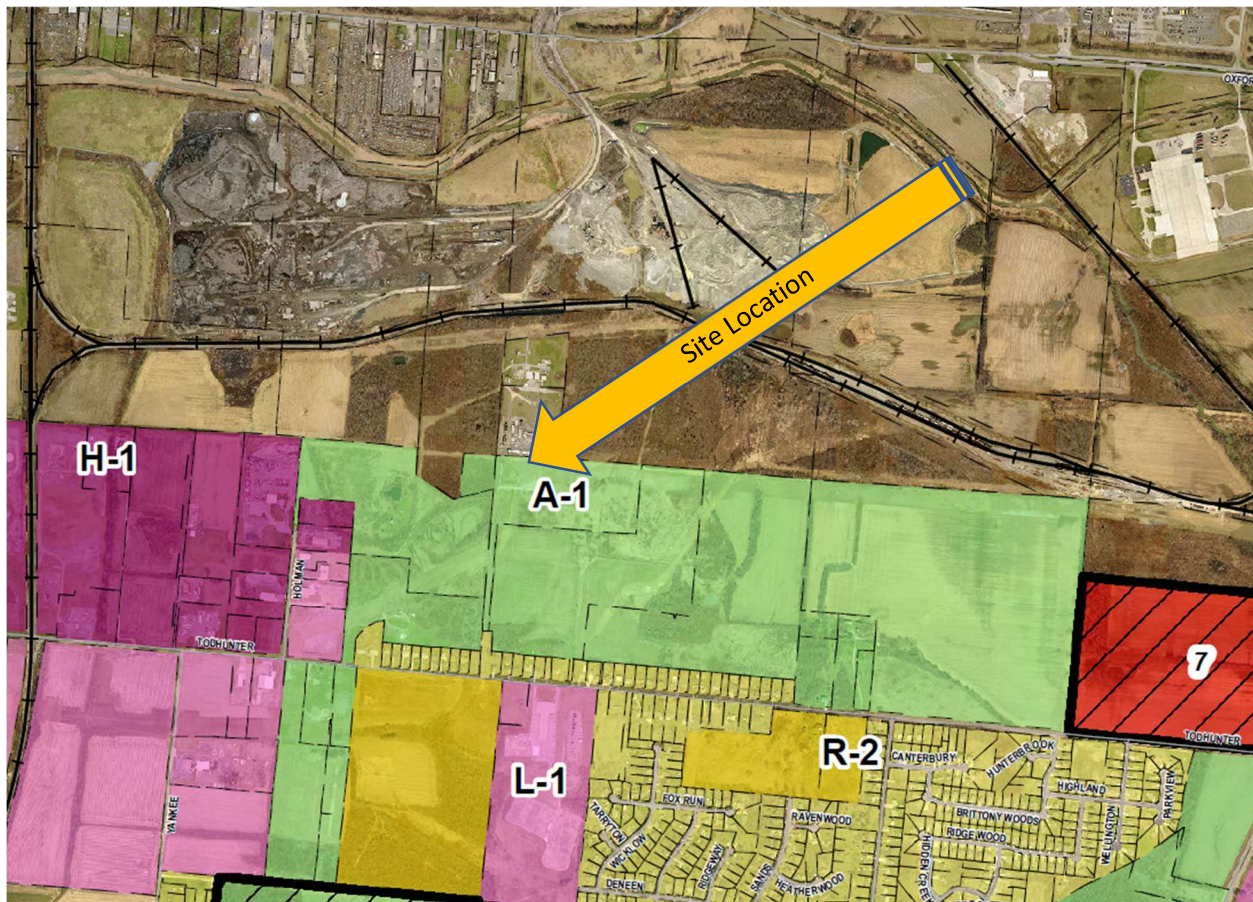
The proposed use will not be detrimental to property values in the immediate vicinity.

- (12) The proposed use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The proposed use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

On behalf of Duke Energy, we respectfully request zoning approval for the Public Utility Communication Structure Facility as proposed.

Exhibit A – Zoning Map



Zoning Districts

 A-1 Large Scale Agricultural	 C-2 General Commercial
 A-2 Small Scale Agricultural	 C-3 Downtown Commercial
 R-1 Single-Family Residential Infill	 C-4 Gateway Commercial
 R-2 Single-Family Residential	 L-1 Light Industrial
 R-3 Two-Family Residential	 H-1 Heavy Industrial
 R-4 Multi-Family Residential	 PUD-Planned Unit Development
 B-P Business Park	 WPB-O Wellhead Protection Buffer Overlay
 C-1 Highway Commercial	 DWP-O Delineated Wellhead Protection

See Exhibit B – Location Aerial

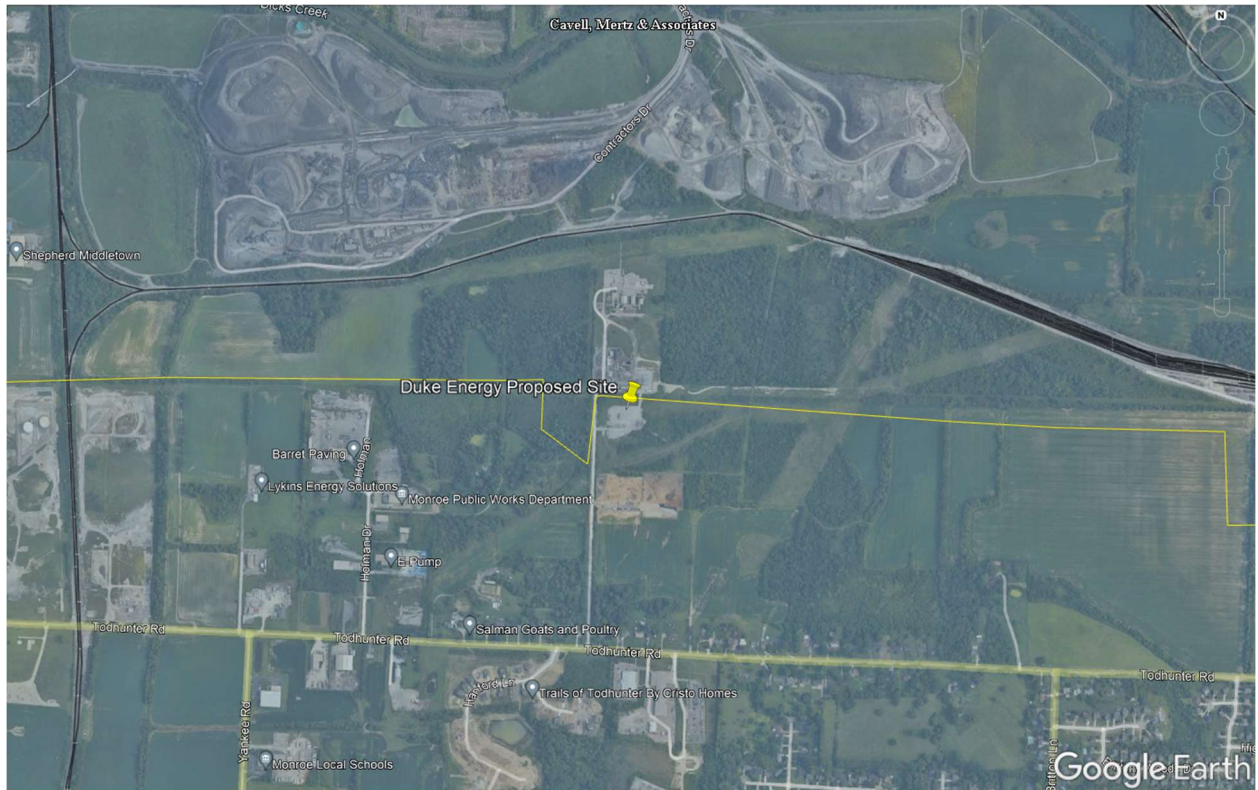


Exhibit C – Visual Depiction

Looking North from 599 Todhunter Rd



Looking East from 980 Holman Dr



Looking North from Entrance to Trails of Todhunter



Photo Locations

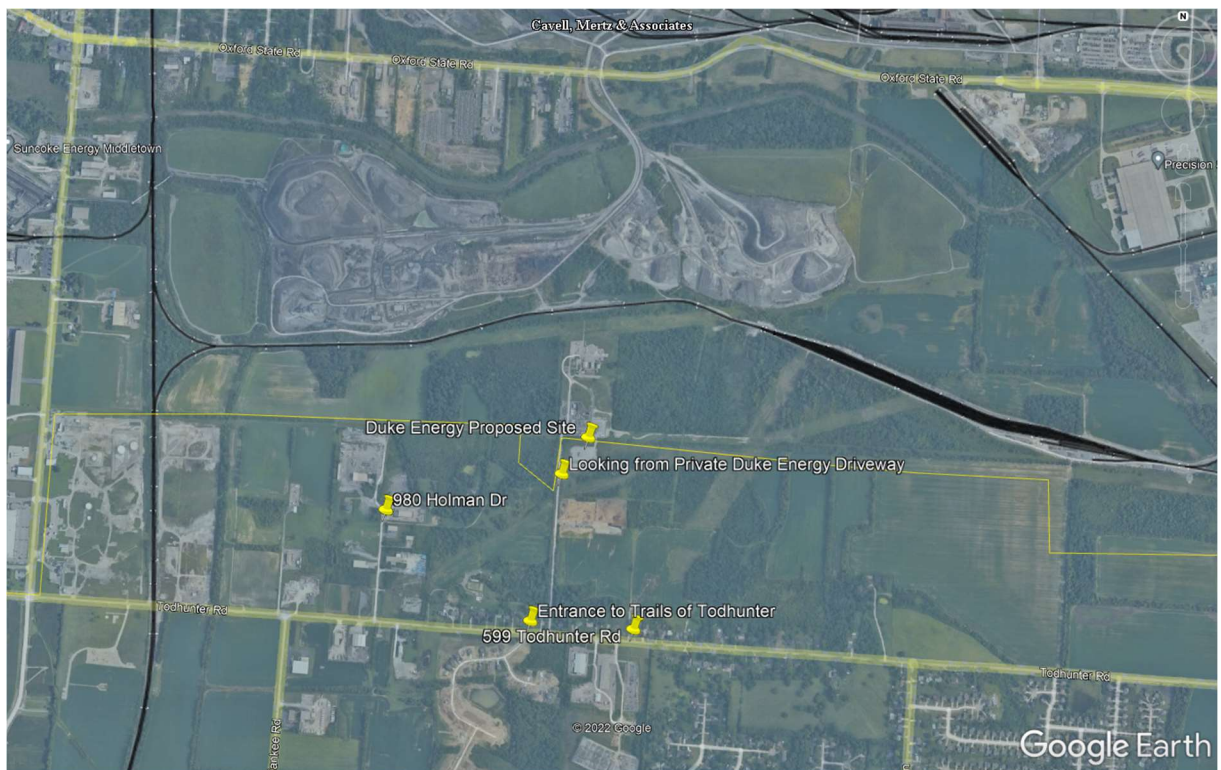


Exhibit D – FAA Determination of No Hazard



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2021-AGL-16629-OE

Issued Date: 07/08/2021

Kevin Hursey
Duke Energy Business Services, LLC
401 South College Street
Charlotte, NC 28202

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Dicks Creek
Location:	Monroe, OH
Latitude:	39-27-50.69N NAD 83
Longitude:	84-22-38.20W
Heights:	780 feet site elevation (SE) 315 feet above ground level (AGL) 1095 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, a med-dual system-Chapters 4,8(M-Dual),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 01/08/2023 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within

6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact Luke Wray, at (817) 222-4559, or luke.w.wray@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2021-AGL-16629-OE.

Signature Control No: 486197088-487404471
Steve Phillips
Manager, Obstruction Evaluation Group

(DNE)

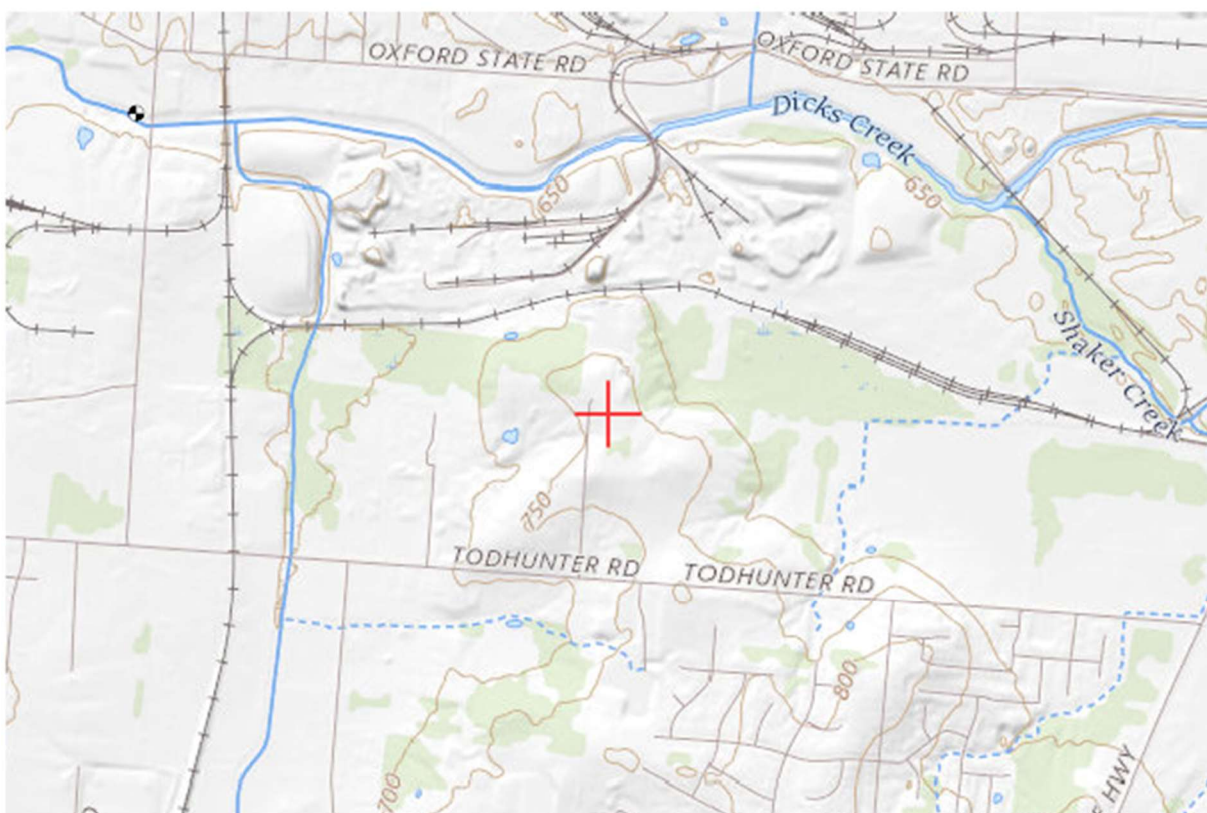
Attachment(s)
Frequency Data
Map(s)

cc: FCC

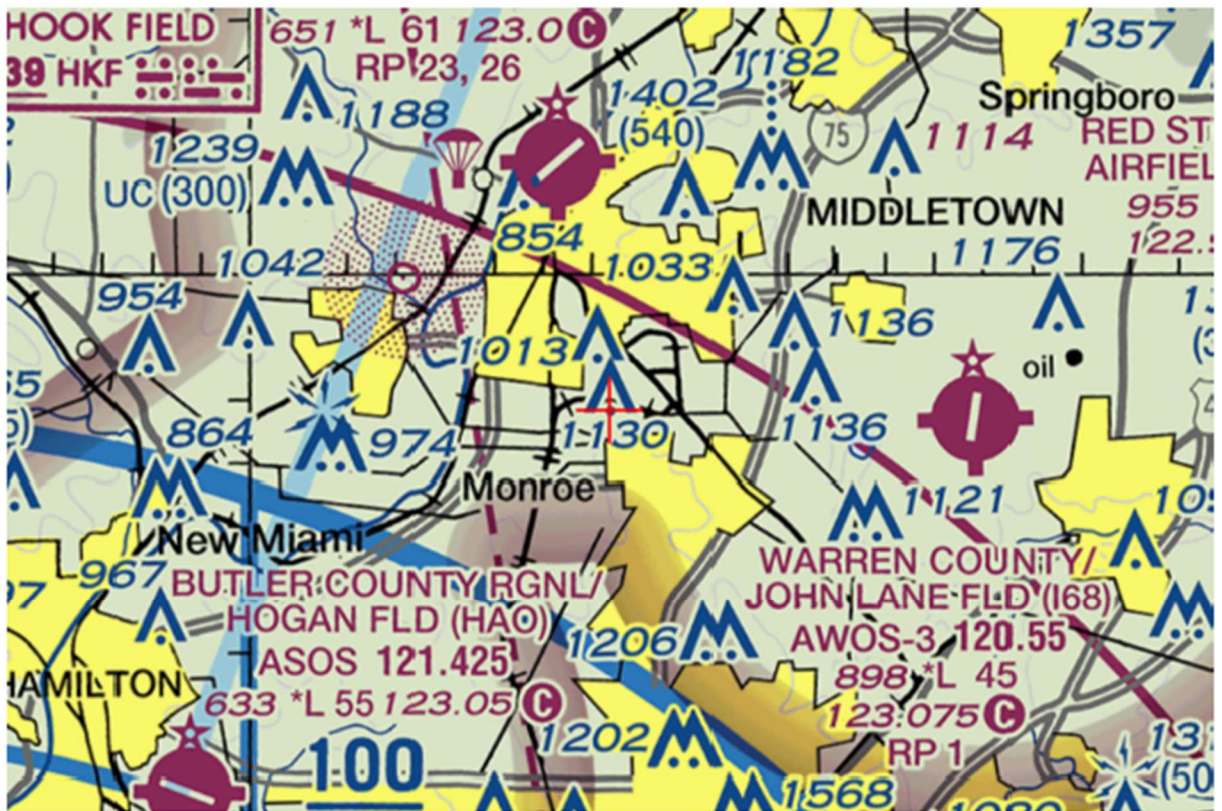
Frequency Data for ASN 2021-AGL-16629-OE

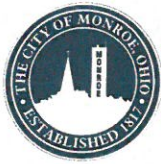
LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W

TOPO Map for ASN 2021-AGL-16629-OE



Sectional Map for ASN 2021-AGL-16629-OE





Application for Site Plan Review

Monroe Development Department
233 South Main Street, Monroe, Ohio 45050
Phone: 513-539-7374
www.monroeohio.org

For Staff Use Only

Submittal Date:

Date Application Determined Complete:

Date of Planning Commission Review:

Fee Paid:

Staff Initials:

Application/Case Number:

Site Plan Review Information

1. The site plan review procedure and applicability requirements are established in Section 1203.06 of the Monroe Planning and Zoning Code.
2. Prior to submitting this application, you are required to meet with staff from the Development Department for a pre-application conference. Please contact the department to schedule the conference.
3. The Monroe Planning Commission reviews all site plan review applications unless specifically exempted in Section 1203.06(B)(3).
4. Approval of a site plan does not constitute approval to begin construction. Applicants with approved site plans are required to submit all applicable zoning permit and building permit applications.
5. Unless an alternative timeline is approved by the Planning Commission, construction related to the approved site plan must begin within one year of the site plan approval or the approval shall be voided. See Section 1203.06(H) for additional information.

Basic Project and Site Information

Project Address: Orton Drive

County: ☐ Butler ☒ Warren

Total Lot Area: 1.6714 Acres

County Tax Parcel ID: 11052010021

Project/Development Name: Warren County Dispensary

Existing Zoning District: Commercial

Project Type: ☒ New Building ☐ Expansion of Existing Structure
☐ Addition to Site (e.g., parking, landscaping, lighting, etc.)

Applicant Information

Applicant Name: Cincinnati Commercial Contracting

Contact Person: Christian Stone

Contact Address: 4779 Red Bank Expressway, Cincinnati, OH 45227

Contact Phone Number: 513-561-6633 x107

Contact Fax Number:

Contact E-Mail: cstone@cincigroup.com

Property Owner Name: 17AC EAST OF SENATE LLC

The applicant may attach a separate sheet of a paper with contact information for additional people, if necessary (e.g., additional owners, registered engineer, landscape architect, etc.). The same contact information shall be provided for each contact name.

Project Address or Tax Parcel ID: 11052010021

Additional Project Information

1) Please describe, in detail, any existing uses and/or buildings on the project site.

Vacant Lot

2) Please describe, in detail, the proposed uses and the proposed development. Provide a summary of the square footage related to each use and/or the total number of proposed dwelling units.

New Dispensary Facility proposed.

3) What are the anticipated start and completion dates for the project?

Start Date: 8/15/2022

Completion Date: 2/15/2023

4) What is the estimated value (in dollars) of the proposed property improvements?

1.8 Million



5) Check any relevant procedural reviews applicable to this project:

☐ Conditional Use ☐ Variance ☐ Administrative Waiver ☐ Alternative Equivalent Compliance

If you checked any of the above procedures, please provide specific details on what you are seeking to have approved through the applicable review procedure? Provide the application/case numbers for any related applications.

Project Address or Tax Parcel ID: 11052010021

Additional Project Information Continued

6) Does the project require any addition permits, licenses, or reviews by outside agencies (e.g., Butler or Warren County, ODNR, OEPA, etc.). ☐ Yes ☒ No If yes, please describe below.

Certification and Signatures

Applicant Signature - I certify that, to the best of my knowledge, the information contained in this form and within any attachments is correct and truthful. I understand that knowingly falsifying this information may be grounds for the denial or revoking of this application and any subsequent zoning permit or other review applications.

Print Name: Christian Stone

Signature:

Christian Stone

Date:

6/21/2022

Property Owner Signature - If the property owner is not the named applicant on this form, the property owner shall sign the form below acknowledging that the applicant is an authorized agent of the property owner as it relates to proposed project. If the site plan review is for multiple properties, a signature from each property owner is required.

Print Name: Christian Stone

Signature:

Christian Stone

Date:

6/21/2022

Note: A letter signed by the property owner, authorizing the applicant to act on their behalf may be submitted in lieu of the property owner's signature on this form.

Submittal Requirement Checklist

Submittals shall include 8 copies (minimum of 24" x 36") and 8 copies (minimum of 11" x 17") Additional copies may be required based on project specifics. Final mylars and digital Files will be required after approval.

Digital Submittal Requirements

☐	All document applications shall be submitted in an electronic format compatible (Adobe PDF) with the city's computer systems.
☐	All site plan materials, in map format, shall be submitted in a format compatible with the city's Geographic Information Systems (i.e. shapfile, geodatabase, or dwg) and shall be projected into NAD 1983 Ohio State Plane South - FIPS 3402 coordinate system using US Survey foot units.

General Information

☐	Site Plan Review Application form
☐	Application fee
☐	Copies of the plans and maps established below at a scale no smaller than 1 inch = 100 feet, on full-sized copies unless on 11" x 17" or otherwise noted
☐	Any additional information determined to be necessary by the Development Department

Vicinity Map (Scale may be smaller than 1" = 100')

☐	Date, north arrow, scale, and a legend for all symbols
☐	Project location
☐	All surrounding properties, streets, and corporation limits within a minimum of 500' of the outer boundaries of the project site

Existing Conditions Map

☐	All existing zoning district classifications on the site and adjacent to the site
☐	Parcel boundaries of the site and all parcels adjacent to the site
☐	Names of all subdivisions and land owners owning lots adjacent to the site
☐	Existing streets within 200' of site with names and centerlines
☐	Existing watercourses and bodies of water including any applicable flood hazard areas
☐	Planned road network (including street names if available) within 500' of site (if different from existing streets)
☐	Existing land uses on the site and adjacent parcels (including across any streets)
☐	Railroad infrastructure and rights-of-way
☐	All existing easements (including drainage) with dimensions and designation as to type
☐	Location of existing curb cuts, private streets, parking and loading areas, pedestrian walks, lighting facilities, and outside trash storage facilities

Site Layout Plan

☐	Lot numbers and sizes
☐	Square footage (gross) of existing buildings to remain and proposed buildings
☐	Required front, side, and rear yard width/setbacks
☐	All existing and proposed easements, including dimensions and type (e.g., drainage, access, public utility, etc.)
☐	Location, width, and classification of all existing and proposed streets in the development
☐	Location of any outdoor storage area(s) that require screening
☐	Locations of all proposed external street connections (including street stubs)
☐	Location, width, and materials of all sidewalks, trails, and paths (including connections to the public sidewalk system and adjacent developments)

Submittal Requirement Checklist

Submittals shall include 8 copies (minimum of 24" x 36") and 8 copies (minimum of 11" x 17") Additional copies may be required based on project specifics. Final mylars and digital Files will be required after approval.

Parking Plan and Traffic Control Plan

☐	Traffic impact study, if required
☐	Notation of total number of parking spaces, loading spaces, and stacking spaces required by ordinance
☐	Total number, dimensions, and location of parking spaces proposed off-street, on-street, and within parking structures, including information on handicapped parking spaces
☐	Total number of parking spaces to be provided through approval of shadow parking, off-site parking, or shared parking alternatives
☐	Number, location, and size of loading spaces provided
☐	Number and location of stacking spaces provided
☐	Location, arrangement, and dimensions of vehicular entrances, exits and parking lot aisles
☐	Location of pedestrian walkways and crossings
☐	Number and location of pervious parking spaces, if provided
☐	Proposed traffic control devices (in accordance with the Manual on Uniform Traffic Control Devices)
☐	Signing and striping plan
☐	Fire lanes and areas of parking prohibition
☐	Location of all sight triangles

Stormwater Management Sheet and Drainage Plan

☐	Drainage basin(s) where the site is located and drainage patterns
☐	Existing and proposed locations, types, and sizes of drainage structures and calculations demonstrating how post-development runoff will not exceed pre-development runoff
☐	Erosion and siltation control measures and devices with narrative, including location of outfall for stormwater to proper catch basin (indicated sizes and slopes of existing pipes)
☐	Drainage computations from proposed development to proper pickup point
☐	All proposed elevations and slopes for grading
☐	Description of maintenance procedures for stormwater management devices

Utilities Plan (May be included on Site Layout Plan)

☐	Existing and proposed locations, types, and sizes of all water, sanitary sewer, storm sewer, gas, telephone, power and other utility lines and meters, easements and any other utilities affected by the site (includes above ground utilities and grades and computations where appropriate)
☐	Notation that all new utilities (including cable television, electrical, natural gas, sewer, telephone, and water lines) shall be placed underground
☐	Locations where existing overhead utilities will be relocated underground (if applicable)
☐	Identification of any connections, above or below ground, that are located within the City of Monroe's right-of-way

Landscaping Plan

☐	Exact locations, dimensions, and counts of existing and proposed landscape materials provided within and around vehicular use areas, including the size of landscaping islands
☐	Exact locations and counts of existing and proposed landscape materials provided within any required buffer areas including the type of buffer used, the buffer width provided, the proposed configuration of trees, shrubs, and screening features
☐	Location, size, and species of all existing and proposed street trees
☐	The total number of trees and shrubs provided, and the total number of different species planted
☐	Notations for any existing landscape within sight triangles indicating maximum shrub height or tree canopy height

Submittal Requirement Checklist

Submittals shall include 8 copies (minimum of 24" x 36") and 8 copies (minimum of 11" x 17") Additional copies may be required based on project specifics. Final mylars and digital Files will be required after approval.

☐	Location and amount of credit towards landscape material requirements provided by existing landscaping
☐	Demarcation of existing trees to be removed
☐	Location and amount of all open space set-aside areas by development phase
☐	Details of all open space improvements and common features (e.g., fountains, benches, street furnishings, play equipment, etc.)

Architectural and Building Elevation Plans

☐	Color elevations for each building side facing a public street, alley, public open space, or public building, illustrating compliance with the architectural standards of the applicable zoning district
☐	Dimensions, in feet, of all façade recesses or similar fenestration
☐	Preliminary floor plan for principal buildings
☐	Height of all buildings in feet, including number of building stories
☐	Accessory structure size(s), if applicable
☐	Accessory structure height(s), if applicable
☐	Description of the type of material(s) used on each façade elevation
☐	Illustrative elevation of all fencing, walls, and retaining walls visible from a street, open space, or public building that will be used for buffering or screening of adjacent residential uses, dumpsters, service structures, utilities, parking areas, loading areas, and similar activity areas

Lighting Plan

☐	Location, type, and height of all lighting fixtures (including street lights)
☐	Details on colors and materials for all lighting fixtures
☐	Grid or photometric diagram showing maximum illumination values at the lot line, and uniformity ratios within parking lots, measured in footcandles

Signage Plan

☐	All sign areas, dimensions and height (including shape)
☐	Position of all signs in relation to the use being advertised (may be identified on the site layout plan)
☐	Location and style of all address numbers, building numbers, or allowable building identifications
☐	Plan of illumination for the sign including information on message timing for electronic message centers
☐	Landscaping around base of sign (may be identified on the landscaping plan)



Drainage Calculations

June 20, 2022

For: BROOKS-SR63 DISPENSARY
BROOKS RD.
CITY OF MONROE, WARREN CO., OHIO

By: Evans Engineering
4240 Airport Rd., Suite 211
Cincinnati, Ohio 45226

Project Narrative

This project consists of constructing a commercial building on a vacant lot located on the southwest corner of Orton Drive and Brooks Drive in Monroe, Ohio. Storm water detention will be provided by underground Stormtech chambers. We have modeled our storm water design on current City of Monroe Storm Water Regulations.

Existing Conditions

The site is located at the southwest corner of Orton Drive and Brooks Drive. It is mostly an open grass area draining east into the storm sewer in Brooks Drive. The time of concentration for the existing conditions was estimated to be 10 minutes. The predeveloped runoff coefficient used in the calculations was 0.3.

Proposed Drainage

Storm water detention will be provided for the proposed building and paved areas, using an underground Stormtech system. The drainage area to the detention system will be approximately 0.785 acres. Grass areas around the perimeter of the site will remain as direct runoff. This development will result in 75% imperviousness of the drainage area tributary to the proposed detention system. The basin will outlet through a control structure located on the south end of the system.

The required storage volume was determined by finding the critical storm and then using Hydraflow to model the detention system. A weir wall with orifices will be built into the control structure. The orifices are sized such that the release rate due to the critical storm event in the post-developed condition is restricted to the runoff rate due to a 1-year storm in the pre-developed conditions. Less frequent, more intense storms will be restricted to the pre-developed runoff rate due to one design storm lower (i.e. $Q_{50\text{yr-post}} < Q_{25\text{yr-pre}}$). In this case the critical storm was found to be the 25-year storm.

The pre-developed time of concentration of 10 minutes was used again for the post-developed condition in the Hydraflow model so that similar storms are being compared. The post-developed runoff coefficient was calculated to be 0.75. Through an iterative process of sizing the detention system and controlling orifice to meet the requirements, the required storage volume was found to be 3391 ft³ during the 100-year storm event. The Stormtech system shown provides 4193 ft³ of storage. Hydrographs are attached showing that all design storms up to the critical storm are restricted to the peak discharge rate of the 1-year storm in predeveloped conditions.

We have designed the erosion and sediment control to minimize sediment loss during construction by using silt fencing, inlet controls, and temporary sediment control. We have included notes to discuss stabilization of ground. Upon completion and stabilization there will be grass and landscaping to be placed around the perimeter of the property. Upon completion, this project should have a good stable buffer around the property which should help water quality and storm water management.

Critical Storm Determination Using SCS Method for Runoff Volume Due to 24-hour Storm

$$Q = (P - 0.2S)^2 / (P + 0.8S)$$

$$S = 1000 / CN - 10$$

Drainage Area (ft ²)	34187
P _{1yr-24hr} (in.)	2.5
CN _{pre}	80
CN _{post}	93.5

CN_{pre} for open space, good condition (grass cover > 75%), Soil Group D

CN_{post} = weighted average of 80 and 98 with 75% imperviousness

$$S_{pre} = 2.500$$

$$S_{post} = 0.695$$

$$CN_{post} = 98 * 0.75 + 80 * 0.25 = 93.5$$

$$Q_{pre} \text{ (in.)} = 0.89$$

$$Q_{post} \text{ (in.)} = 1.82$$

$$V_{pre} \text{ (ft}^3\text{)} = 2532$$

$$V_{post} \text{ (ft}^3\text{)} = 5196$$

Percent Volume Increase 105

Critical Storm (yr) 25

% Increase in Runoff Volume from a 1-yr, 24 hour Storm		Storm Frequency (Years)
Equal or Greater than (percent)	Less Than (percent)	
-	10	1
10	20	2
20	50	5
50	100	10
100	250	25
250	500	50
500	-	100

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	



DISPENSARY - WARREN

MONROE, OH

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

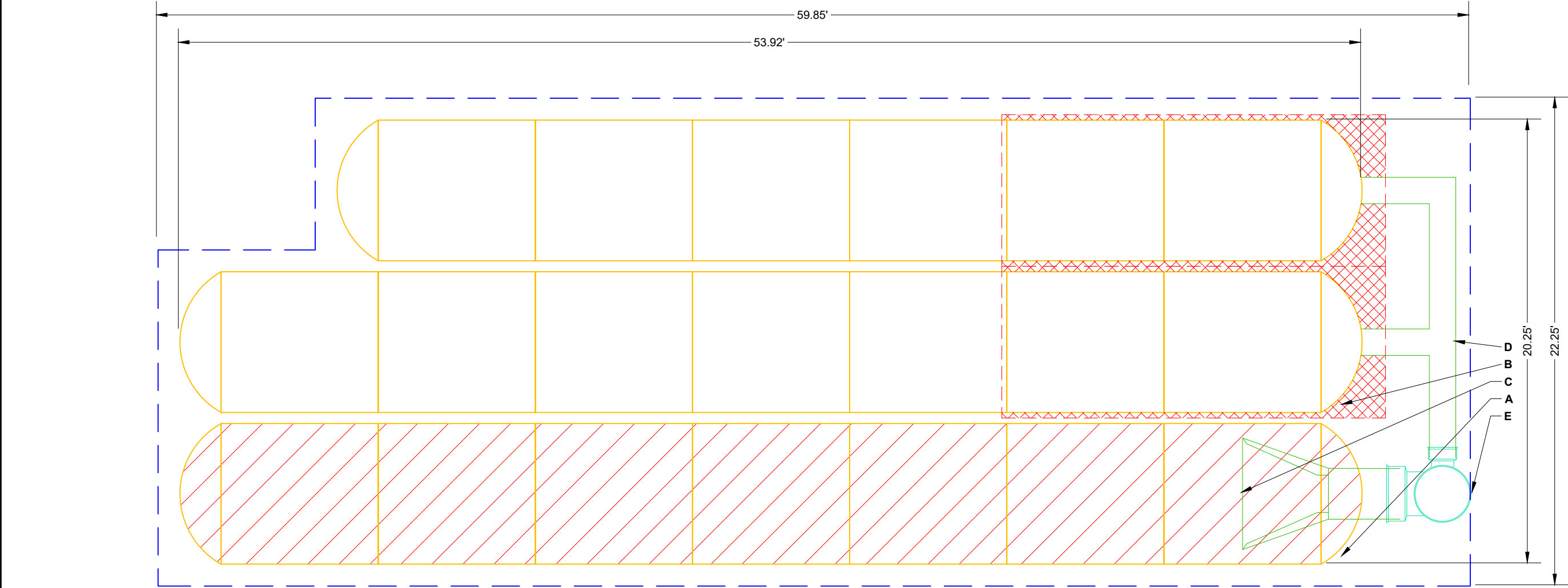
NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT		PROPOSED ELEVATIONS		*INVERT ABOVE BASE OF CHAMBER				
				PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
20	STORMTECH MC-3500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	674.00					
6	STORMTECH MC-3500 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	668.00	PREFABRICATED END CAP	A	24" BOTTOM CORED END CAP, PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	667.50	PREFABRICATED END CAP	B	12" TOP CORED END CAP, PART#: MC3500IEPP12T / TYP OF ALL 12" TOP CONNECTIONS	26.36"	
9	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	667.50	FLAMP	C	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MC350024RAMP		
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	667.50	MANIFOLD	D	12" x 12" TOP MANIFOLD, ADS N-12	26.36"	
4194	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	667.00	NYLOPLAST (INLET W/ ISO PLUS ROW)	E	30" DIAMETER (24.00" SUMP MIN)		5.0 CFS IN
		TOP OF MC-3500 CHAMBER:	666.00					
		12" x 12" TOP MANIFOLD INVERT:	664.45					
		24" ISOLATOR ROW PLUS INVERT:	662.42					
1282	SYSTEM AREA (SF)	BOTTOM OF MC-3500 CHAMBER:	662.25					
164.2	SYSTEM PERIMETER (ft)	BOTTOM OF STONE:	661.50					



- 

ISOLATOR ROW PLUS
(SEE DETAIL)
- 

PLACE MINIMUM 17.50' OF ADSPLUS175 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

— — — — — BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

DISPENSARY - WARREN

MONROE, OH

DATE:

DRAWN: KZ

PROJECT #:

CHECKED: N/A

StormTech®

Chamber System

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1-800-733-7473

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SHEET

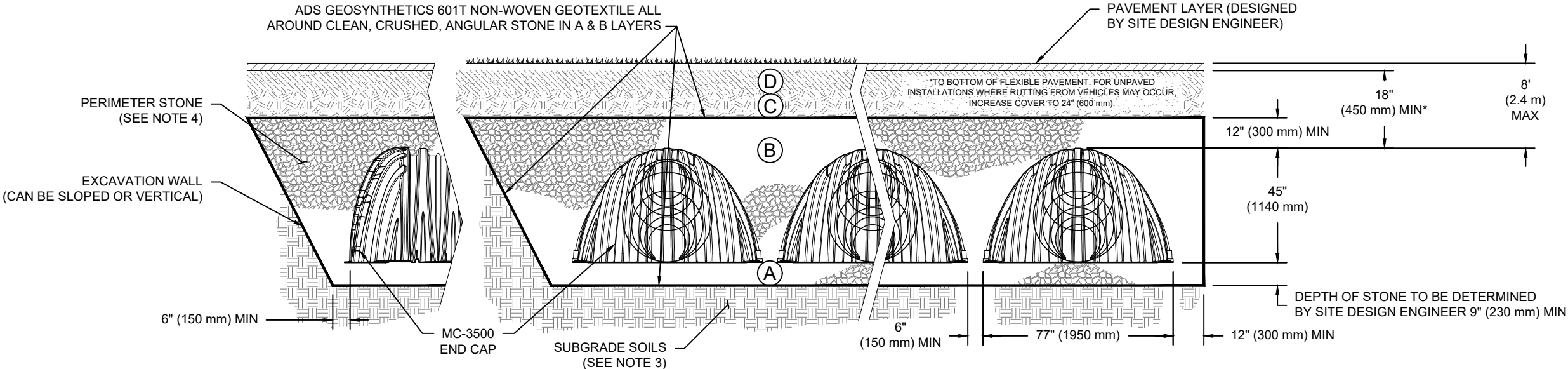
2 OF 6

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ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT³%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

DISPENSARY - WARREN

MONROE, OH

DRAWN: KZ

CHECKED: N/A

DATE:

PROJECT #:

DESCRIPTION

CHK

DRW

DATE

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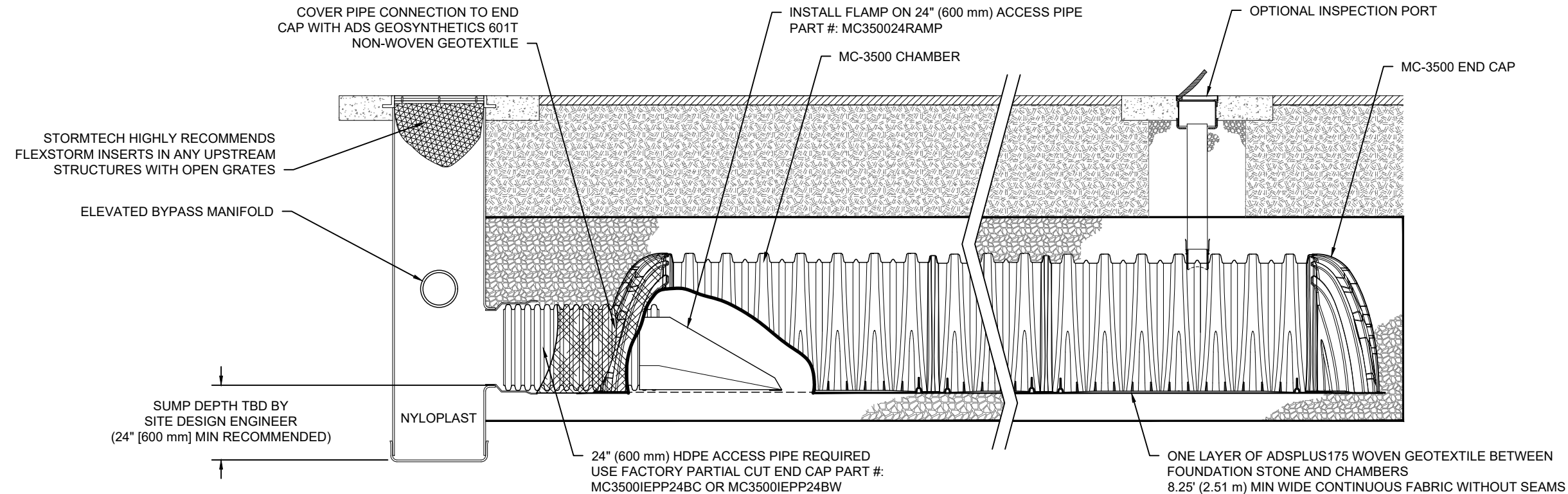
**ADS**

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SHEET

3 OF 6

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

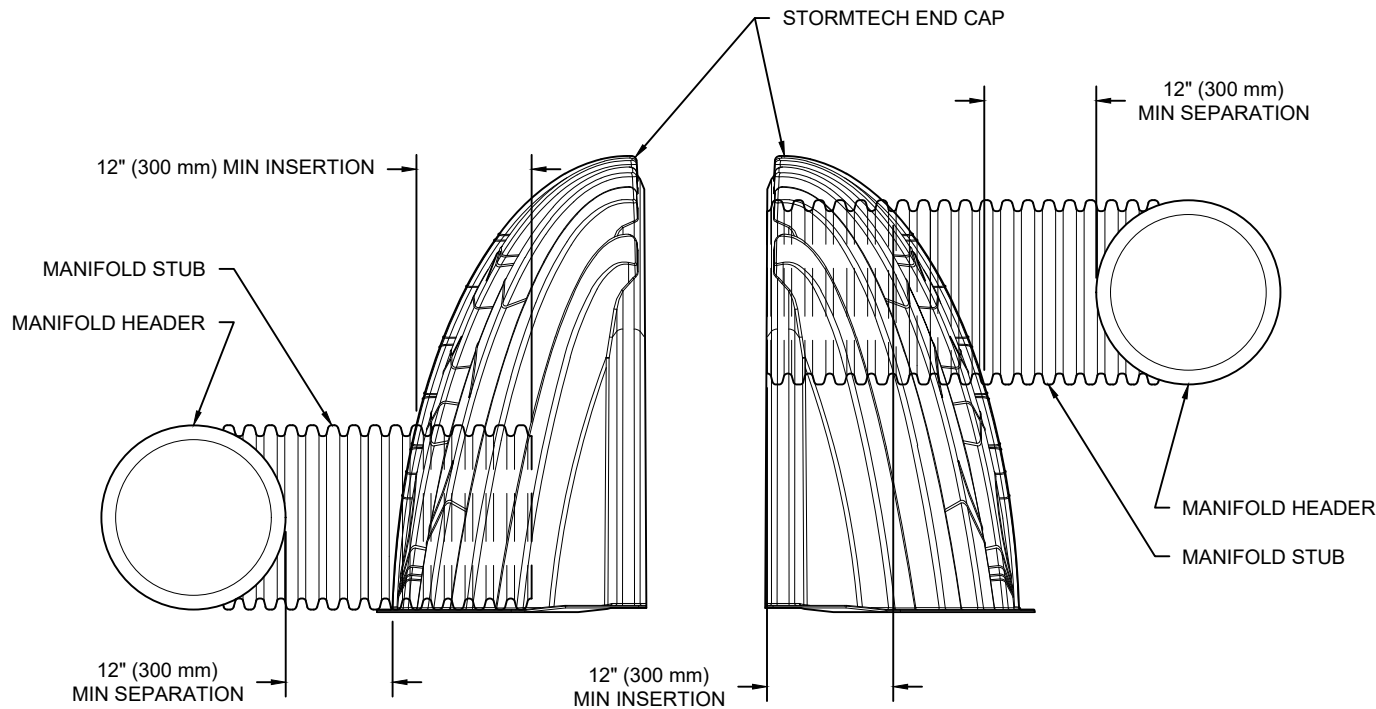
- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR PLUS ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

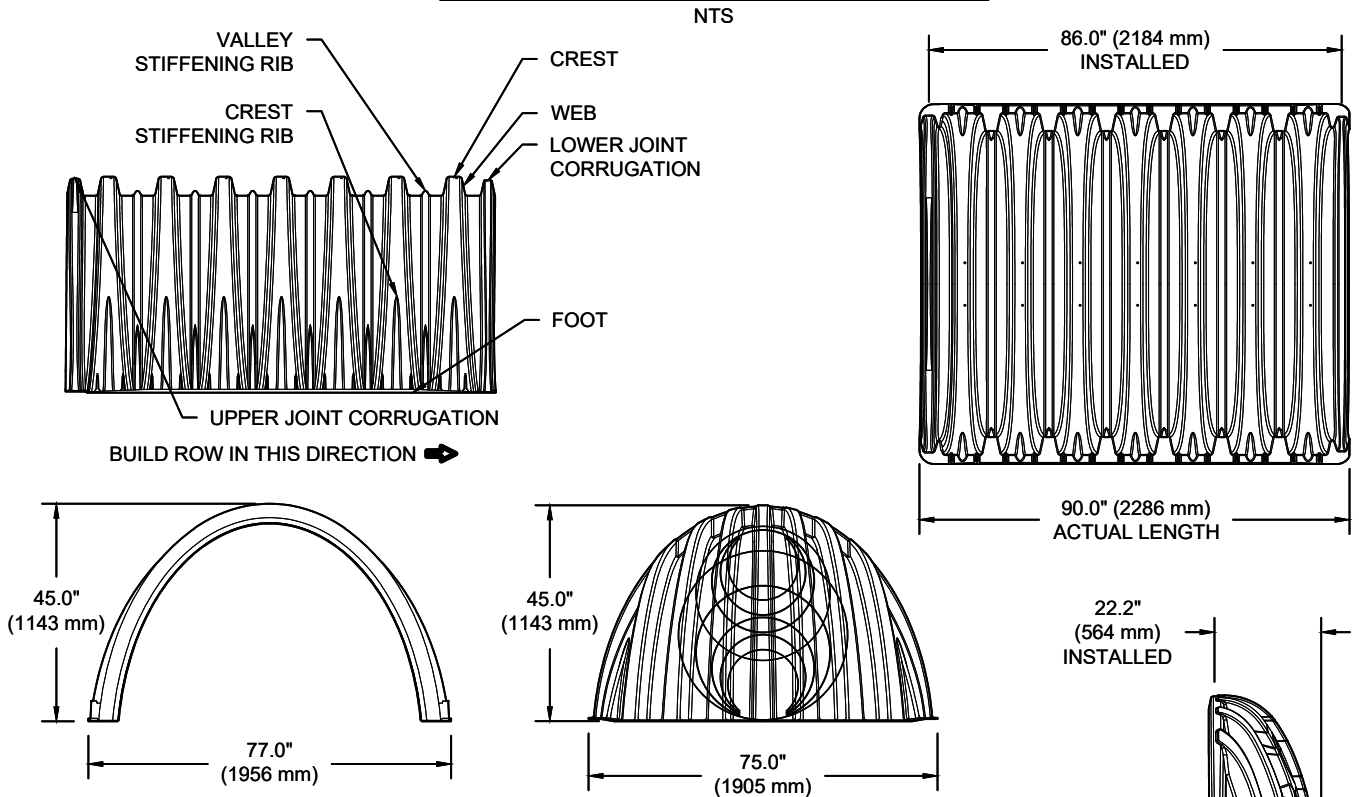
4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473 ADS	DISPENSARY - WARREN				MONROE, OH	
					DATE:	DRAWN: KZ
					PROJECT #:	CHECKED: N/A
					DESCRIPTION	
StormTech® Chamber System 888-892-2694 WWW.STORMTECH.COM				DATE	DRW	CHK
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.						
				SHEET		
				4 OF 6		

MC-SERIES END CAP INSERTION DETAIL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-3500 TECHNICAL SPECIFICATION



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW		---	1.77" (45 mm)
MC3500IEPP18BC			
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW		---	2.06" (52 mm)
MC3500IEPP24BC			
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

DISPENSARY - WARREN

MONROE, OH

DATE:

DRAWN: KZ

PROJECT #:

CHECKED: N/A

DESCRIPTION

CHK

DATE

DRW

StormTech®
Chamber System

888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

ADS

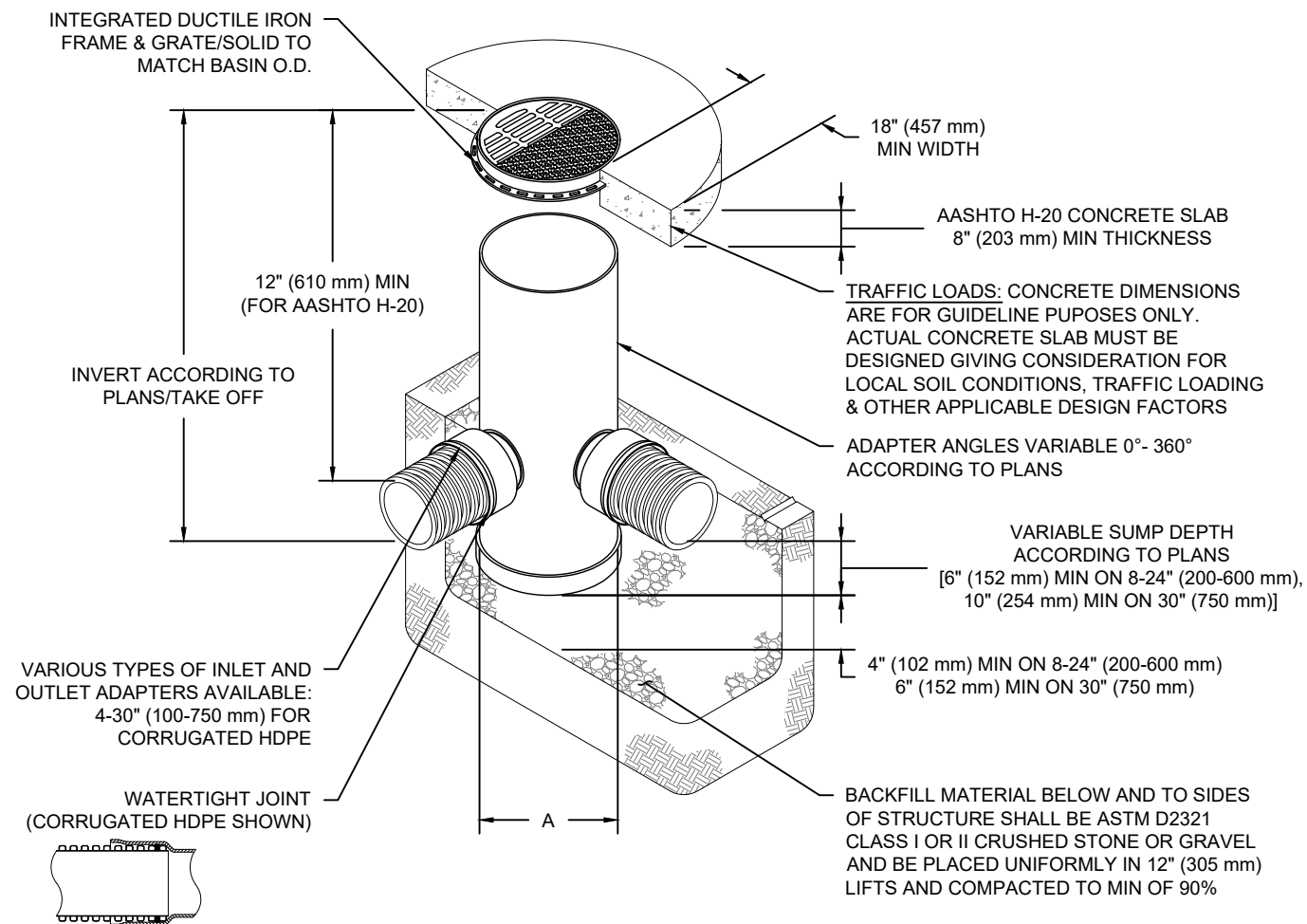
SHEET

5 OF 6

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

NYLOPLAST DRAIN BASIN

NTS



NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: **WWW.NYLOPLAST-US.COM**
6. TO ORDER CALL: **800-821-6710**

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

DISPENSARY - WARREN

MONROE, OH

DATE:

CHECKED: N/A

PROJECT #:

770-932-2443 WWW.NYLOPLAST-US.COM		DATE	DRW	CHK	DESCRIPTION
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Nyloplast®

770-932-2443 | WWW.NYLOPLAST-US.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473



SHEET

6 OF 6

Hydrograph Report

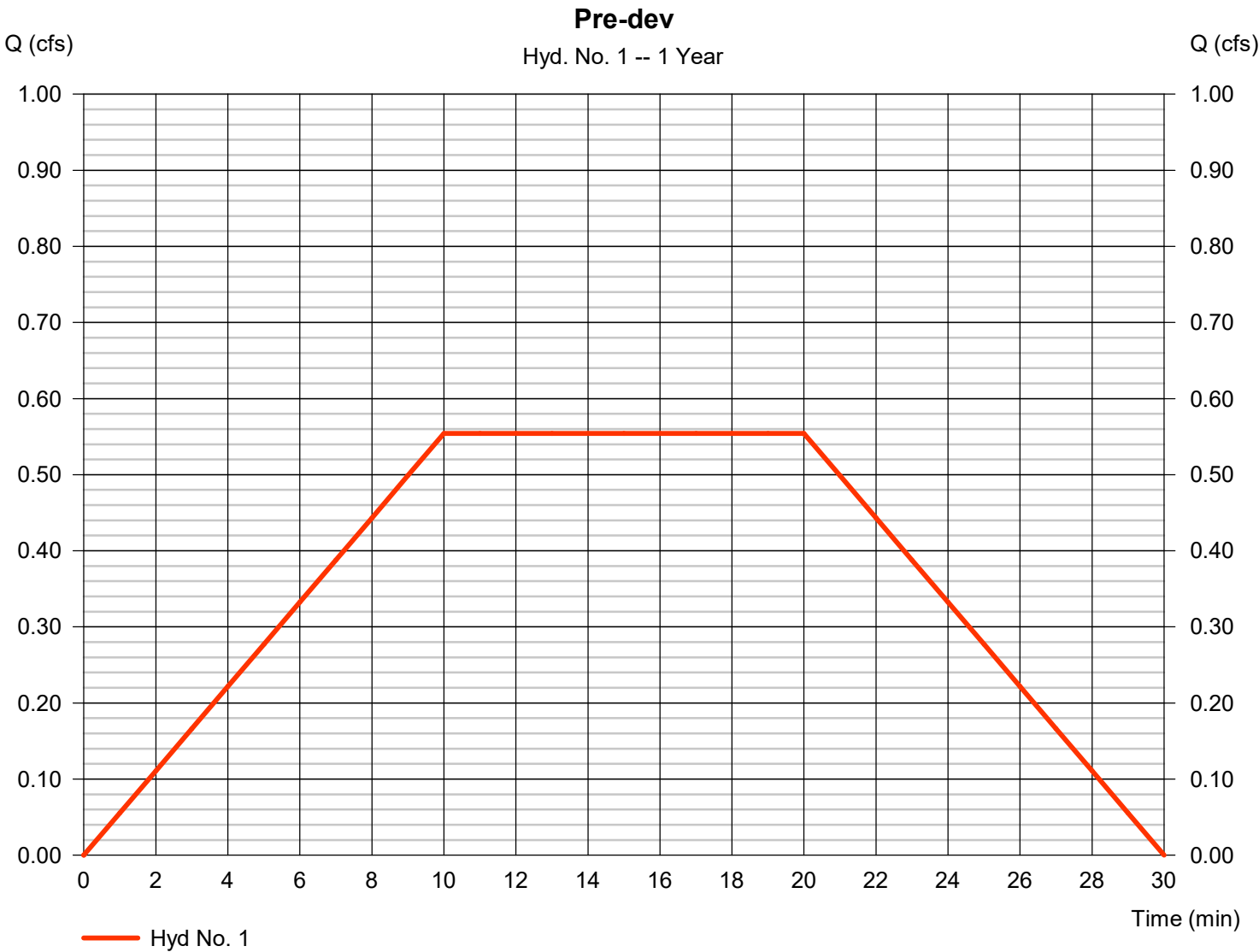
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.554 cfs
Storm frequency	= 1 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 665 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 2.353 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.385 cfs
Storm frequency	= 1 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,662 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 2.353 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.785$



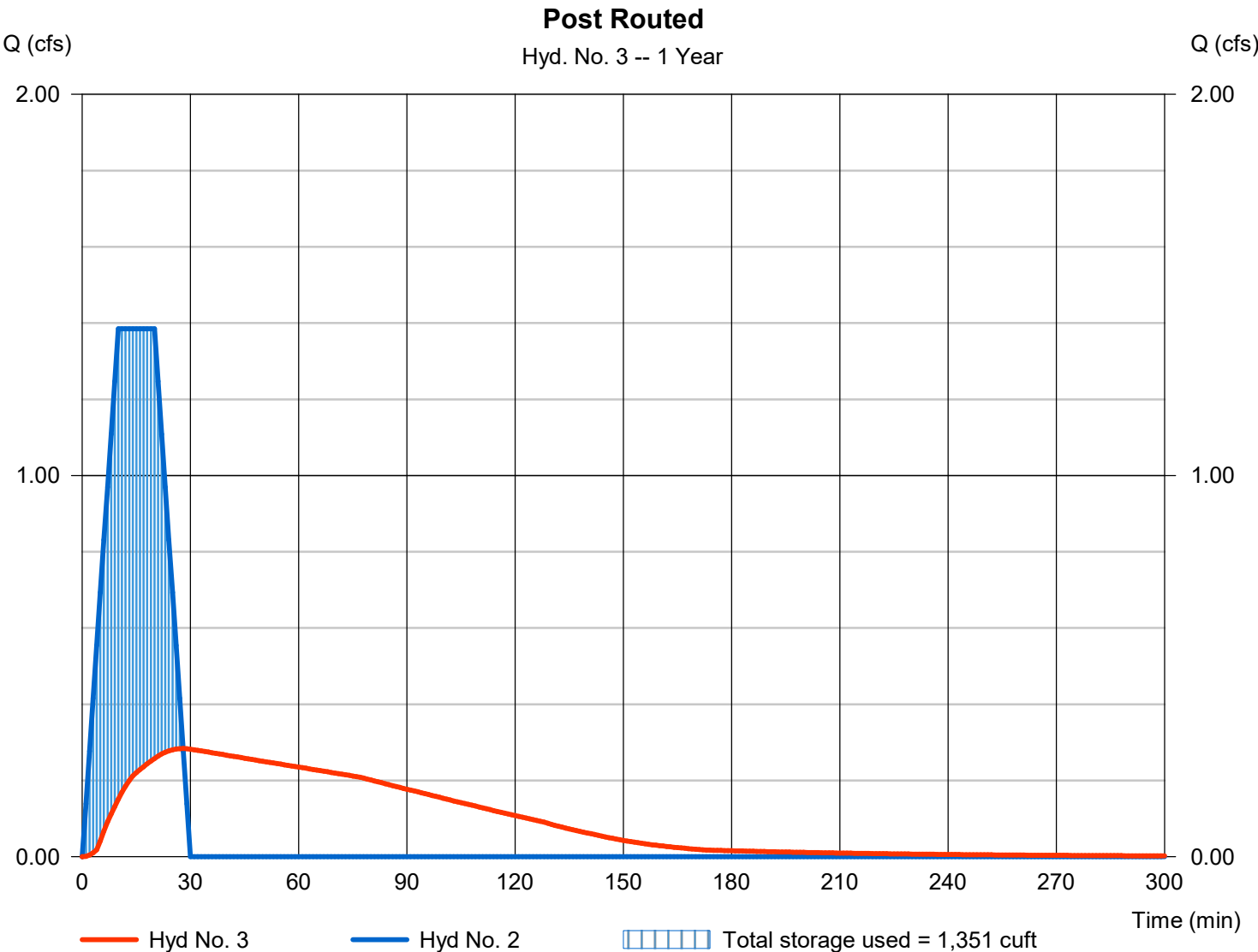
Hydrograph Report

Hyd. No. 3

Post Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.284 cfs
Storm frequency	= 1 yrs	Time to peak	= 28 min
Time interval	= 1 min	Hyd. volume	= 1,659 cuft
Inflow hyd. No.	= 2 - Post-dev	Max. Elevation	= 663.20 ft
Reservoir name	= Underground	Max. Storage	= 1,351 cuft

Storage Indication method used.



Pond No. 1 - Underground

Pond Data

Pond storage is based on user-defined values.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	661.50	n/a	0	0
1.00	662.50	n/a	644	644
2.00	663.50	n/a	1,009	1,653
3.00	664.50	n/a	938	2,591
4.00	665.50	n/a	800	3,391
5.00	666.50	n/a	546	3,937
5.50	667.00	n/a	255	4,192
6.00	667.50	n/a	8	4,200

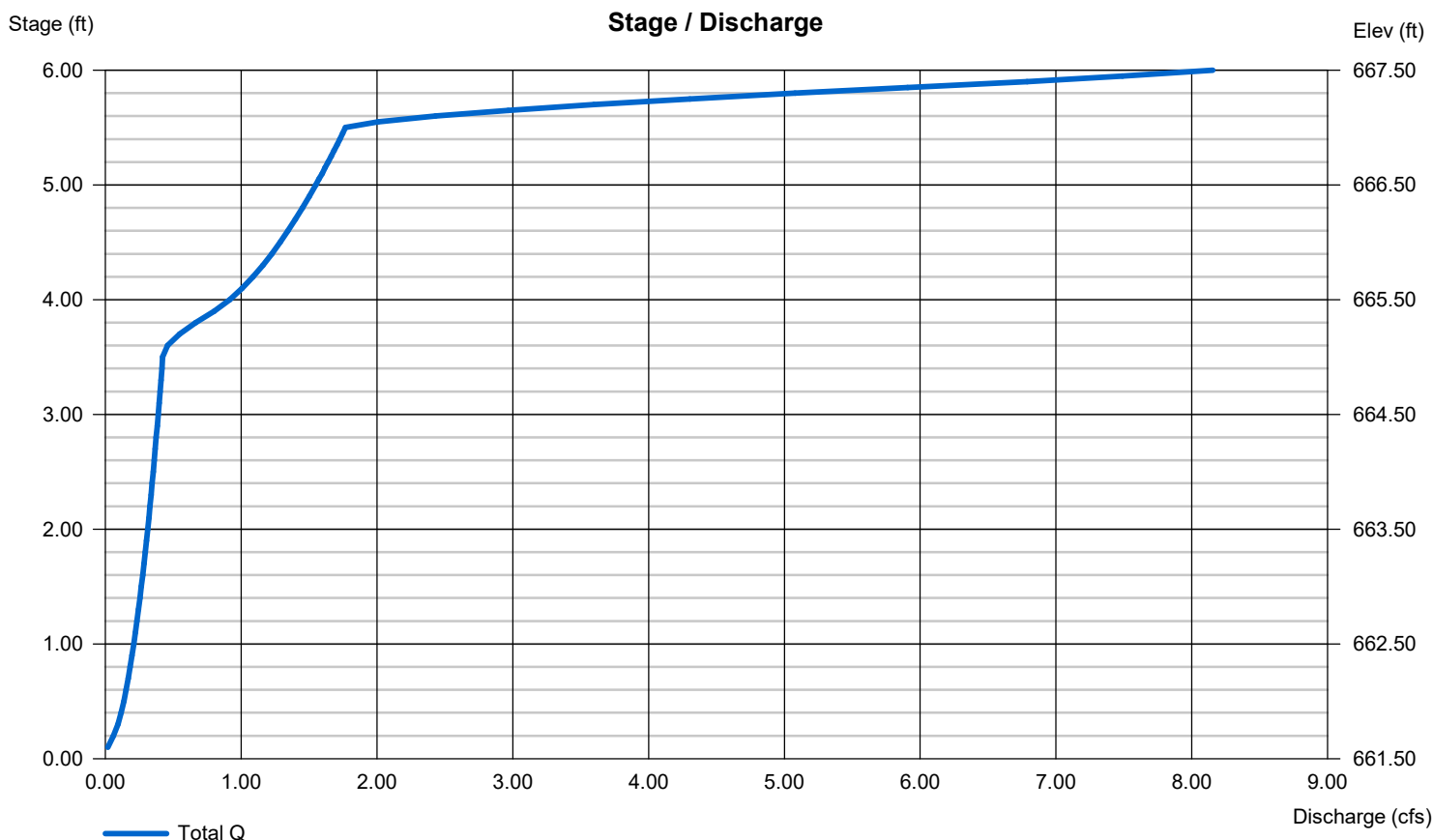
Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	3.00	6.00	0.00
Span (in)	= 12.00	3.00	6.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 661.50	661.50	665.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .012	.012	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 6.00	0.00	0.00	0.00
Crest El. (ft)	= 667.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= Yes	No	No	No
Exfil.(in/hr)	= 0.000 (by Wet area)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

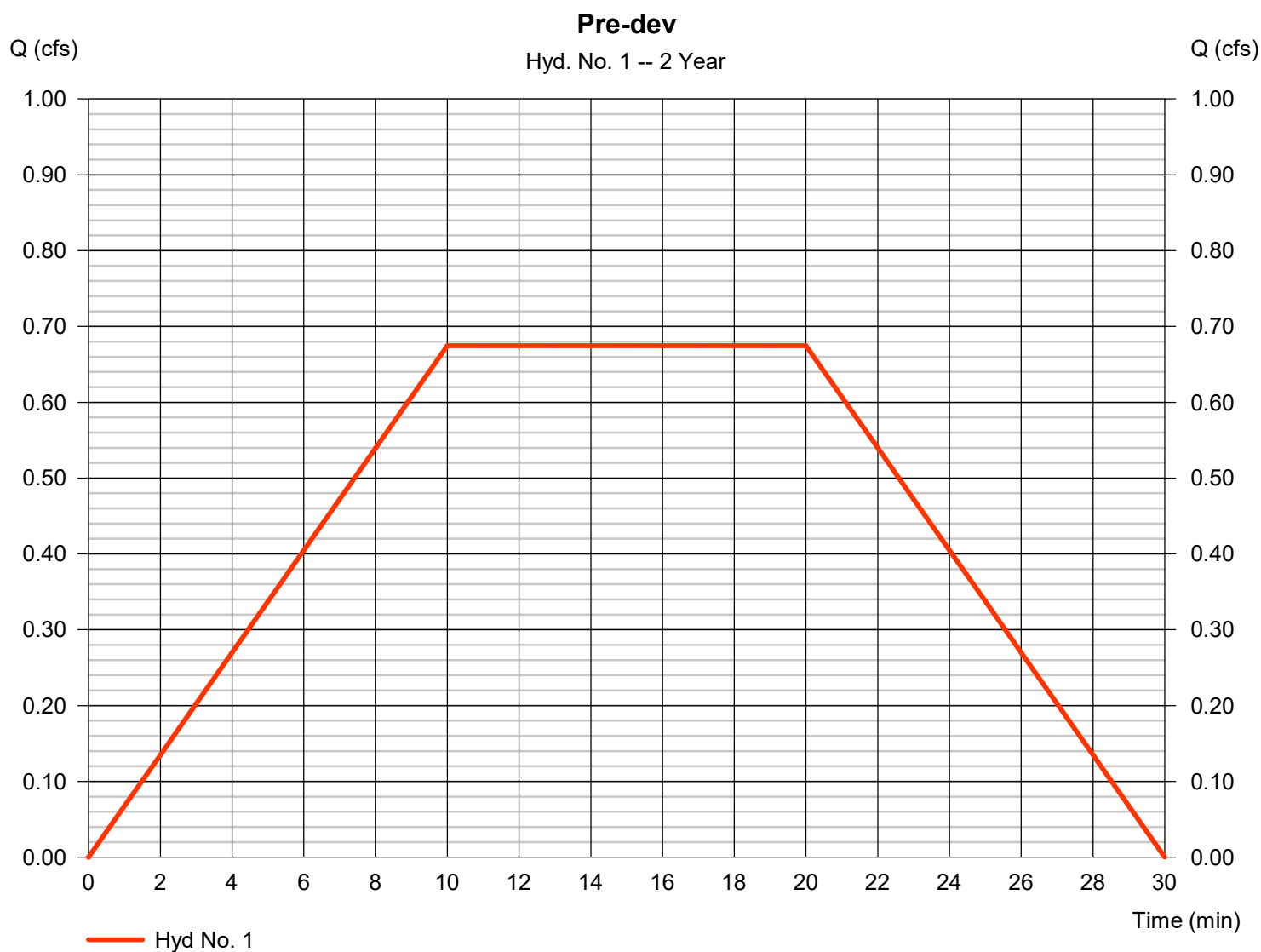
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.675 cfs
Storm frequency	= 2 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 810 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 2.865 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.687 cfs
Storm frequency	= 2 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 2,024 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 2.865 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.785$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

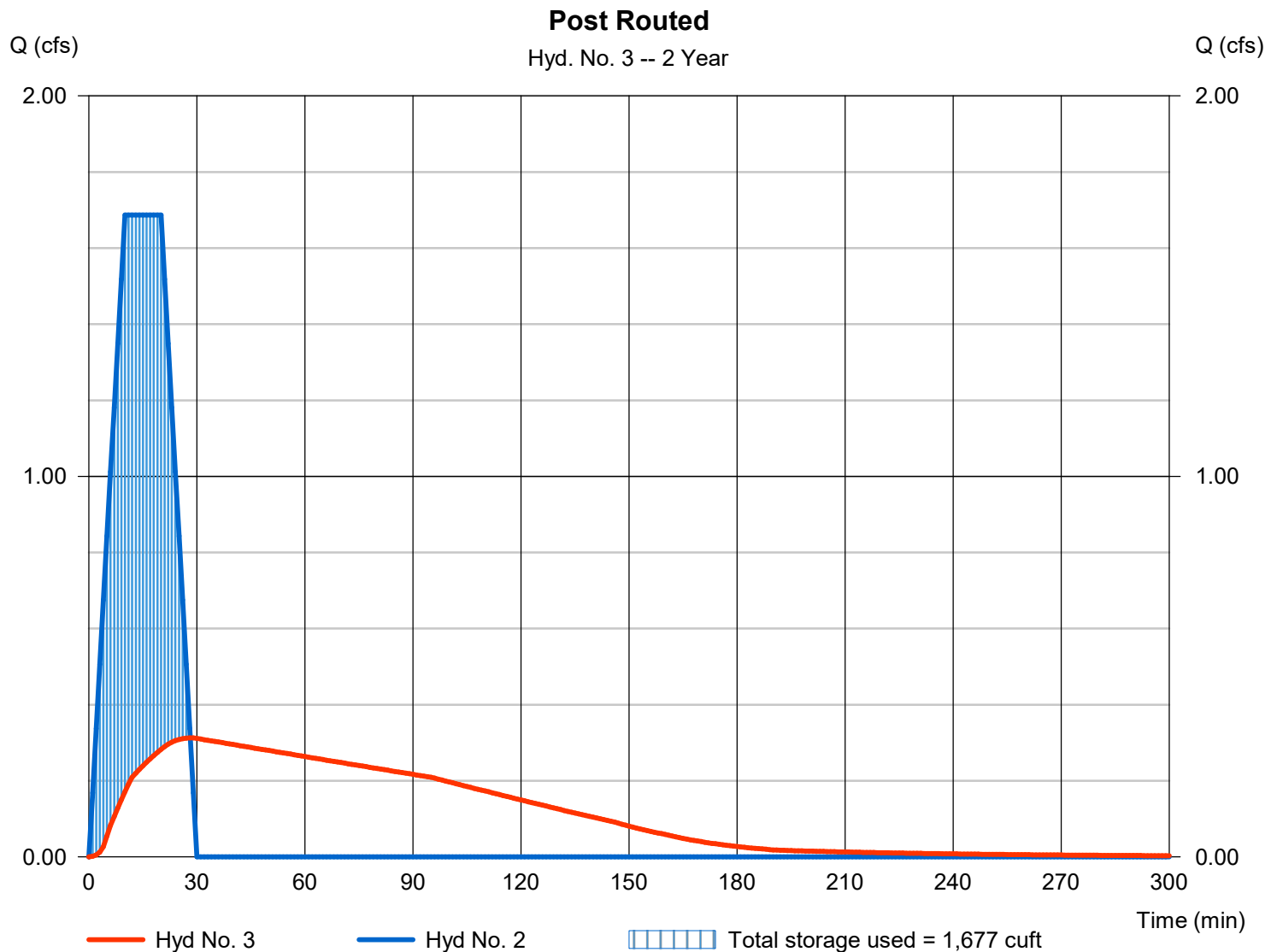
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 2 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.313 cfs
 Time to peak = 28 min
 Hyd. volume = 2,020 cuft
 Max. Elevation = 663.53 ft
 Max. Storage = 1,677 cuft

Storage Indication method used.



Hydrograph Report

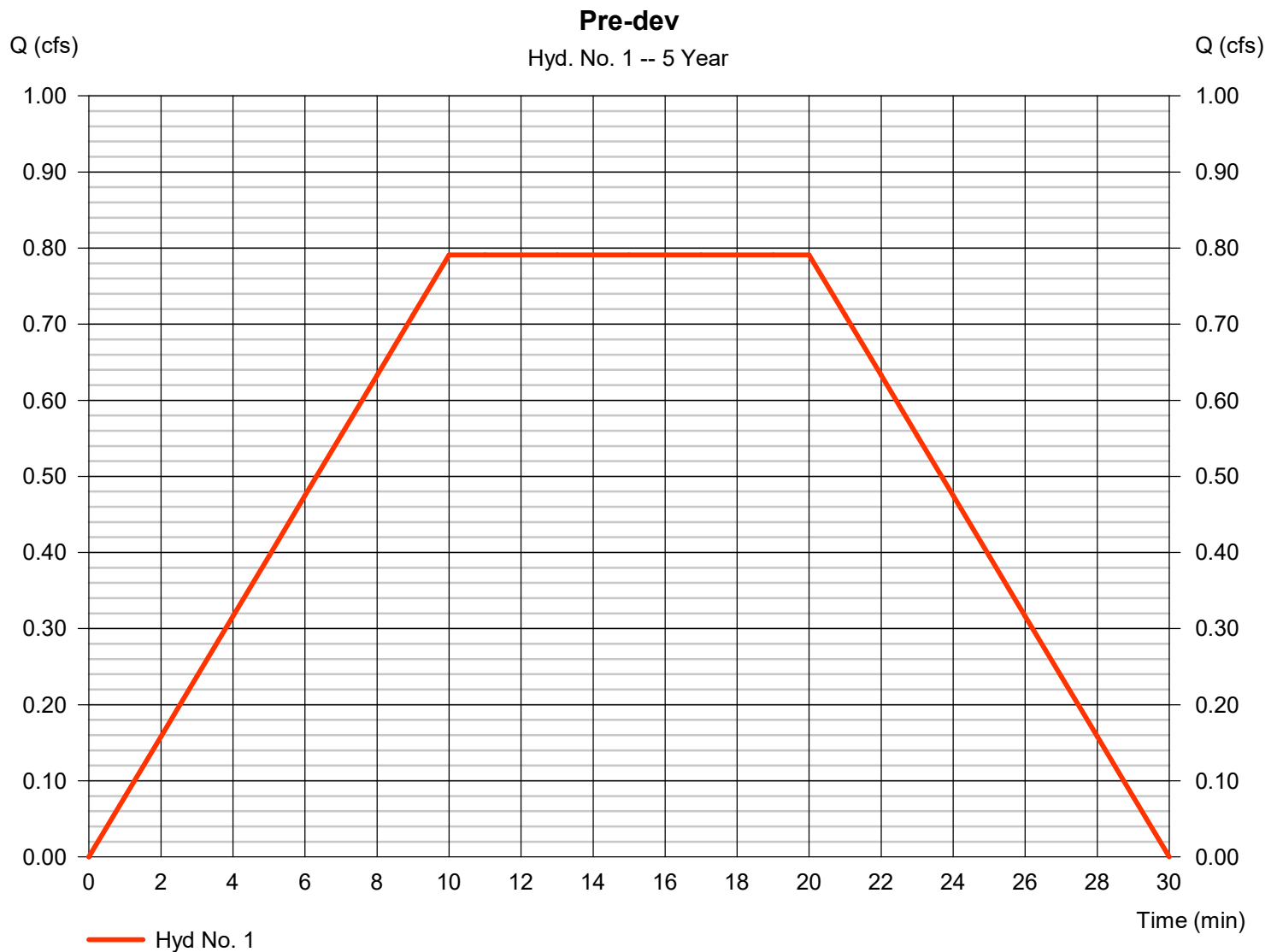
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.791 cfs
Storm frequency	= 5 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 949 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 3.359 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.978 cfs
Storm frequency	= 5 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 2,373 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 3.359 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = [(0.480 x 0.90) + (0.280 x 0.30)] / 0.785



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

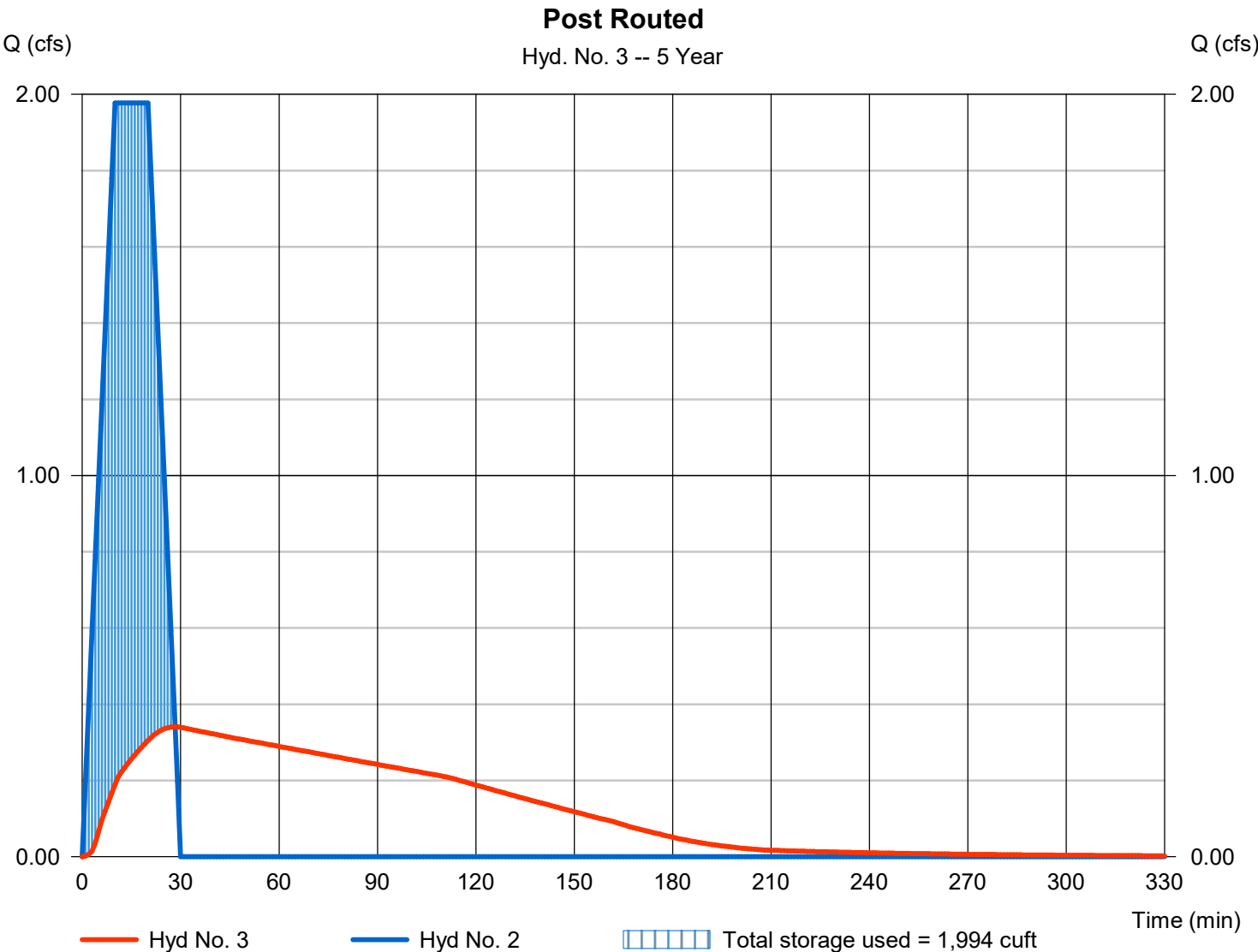
Monday, 06 / 20 / 2022

Hyd. No. 3

Post Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.341 cfs
Storm frequency	= 5 yrs	Time to peak	= 28 min
Time interval	= 1 min	Hyd. volume	= 2,369 cuft
Inflow hyd. No.	= 2 - Post-dev	Max. Elevation	= 663.87 ft
Reservoir name	= Underground	Max. Storage	= 1,994 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.931 cfs
Storm frequency	= 10 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,117 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 3.953 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

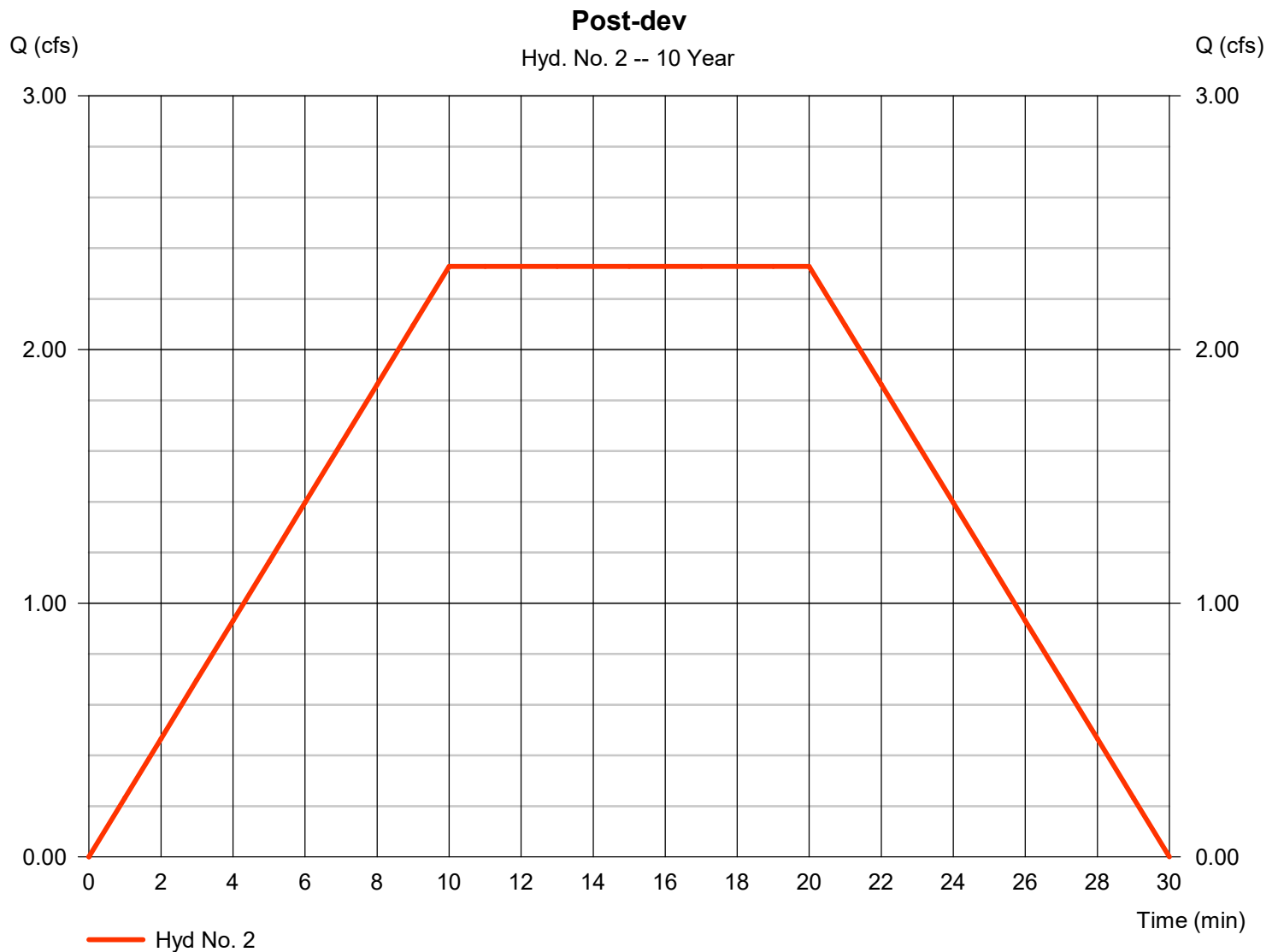
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 2.328 cfs
Storm frequency	= 10 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 2,793 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 3.953 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.785$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

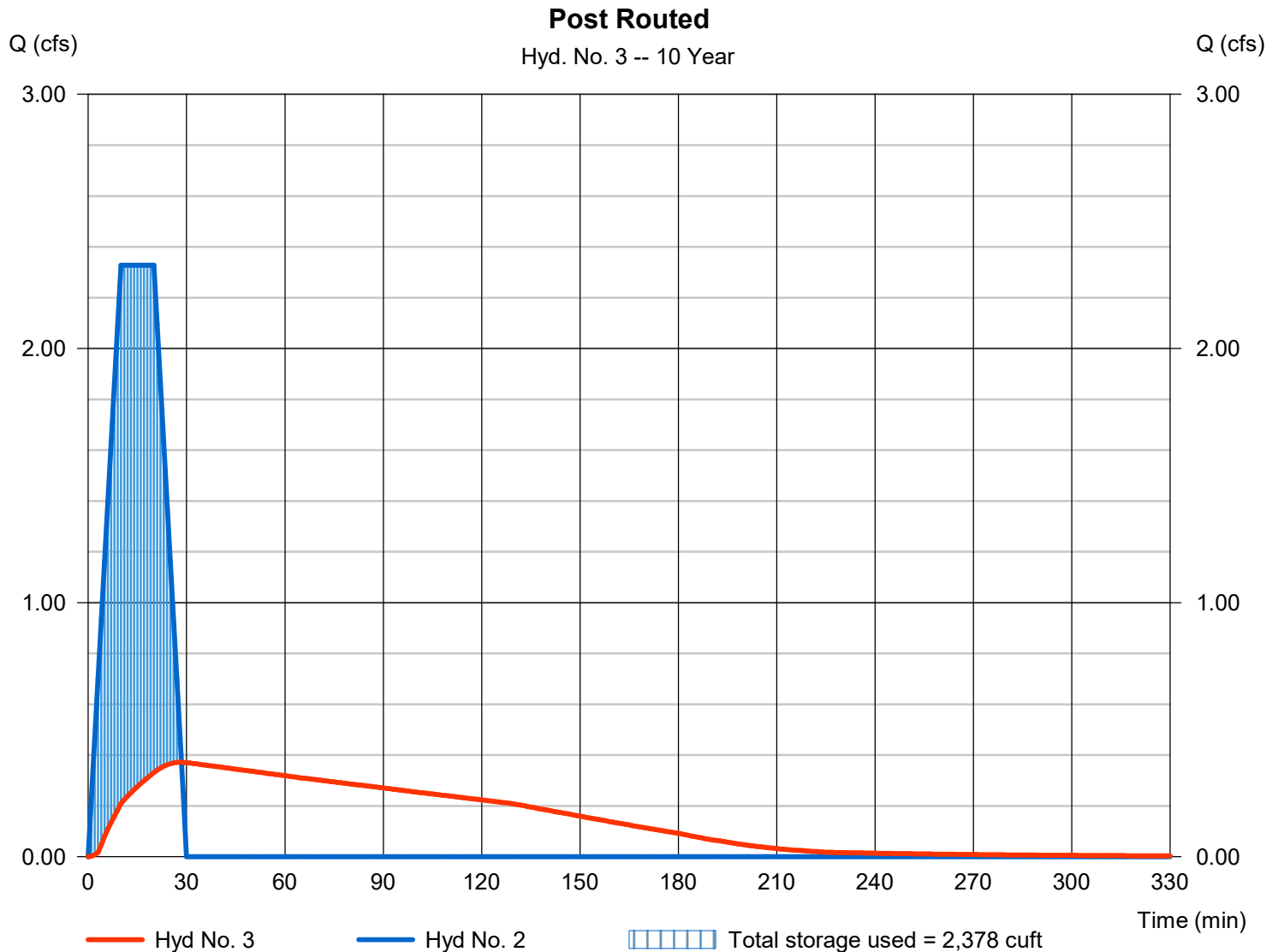
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 10 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.372 cfs
 Time to peak = 28 min
 Hyd. volume = 2,789 cuft
 Max. Elevation = 664.28 ft
 Max. Storage = 2,378 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.083 cfs
Storm frequency	= 25 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,300 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 4.600 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

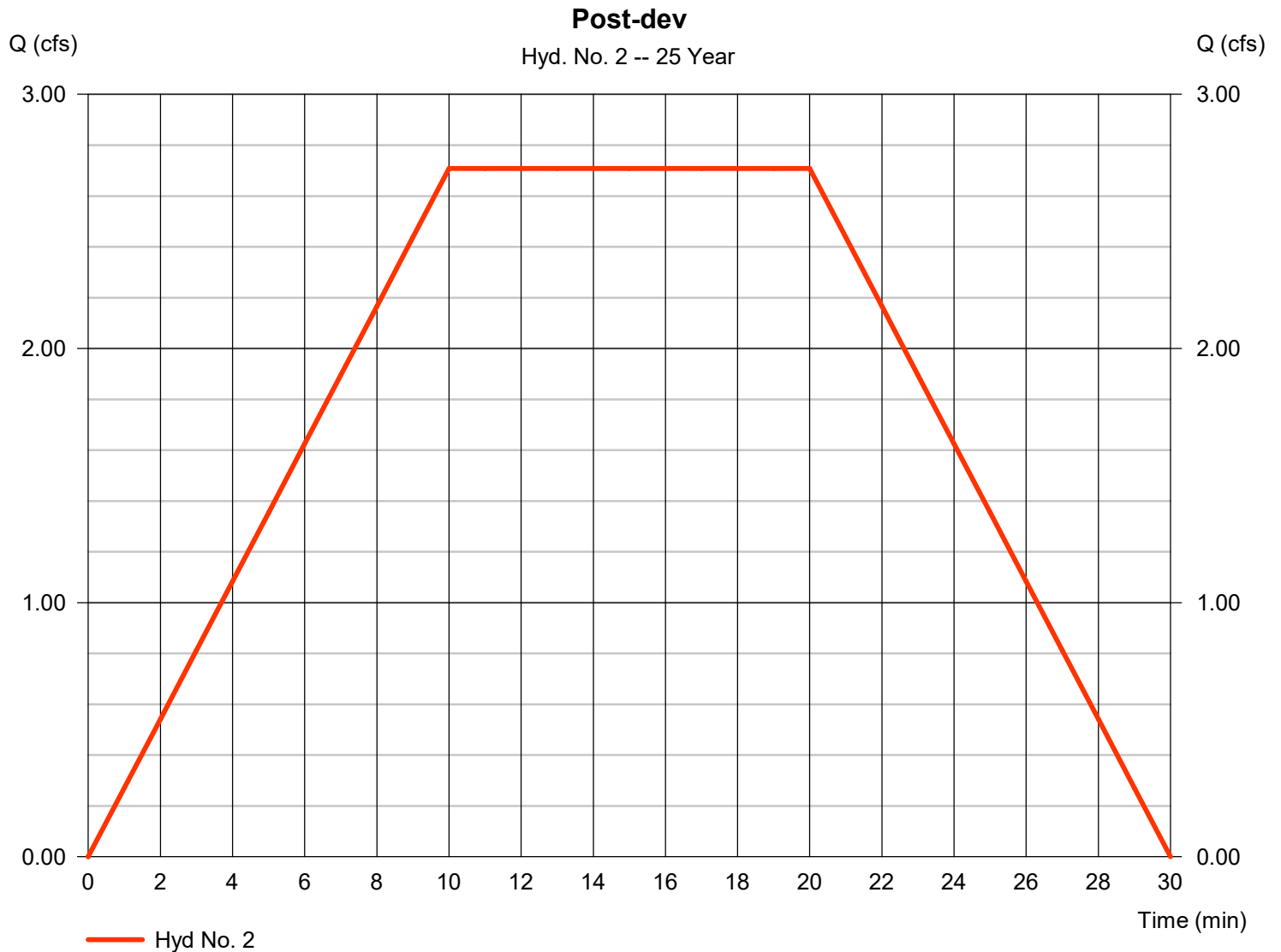
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 2.708 cfs
Storm frequency	= 25 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 3,250 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 4.600 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.785$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

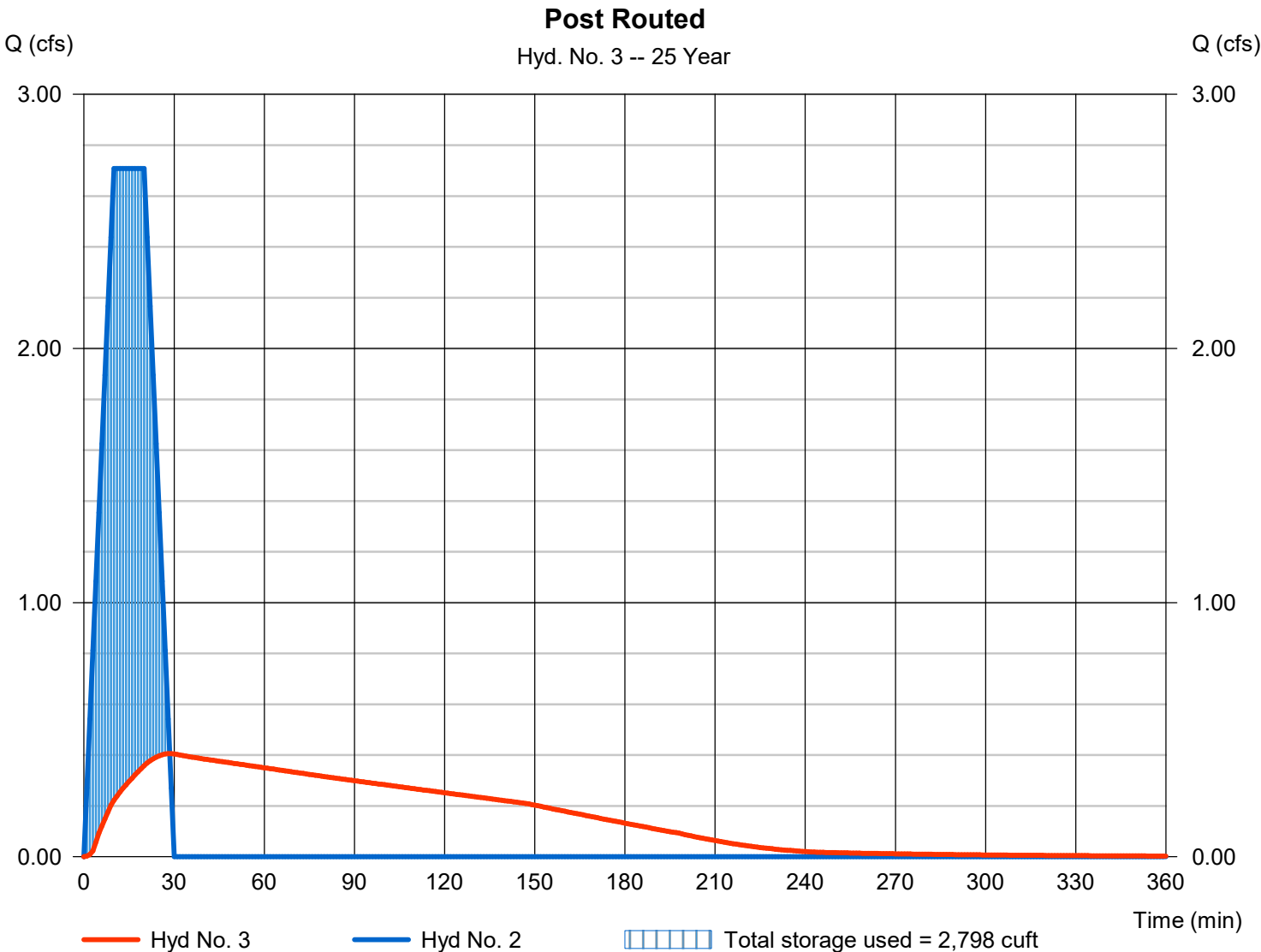
Monday, 06 / 20 / 2022

Hyd. No. 3

Post Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.406 cfs
Storm frequency	= 25 yrs	Time to peak	= 29 min
Time interval	= 1 min	Hyd. volume	= 3,246 cuft
Inflow hyd. No.	= 2 - Post-dev	Max. Elevation	= 664.76 ft
Reservoir name	= Underground	Max. Storage	= 2,798 cuft

Storage Indication method used.

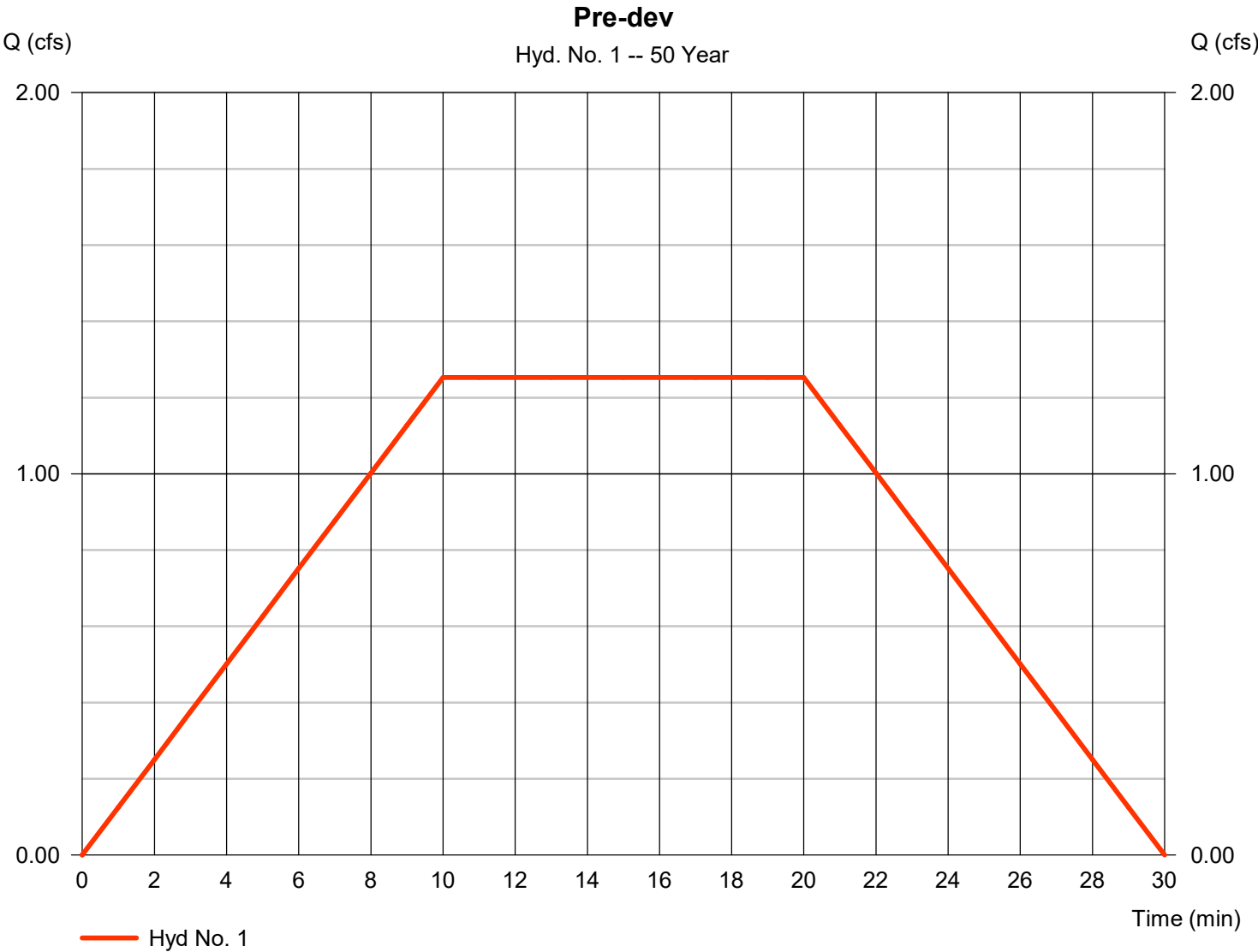


Hydrograph Report

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.253 cfs
Storm frequency	= 50 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,503 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 5.319 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

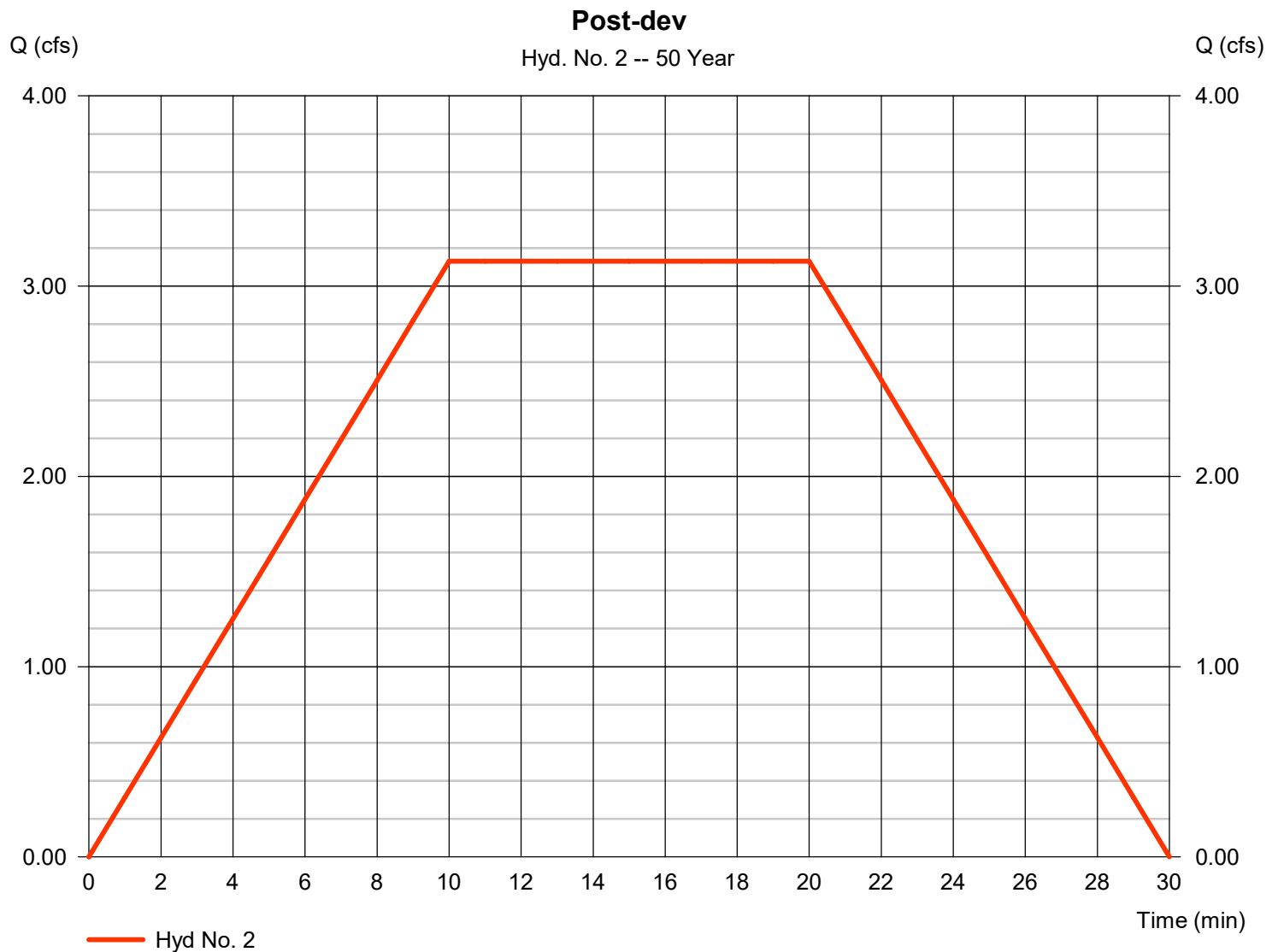
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 3.132 cfs
Storm frequency	= 50 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 3,758 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 5.319 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.785$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

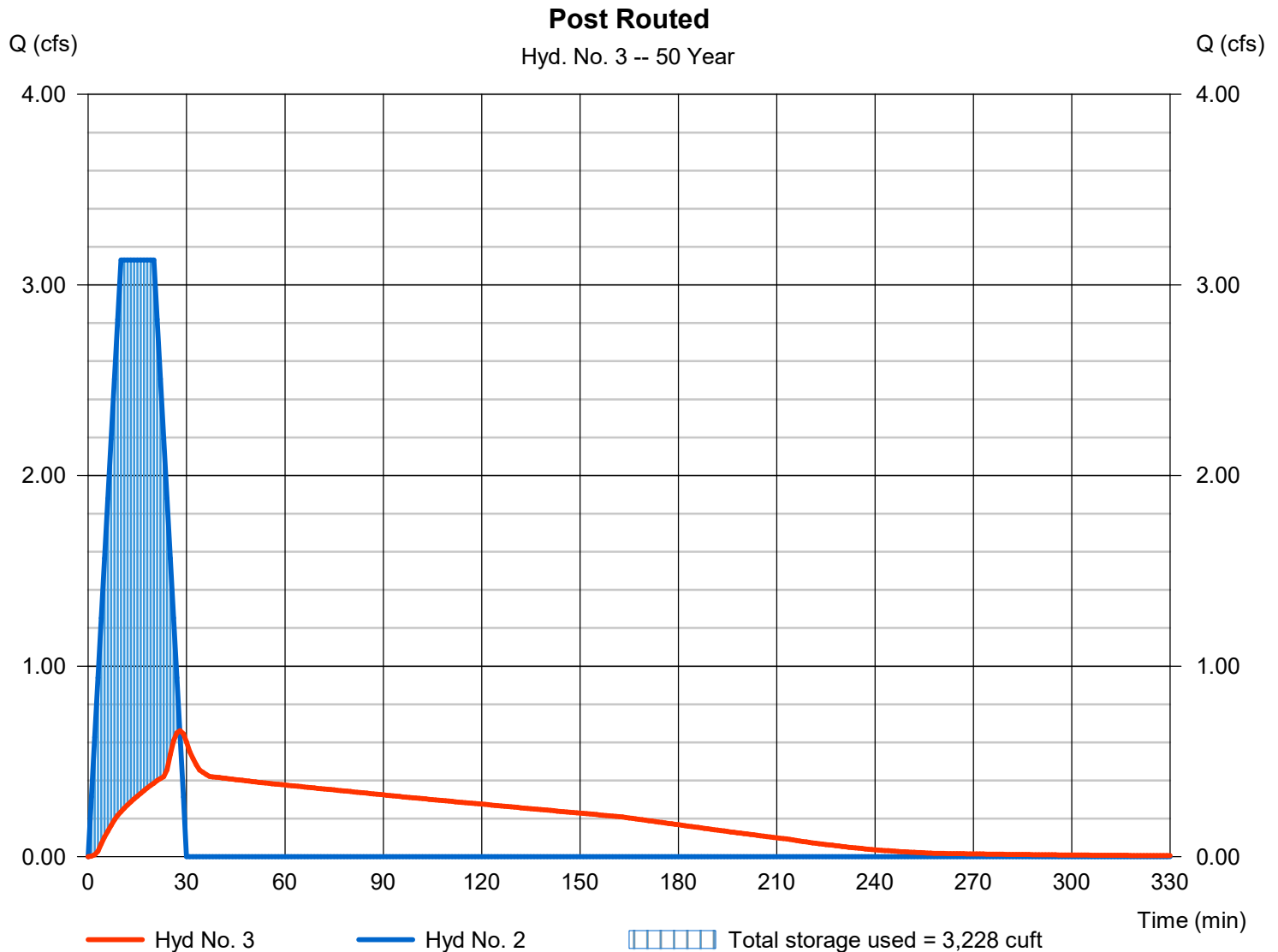
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 50 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.661 cfs
 Time to peak = 28 min
 Hyd. volume = 3,754 cuft
 Max. Elevation = 665.30 ft
 Max. Storage = 3,228 cuft

Storage Indication method used.

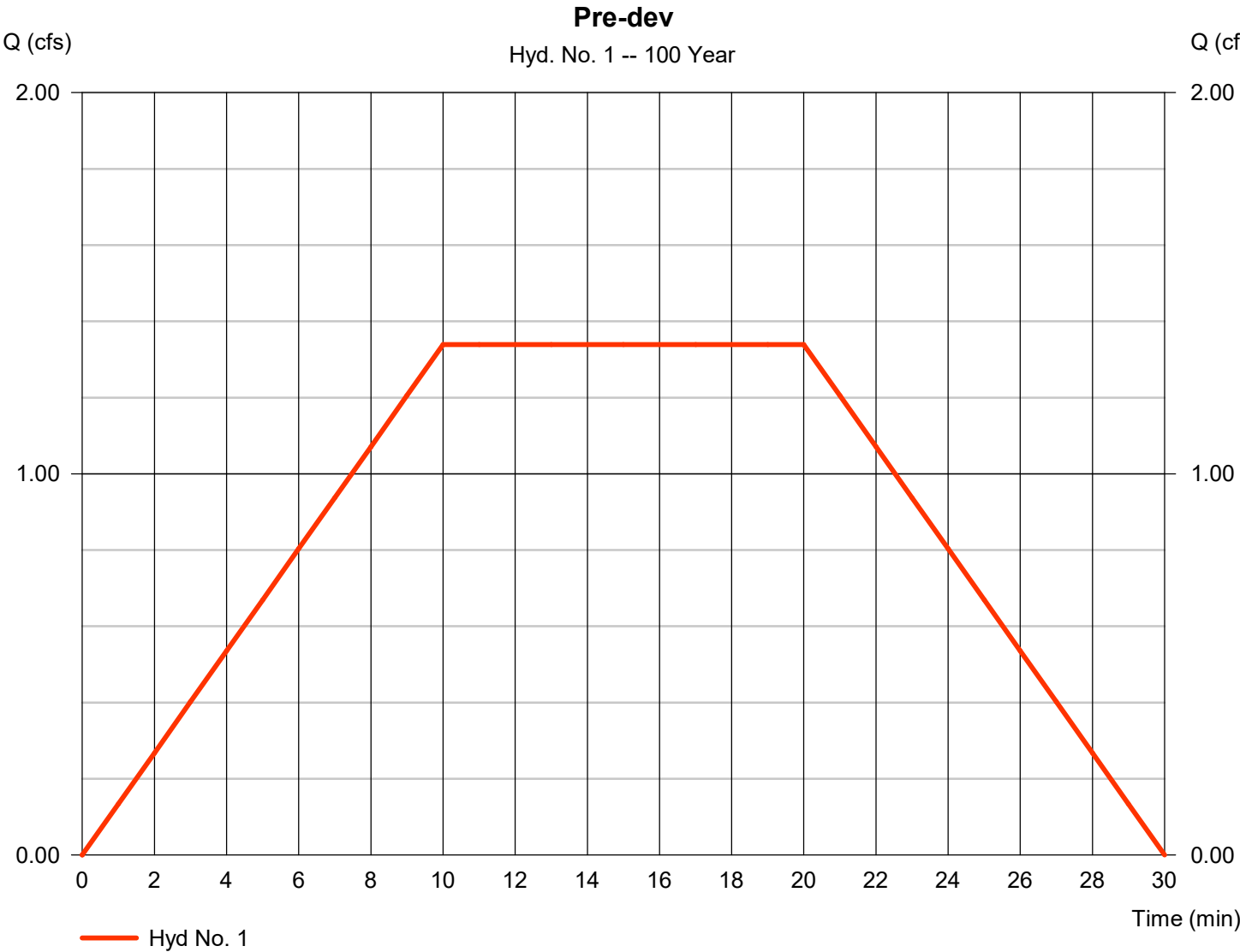


Hydrograph Report

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.339 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,607 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.3
Intensity	= 5.686 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 3.348 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 4,017 cuft
Drainage area	= 0.785 ac	Runoff coeff.	= 0.75*
Intensity	= 5.686 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.785$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

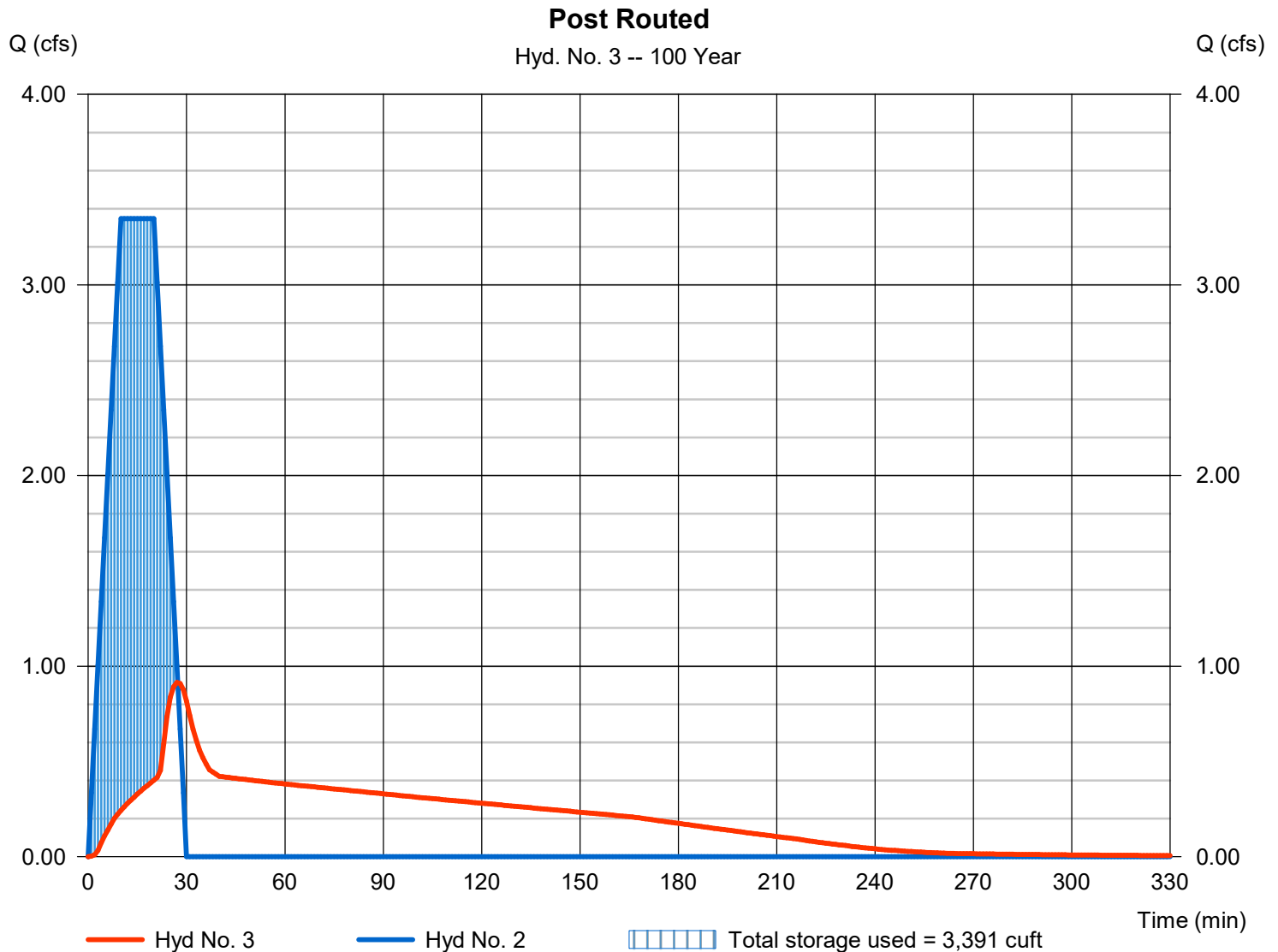
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 100 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.915 cfs
 Time to peak = 27 min
 Hyd. volume = 4,014 cuft
 Max. Elevation = 665.50 ft
 Max. Storage = 3,391 cuft

Storage Indication method used.



Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	80.0000	14.0000	1.0000	-----
2	106.0000	17.0000	1.0000	-----
3	0.0000	0.0000	1.0000	-----
5	131.0000	19.0000	1.0000	-----
10	170.0000	23.0000	1.0000	-----
25	230.0000	30.0000	1.0000	-----
50	250.0000	27.0000	1.0000	-----
100	290.0000	31.0000	1.0000	-----

File name: butler county.IDF

$$\text{Intensity} = B / (T_c + D)^E$$

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	4.21	3.33	2.76	2.35	2.05	1.82	1.63	1.48	1.36	1.25	1.16	1.08
2	4.82	3.93	3.31	2.86	2.52	2.26	2.04	1.86	1.71	1.58	1.47	1.38
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.46	4.52	3.85	3.36	2.98	2.67	2.43	2.22	2.05	1.90	1.77	1.66
10	6.07	5.15	4.47	3.95	3.54	3.21	2.93	2.70	2.50	2.33	2.18	2.05
25	6.57	5.75	5.11	4.60	4.18	3.83	3.54	3.29	3.07	2.88	2.71	2.56
50	7.81	6.76	5.95	5.32	4.81	4.39	4.03	3.73	3.47	3.25	3.05	2.87
100	8.06	7.07	6.30	5.69	5.18	4.75	4.39	4.08	3.82	3.58	3.37	3.19

Tc = time in minutes. Values may exceed 60.

Precip. file name: Sample.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	2.20	0.00	3.30	4.25	5.77	6.80	7.95
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10

BUILDING TOTALS		
BRICK	4,004	58%
STONE	264	4%
GLASS/DOORS	2,008	29%
EIFS	596	9%
ALL WALLS	6,872	100%

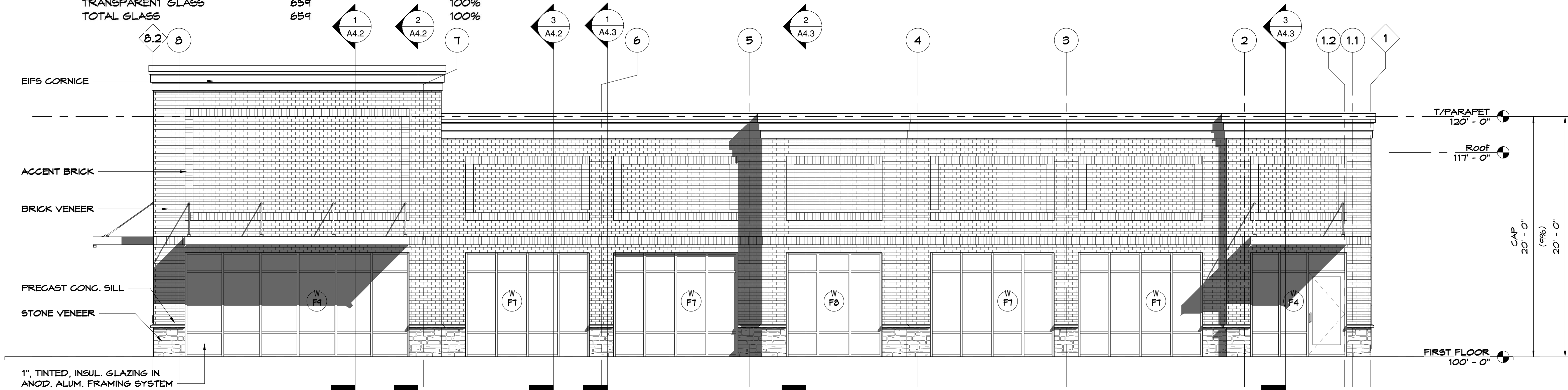


SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

SOUTH ELEVATION		
FINISH	AREA (sf)	% ON ELEVATION
BRICK	1,209	51%
STONE	68	3%
GLASS	659	31%
EIFS	187	9%
TOTAL WALL	2,123	100%

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	659	100%
TOTAL GLASS	659	100%

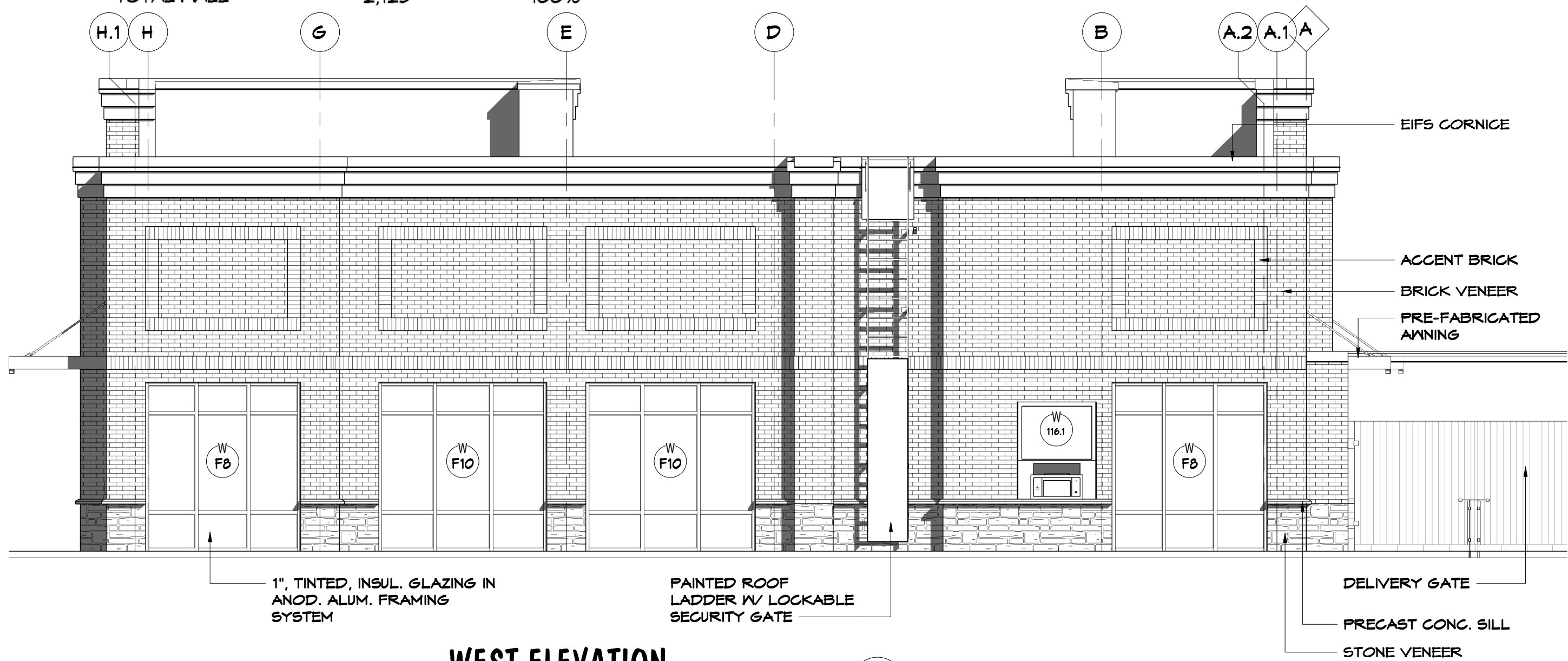


NORTH ELEVATION

SCALE: 3/16" = 1'-0"

NORTH ELEVATION		
FINISH	AREA (sf)	% ON ELEVATION
BRICK	1,211	51%
STONE	68	3%
GLASS	659	31%
EIFS	187	9%
TOTAL WALL	2,125	100%

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	659	100%
TOTAL GLASS	659	100%

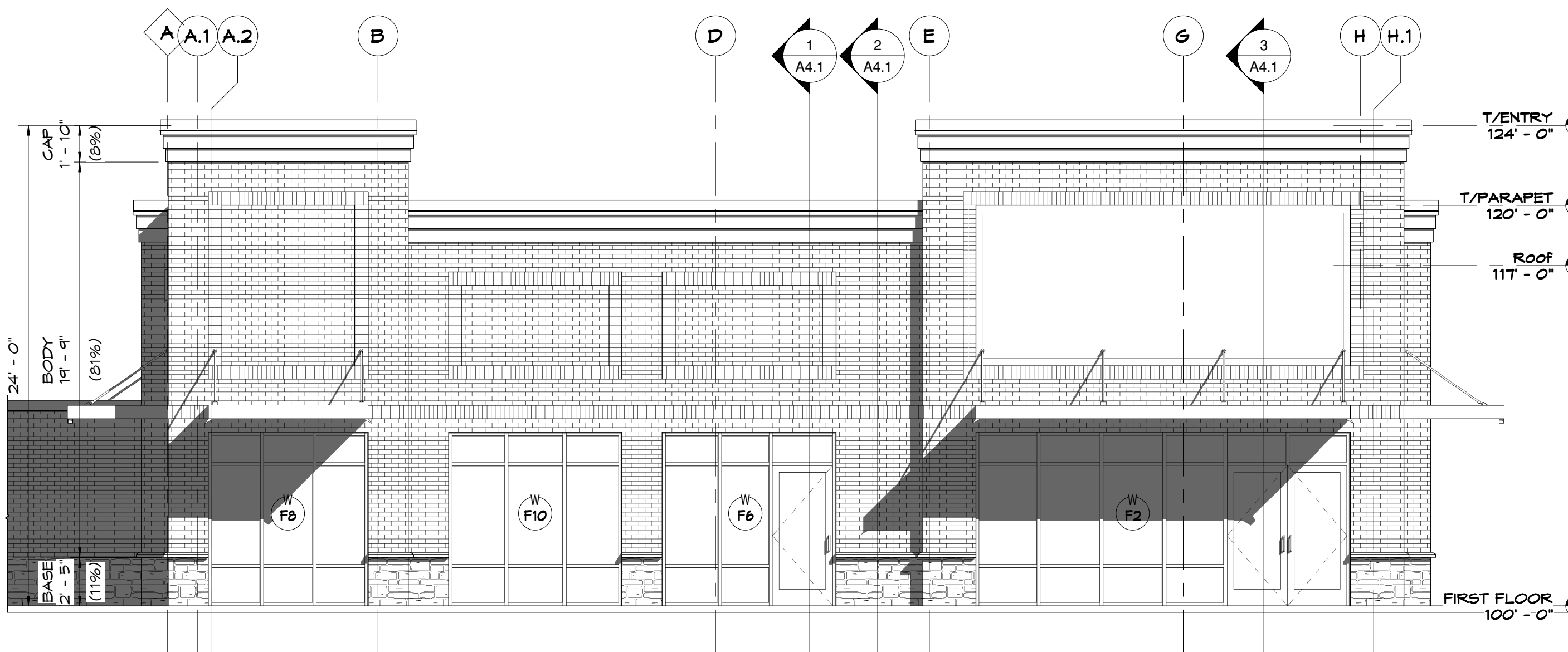


WEST ELEVATION

SCALE: 3/16" = 1'-0"

WEST ELEVATION		
FINISH	AREA (sf)	% ON ELEVATION
BRICK	736	60%
STONE	76	6%
GLASS	309	25%
EIFS	114	9%
TOTAL WALL	1,235	100%

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	309	100%
TOTAL GLASS	309	100%



EAST ELEVATION

SCALE: 3/16" = 1'-0"

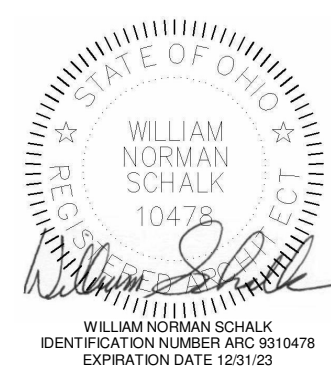
EAST ELEVATION		
FINISH	AREA (sf)	% ON ELEVATION
BRICK	848	61%
STONE	52	4%
GLASS	381	27%
EIFS	108	8%
TOTAL WALL	1,389	100%

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	381	100%
TOTAL GLASS	381	100%

Proposed Retail Center For:
WARREN DISPENSARY
Monroe, Ohio

REV. DATE CK'D

Drawn By: WNS Checked By: WNS



Date: A1.3 Job No: 22.033

A2.1

SHEET CONTENTS:
ELEVATIONS

K|B|A
K B A Incorporated ARCHITECTS
CINCINNATI OHIO
29 HIGH STREET
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Fax: 513.752.7833
www.KBAinc.com
CINCINNATI COMMERCIAL CONTRACTING
Your Choice for Quality
4779 Red Bank Expressway Cincinnati, Ohio 45227
phone (513) 561-6633 fax (513) 561-3554



ALTERNATE EXTERIOR COLOR SCHEME

SCALE: NTS

1
A2.3

K | B | A
K B A Incorporated ARCHITECTS
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CC CINCINNATI
COMMERCIAL
CONTRACTING
Your Choice for Quality
4799 Red Bank Expressway Cincinnati, Ohio 45227
phone (513) 561-6633 fax (513) 561-3554

Proposed Retail Center For:
WARREN DISPENSARY
Monroe, Ohio

REV. DATE CK'D

Drawn By: AuthoChecked By: Checker

Preliminary
Not For
Construction

Date:A1.3 Job No22.033

A2.3



Envelope Compliance Certificate

Project Information

Energy Code: 90.1 (2010) Standard
Project Title: Warren Dispensary
Location: Monroe (Butler), Ohio
Climate Zone: 5a
Project Type: New Construction
Vertical Glazing / Wall Area: 32%

Construction Site:
Monroe, OH

Owner/Agent:

Designer/Contractor:
Matt Remar
KBA Incorporated
29 High Street
Milford, OH 45150

Building Area

Floor Area

1-Retail : Nonresidential

6173

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor _(a)
South Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1722	19.0	0.0	0.109	0.064
Window 3: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	614	---	---	0.260	0.550
Door 4: Glass (> 50% glazing):Metal Frame, Non-Entrance Door, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	24	---	---	0.260	0.550
West Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1118	19.0	0.0	0.109	0.064
Window 5: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	215	---	---	0.260	0.550
North Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1722	19.0	0.0	0.109	0.064
Window 6: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	638	---	---	0.260	0.550
Door 5: Glass (> 50% glazing):Metal Frame, Non-Entrance Door, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	24	---	---	0.260	0.550
East Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1118	19.0	0.0	0.109	0.064
Window 7: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	283	---	---	0.260	0.550
Door 6: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	24	---	---	0.800	0.700
Door 7: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	24	---	---	0.260	0.800
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Retail]	6173	---	30.0	0.032	0.048
Floor 1: Slab-On-Grade:Unheated, Vertical 2 ft., [Bldg. Use 1 - Retail] (c)	335	---	10.0	0.540	0.540

- (a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
- (b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
- (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 10% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Matt Remar - Designer

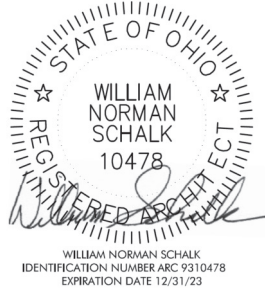
Name - Title

Matt Remar

Signature

07-08-22

Date





Inspection Checklist

Energy Code: 90.1 (2010) Standard

Requirements: 95.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2.5.4. 3.1.1.5.7 [PR1] ¹	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
4.2.2.8.4. 1.1.8.4.1. 2.8.7 [PR6] ²	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.5.3.3 [FO1] ²	Below-grade wall insulation R-value.	R-_____	R-_____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.3.5 [FO3] ²	Slab edge insulation R-value.	R-_____ ☐ Unheated ☐ Heated	R-_____ ☐ Unheated ☐ Heated	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [FO4] ²	Slab edge insulation installed per manufacturer's instructions.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.5 [FO5] ²	Slab edge insulation depth/length.	_____ ft	_____ ft	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.7.3 [FO7] ¹	Insulation in contact with the ground has ≤0.3% water absorption rate per ASTM C272.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
6.4.4.1.5 [FO11] ³	Bottom surface of floor structures incorporating radiant heating insulated to ≥R-3.5.	R-_____	R-_____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply. See the Envelope Assemblies table for values.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.2 [FR1] ³	Factory-built fenestration and doors are labeled as meeting air leakage requirements.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.4.3.4 [FR4] ³	Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are >=7 ft apart.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.4.3a [FR8] ¹	Vertical fenestration U-Factor.	U- ____	U- ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.4.3b [FR9] ¹	Skylight fenestration U-Factor.	U- ____	U- ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.4.4.1 [FR10] ¹	Vertical fenestration SHGC value.	SHGC: ____	SHGC: ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.4.4.2 [FR11] ¹	Skylight SHGC value.	SHGC: ____	SHGC: ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.2.1 [FR12] ²	Fenestration products rated in accordance with NFRC.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.2.2 [FR13] ¹	Fenestration products are certified as to performance labels or certificates provided.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.2.3, 5.3.6 [FR14] ²	U-factor of opaque doors associated with the building thermal envelope meets requirements.	U- ____ ☐ Swinging ☐ Nonswinging	U- ____ ☐ Swinging ☐ Nonswinging	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.4.3.1 [FR15] ¹	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces and in climate zones 1-6.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

☐ 1 High Impact (Tier 1)
 ☐ 2 Medium Impact (Tier 2)
 ☒ 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10] ²	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.1 [IN1] ¹	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.1 [IN2] ¹	Roof R-value. For some ceiling systems, verification may need to occur during Framing Inspection.	R-_____ ☐ Above deck ☐ Metal ☐ Attic	R-_____ ☐ Above deck ☐ Metal ☐ Attic	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2, 5.8.1.3 [IN3] ¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the ceiling slope is ≤ 3:12.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.2 [IN6] ¹	Above-grade wall insulation R-value.	R-_____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	R-_____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.4 [IN8] ²	Floor insulation R-value.	R-_____ ☐ Mass ☐ Steel ☐ Wood	R-_____ ☐ Mass ☐ Steel ☐ Wood	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.1 [IN10] ²	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.4 [IN11] ²	Eaves are baffled to deflect air to above the insulation.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.5 [IN12] ²	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.6 [IN13] ²	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

☐ 1 High Impact (Tier 1)
 ☐ 2 Medium Impact (Tier 2)
 ☒ 3 Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.8.1.7 [IN14] ²	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.7.1 [IN15] ²	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.7.2 [IN16] ²	Foundation vents do not interfere with insulation.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.8 [IN17] ³	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
5.4.3.3 [FI1] ¹	Weatherseals installed on all loading dock cargo doors in Climate Zones 4-8.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

GENERAL NOTES:

THE OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS", CURRENT EDITION, AND THE CURRENT "RULES AND REGULATIONS" OF THE CITY OF MONROE SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN, UNLESS OTHERWISE NOTED.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PER LOCAL, STATE, AND FEDERAL REQUIREMENTS.

WHERE PLANS REFER TO CONTRACTOR, IT MAY MEAN SUBCONTRACTOR AT THE GENERAL CONTRACTOR'S DISCRETION.

ALL WORK IN THE BROOKS DR., OR ORTEN DR. RIGHTS-OF-WAY, INCLUDING UTILITY CUTS/TAPS WILL NEED A PERMIT FROM THE CITY OF MONROE.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR(S) TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK.

ITEM 201: CLEARING AND GRUBBING: THIS WORK CONSISTS OF CLEARING, GRUBBING, SCALPING, REMOVING TREES AND STUMPS, AND REMOVING ALL VEGETATION AND CONSTRUCTION DEBRIS FROM THE LIMITS SHOWN ON THE PLANS, EXCEPT SUCH OBJECTS THAT ARE TO REMAIN OR ARE TO BE REMOVED ACCORDING TO OTHER ITEMS OF WORK.

USE REMOVED OR EXCAVATED MATERIALS IN THE WORK WHEN THE MATERIAL CONFORMS TO THE SPECIFICATIONS; IF NOT THEN RECYCLE, OR DISPOSE OF THE MATERIAL ACCORDING TO 105.16 AND 105.17.

REMOVE OR SAVE ALL TREES, SHRUBS, AND PLANTS AS DESIGNATED ON THE PLANS. PRESERVE ALL VEGETATION AND OBJECTS NOT DESIGNATED FOR REMOVAL. PAINT CUT OR SCARRED SURFACES OF TREES OR SHRUBS SELECTED FOR RETENTION ACCORDING TO 666.04. IN ORDER TO RETARD AND PREVENT THE SPREAD OF THE EMERALD ASH BORER, LIMIT THE MOVEMENT OF REGULATED ARTICLES ACCORDING TO OHIO ADMINISTRATIVE CODE 901:5-56. OBSERVE REQUIREMENTS FOR HANDLING AND TRANSPORTING OF REGULATED ARTICLES IN QUARANTINED AREAS AS DEFINED BY THE OHIO DEPARTMENT OF AGRICULTURE (HTTP://WWW.AGRI.OHIO.GOV/EAB/).

ALL EROSION AND SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH THE SWPPP PLAN AND LOCAL AND OHIO EPA REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ALL INSPECTIONS AND REPORTING AS REQUIRED BY THE OHIO EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION (NPDES) PERMIT. CONTRACTOR SHALL PROVIDE WRITTEN REPORTS TO THE OWNER AND KEEP COPY ON FILE.

THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED THROUGH INFORMATION PROVIDED BY THE VARIOUS UTILITY OWNERS AND BY FIELD SURVEY, BUT ARE NOT GUARANTEED TO BE ACCURATE OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, PRIOR TO CONSTRUCTION, TO DETERMINE THE ACTUAL FIELD LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES IMPACTING HIS WORK. THE CONTRACTOR IS DIRECTED TO CONTACT THE OHIO UTILITY PROTECTION, INC. AT 1 (800) 362-2764 AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

THE LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.

THE DESIGN ENGINEER ASSUMES NO RESPONSIBILITY FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF OPERATIONS OF THE CONTRACTOR, NOR FOR SAFETY ON THE JOB SITE OR THE CONTRACTOR'S FAILURE TO COMPLETE THE WORK AS SPECIFIED ON THIS PLAN.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SURVEYING AND CONSTRUCTION STAKING REQUIRED FOR SITEWORK IN THIS PACKAGE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL RESTRICT ALL CONSTRUCTION ACTIVITIES TO THE PROJECT SITE AND EXISTING RIGHTS-OF-WAY, CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER.

ACCESS TO ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

ANY STORM PIPES DAMAGED DURING CONSTRUCTION SHALL EITHER BE RESTORED TO ITS ORIGINAL CONDITION OR CONNECTED TO THE STORM SEWER SYSTEM AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION AS DIRECTED OR APPROVED BY THE OWNER.

ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

ALL MANHOLES, FIRE HYDRANTS AND VALVE BOXES SHALL BE ADJUSTED TO FINAL GRADE AT THE CONTRACTOR'S EXPENSE.

GRANULAR BACKFILL SHALL BE REQUIRED IN ALL TRENCHED IN AREAS OF EXISTING PAVEMENT OR BUILDING SLAB. FILL IN PROPOSED PAVEMENT OR BUILDING PAD AREAS SHALL BE COMPACTED TO THE PROJECT'S GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND FIELD PERSONNEL APPROVAL.

STORM SEWERS AND STRUCTURES:

ALL PROPOSED STORM SEWERS AND STRUCTURES ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER. SUPPLY PIPE OF THE REQUIRED SIZE OR ONE SIZE LARGER. PROPOSED STORM SEWERS "PR. STM" SHALL BE PVC-SDR 35/ HIGH DENSITY POLYETHYLENE (HDPE), PER ODOT 707.33/ OR REINFORCED CONCRETE PIPE, PER ODOT ITEM 706.02, CLASS IV. ALL STORM SHALL BE INSTALLED PER ODOT ITEM 611.10, TYPE A (CULVERTS) AND TYPE B (STORM/SANITARY UNDER PAVEMENT).

611.06 BEDDING. TYPE 1 BEDDING CONSISTS OF STRUCTURAL BACKFILL EXTENDING AT LEAST 6 INCHES (150 MM) BELOW THE BOTTOM OF THE CONDUIT FOR THE FULL WIDTH OF THE TRENCH. COMPACT THE BEDDING ACCORDING TO 611.06.

USE TYPE 1 BEDDING FOR 706.05, OR 706.051 AND 706.052 ON SLAB BOTTOMS, OR CORRUGATED INVERT PLATES.

TYPE 2 BEDDING CONSISTS OF STRUCTURAL BACKFILL EXTENDING AT LEAST 3 INCHES (75 MM) FOR ALL 706 RIGID PIPE CONDUITS AND 6 INCHES (150 MM) FOR ALL OTHER CONDUITS BELOW THE BOTTOM OF THE CONDUIT FOR THE FULL WIDTH OF THE TRENCH. EXTEND THE BEDDING UP AROUND THE PIPE FOR A DEPTH OF NOT LESS THAN 30 PERCENT OF THE RISE OF THE CONDUIT. SHAPE THE BEDDING TO FIT THE CONDUIT WITH RECESSES SHAPED TO RECEIVE THE BELL OF BELL-AND-SPIGOT PIPE. LEAVE THE BEDDING BELOW THE MIDDLE ONE-THIRD OF THE PIPE SPAN UNCOMPACTED. COMPACT THE REMAINING BEDDING ACCORDING TO 611.06.

USE TYPE 2 BEDDING FOR TYPES A, B, C, AND D CONDUITS EXCEPT FOR LONG SPAN STRUCTURES AND FOR CONDUITS THAT REQUIRE TYPE 3 BEDDING.

COMPACTED FILLS SHALL BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO TRENCHING FOR PLACEMENT OF SEWER. ALL FILLS SHALL BE INSPECTED AND APPROVED BY THE PROJECT'S GEOTECHNICAL ENGINEER, OR PER GOVERNING AGENCIES APPROVAL.

CATCH BASINS AND/OR MANHOLES OVER 4 FEET SHALL BE FURNISHED WITH STEPS, MEETING ODOT ITEM 706.13, 711.13, 711.30, OR 711.31.

CATCH BASINS LOCATED IN PAVEMENT AREAS SHALL HAVE FINGER DRAINS. (SEE DETAIL SHEET).

DISTANCES LISTED ON THE PLANS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

EXCAVATION/FILL:

SITE BUILDING PAD EXCAVATION AND EMBANKMENT SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATION AND APPROVAL.



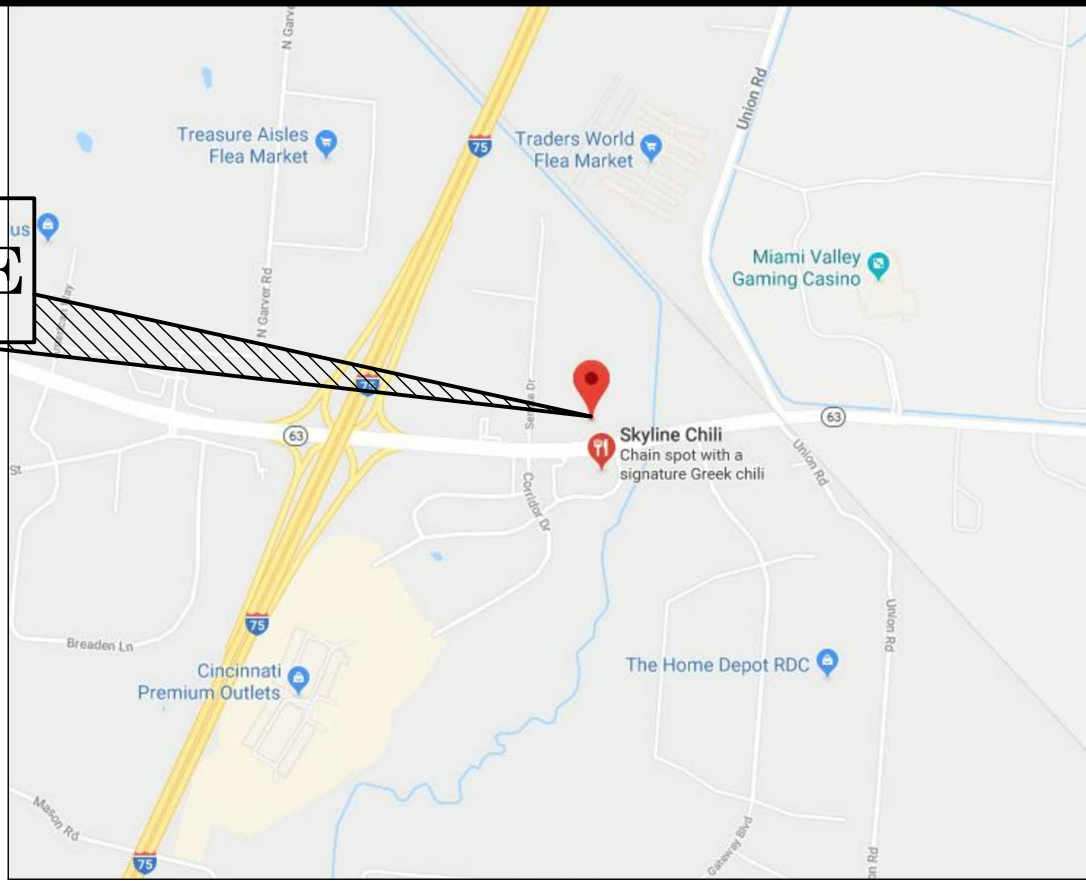
PLANS FOR THE CONSTRUCTION OF A NEW COMMERCIAL BUILDING KNOWN AS:

BROOKS-SR63 DISPENSARY

BROOKS RD., CITY OF MONROE, WARREN COUNTY, OHIO

JUNE, 2022

PROPOSED SITE



LOCATION MAP

OWNER/APPLICANT:

CINCINNATI COMMERCIAL CONTRACTING
4779 RED BANK RD,
CINCINNATI, OH 45227
513-561-6633

CIVIL ENGINEERING:

EVANS ENGINEERING
4240 AIRPORT RD., SUITE 211
CINCINNATI, OHIO 45226
(513)-321-2168
JONATHAN R. EVANS, P.E.

SURVEYING:

BINZ SURVEYING, LLC.
6547 BROOKS RD.
HARRISON, OHIO 45030
(513) 260-1293
DAN BINZ

INDEX:

- C-1 TITLE SHEET & GENERAL NOTES
- C-1.1 SITE CONSTRUCTION DETAILS
- C-1.2 SITE CONSTRUCTION DETAILS
- C-2 EXISTING CONDITIONS & DEMO PLAN
- C-3 SITE DIMENSION PLAN
- C-3.1 UTILITY SERVICE PLAN
- C-4 GRADING PLAN
- C-5 STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
- C-5.1 SWPPP NOTES & DETAILS

STANDARD DRAWINGS:

THE FOLLOWING ODOT AND LOCAL STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THIS PLAN:

- CB-2-2A, 2-2B, 2-2C (7-16-2021) CATCH BASINS NOs 2-2A, B & C
- CB-2-3, 2-4 (7-16-2021) CATCH BASINS NO's 2-3 & 2-4
- CB-2-5, 2-6 (7-16-2021) CATCH BASINS NO's 2-5 & 2-6
- CB 3 (7-16-2021) CATCH BASIN NO. 3
- CB 3A (7-16-2021) CATCH BASIN NO. 3A
- MH 3 (7-16-2021) MANHOLE NO. 3
- BP-7.1 (7-17-2020) NEW CURB RAMPS
- HW-2.1 (7-20-2018) HALF-HEIGHT HEADWALLS

THE FOLLOWING CITY OF MONROE STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THIS PLAN:

- 300-2, 300-5, 300-9, 300-10, 300-11, 300-12
- 300-15, 300-16, 300-17, 300-18, 300-19, 500-1,
- 500-5, 500-7, 500-8, 600-11, 600-12, 600-13,
- 600-14, 600-15, 600-17 800-2, 800-4, 800-10,
- 800-11, 800-13

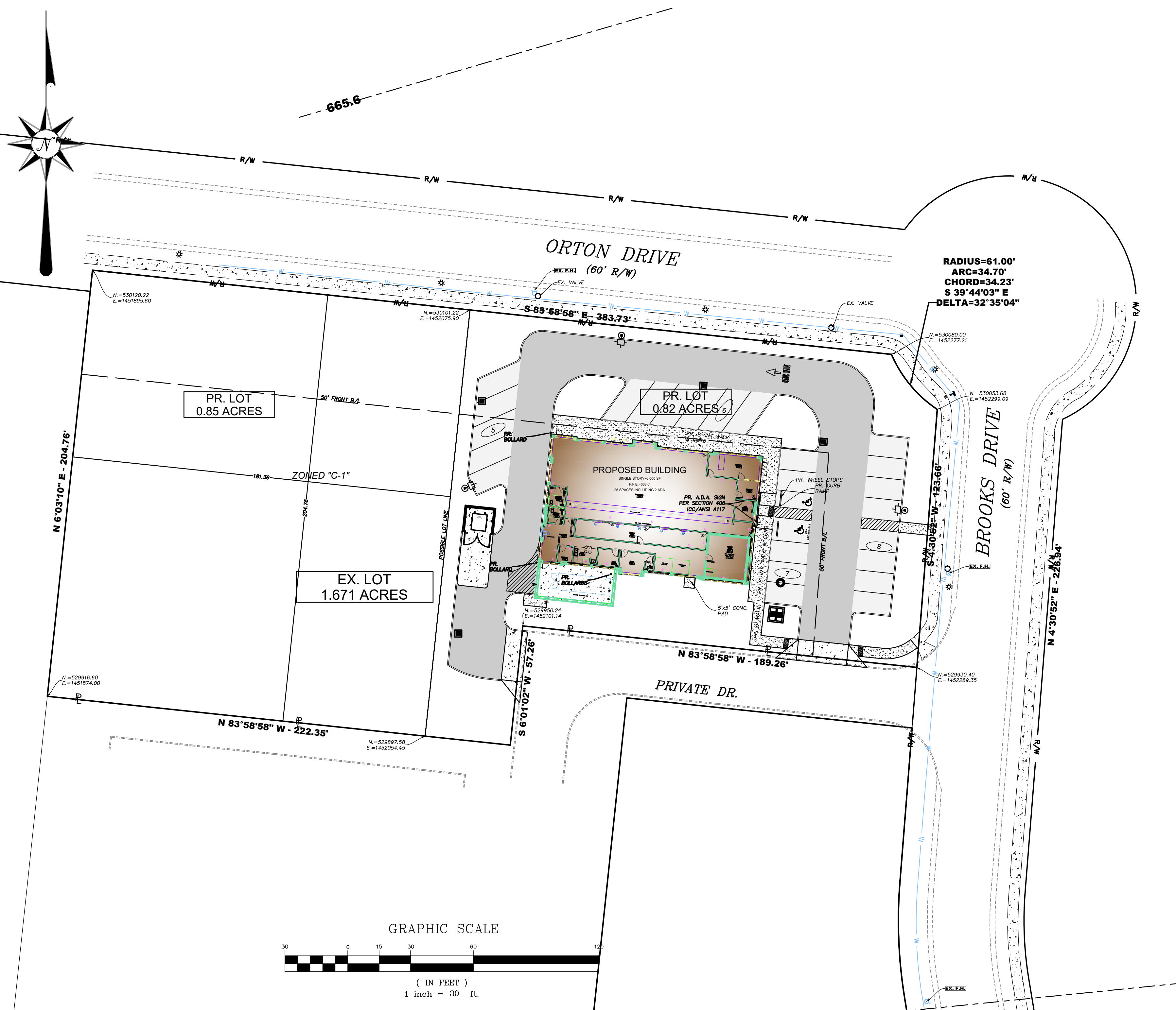
ANY MAINTENANCE OF TRAFFIC SHALL BE PER ODOTCD AND ODOT SPEC MT-101.9.

APPROVAL:

DRAWINGS APPROVED FOR CONSTRUCTION-CITY OF MONROE:

BY: _____

TITLE _____ DATE: _____



DEPARTMENT/ UTILITY TABLE:

CITY OF MONROE PLANNING & ZONING & BUILDING DEPARTMENT
233 S. MAIN ST.
MONROE, OHIO 45050
KAMERYN JONES
513-539-7374 EXT.-1020
JONESK@MONROEOHIO.ORG

DUKE ENERGY-ELECTRIC
BRETT KING
CINCINNATI, OHIO 45216
TEL: 513-287-4658
BRETT.KING@duke-energy.com

BUTLER COUNTY WATER & SEWER (FOR SEWER)
RICK SMITH
130 HIGH STREET
HAMILTON, OH 45011
513.887.3067
RICHARD.SMITH@BCOHIO.US

CITY OF MONROE PUBLIC WORKS
(WATER, STORM & SWP3)
1000 HOLMAN AVENUE
MONROE, OH 45050
513-727-8953

DUKE ENERGY-GAS
JEREMY PRATT
TEL: 513-287-4625
TEM: JEREMY.PRATT@DUKE-ENERGY.COM

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

NO. & DESCRIPTION

BY

DATE

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



TITLE SHEET & GENERAL
NOTES

BROOKS-SR63 DISPENSARY
BROOKS RD.,
CITY OF MONROE, WARREN COUNTY, OHIO

SCALE: HORIZ. VERT.

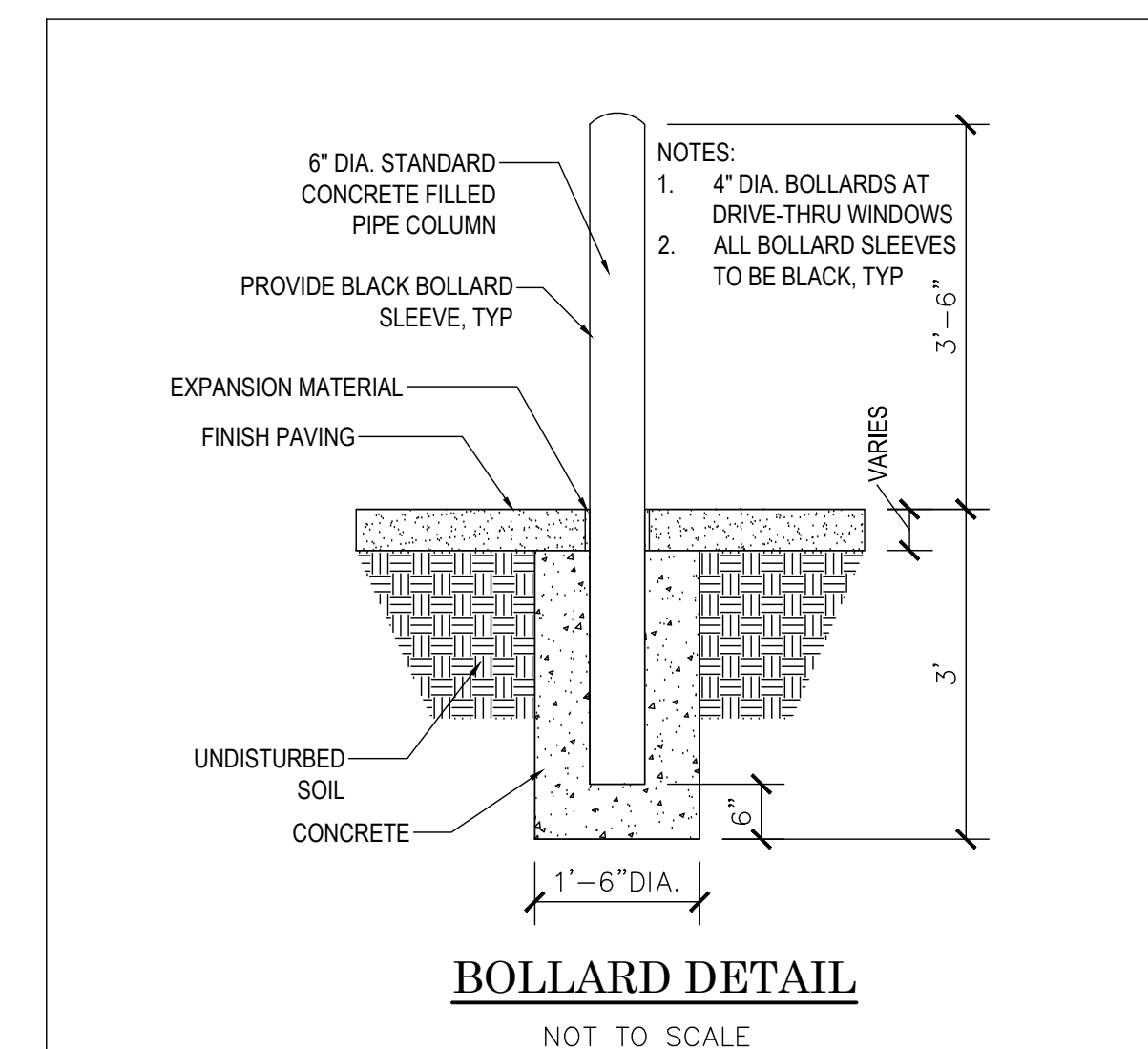
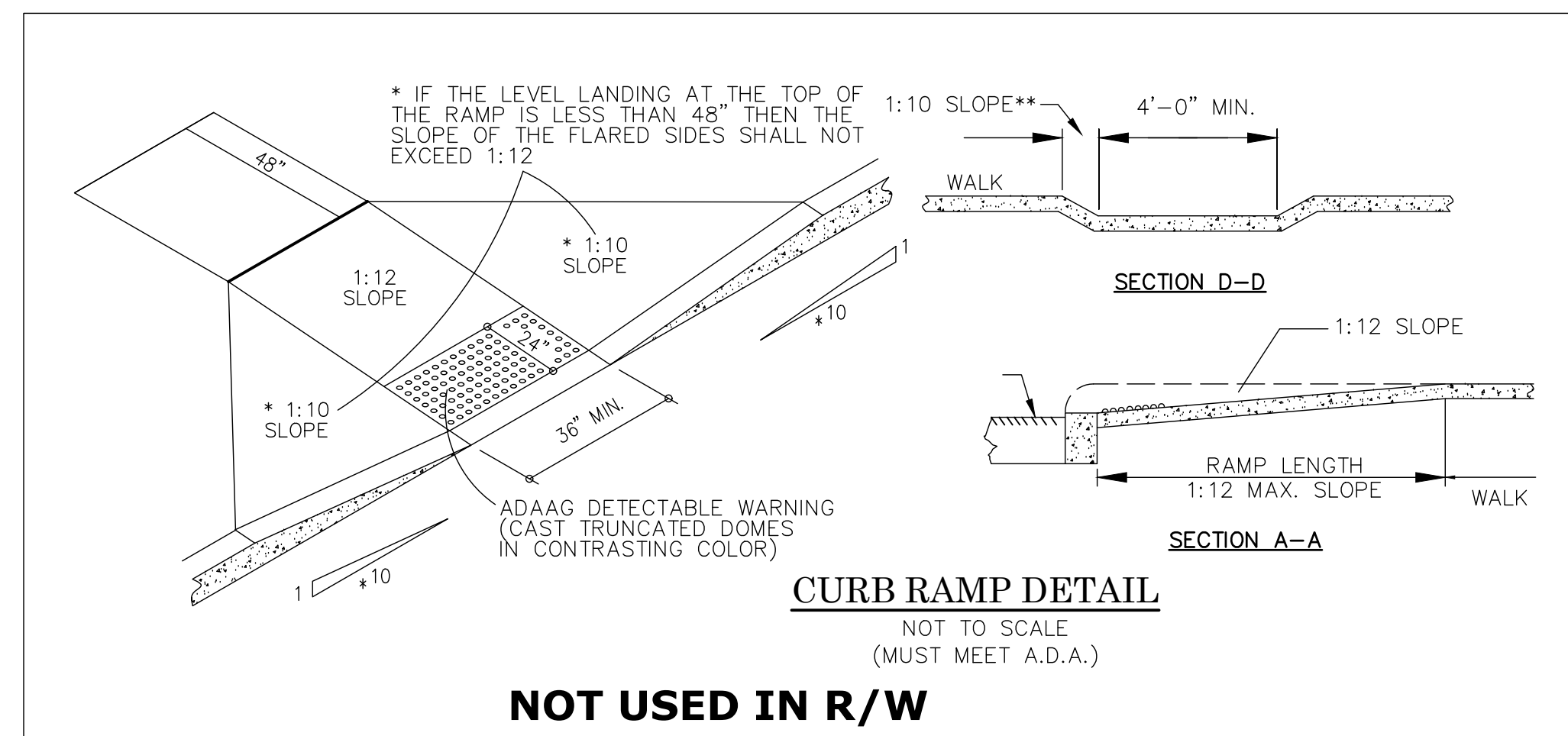
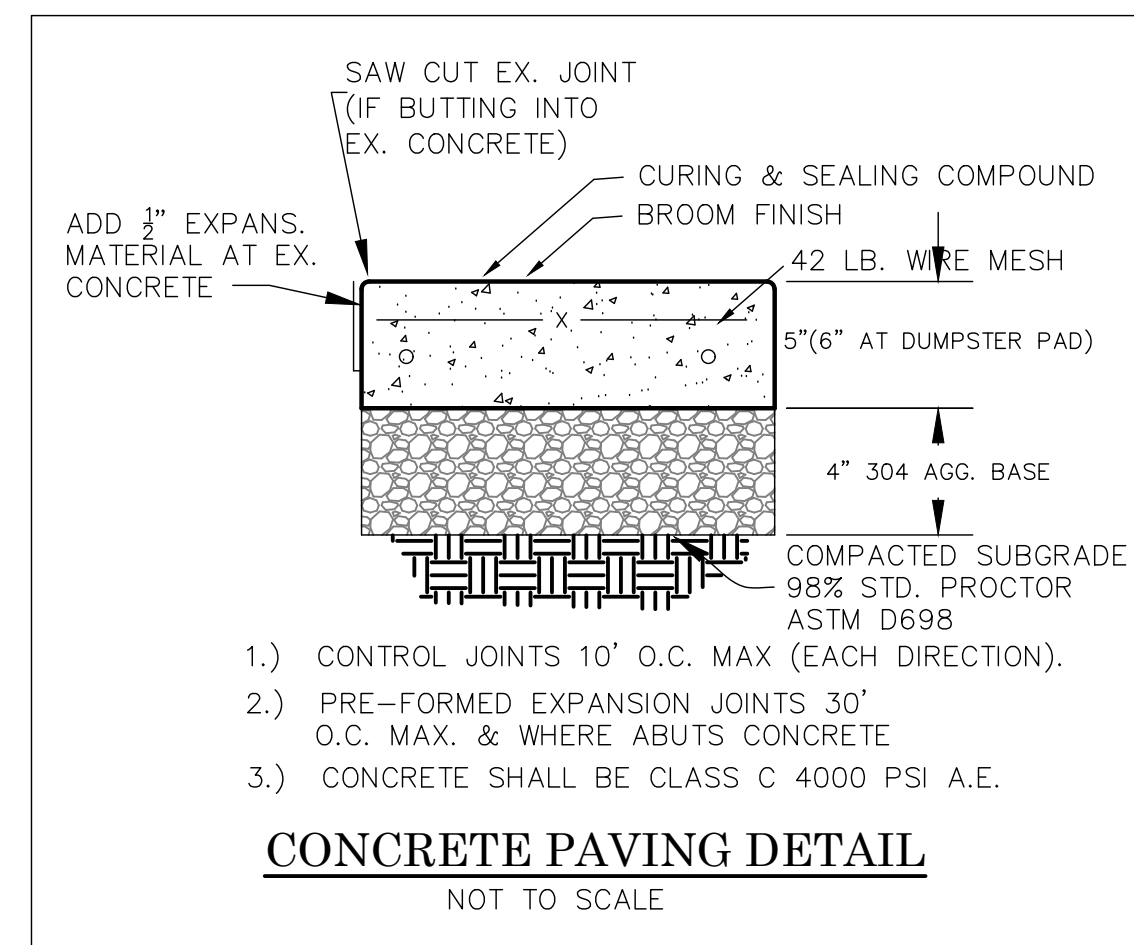
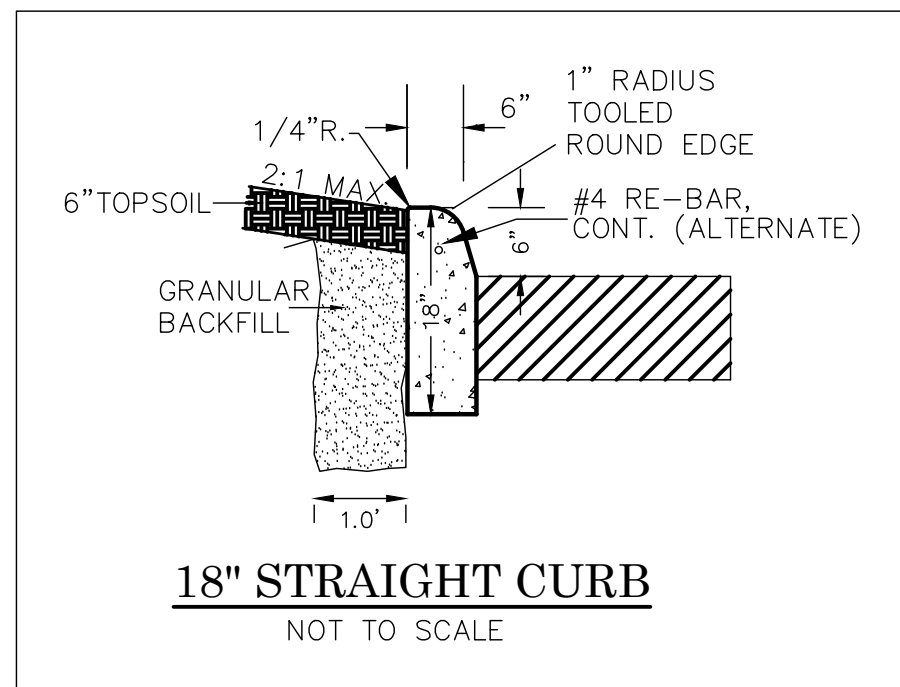
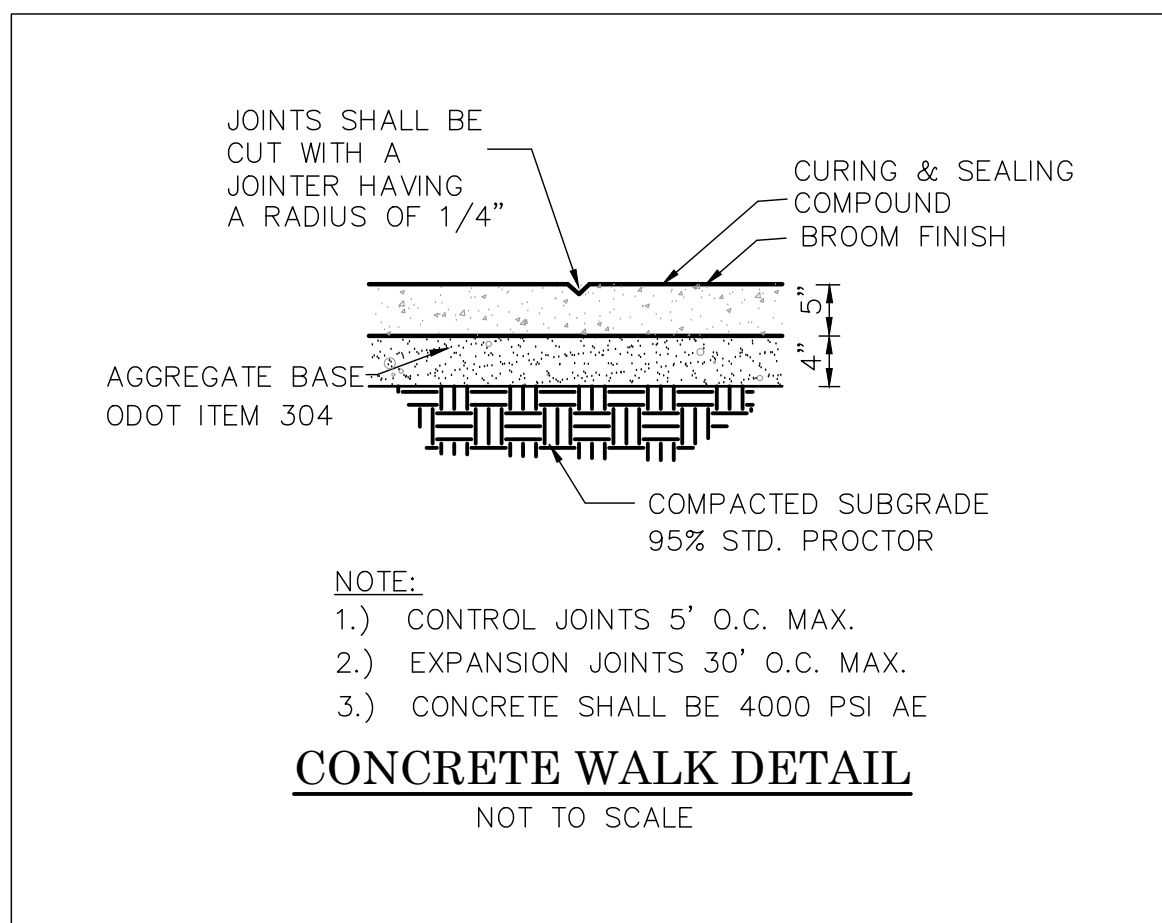
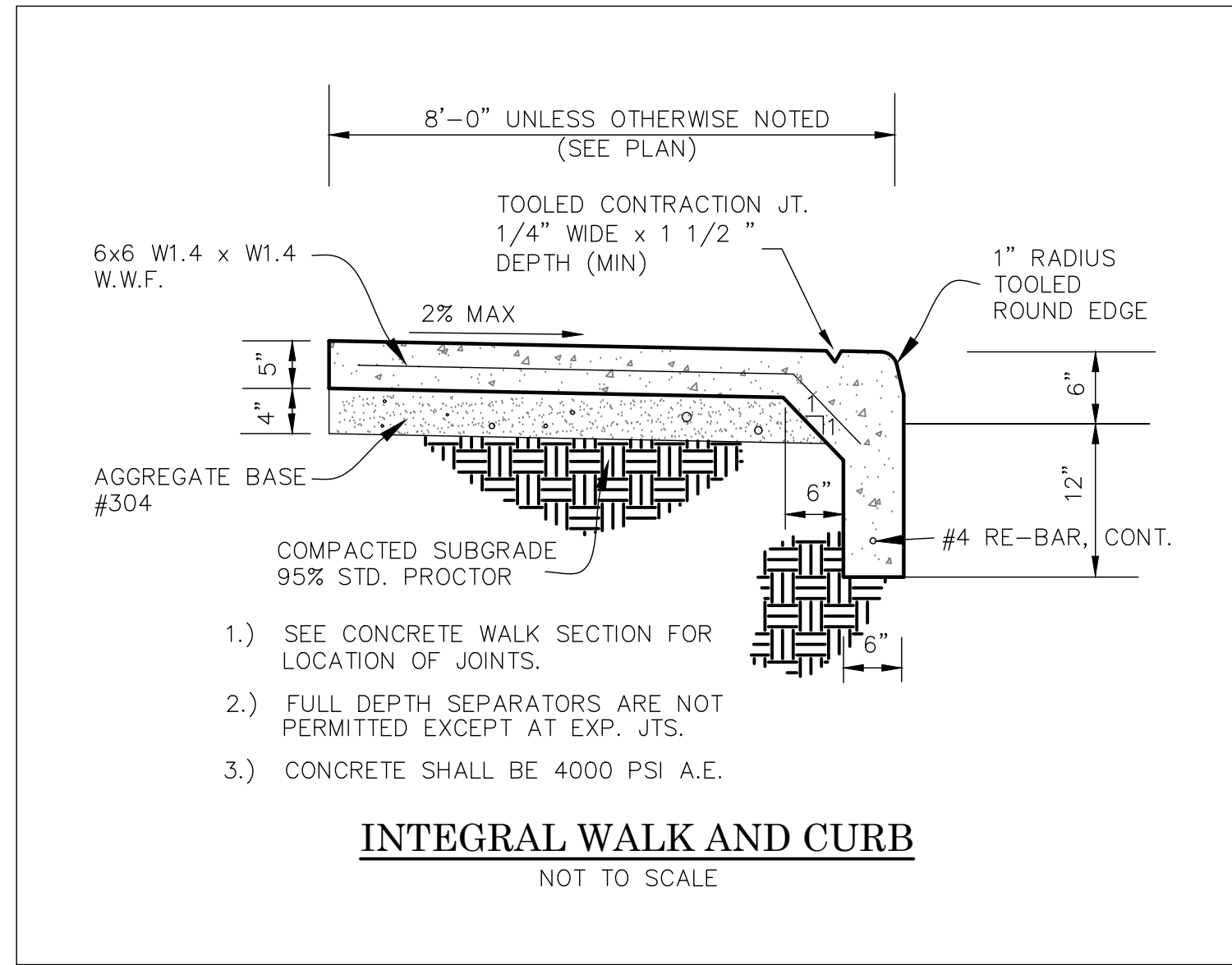
1"=30' N/A

JOB NO. 22-132

DATE Jul. 7, 2022

SHEET NO.

C-1



Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	3	RSX3_LED_P4_40K_R3_HS	Single	RSX3 LED P4 40K R3 HS	PL-1	0.950	28396	311.92	935.76	32

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site	Illuminance	Fc	0.97	5.3	0.0	N.A.	N.A.
Pavement	Illuminance	Fc	2.82	5.3	0.6	4.70	8.83



Warren - Dispensary
New Dispensary

Orton Drive,
Monroe, OH 45050

REV	DATE	DESCRIPTION

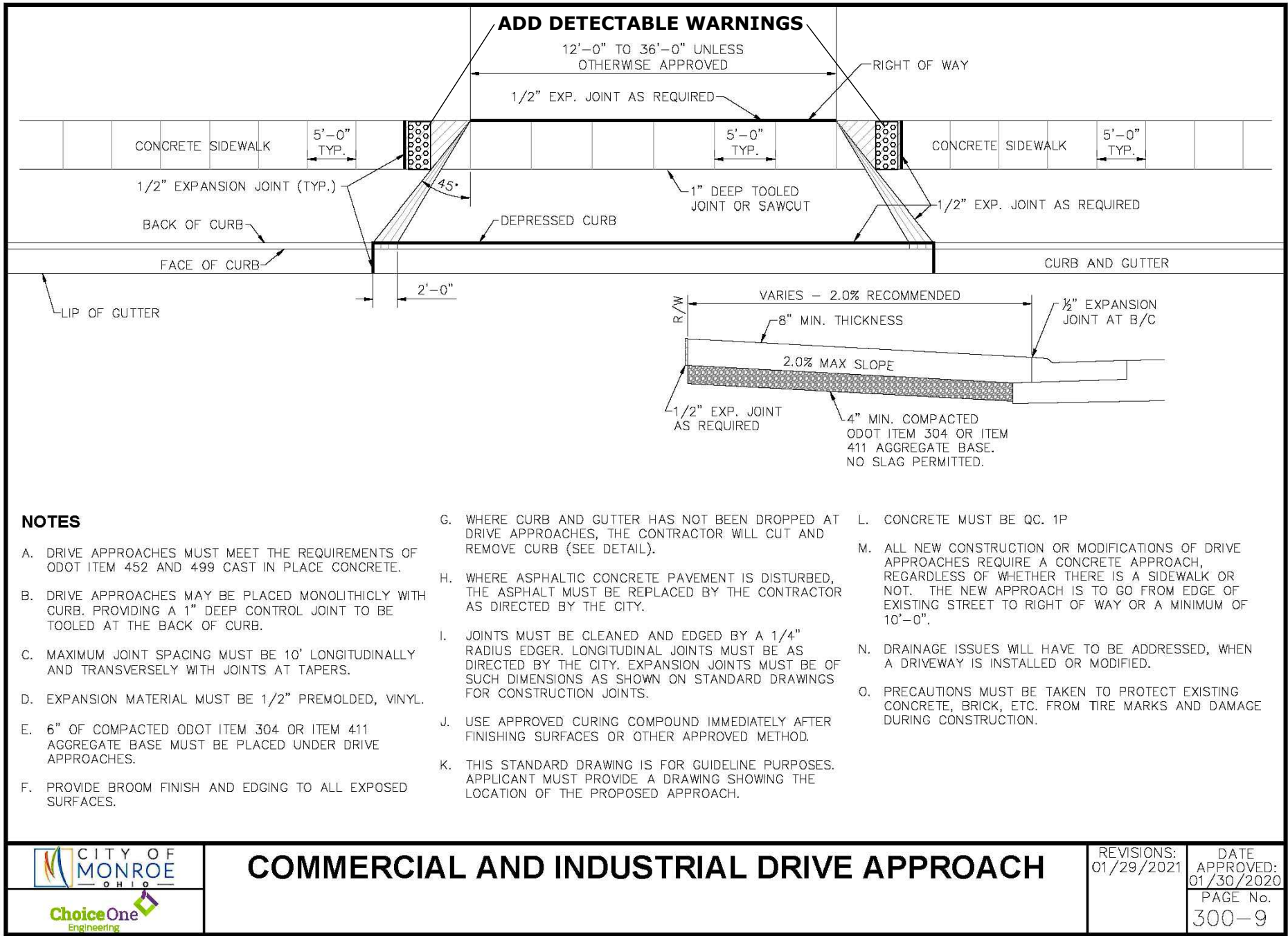
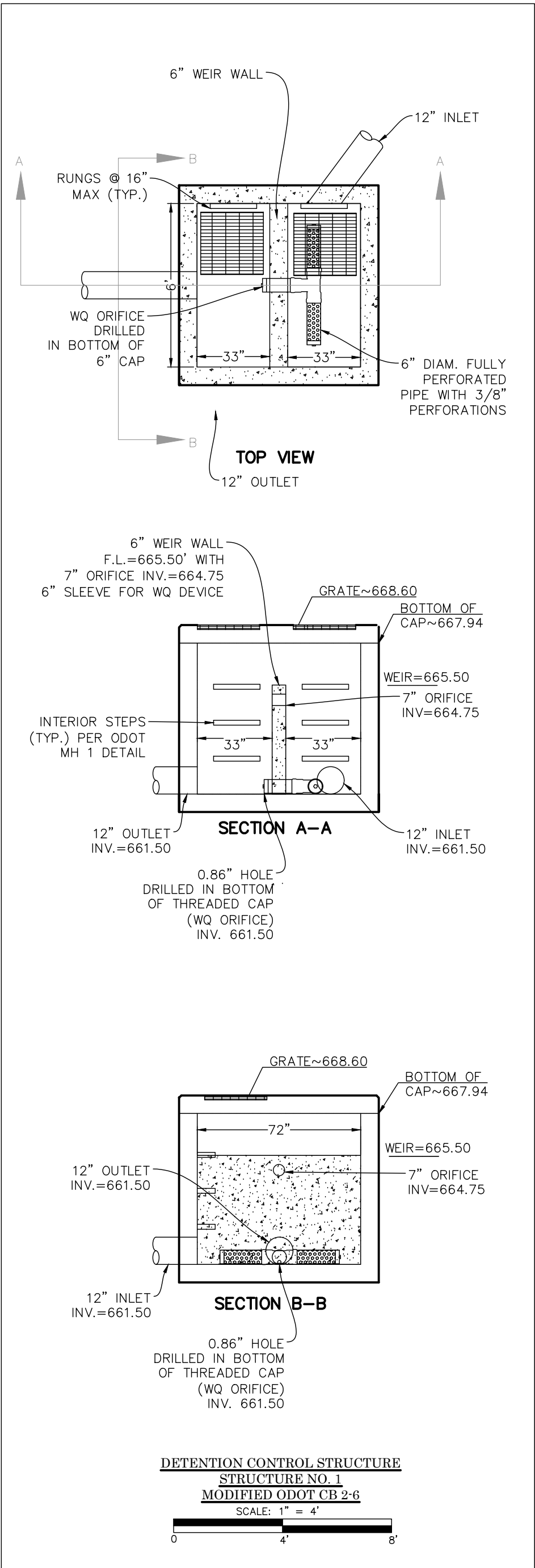
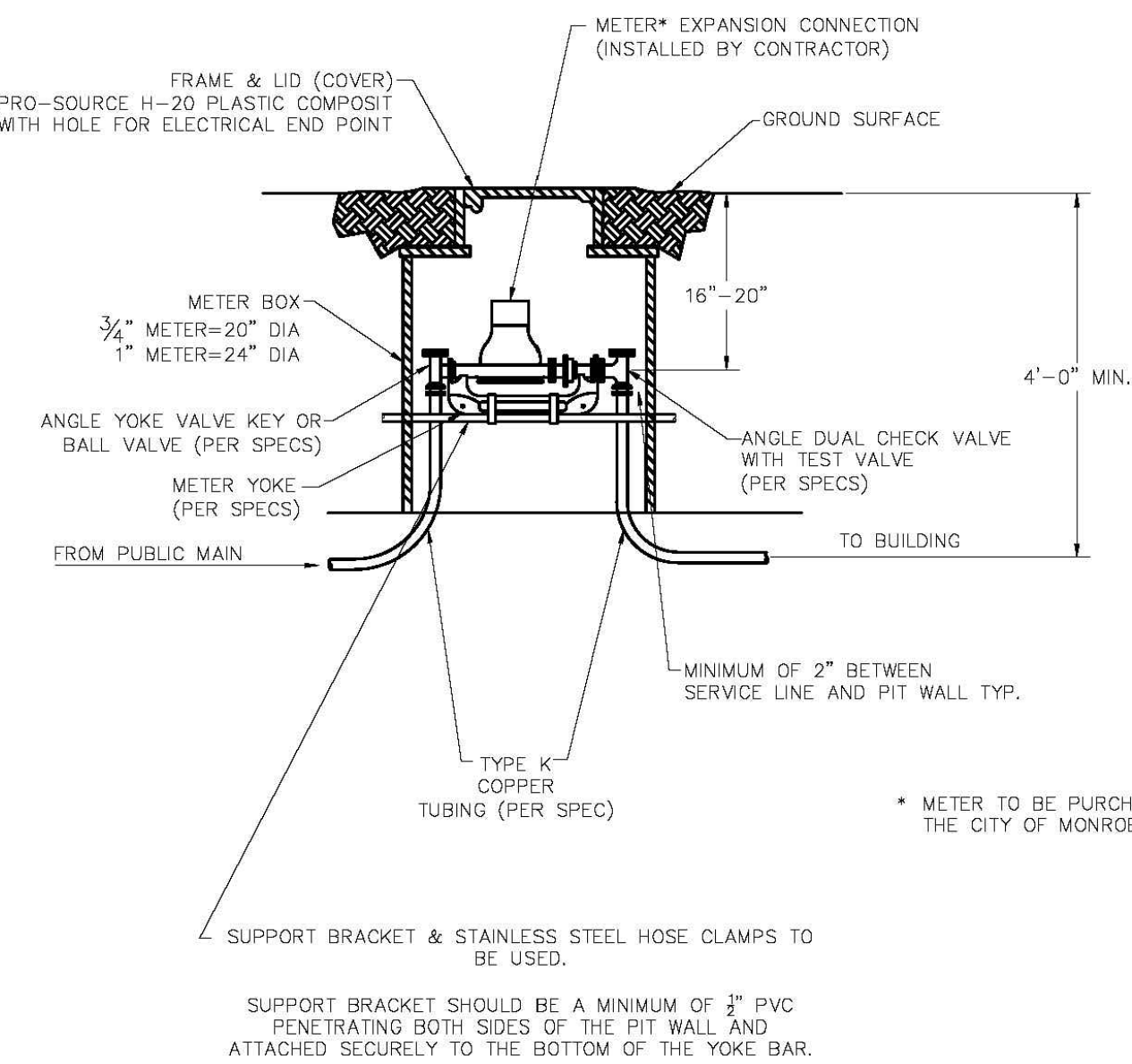
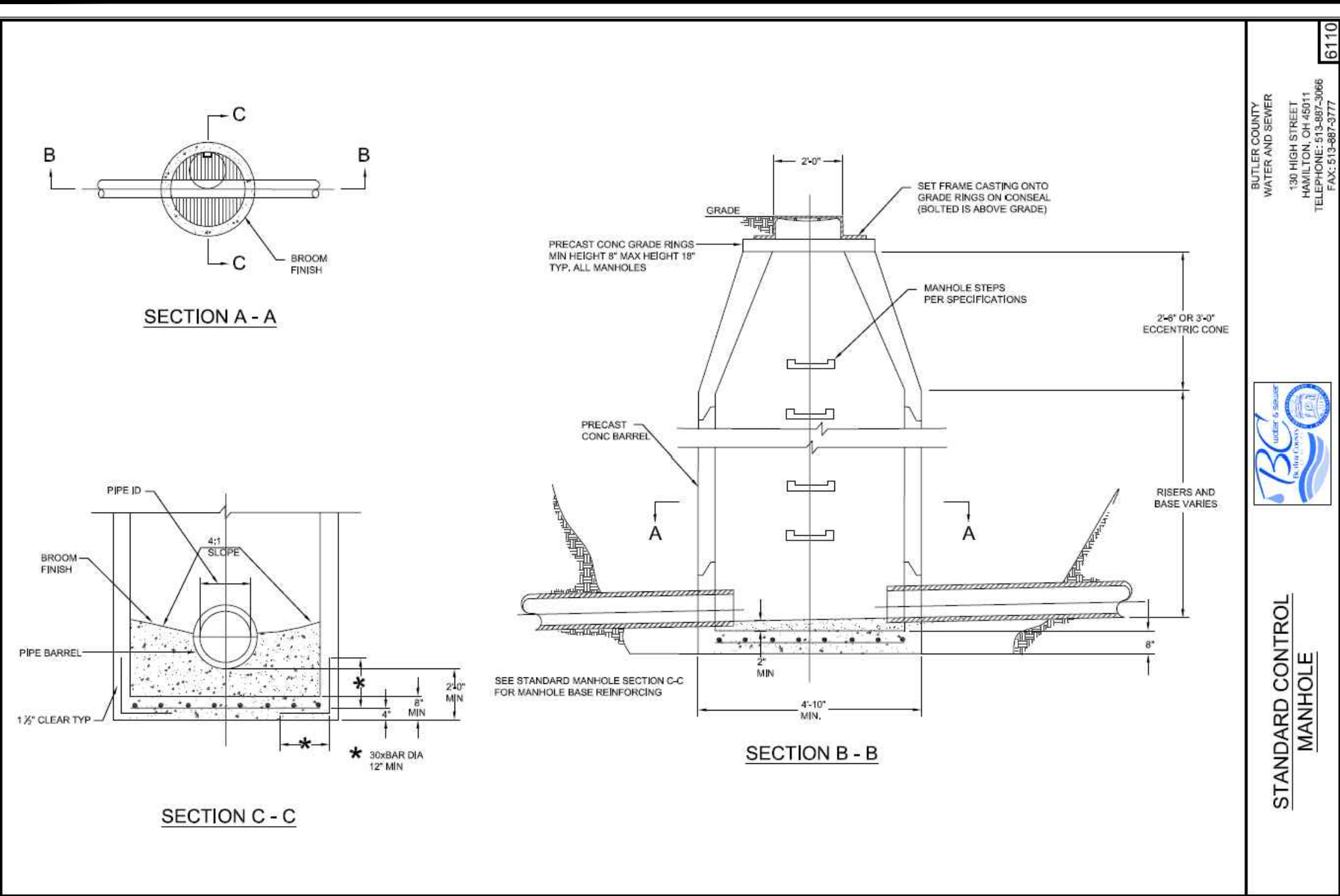
PH101

PHOTOMETRIC PLAN

DATE: 07/08/2022

DRAWN BY: CCC

NOT FOR CONSTRUCTION



PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



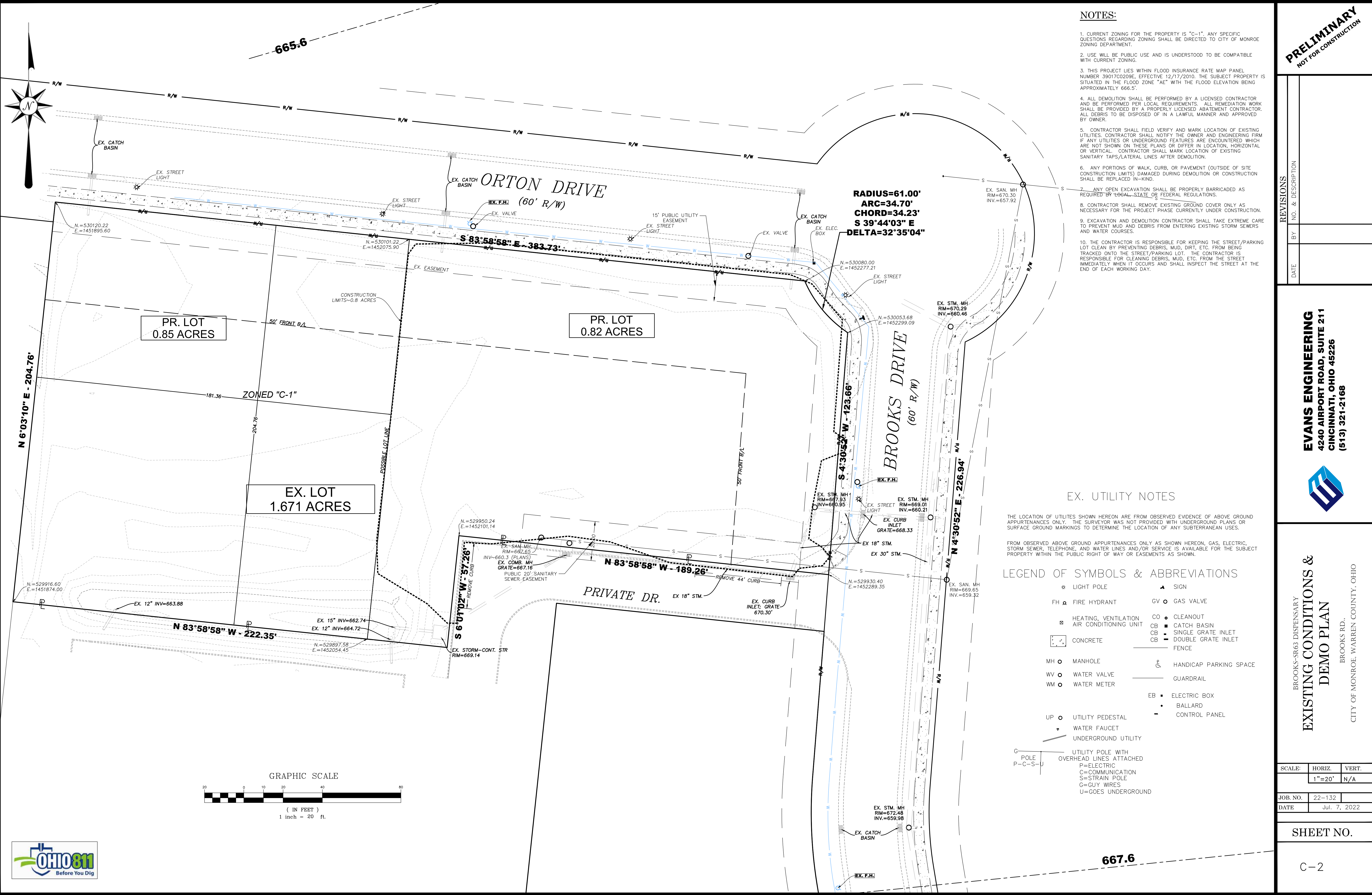
BROOKS-SR63 DISPENSARY
SITE CONSTRUCTION
DETAILS

BROOKS RD.
CITY OF MONROE, WARREN COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	N/A	N/A
JOB NO.	22-132	
DATE	Jul. 7, 2022	

SHEET NO.

C-1.2



- NOTES:**
1. CURRENT ZONING FOR THE PROPERTY IS "C-1". ANY SPECIFIC QUESTIONS REGARDING ZONING SHALL BE DIRECTED TO CITY OF MONROE ZONING DEPARTMENT.
 2. USE WILL BE PUBLIC USE AND IS UNDERSTOOD TO BE COMPATIBLE WITH CURRENT ZONING.
 3. THIS PROJECT LIES WITHIN FLOOD INSURANCE RATE MAP PANEL NUMBER 39017C0209E, EFFECTIVE 12/17/2010. THE SUBJECT PROPERTY IS SITUATED IN THE FLOOD ZONE "AE" WITH THE FLOOD ELEVATION BEING APPROXIMATELY 666.5'.
 4. ALL DEMOLITION SHALL BE PERFORMED BY A LICENSED CONTRACTOR AND BE PERFORMED PER LOCAL REQUIREMENTS. ALL REMEDIATION WORK SHALL BE PROVIDED BY A PROPERLY LICENSED ABATEMENT CONTRACTOR. ALL DEBRIS TO BE DISPOSED OF IN A LAWFUL MANNER AND APPROVED BY OWNER.
 5. CONTRACTOR SHALL FIELD VERIFY AND MARK LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEERING FIRM IF ANY UTILITIES OR UNDERGROUND FEATURES ARE ENCOUNTERED WHICH ARE NOT SHOWN ON THESE PLANS OR DIFFER IN LOCATION, HORIZONTAL OR VERTICAL. CONTRACTOR SHALL MARK LOCATION OF EXISTING SANITARY TAPS/LATERAL LINES AFTER DEMOLITION.
 6. ANY PORTIONS OF WALK, CURB, OR PAVEMENT (OUTSIDE OF SITE CONSTRUCTION LIMITS) DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLACED IN-KIND.
 7. ANY OPEN EXCAVATION SHALL BE PROPERLY BARRICADED AS REQUIRED BY LOCAL, STATE OR FEDERAL REGULATIONS.
 8. CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.
 9. EXCAVATION AND DEMOLITION CONTRACTOR SHALL TAKE EXTREME CARE TO PREVENT MUD AND DEBRIS FROM ENTERING EXISTING STORM SEWERS AND WATER COURSES.
 10. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STREET/PARKING LOT CLEAN BY PREVENTING DEBRIS, MUD, DIRT, ETC. FROM BEING TRACKED ONTO THE STREET/PARKING LOT. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DEBRIS, MUD, ETC. FROM THE STREET IMMEDIATELY WHEN IT OCCURS AND SHALL INSPECT THE STREET AT THE END OF EACH WORKING DAY.

EX. UTILITY NOTES

THE LOCATION OF UTILITIES SHOWN HEREON ARE FROM OBSERVED EVIDENCE OF ABOVE GROUND APPURTENANCES ONLY. THE SURVEYOR WAS NOT PROVIDED WITH UNDERGROUND PLANS OR SURFACE GROUND MARKINGS TO DETERMINE THE LOCATION OF ANY SUBTERRANEAN USES.

FROM OBSERVED ABOVE GROUND APPURTENANCES ONLY AS SHOWN HEREON, GAS, ELECTRIC, STORM SEWER, TELEPHONE, AND WATER LINES AND/OR SERVICE IS AVAILABLE FOR THE SUBJECT PROPERTY WITHIN THE PUBLIC RIGHT OF WAY OR EASEMENTS AS SHOWN.

LEGEND OF SYMBOLS & ABBREVIATIONS

- | | | | |
|----|---|----|------------------------|
| ✱ | LIGHT POLE | ▲ | SIGN |
| FH | FIRE HYDRANT | GV | GAS VALVE |
| ⊠ | HEATING, VENTILATION
AIR CONDITIONING UNIT | CO | CLEANOUT |
| ■ | CONCRETE | CB | CATCH BASIN |
| MH | MANHOLE | CB | SINGLE GRATE INLET |
| WV | WATER VALVE | CB | DOUBLE GRATE INLET |
| WM | WATER METER | — | FENCE |
| UP | UTILITY PEDESTAL | Ⓢ | HANDICAP PARKING SPACE |
| + | WATER FAUCET | — | GUARDRAIL |
| — | UNDERGROUND UTILITY | EB | ELECTRIC BOX |
| — | UTILITY POLE WITH
OVERHEAD LINES ATTACHED | • | BALLARD |
| P | ELECTRIC | — | CONTROL PANEL |
| C | COMMUNICATION | | |
| S | STRAIN POLE | | |
| G | GUY WIRES | | |
| U | GOES UNDERGROUND | | |

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION

DATE	BY

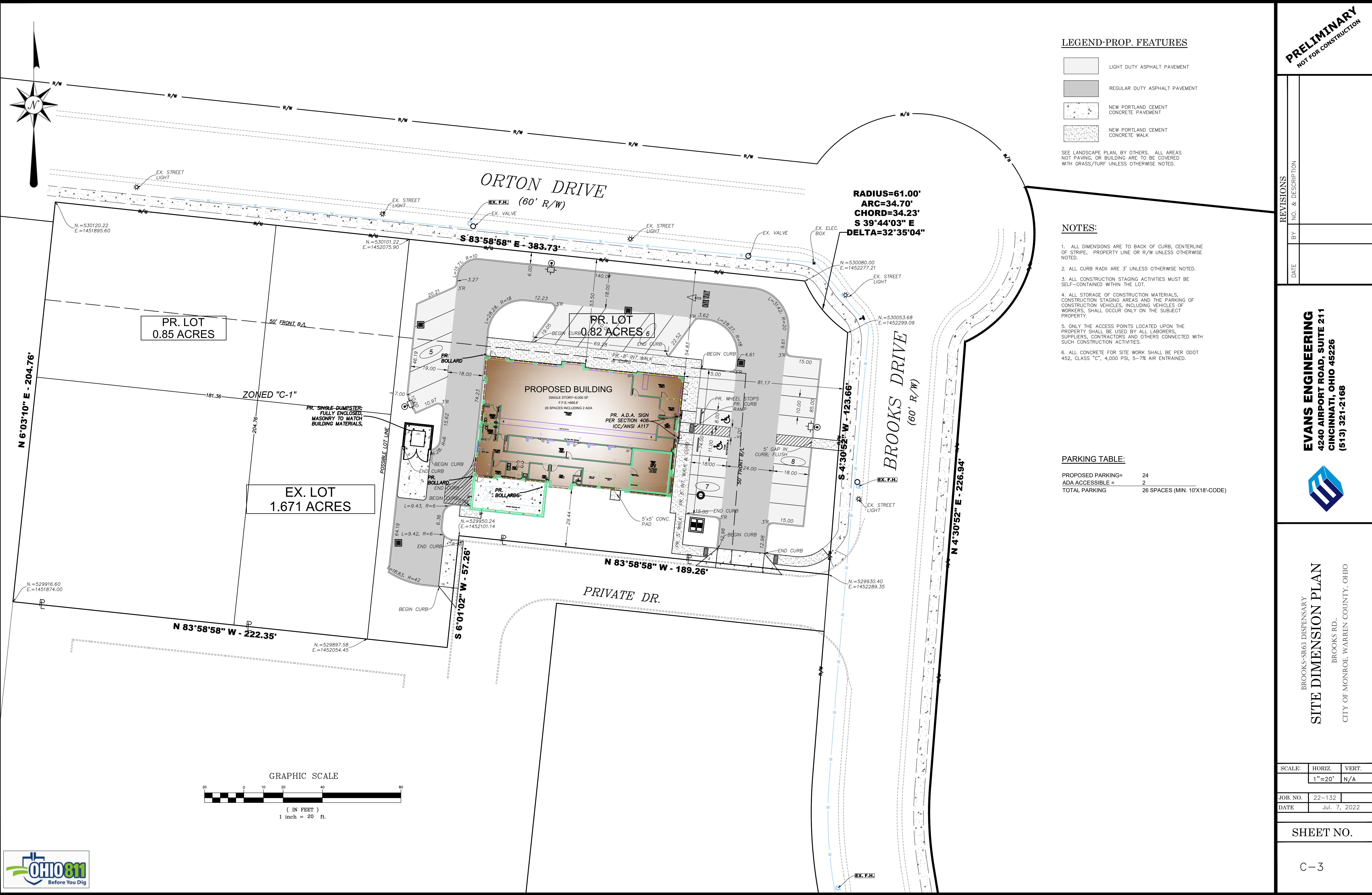
EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

BROOKS-SR63 DISPENSARY
EXISTING CONDITIONS &
DEMO PLAN
CITY OF MONROE, WARREN COUNTY, OHIO
BROOKS RD.

SCALE:	HORIZ.	VERT.
	1"=20'	N/A
JOB NO.	22-132	
DATE	Jul. 7, 2022	

SHEET NO.
C-2

C:\Users\jevan\Evans Engineering\Engineering Projects-Civil - Documents\22-132 Monroe Dispensary\DWG\C2-EXC-22-132.dwg, 7/7/2022 4:09:43 PM, _AutoCAD PDF (General Documentation).pc3



LEGEND-PROP. FEATURES

- LIGHT DUTY ASPHALT PAVEMENT
- REGULAR DUTY ASPHALT PAVEMENT
- NEW PORTLAND CEMENT CONCRETE PAVEMENT
- NEW PORTLAND CEMENT CONCRETE WALK

SEE LANDSCAPE PLAN, BY OTHERS. ALL AREAS NOT PAVING, OR BUILDING ARE TO BE COVERED WITH GRASS/TURF UNLESS OTHERWISE NOTED.

NOTES:

- ALL DIMENSIONS ARE TO BACK OF CURB, CENTERLINE OF STRIPE, PROPERTY LINE OR R/W UNLESS OTHERWISE NOTED.
- ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.
- ALL CONSTRUCTION STAGING ACTIVITIES MUST BE SELF-CONTAINED WITHIN THE LOT.
- ALL STORAGE OF CONSTRUCTION MATERIALS, CONSTRUCTION STAGING AREAS AND THE PARKING OF CONSTRUCTION VEHICLES, INCLUDING VEHICLES OF WORKERS, SHALL OCCUR ONLY ON THE SUBJECT PROPERTY.
- ONLY THE ACCESS POINTS LOCATED UPON THE PROPERTY SHALL BE USED BY ALL LABORERS, SUPPLIERS, CONTRACTORS AND OTHERS CONNECTED WITH SUCH CONSTRUCTION ACTIVITIES.
- ALL CONCRETE FOR SITE WORK SHALL BE PER ODOT 452, CLASS "C", 4,000 PSI, 5-7% AIR ENTRAINED.

PARKING TABLE:

PROPOSED PARKING=	24
ADA ACCESSIBLE =	2
TOTAL PARKING	26 SPACES (MIN. 10'X18'-CODE)

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS	
NO.	DESCRIPTION

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



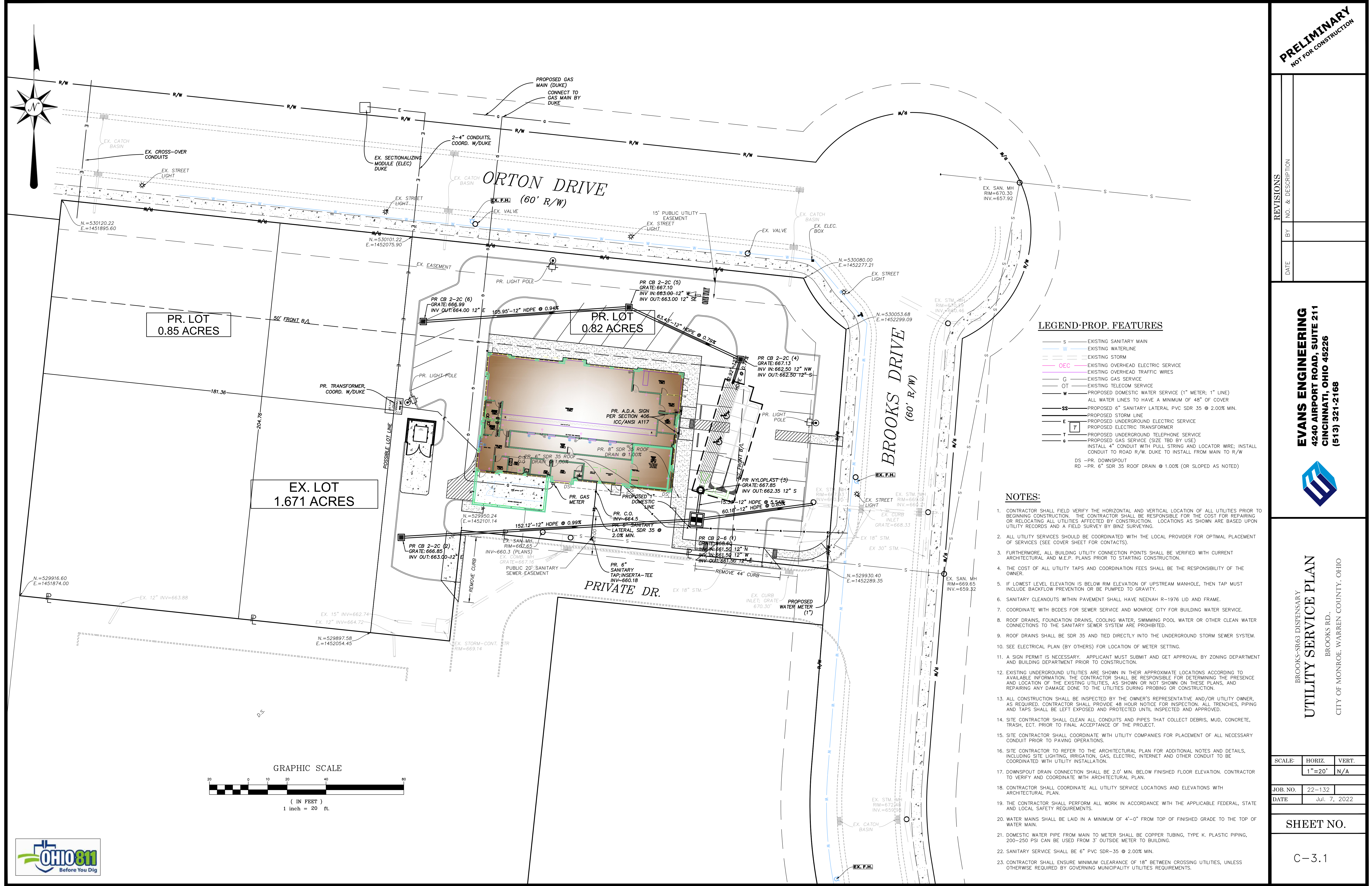
BROOKS-SR63 DISPENSARY
SITE DIMENSION PLAN
BROOKS RD.,
CITY OF MONROE, WARREN COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=20'	N/A
JOB. NO.	22-132	
DATE	Jul. 7, 2022	

SHEET NO.

C-3





PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS	
NO.	DESCRIPTION

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

BROOKS-SR63 DISPENSARY
UTILITY SERVICE PLAN

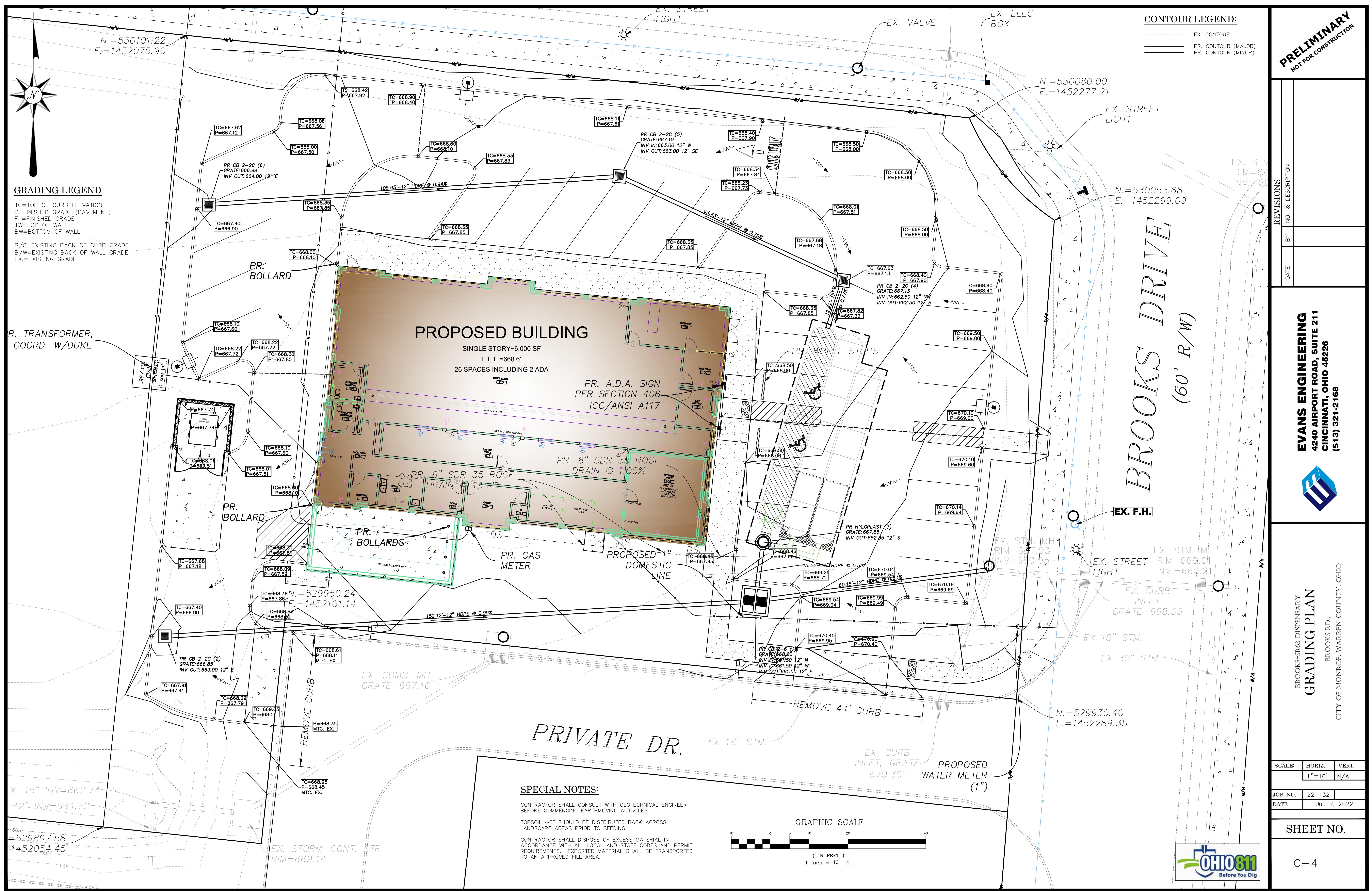
BROOKS RD.,
CITY OF MONROE, WARREN COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=20'	N/A

JOB NO.	22-132
DATE	Jul. 7, 2022

SHEET NO.

C-3.1



PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION

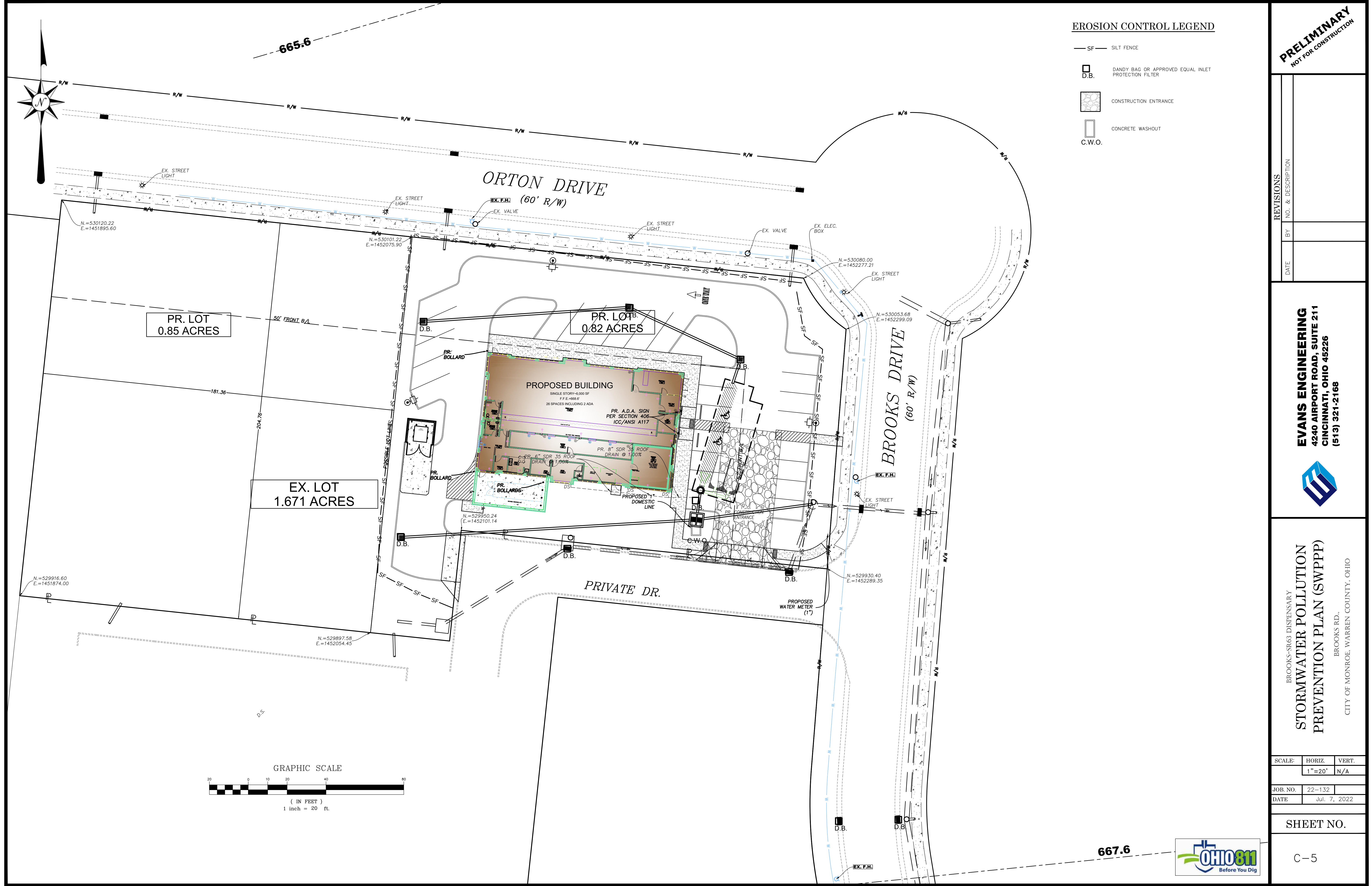
EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

BROOKS-SR63 DISPENSARY
GRADING PLAN

BROOKS RD.
CITY OF MONROE, WARREN COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=10'	N/A
JOB NO.	22-132	
DATE	Jul. 7, 2022	

SHEET NO.
C-4



PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION
BY	
DATE	

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

BROOKS-SR63 DISPENSARY
STORMWATER POLLUTION
PREVENTION PLAN (SWPPP)

BROOKS RD.
CITY OF MONROE, WARREN COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=20'	N/A
JOB. NO.	22-132	
DATE	Jul. 7, 2022	

SHEET NO.

C-5

EROSION AND SEDIMENT CONTROL NOTES:

PRE-CONSTRUCTION:

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF MONROE (513) 352-4973 AT LEAST SEVEN (7) DAYS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITIES AND, UNLESS WAIVED BY THE UTILITY, WILL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES FROM THE CITY OF MONROE.

2. THE CONTRACTOR SHALL NOTIFY THE CITY OF MONROE BY TELEPHONE AT THE FOLLOWING POINTS:

- A. THE REQUIRED PRE-CONSTRUCTION MEETING
- B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
- C. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE
- D. PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES
- E. PRIOR TO FINAL ACCEPTANCE

3. A COPY OF THE APPROVED SEDIMENT AND EROSION CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

4. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED AND APPROVED BY A REPRESENTATIVE OF THE CITY OF MONROE PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES.

5. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE AN EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM A REPRESENTATIVE OF THE CITY OF MONROE.

6. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE CITY OF MONROE BEFORE ANY CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION ARE IMPLEMENTED UNLESS IMMEDIATE ACTION IS NECESSARY. IN THIS CASE, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

7. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM AN SMU REPRESENTATIVE. THE CONTRACTOR SHALL KEEP WRITTEN RECORDS OF ALL SEDIMENT AND EROSION CONTROL INSPECTIONS AND MAINTENANCE FOR THE DURATION OF THE PROJECT. THIS INFORMATION MUST BE MADE AVAILABLE TO REPRESENTATIVES OF THE CITY OF MONROE UPON REQUEST.

SAFETY:

8. THE CITY OF MONROE SITE REPRESENTATIVE ALWAYS HAS THE OPTION OF REQUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES IF DEEMED NECESSARY.

9. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH AN APPROVED SAFETY FENCE. THE FENCE MUST CONFORM TO LOCAL ORDINANCES AND REGULATIONS. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL BUILDING OFFICIALS ON APPLICABLE SAFETY REQUIREMENTS. WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE MUST BE MADE OF WELDED WIRE AND AT LEAST FORTY TWO (42) INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN EIGHT (8) FEET, HAVE MESH OPENINGS NO GREATER THAN TWO (2) INCHES IN WIDTH AND FOUR (4) INCHES IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED AND IN GOOD CONDITION AT ALL TIMES.

10. STORM DRAIN INLETS IN NON-SUMP AREAS SHALL HAVE TEMPORARY ASPHALT PADS CONSTRUCTED AT THE TIME OF BASE PAVING TO DIRECT GUTTER FLOW INTO THE INLETS TO AVOID SURCHARGING AND OVERFLOW OF INLETS IN SUMP AREAS.

11. STOCKPILE SLOPES SHALL NOT BE STEEPER THAN 2:1.

STABILIZED CONSTRUCTION ENTRANCE:

12. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY USING A STREET SWEEPER OR SCRAPER. DEBRIS SHALL NOT BE WASHED OFF PAVED SURFACES OR INTO STORM DRAINS.

13. CONSTRUCTION ENTRANCES SHOULD NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES. VEHICLES THAT ENTER AND LEAVE THE SITE SHALL BE RESTRICTED FROM MUDDY AREAS OR CLEANED BEFORE LEAVING SITE.

SEDIMENT TRAPS AND BASINS:

14. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN TWENTY (20) FEET OR ANY EXISTING OR PROPOSED FOUNDATION OR TRAFFIC AREA. NO STRUCTURE MAY BE CONSTRUCTED WITHIN TWENTY (20) FEET OF AN ACTIVE SEDIMENT TRAP OR BASIN.

15. SEDIMENT TRAPS AND BASINS MUST HAVE STABLE INFLOW AND OUTFLOW POINTS SO THAT WATER CAN DISCHARGE WITHOUT CAUSING EROSION.

16. SEDIMENT BASINS/TRAPS SHALL NOT BE GREATER THAN FOUR (4) FEET IN DEPTH.

17. SEDIMENT MUST BE CLEANED, AND THE TRAP/BASIN RESTORED TO ITS ORIGINAL DIMENSIONS, WHEN ACCUMULATION REACHES A HEIGHT HALF-WAY UP TO THE TOP OF THE DESIGNED HOLDING AREA.

18. SEDIMENT REMOVED FROM TRAPS AND BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR VEGETATION PRESERVATION AREA.

19. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM, STABLE GROUND SURFACE, OR RELEASE FROM THE SITE.

20. SEDIMENT BASINS MUST BE REMOVED WITHIN THIRTY SIX (36) MONTHS AFTER THEIR CONSTRUCTION.

21. OHIO DAM SAFETY LAWS APPLY TO BASINS LARGER THAN FIFTEEN (15) ACRE-FEET (24,000 CY) AS MEASURED TO THE TOP OF THE HOLDING AREA.

TEMPORARY & PERMANENT STABILIZATION:

22. ALL CRITICAL SLOPES (3:1 OR STEEPER) SHALL BE STABILIZED WITH SOD OR SEED AS SOON AS POSSIBLE BUT NO LATER THAN SEVEN (7) CALENDAR DAYS AFTER ACHIEVING FINAL GRADE.

23. ALL AREAS NO DRAINING TO A FUNCTIONING SEDIMENT BASIN MUST BE FINAL GRADED AND STABILIZED WITH SOD OR SEED WITHIN SEVEN (7) CALENDAR DAYS OF ACHIEVING FINAL GRADE.

24. ALL AREAS WITHIN FIFTY (50) FEET OF A STREAM MUST BE STABILIZED WITHIN TWO (2) CALENDAR DAYS OF ACHIEVING FINAL GRADE.

25. ALL AREAS THAT ARE TO REMAIN IDLE, INCLUDING STOCK PILES, FOR FOURTEEN (14) CALENDAR DAYS MUST BE STABILIZED WITH SEED OR SOD.

26. WHEN THE PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED BY MARCH 15 OR EARLIER IF GROUND AND WEATHER CONDITIONS ALLOW.

27. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING, RIP-RAP, OR BY OTHER APPROVED STABILIZATION MEASURES WITHIN TWO (2) DAYS OF ACHIEVING FINAL GRADE.

28. TEMPORARY SEDIMENT CONTROL DEVICES MAY BE REMOVED, WITH PERMISSION OF AN SMU REPRESENTATIVE, THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS.

29. STORMWATER MANAGEMENT STRUCTURES, USED TEMPORARILY FOR SEDIMENT CONTROL, SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS.

TEMPORARY AND PERMANENT SEEDING:

1.1 SEEDBED PREPARATION

A. LIME (IN LIEU OF A SOIL TEST RECOMMENDATION) ON ACID SOIL (ph=5.5 OR LESS) AND SUBSOIL AT A RATE OF 100 POUNDS PER 1000 SF, OR TWO (2) TONS PER ACRE OF AGRICULTURAL GROUND LIMESTONE.

B. FERTILIZER (IN LIEU OF A SOILS TEST RECOMMENDATION) SHALL BE APPLIED AT A RATE OF 12-15 POUNDS (25 POUNDS FOR PERMANENT SEEDING) PER 1000 SF OF 10-10-10 OR 12-12-12 ANALYSIS OR EQUIVALENT.

1.2 SEEDING

1.1. TEMPORARY SEEDING MIXTURE

SEEDING PERIOD	TYPE	RATE (1000 SF)
----------------	------	----------------

SPRING AND SUMMER	1. OATS	3 LBS
	2. PEREN. RYEGRASS	1 LBS
	3. TALL FESCUE	1 LBS
FALL	1. PEREN. RYEGRASS	1 LBS
	2. RYE	3 LBS
	3. WHEAT	3 LBS
	4. TALL FESCUE	1 LBS

2. PERMANENT SEEDING MIXTURE

SEEDING PERIOD	TYPE	RATE (1000 SF)
----------------	------	----------------

SPRING, SUMMER, AND FALL	1. CREEPING RED FESCUE 0.5 LBS DOMESTIC RYEGRASS 0.25 LBS KENTUCKY BLUEGRASS 0.25 LBS	0.25 LBS
	2. TALL FESCUE	1 LBS
	3. DWARF FESCUE	1 LBS

2-1 SEEDING FOR STEEP BANKS OR CUTS

SPRING, SUMMER, AND FALL	1. TALL FESCUE	1 LBS
	2. CROWNVECH	0.25 LBS
	3. TALL FESCUE	0.50 LBS
	3. FLATIRA	0.50 LBS

2-2 SEEDING FOR WATERWAYS AND ROAD DITCHES

SPRING, SUMMER AND FALL	1. TALL FESCUE	1 LBS

B. APPLY THE SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) PREFERABLY ON A FIRM, MOST SEEDBED. SEED WHEAT OR RYE NO DEEPER THAN ONE (1) INCH. SEED RYEGRASS NO DEEPER THAN ONE QUARTER (¼) OF AND INCH.

TEMPORARY AND PERMANENT SEEDING(CONT.)

C. WHEN FEASIBLE, EXCEPT WHERE A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHEREVER POSSIBLE.

D. OTHER SEEDING SPECIES MAY BE SUBSTITUTED FOR THESE MIXTURES.

E. THESE SEEDING RATES NEED TO BE INCREASED TWO TO THREE TIMES IF THEY ARE TO BE USED AS A LAWN.

2. DORMANT SEEDING

A. TEMPORARY SEEDING-AFTER NOVEMBER 1, USE MULCH ONLY.

B. PERMANENT SEEDING- SEEDINGS SHOULD NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 20. THE FOLLOWING METHODS MAY BE USED TO MAKE A "DORMANT SEEDING":

1. FROM OCT. 1 THROUGH NOV. 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOV. 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

2. FROM NOV. 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, AND MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

3. MULCHING

A. MULCH SHALL CONSIST OF SMALL GRAIN STRAW (PREFERABLY WHEAT OR RYE) AND SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE OR 100 POUNDS PER 1000 SF.

B. SPREAD THE MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED.

C. MULCH ANCHORING METHODS:

1. MECHANICAL- USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH INTO THE SOIL.

2. ASPHALT EMULSION- APPLY AT THE RATE OF 160 GALLONS PER ACRE INTO THE MULCH AS IT IS BEING APPLIED.

3. MULCH NETTING-USE ACCORDING TO THE MANUF. RECOMMENDATIONS.

4. IRRIGATION

SUPPLY NEW SEEDLINGS WITH ADEQUATE WATER FOR PLANT GROWTH UNTIL THEY ARE FIRMLY ESTABLISHED.

STABILIZATION:

DISTURBED AREAS MUST BE STABILIZED AS FOLLOWS:

PERMANENT STABILIZATION

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any area within 50 feet of a stream and at final grade	Within two days of reaching final grade
All other areas at final grade	Within seven days of reaching final grade within that area

TEMPORARY STABILIZATION

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a stream and not at final grade	Within two days of the most recent disturbance if the area will lie dormant for more than 14 days
For all construction activities, any disturbed areas that will be dormant for more than 14 days but less than one year, and not within 50 feet of a stream	Within seven days of the most recent disturbance within the area
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

DANDY CURB SACK™

DETAIL OF INLET SEDIMENT CONTROL DEVICE WITH CURB FILTER

PROJECT: DR. BY: _____
CITY/STATE: DATE: DR. NO: _____

DETAIL OF INLET SEDIMENT CONTROL DEVICE DANDY CURB FILTER BAG

THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION.

CONSTRUCTION SEQUENCE:

Table 6.2.2 A Construction Sequence for Small Construction Sites

Stage	Actions
Mark off set aside areas	1. Fence naturally vegetated areas and the dripline of trees that will be maintained and protected during construction.
Install initial sediment and erosion controls	2. Install appropriate sediment controls to protect downstream and adjacent areas. These are to be installed prior to grading and construction begins and includes practices such as sediment traps, sediment barriers(silt fence, filter socks and berms) and protection of catch basins with inlet protection.
Prepare site and construct improvements	3. Install stone construction entrance prior to general grading or excavation or delivery of materials.
	4. Remove topsoil and stockpile, seeding stockpile immediately upon completion. Install sediment controls as necessary.
	5. Grade site or excavate building foundation or basement.
	6. Temporary seed rough graded areas and maintain or repair sediment controls as needed. Maintenance includes the removal of sediment from streets and sediment controls.
	7. Construct the building and site improvements.
Final grading and stabilization	8. Complete land grading and shaping. Soils shall be roughly graded, followed by the spreading and grading of topsoil. Installation of roof drains and other drains to stable outlets should be completed at this time.
	9. Establish permanent vegetation. After reaching final grade elevations and leveling of topsoil, bare soils shall be stabilized with seed and mulch, sod or other permanent landscaping materials.
	10. Remove temporary sediment control practices once vegetation is established.

DANDY CURB SACK™ SPECIFICATIONS

NOTE: THE DANDY CURB SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	lN (lbf)	1.78 (400) x 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	5 x 15
Puncture Strength	ASTM D 4633	lN (lbf)	0.97 (150)
Mullen Burst Strength	ASTM D 3786	lPa (psi)	5500 (800)
Trapezoid Tear Strength	ASTM D 4533	lN (lbf)	0.87 (150) x 0.23 (185)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4461	l/min/m² (gal/min/ft²)	2882 (70)
Permeability	ASTM D 4461	Sec⁻¹	0.90

HI-FLOW DANDY CURB SACK™ (SAFETY ORANGE)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	lN (lbf)	1.62 (365) x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 x 10
Puncture Strength	ASTM D 4633	lN (lbf)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	lPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	lN (lbf)	0.51 (115) x 0.33 (75)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4461	l/min/m² (gal/min/ft²)	5807 (145)
Permeability	ASTM D 4461	Sec⁻¹	2

*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows

Specifications for Construction Entrance

PLAN VIEW

PROFILE

18" or Sufficient of Divert Runoff

14ft Minimum and Not Less Than Width of Ingress or Egress

70 ft. (or 30ft for Access to Individual House Lot)

Right of Way Diversion as Needed

Road or Other Existing Paved Surface

Culvert as Needed

Figure 7.6.1

Minimum Specifications for Construction Entrance

Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	150 lbs.
Minimum Burst Strength	250 psi.
Minimum Elongation	20%.
Apparent Opening Size	100 - 0.6 mm.
Permeability	1-10-3 cm/sec.

Notes:

1. Stone Size - GDOT #2 (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.

2. Length - The Construction entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. exception: apply 30 ft. minimum to single residence lots.

3. Thickness - The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.

4. Width - The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.

5. Geotextile - A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong no-staple polypropylene fibers and meet the following specifications:

6. Tinning - The construction entrance shall be installed as soon as is practicable before major grading activities.

7. Culvert - A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed onto paved surfaces.

8. Water Bar - A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.

9. Maintenance - Top dressing of additional stone shall be applied as conditions demand. Must be kept dropped, washed or tracked onto public roads, or any surface where runoff is checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.

10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction site shall be restricted from muddy areas.

11. Removal - The entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

Notes:

FILTER FABRIC SHALL BE FASTENED TO WOODEN POSTS USING 1/2" HEAVY DUTY STAPLES.

FILTER FABRIC SHALL BE PLACED IN A CONTINUOUS ROLL TO MINIMIZE THE OCCURRENCE OF JOINTS. WHERE JOINTS CANNOT BE AVOIDED, FABRIC SHALL BE SPLICED TOGETHER AT SUPPORT POSTS, WITH A MINIMUM OF 6-INCH OVERLAP, AND SECURELY SEALED.

SILT FENCE (SF) DETAIL

NO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION
BY	
DATE	

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 2411
CINCINNATI, OHIO 45226
(513) 321-2168

SWPPP NOTES & DETAILS

BROOKS-SR63 DISPENSARY

BROOKS RD..

CITY OF MONROE, WARREN COUNTY, OHIO

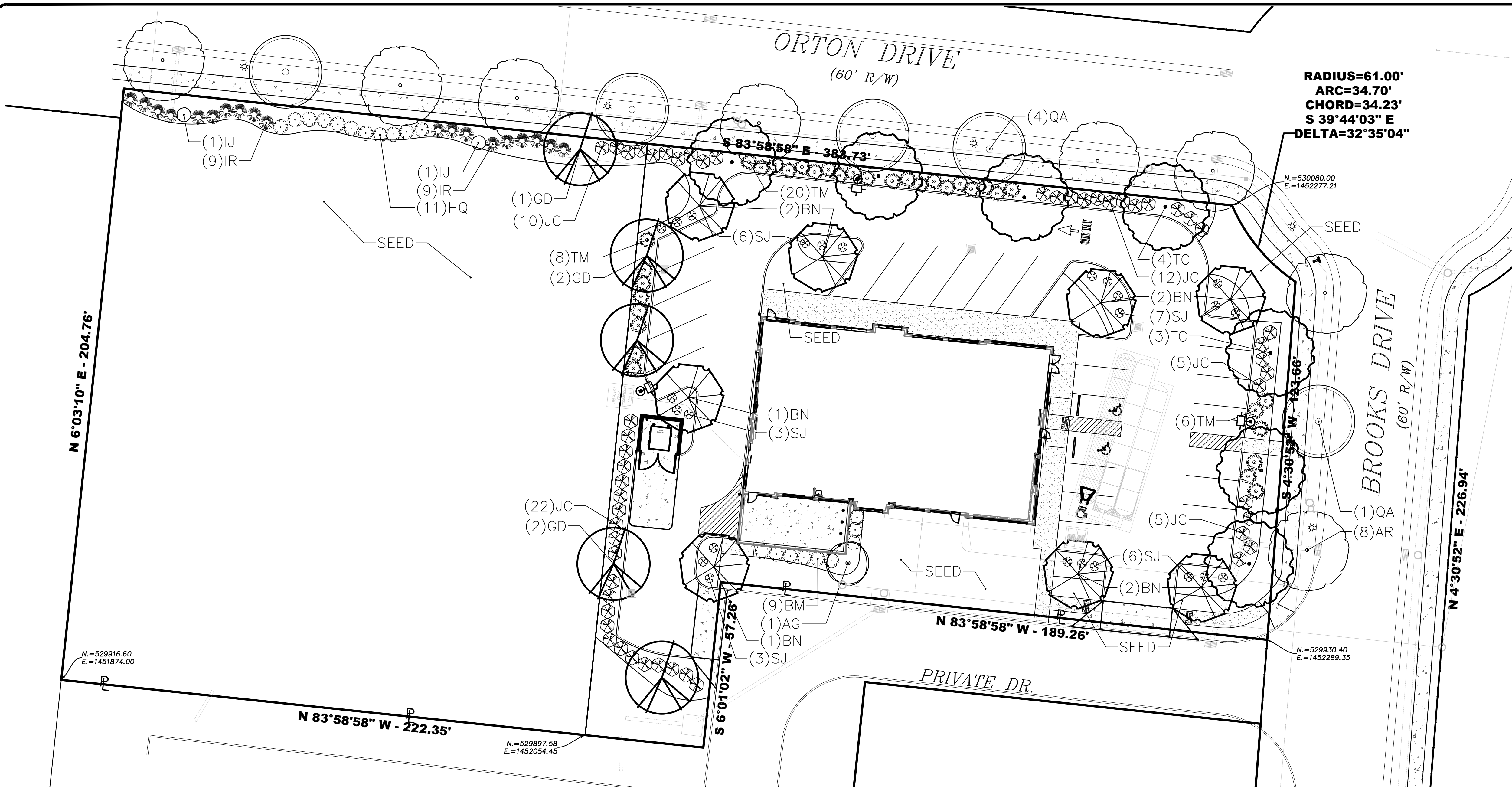
SCALE: HORIZ. VERT.
N/A N/A

JOB NO. 22-132

DATE Jul. 7, 2022

SHEET NO.

C-5.1



LANDSCAPE NOTES:

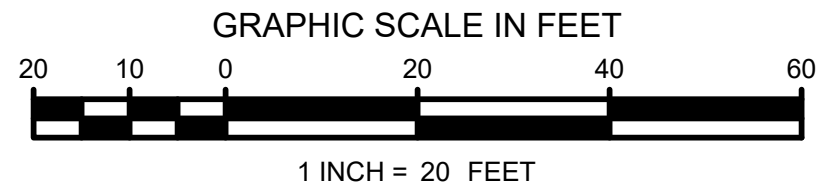
- ALL PLANTING BEDS TO BE TILLED TO A DEPTH OF 4". RAKE TILLED AREAS TO REMOVE DEBRIS 1" OR LARGER. PLANTING BEDS TO RECEIVE A MINIMUM OF 4" OF TOPSOIL AND TILL WITH LOOSE SUBGRADE. GRADE PLANTING BEDS TO A SMOOTH, UNIFORM GRADE.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
- ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
- ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD.
- ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
- ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE PERIOD OF SPECIFIED.
- ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
- STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A SHREDDED HARDWOOD MULCH TO A MINIMUM DEPTH OF THREE INCHES. APPLY PRE-EMERGENT HERBICIDE BEFORE MULCHING.
- ALL EXISTING TREES SHOWN ON THE PLAN TO BE PRESERVED AND PROTECTED.

PERMANENT SEEDING

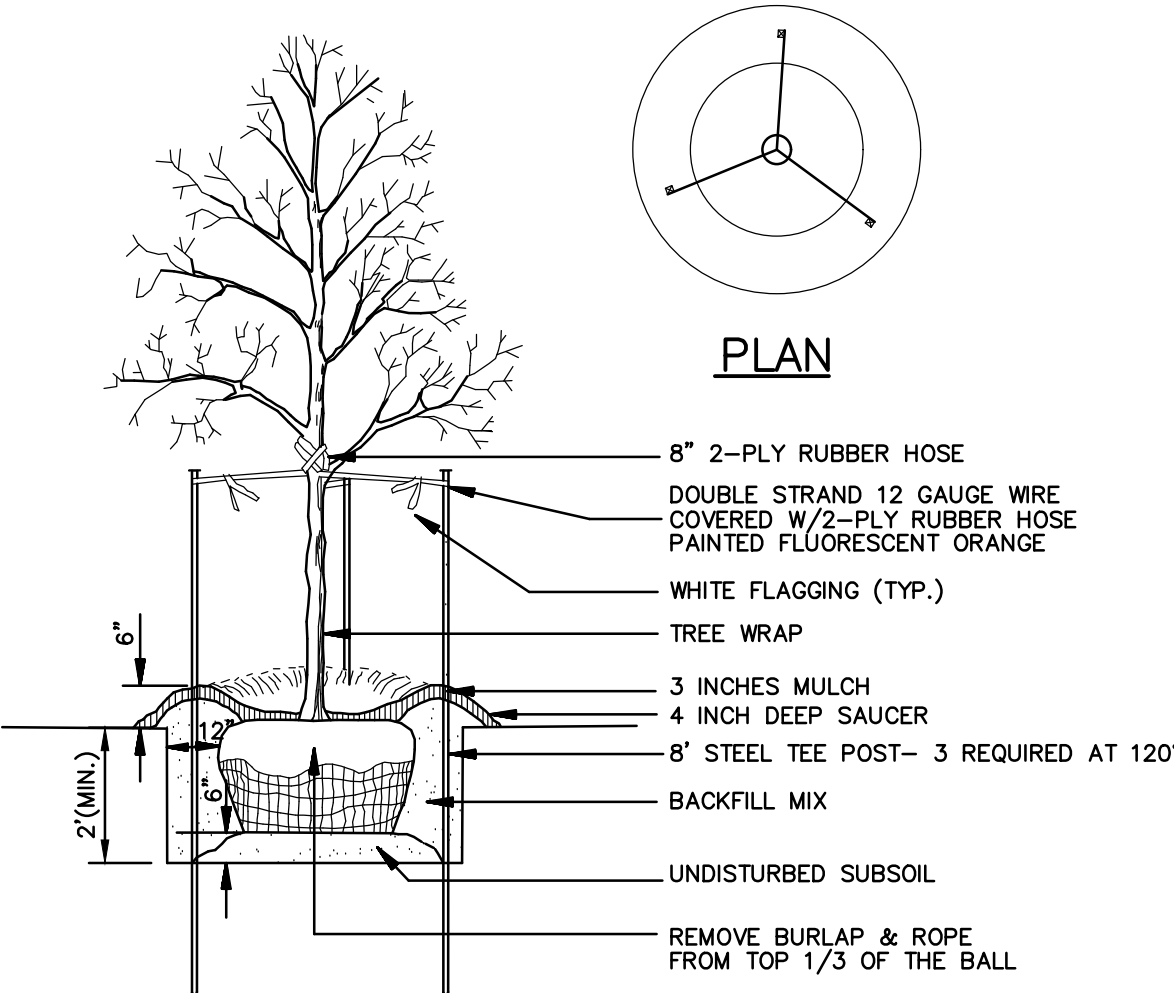
- ALL DISTURBED AREAS SHOULD BE FINE GRADED AND SEEDED IMMEDIATELY AFTER CONSTRUCTION. SEED WITH APPROPRIATE MIXTURE AT THE MANUFACTURER'S WRITTEN RECOMMENDED RATE.
- TILL AREAS TO BE SEEDED TO A DEPTH OF 4". RAKE TILLED AREAS TO REMOVE DEBRIS 1" OR LARGER. PROTECT SEEDED AREAS WITH SLOPES EXCEEDING 1:6 WITH EROSION CONTROL FIBER MESH.
- PROTECT SEEDED AREAS WITH STRAW MULCH AT A UNIFORM RATE OF 2 TONS PER ACRE TO A DEPTH OF 1" OVER SEEDED AREAS.

KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION	REMARKS
CANOPY/EVERGREEN TREES						
AG	1	Amelanchier grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	6" ht.	B&B	Multi-stem
AR	8	Acer rubrum 'October Glory'	October Glory Maple	2.0" cal.	B&B	Straight Central Leader
BN	8	Betula Nigra	River Birch	8" ht.	B&B	
GD	5	Gymnocladus dioica	Kentucky Coffee Tree	2.5" cal.	B&B	Straight Central Leader
QA	5	Quercus alba	White Oak	2.0" cal.	B&B	Straight Central Leader
TC	7	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	2.5" cal.	B&B	Straight Central Leader
SHRUBS/PERENNIALS						
BM	9	Buxus x 'Green Mountain'	Green Mountain Boxwood	36" ht.	B&B	
HQ	11	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oakleaf Hydrangea		#3 cont.	
IJ	2	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry Holly	36" ht.	B&B	
IR	18	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry Holly	36" ht.	B&B	
SJ	25	Juniperus chinensis 'Sea Green'	Sea Green Juniper	36" ht.	B&B	
TM	34	Taxus x media 'Densformis'	Densformis Yew	36" ht.	B&B	

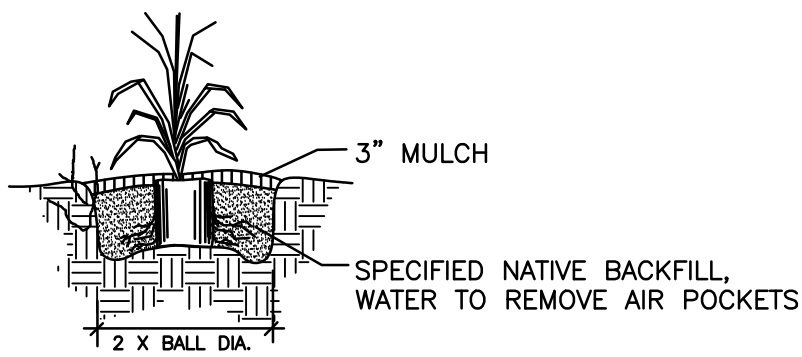
LANDSCAPE REQUIREMENTS		
	REQUIRED	PROVIDED
VEHICULAR USE AREAS (ISLANDS)	1 TREE AND 3 SHRUBS PER ISLAND, 8 ISLANDS = 8 TREES AND 24 SHRUBS	8 TREES, 24 SHRUBS
VEHICULAR USE AREAS (PERIMETER)	1 TREE PER 5 PARKING SPACES AND 3' TALL EVERGREEN SCREEN ALONG PARKING AREAS. 26 PARKING SPACES = 6 TREES	6 TREES, 3' TALL EVERGREEN SCREEN
NON-PARKING VEHICULAR USE AREAS	1 TREE PER 50 LINEAR FEET AND 3 SHRUBS PER 15 LINEAR FEET OF VUA. 410 LINEAR FEET OF ACCESS DRIVE = 9 TREES AND 82 SHRUBS	9 TREES, 82 SHRUBS
FRONT YARD LANDSCAPE REQUIREMENTS (PARKING LOT ADJACENT TO ROW)	20% TO BE LANDSCAPED WITH TREES AND SHRUBS. (MIN. 6 FOOT WIDE AREA ADJACENT TO THE RIGHT OF WAY. PERIMETER VUA CAN COUNT TOWARDS REQUIREMENT.) BROOKS DRIVE: 2,900 SF FRONT YARD AREA = 580 SF LANDSCAPE AREA REQUIRED. ORTON DRIVE: 7,280 SF FRONT YARD AREA = 1,456 SF LANDSCAPE AREA REQUIRED.	BROOKS DRIVE: 930 SF FRONT YARD LANDSCAPE AREA PROVIDED. ORTON DRIVE: 3,850 SF FRONT YARD LANDSCAPE AREA PROVIDED.
STREET TREES	BROOKS DRIVE: 1 TREE PER 40 LF, ALONG ROW. 120 LF ROW TOTAL = 3 STREET TREES. ORTON DRIVE: 1 TREE PER 40 LF = 400 LF = 10 STREET TREES.	BROOKS DRIVE: 3 TREES ORTON DRIVE: 10 TREES



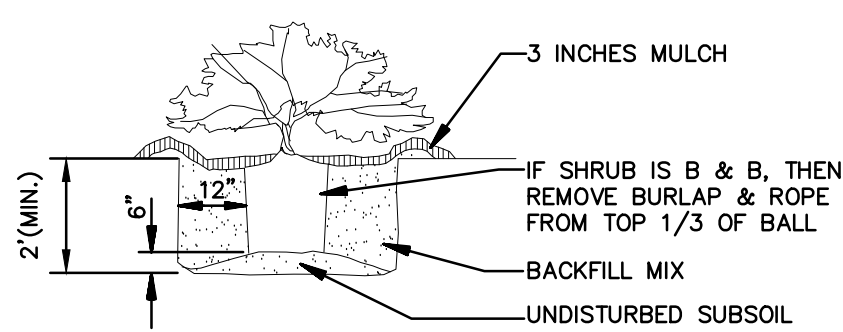
UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE



TREE PLANTING
NOT TO SCALE



PERENNIAL PLANTING DETAIL
NOT TO SCALE
① LOOSEN SOIL IN ROOT BALL AND SPREAD ROOTS PRIOR TO PLACING IN PIT.



SHRUB PLANTING
NOT TO SCALE

REVISION NUMBER	DATE	REMARKS

2K LA
2K Landscape Architecture, LLC
3234 Harvest Ave.
Cincinnati, Ohio 45213
513.228.8572
www.2KlandscapeArchitecture.com

LANDSCAPE PLAN
BROOKS-SR63 DISPENSARY
BROOKS DRIVE
CITY OF MONROE, BUTLER COUNTY, OHIO

OWNER:
PROJECT NO.: 2022-27
DATE: JULY 7, 2022
DRAWN BY: KTC
CHECKED BY: KTC
SCALE: 1" = 20'

SHEET:
L-1



RSX3 LED
Area Luminaire



UL
DLC
EPA
Energy Star
RoHS
REACH
UL
DLC
EPA
Energy Star
RoHS
REACH

Specifications

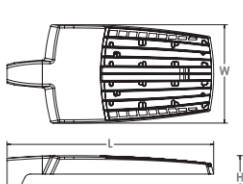
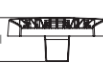
EPA (E-90): 0.70 ft² (0.07 m²)

Length: 33.8" (85.9 cm)
(SFA mount)

Width: 16.1" (40.9 cm)

Height: 3.0" (7.6 cm) Main Body
7.2" (18.3 cm) Arm
(max)

48.0 lbs (21.8 kg)

Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX3 delivers 25,000 to 41,000 lumens allowing it to replace 400W to 1000W HID luminaires.

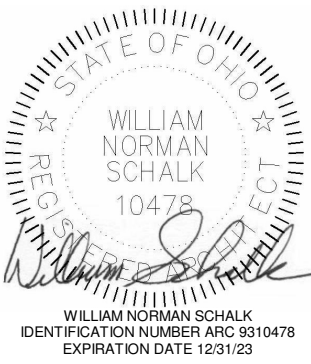
The RSX3 features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral dipfilter and other mounting configurations are available.

Ordering Information							EXAMPLE: RSX3 LED P4 40K R3 MVOUT SPA DBXD	
RSX3 LED								
Series	Performance Package	Color Temperature	Reactivation	Mounting	Mounting			
RSX3 LED	P1	SWK 3000K	R2	Type 1W66	AWOL1 (200V/277V)	SPA	Square pole mounting (3.0" max. dia) pole for 1.9" x 17" min. 30g/16.3 x 2.4 in PT	
	P2	SWK 4000K	R3	Type 1W66	AWOL1 (200V/277V)	SPA	Square pole mounting (3.0" max. dia) pole for 2.1 x 14 in PT	
	P3	SWK 5000K	R35	Type 3W61	AWOL1 (200V/277V)	SPA	Square pole mounting (3.0" max. dia) pole for 2.1 x 14 in PT	
	P4	SWK 5000K	R4	Type 4W66	AWOL1 (200V/277V)	SPA	Square pole mounting (3.0" max. dia) pole for 2.1 x 14 in PT	
				Base specific ordering options as noted:				
				AWOL1 (200V/277V)				
				AWOL1 (200V/277V)				
				AWOL1 (200V/277V)				
				AWOL1 (200V/277V)				
				AWOL1 (200V/277V)				
			AWR	Armature Foot Base	AWP	AWP	AWP	
			AWR	Armature Foot Base	AWP	AWP	AWP	
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Proposed Retail Center For:
WARREN DISPENSARY
Monroe, Ohio

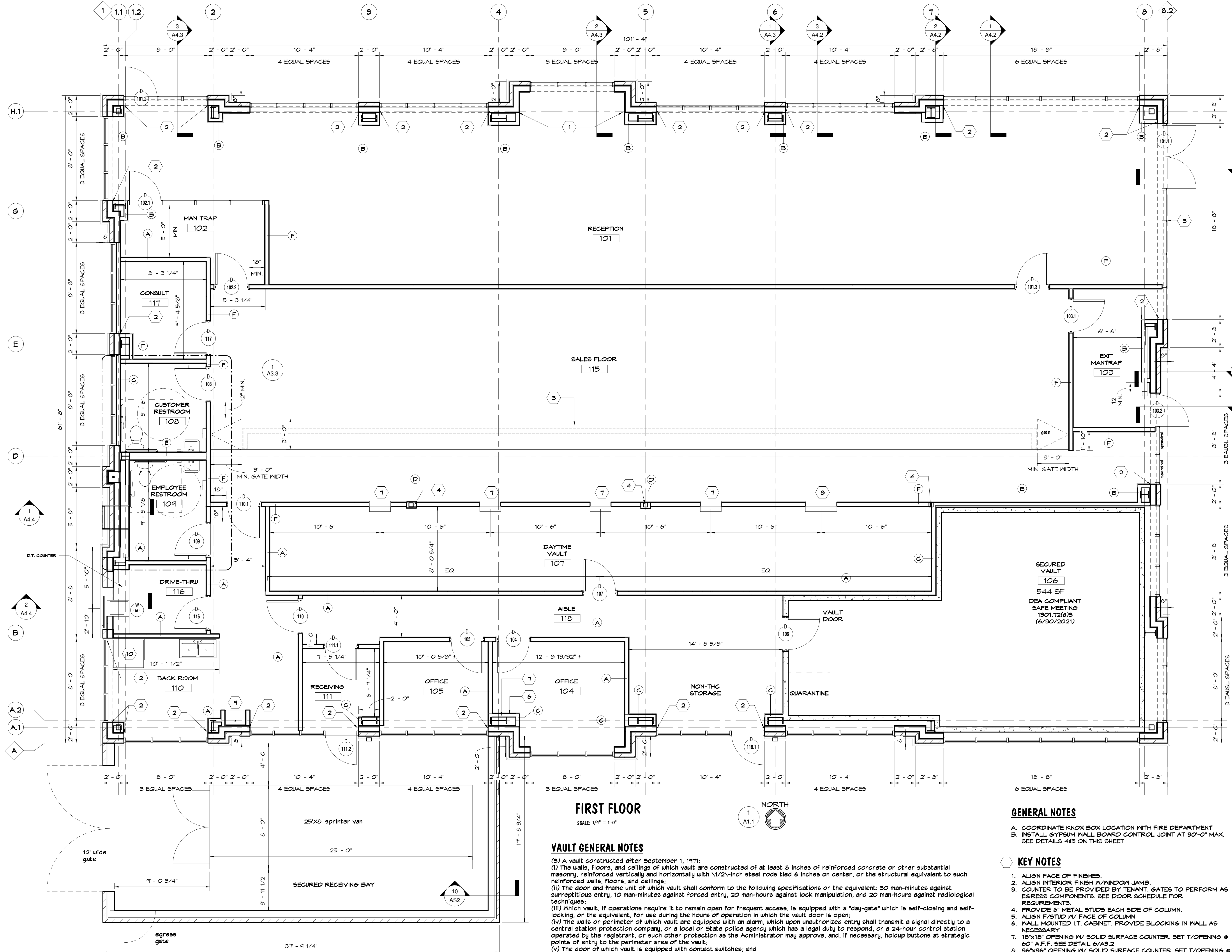
REV. DATE CK'D

Drawn By: WNS Checked By: WNS



Date: A1.3 Job No: 22.033

A1.1



FIRST FLOOR

SCALE: 1/4" = 1'-0"

VAULT GENERAL NOTES

- (B) A vault constructed after September 1, 1971:
- (I) The walls, floors, and ceilings of which vault are constructed of at least 8 inches of reinforced concrete or other substantial masonry, reinforced vertically and horizontally with 1/2-inch steel rods tied 6 inches on center, or the structural equivalent to such reinforced walls, floors, and ceilings;
- (II) The door and frame unit of which vault shall conform to the following specifications or the equivalent: 30 man-minutes against surreptitious entry, 10 man-minutes against forced entry, 20 man-hours against lock manipulation, and 20 man-hours against radiological techniques;
- (III) Which vault, if operations require it to remain open for frequent access, is equipped with a "day-gate" which is self-closing and self-locking, or the equivalent, for use during the hours of operation in which the vault door is open;
- (IV) The walls or perimeter of which vault are equipped with an alarm, which upon unauthorized entry shall transmit a signal directly to a central station protection company, or a local or State police agency which has a legal duty to respond, or a 24-hour control station operated by the registrant, or such other protection as the Administrator may approve, and, if necessary, holdup buttons at strategic points of entry to the perimeter area of the vault;
- (V) The door of which vault is equipped with contact switches; and
- (VI) Which vault has one of the following: Complete electrical lacing of the walls, floor and ceilings; sensitive ultrasonic equipment within the vault; a sensitive sound accumulator system; or such other device designed to detect illegal entry as may be approved by the Administration.

GENERAL NOTES

- A. COORDINATE KNOX BOX LOCATION WITH FIRE DEPARTMENT
B. INSTALL GYPSUM WALL BOARD CONTROL JOINT AT 30'-0" MAX.
SEE DETAILS 445 ON THIS SHEET

KEY NOTES

- ALIGN FACE OF FINISHES.
- ALIGN INTERIOR FINISH W/ WINDOW JAMB.
- COUNTER TO BE PROVIDED BY TENANT. GATES TO PERFORM AS EGRESS COMPONENTS. SEE DOOR SCHEDULE FOR REQUIREMENTS.
- PROVIDE 6" METAL STUDS EACH SIDE OF COLUMN.
- ALIGN F/STUD W/ FACE OF COLUMN
- WALL MOUNTED I.T. CABINET. PROVIDE BLOCKING IN WALL AS NECESSARY
- 18"x18" OPENING W/ SOLID SURFACE COUNTER. SET T/OPENING @ 60" A.F.F. SEE DETAIL 6/A3.2
- 36"x36" OPENING W/ SOLID SURFACE COUNTER. SET T/OPENING @ 60" A.F.F. SEE DETAIL 6/A3.2
- MOP SINK
- PROVIDE WATER/POWER FOR REFRIGERATOR. REFRIGERATOR BY TENANT.

Architectural elevation drawing of a building facade. The drawing shows a two-story structure with a brick body, stone veneer base, and various window and door openings. Annotations include callouts for materials like "EIFS CORNICE", "T/ENTRY 124'-0\"", "T/PARAPET 120'-0\"", "Roof 111'-0\"", "AGENT BRICK", "BRICK VENEER", "PRE-FABRICATED ANNING", "PRECAST CONG. SILL", and "STONE VENEER". Dimensions are provided for the cap (1'-10"), body (15'-9"), and base (2'-5"). A vertical scale on the right indicates a total height of 24'-0". The drawing is divided into sections labeled 1 through 8, with specific callouts for EIFS and A4.4.

SHEET CONTENTS:
ELEVATIONS

GLASS			
FINISH	AREA (sf)	% OF ELEVATION GLASS	
FALSE GLASS	0		0%
TRANSPARENT GLASS	659		100%
TOTAL GLASS	659		100%

SCALE: 3/16" = 1'-0"

1", TINTED, INSUL. GLAZING IN
ANOD. ALUM. FRAMING SYSTEM

SCALE: 3/16" = 1'-0"

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	659	100%
TOTAL GLASS	659	100%

SCALE: 3/16" = 1'-0"

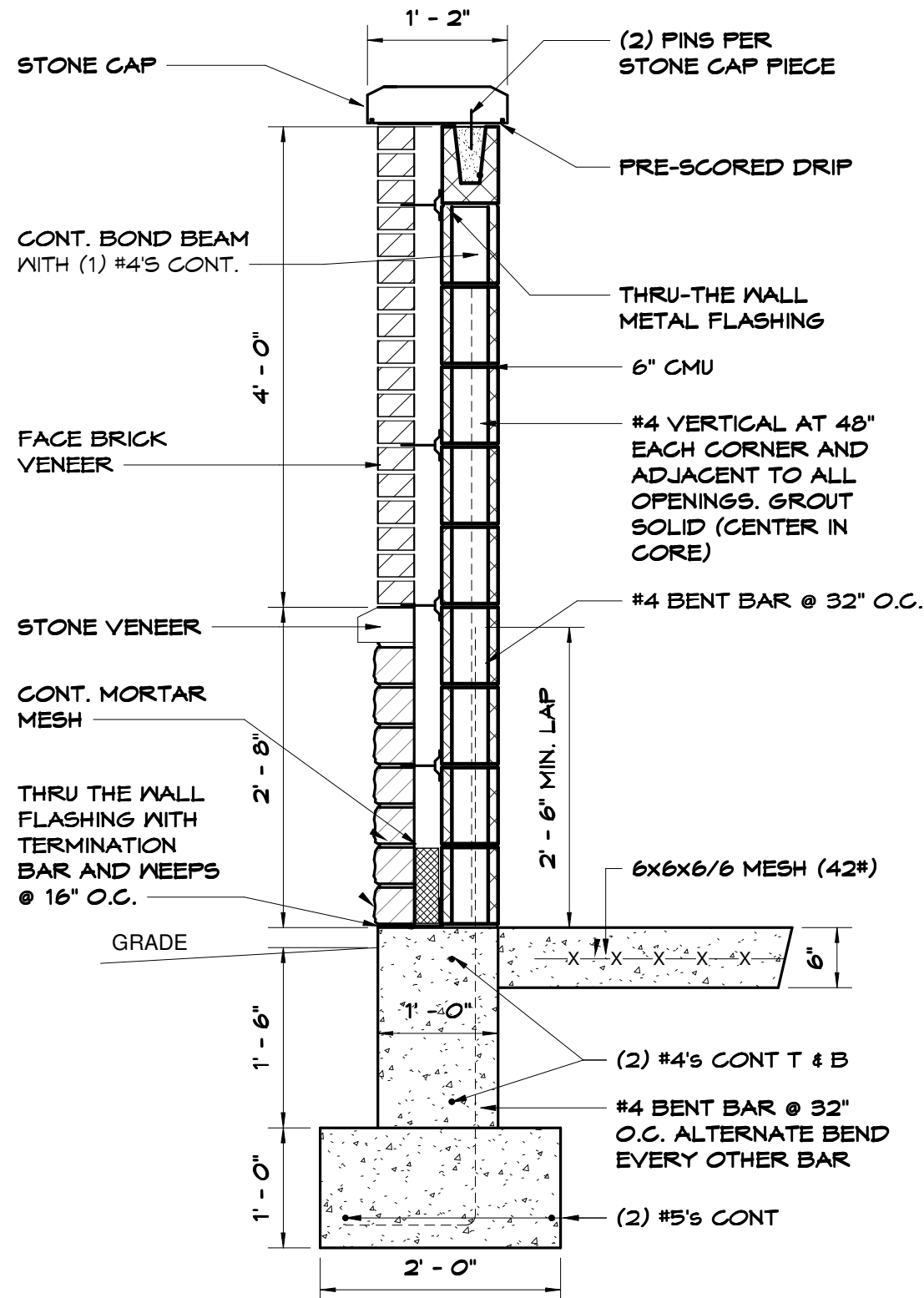
GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	309	100%
TOTAL GLASS	309	100%

SCALE: 3/16" = 1'-0"

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	381	100%
TOTAL GLASS	381	100%

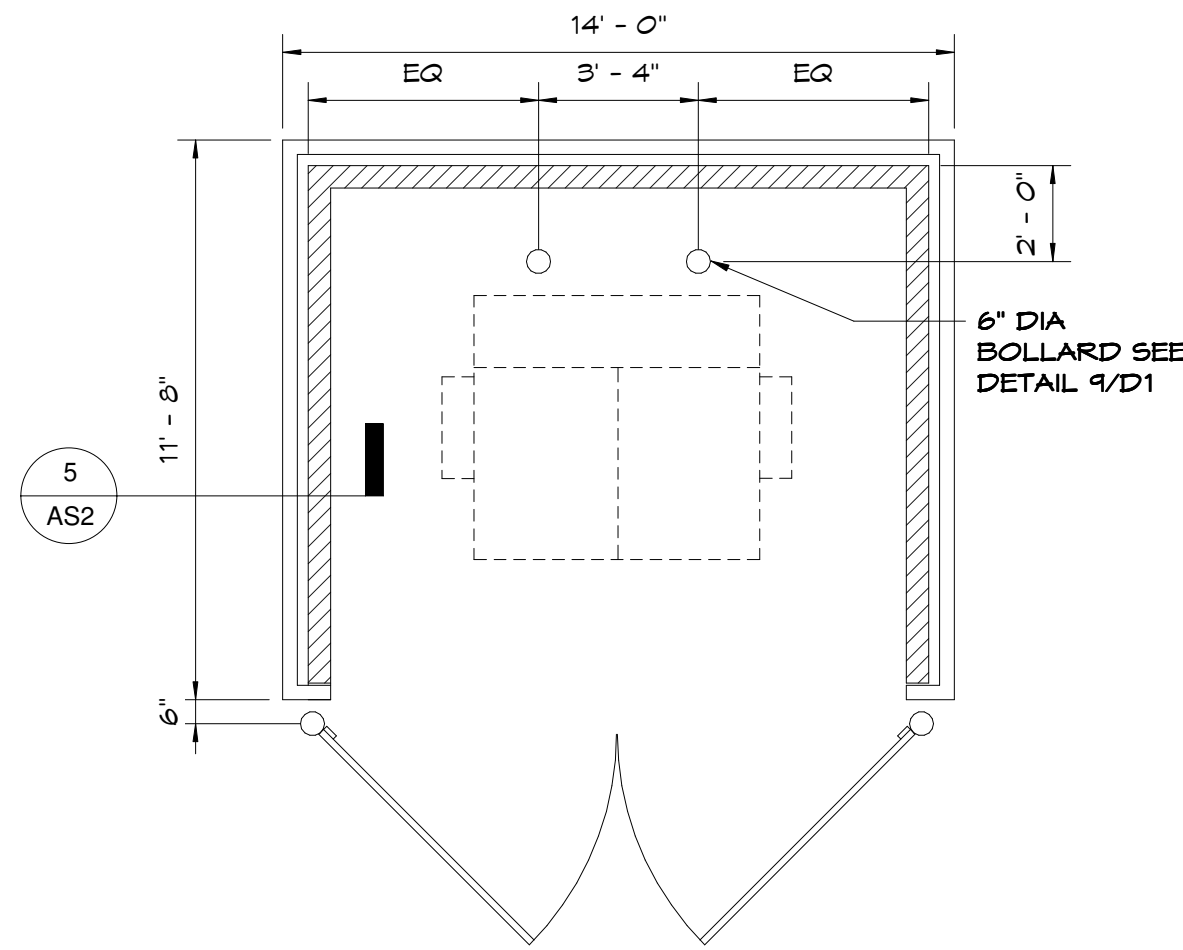
Date:A1.3 Job No22.033

A2.1



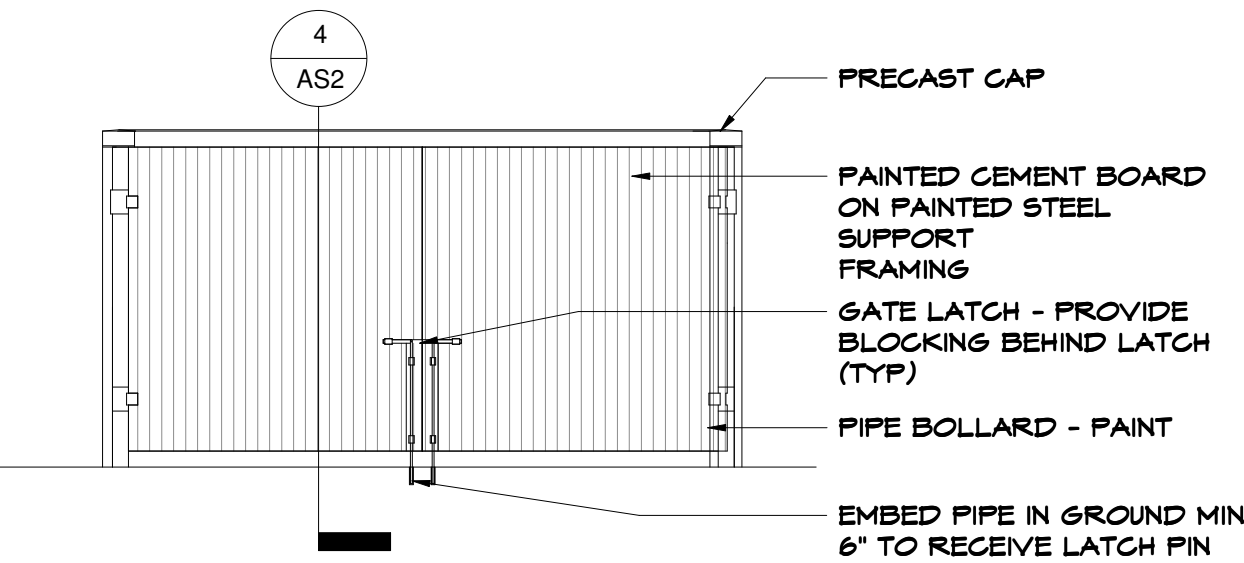
DUMPSTER WALL SECTION

SCALE: 3/4" = 1'-0"



DUMPSTER ENCLOSURE PLAN

SCALE: 1/4" = 1'-0"

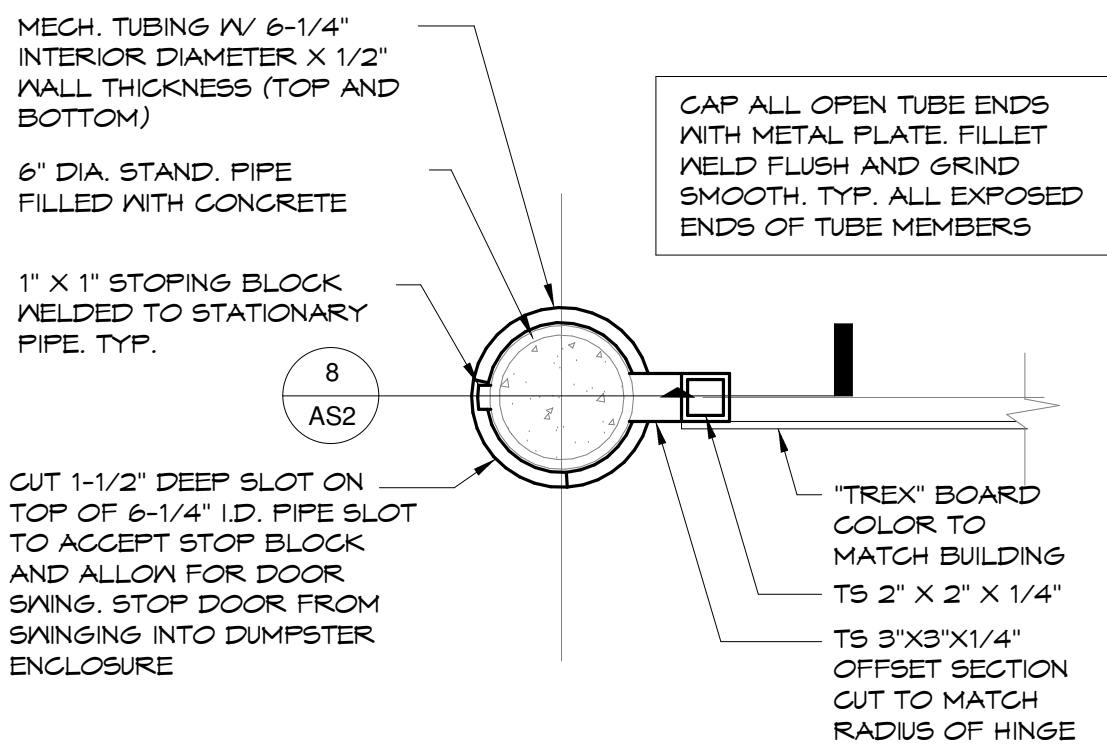


GATE ELEVATION

SCALE: 1/4" = 1'-0"

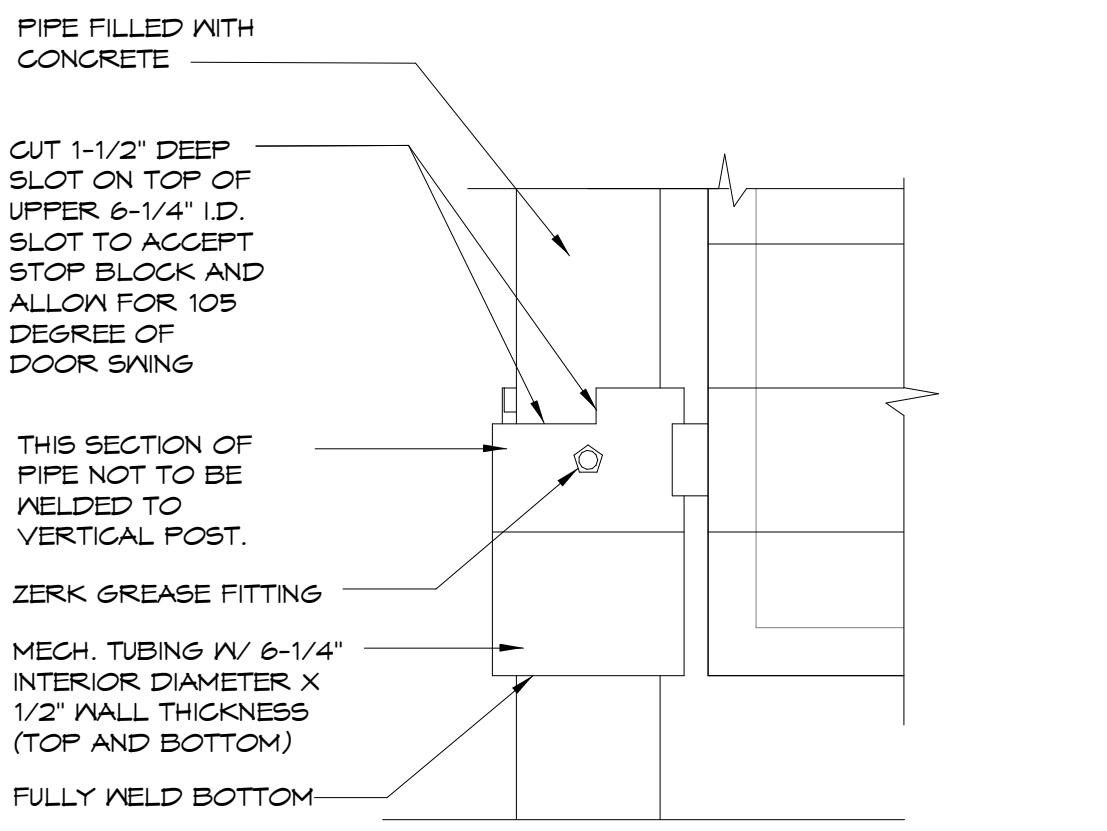
DUMPSTER ENCLOSURE SIDE ELEVATION

SCALE: 1/4" = 1'-0"



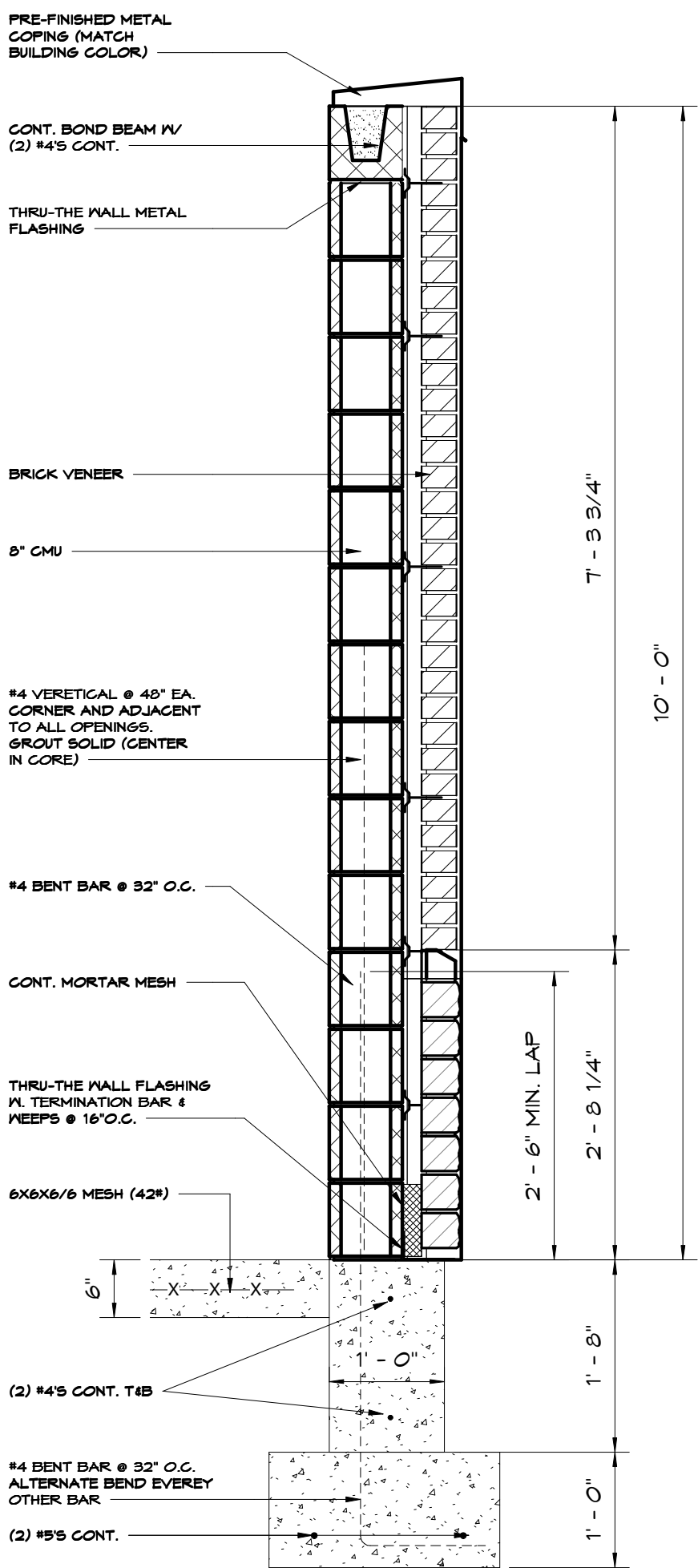
DUMPSTER GATE HINGE PLAN

SCALE: 1 1/2" = 1'-0"



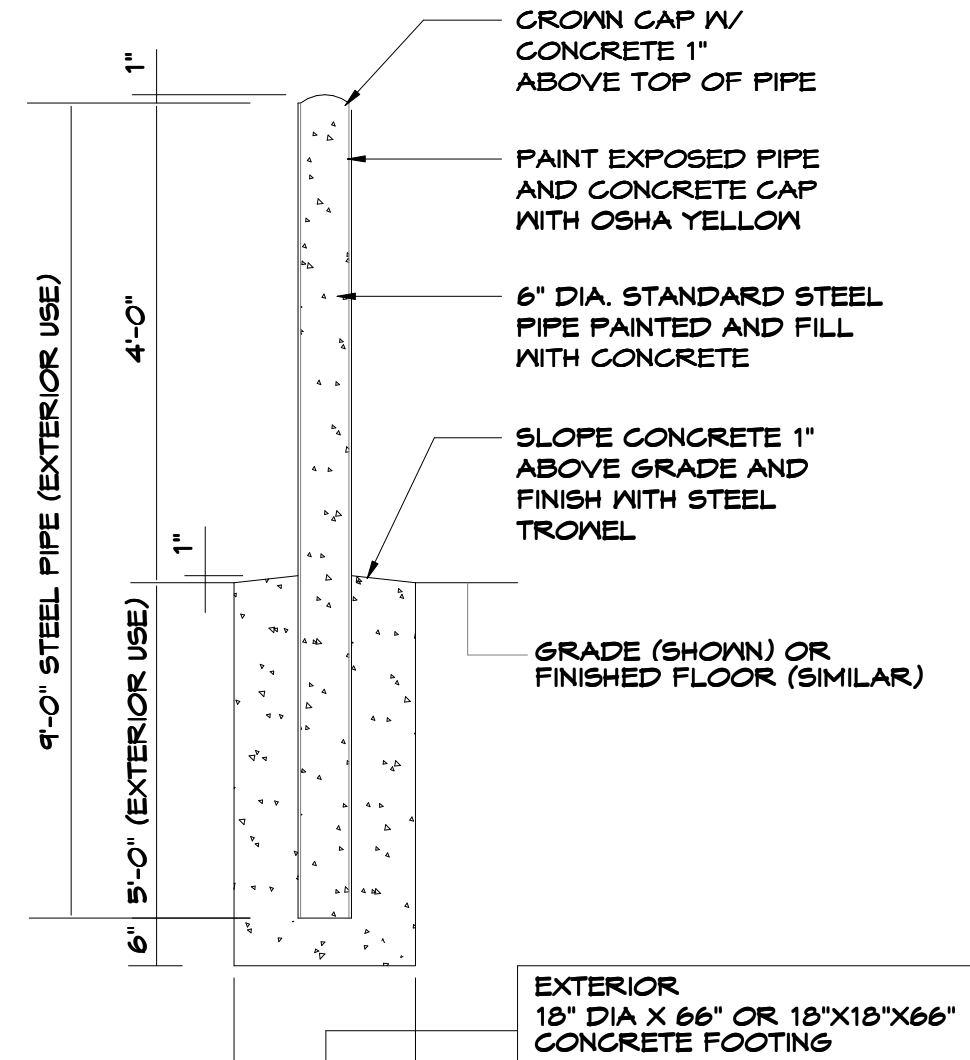
DUMPSTER GATE HINGE-ELEVATION

SCALE: 1 1/2" = 1'-0"



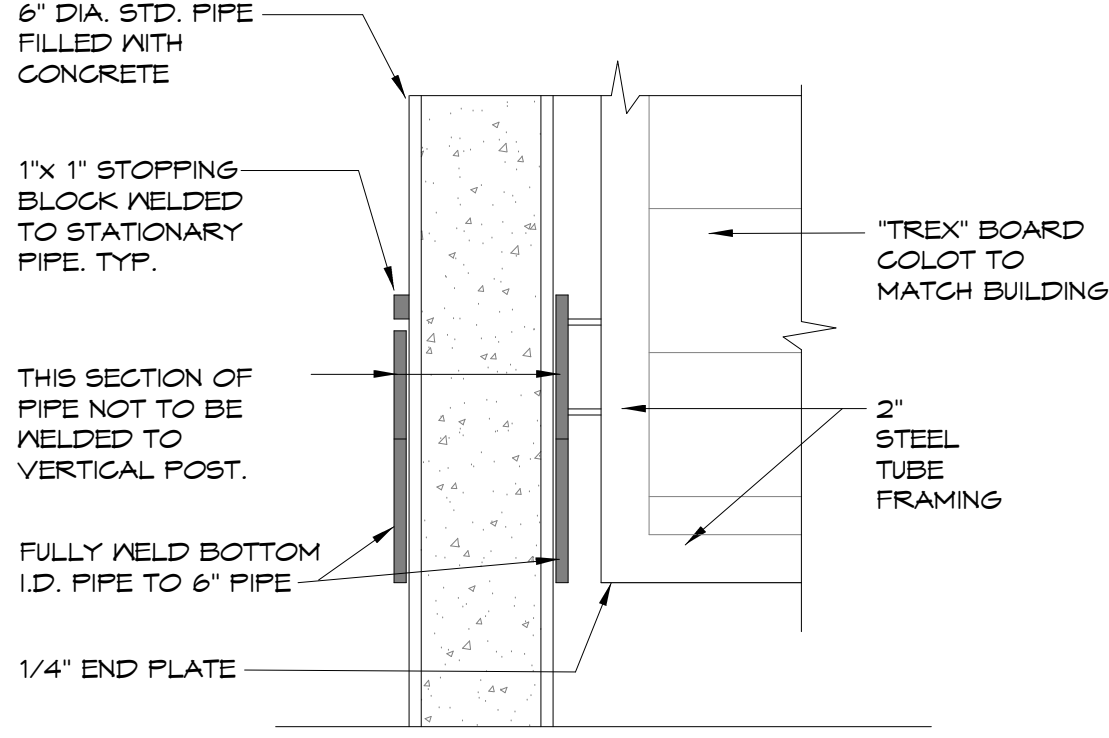
DELIVERY WALL SECTION

SCALE: 3/4" = 1'-0"



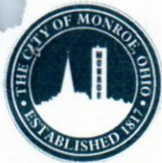
BOLLARD SECTION - EXTERIOR

SCALE: 1/2" = 1'-0"



DUMPSTER GATE HINGE-SECTION

SCALE: 1 1/2" = 1'-0"



Application for Site Plan Review

Monroe Development Department
233 South Main Street, Monroe, Ohio 45050
Phone: 513-539-7374
www.monroehio.org

For Staff Use Only

Submittal Date: ☐ 06/23/22

Date Application Determined Complete:

Date of Planning Commission Review:

Fee Paid: ☐ \$749.90

Staff Initials:

Application/Case Number: ☐ 20220414 GB

Site Plan Review Information

1. The site plan review procedure and applicability requirements are established in Section 1203.06 of the Monroe Planning and Zoning Code.
2. Prior to submitting this application, you are required to meet with staff from the Development Department for a pre-application conference. Please contact the department to schedule the conference.
3. The Monroe Planning Commission reviews all site plan review applications unless specifically exempted in Section 1203.06(B)(3).
4. Approval of a site plan does not constitute approval to begin construction. Applicants with approved site plans are required to submit all applicable zoning permit and building permit applications.
5. Unless an alternative timeline is approved by the Planning Commission, construction related to the approved site plan must begin within one year of the site plan approval or the approval shall be voided. See Section 1203.06(H) for additional information.

Basic Project and Site Information

Project Address: Clarence F Warner Drive

County: ☒ Butler ☐ Warren Total Lot Area: 1.6714 Acres

County Tax Parcel ID: C1800009220028

Project/Development Name: Butler County Dispensary

Existing Zoning District: Commercial

Project Type: ☒ New Building ☐ Expansion of Existing Structure
☐ Addition to Site (e.g., parking, landscaping, lighting, etc.)

Applicant Information

Applicant Name: Cincinnati Commercial Contracting

Contact Person: Christian Stone

Contact Address: 4779 Red Bank Expressway, Cincinnati, OH 45227

Contact Phone Number: 513-561-6633 x107

Contact Fax Number:

Contact E-Mail: cstone@cincigroup.com

Property Owner Name: AMERICAN EXIT 29 LLC

The applicant may attach a separate sheet of a paper with contact information for additional people, if necessary (e.g., additional owners, registered engineer, landscape architect, etc.). The same contact information shall be provided for each contact name.

Project Address or Tax Parcel ID: C1800009220028

Additional Project Information

1) Please describe, in detail, any existing uses and/or buildings on the project site.

Vacant Lot

2) Please describe, in detail, the proposed uses and the proposed development. Provide a summary of the square footage related to each use and/or the total number of proposed dwelling units.

New Dispensary Facility proposed.

3) What are the anticipated start and completion dates for the project?

Start Date: 8/15/2022

Completion Date: 2/15/2023

4) What is the estimated value (in dollars) of the proposed property improvements?

1.8 Million



5) Check any relevant procedural reviews applicable to this project:

☐ Conditional Use ☐ Variance ☐ Administrative Waiver ☐ Alternative Equivalent Compliance

If you checked any of the above procedures, please provide specific details on what you are seeking to have approved through the applicable review procedure? Provide the application/case numbers for any related applications.

Project Address or Tax Parcel ID: C1800009220028

Additional Project Information Continued

6) Does the project require any addition permits, licenses, or reviews by outside agencies (e.g., Butler or Warren County, ODNR, OEPA, etc.). ☐ Yes ☒ No If yes, please describe below.

Certification and Signatures

Applicant Signature - I certify that, to the best of my knowledge, the information contained in this form and within any attachments is correct and truthful. I understand that knowingly falsifying this information may be grounds for the denial or revoking of this application and any subsequent zoning permit or other review applications.

Print Name: Christian Stone

Signature: 

Date: 6/21/2022

Property Owner Signature - If the property owner is not the named applicant on this form, the property owner shall sign the form below acknowledging that the applicant is an authorized agent of the property owner as it relates to proposed project. If the site plan review is for multiple properties, a signature from each property owner is required.

Print Name: Christian Stone

Signature: 

Date: 6/21/2022

Note: A letter signed by the property owner, authorizing the applicant to act on their behalf may be submitted in lieu of the property owner's signature on this form.

Submittal Requirement Checklist

Submittals shall include 8 copies (minimum of 24" x 36") and 8 copies (minimum of 11" x 17") Additional copies may be required based on project specifics. Final mylars and digital Files will be required after approval.

Digital Submittal Requirements

- | | |
|--------------------------|---|
| ☐ | All document applications shall be submitted in an electronic format compatible (Adobe PDF) with the city's computer systems. |
| ☐ | All site plan materials, in map format, shall be submitted in a format compatible with the city's Geographic Information Systems (i.e. shapfile, geodatabase, or dwg) and shall be projected into NAD 1983 Ohio State Plane South - FIPS 3402 coordinate system using US Survey foot units. |

General Information

- | | |
|--------------------------|--|
| ☐ | Site Plan Review Application form |
| ☐ | Application fee |
| ☐ | Copies of the plans and maps established below at a scale no smaller than 1 inch = 100 feet, on full-sized copies unless on 11" x 17" or otherwise noted |
| ☐ | Any additional information determined to be necessary by the Development Department |

Vicinity Map (Scale may be smaller than 1" = 100')

- | | |
|--------------------------|--|
| ☐ | Date, north arrow, scale, and a legend for all symbols |
| ☐ | Project location |
| ☐ | All surrounding properties, streets, and corporation limits within a minimum of 500' of the outer boundaries of the project site |

Existing Conditions Map

- | | |
|--------------------------|---|
| ☐ | All existing zoning district classifications on the site and adjacent to the site |
| ☐ | Parcel boundaries of the site and all parcels adjacent to the site |
| ☐ | Names of all subdivisions and land owners owning lots adjacent to the site |
| ☐ | Existing streets within 200' of site with names and centerlines |
| ☐ | Existing watercourses and bodies of water including any applicable flood hazard areas |
| ☐ | Planned road network (including street names if available) within 500' of site (if different from existing streets) |
| ☐ | Existing land uses on the site and adjacent parcels (including across any streets) |
| ☐ | Railroad infrastructure and rights-of-way |
| ☐ | All existing easements (including drainage) with dimensions and designation as to type |
| ☐ | Location of existing curb cuts, private streets, parking and loading areas, pedestrian walks, lighting facilities, and outside trash storage facilities |

Site Layout Plan

- | | |
|--------------------------|--|
| ☐ | Lot numbers and sizes |
| ☐ | Square footage (gross) of existing buildings to remain and proposed buildings |
| ☐ | Required front, side, and rear yard width/setbacks |
| ☐ | All existing and proposed easements, including dimensions and type (e.g., drainage, access, public utility, etc.) |
| ☐ | Location, width, and classification of all existing and proposed streets in the development |
| ☐ | Location of any outdoor storage area(s) that require screening |
| ☐ | Locations of all proposed external street connections (including street stubs) |
| ☐ | Location, width, and materials of all sidewalks, trails, and paths (including connections to the public sidewalk system and adjacent developments) |

Submittal Requirement Checklist

Submittals shall include 8 copies (minimum of 24" x 36") and 8 copies (minimum of 11" x 17") Additional copies may be required based on project specifics. Final mylars and digital Files will be required after approval.

Parking Plan and Traffic Control Plan

☐	Traffic impact study, if required
☐	Notation of total number of parking spaces, loading spaces, and stacking spaces required by ordinance
☐	Total number, dimensions, and location of parking spaces proposed off-street, on-street, and within parking structures, including information on handicapped parking spaces
☐	Total number of parking spaces to be provided through approval of shadow parking, off-site parking, or shared parking alternatives
☐	Number, location, and size of loading spaces provided
☐	Number and location of stacking spaces provided
☐	Location, arrangement, and dimensions of vehicular entrances, exits and parking lot aisles
☐	Location of pedestrian walkways and crossings
☐	Number and location of pervious parking spaces, if provided
☐	Proposed traffic control devices (in accordance with the Manual on Uniform Traffic Control Devices)
☐	Signing and striping plan
☐	Fire lanes and areas of parking prohibition
☐	Location of all sight triangles

Stormwater Management Sheet and Drainage Plan

☐	Drainage basin(s) where the site is located and drainage patterns
☐	Existing and proposed locations, types, and sizes of drainage structures and calculations demonstrating how post-development runoff will not exceed pre-development runoff
☐	Erosion and siltation control measures and devices with narrative, including location of outfall for stormwater to proper catch basin (indicated sizes and slopes of existing pipes)
☐	Drainage computations from proposed development to proper pickup point
☐	All proposed elevations and slopes for grading
☐	Description of maintenance procedures for stormwater management devices

Utilities Plan (May be included on Site Layout Plan)

☐	Existing and proposed locations, types, and sizes of all water, sanitary sewer, storm sewer, gas, telephone, power and other utility lines and meters, easements and any other utilities affected by the site (includes above ground utilities and grades and computations where appropriate)
☐	Notation that all new utilities (including cable television, electrical, natural gas, sewer, telephone, and water lines) shall be placed underground
☐	Locations where existing overhead utilities will be relocated underground (if applicable)
☐	Identification of any connections, above or below ground, that are located within the City of Monroe's right-of-way

Landscaping Plan

☐	Exact locations, dimensions, and counts of existing and proposed landscape materials provided within and around vehicular use areas, including the size of landscaping islands
☐	Exact locations and counts of existing and proposed landscape materials provided within any required buffer areas including the type of buffer used, the buffer width provided, the proposed configuration of trees, shrubs, and screening features
☐	Location, size, and species of all existing and proposed street trees
☐	The total number of trees and shrubs provided, and the total number of different species planted
☐	Notations for any existing landscape within sight triangles indicating maximum shrub height or tree canopy height

Submittal Requirement Checklist

Submittals shall include 8 copies (minimum of 24" x 36") and 8 copies (minimum of 11" x 17") Additional copies may be required based on project specifics. Final mylars and digital Files will be required after approval.

☐	Location and amount of credit towards landscape material requirements provided by existing landscaping
☐	Demarcation of existing trees to be removed
☐	Location and amount of all open space set-aside areas by development phase
☐	Details of all open space improvements and common features (e.g., fountains, benches, street furnishings, play equipment, etc.)
Architectural and Building Elevation Plans	
☐	Color elevations for each building side facing a public street, alley, public open space, or public building, illustrating compliance with the architectural standards of the applicable zoning district
☐	Dimensions, in feet, of all façade recesses or similar fenestration
☐	Preliminary floor plan for principal buildings
☐	Height of all buildings in feet, including number of building stories
☐	Accessory structure size(s), if applicable
☐	Accessory structure height(s), if applicable
☐	Description of the type of material(s) used on each façade elevation
☐	Illustrative elevation of all fencing, walls, and retaining walls visible from a street, open space, or public building that will be used for buffering or screening of adjacent residential uses, dumpsters, service structures, utilities, parking areas, loading areas, and similar activity areas
Lighting Plan	
☐	Location, type, and height of all lighting fixtures (including street lights)
☐	Details on colors and materials for all lighting fixtures
☐	Grid or photometric diagram showing maximum illumination values at the lot line, and uniformity ratios within parking lots, measured in footcandles
Signage Plan	
☐	All sign areas, dimensions and height (including shape)
☐	Position of all signs in relation to the use being advertised (may be identified on the site layout plan)
☐	Location and style of all address numbers, building numbers, or allowable building identifications
☐	Plan of illumination for the sign including information on message timing for electronic message centers
☐	Landscaping around base of sign (may be identified on the landscaping plan)

Clarence F Warner Dispensary—Preliminary Comments

Sidewalk—

- Sidewalks at 8 FT wide minimum must be installed along facades containing a customer entrance or abutting parking lots.

Parking –

- No area of any parking lot shall have a slope in excess of seven percent. Please revise plans to show calculated slope.

Landscaping –

- 20% of the required front yard area with a 6 FT wide area adjacent to the right of shall be continuously landscaped. Based on calculations provided, this overall quantity may be met but the 6 FT width adjacent to ROW does not appear to be met.
- Parking island and associated landscaping missing from parking row on east side of building.
- Street trees shall be planted 40 feet on center along all streets, where required. The landscape plan shows trees spaced out at irregular intervals. Please revise per code.
 - 1 additional tree is required along American Way.
- No structure, sign, or landscape element shall exceed 30 inches in height, measured from the top of the curb, within the traffic safety visibility areas.
 - Please include any replacement landscaping at the SW corner, which was required for removal due to ADA ramp placement.
- As a reminder, all groundmounted and roofmounted mechanical equipment must be screened.
- As a reminder, size and species minimum standards must be met.

Architectural—

- Base-body-cap appears to be met across the building with exception of areas where the windows go to the floor. Typically, Planning Commission has approved this option.
- As a reminder, spandrel glass only permitted up to 20% of window area.

Signs—

- Signage is approved administratively outside the Planning Commission process.
- Please be aware wall signage is limited to 8% of wall area (frontage facing walls only). Multiple frontage lots are able to have 8% wall area each, but no more than 8% on each wall (i.e. a corner lot cannot combine allowance for 16% on one wall vs two 8% walls).

Department Comments:

- **Police:** No comment.
- **Fire:** Reserves the right to comment during plans review.
- **Engineering:** Review sent to Evans Engineering via email on 6/30. Submitted plans are lacking supporting drainage and stormwater calculations. Full SWP3 with ledger is required.

GENERAL NOTES:

THE OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS", CURRENT EDITION, AND THE CURRENT "RULES AND REGULATIONS" OF THE CITY OF MONROE SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN, UNLESS OTHERWISE NOTED.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PER LOCAL, STATE, AND FEDERAL REQUIREMENTS.

WHERE PLANS REFER TO CONTRACTOR, IT MAY MEAN SUBCONTRACTOR AT THE GENERAL CONTRACTOR'S DISCRETION.

ALL WORK IN THE AMERICAN WAY, AND/OR CLARENCE F WARNER DR., RIGHT OF WAY, INCLUDING UTILITY CUTS/TAPS WILL NEED A PERMIT FROM THE CITY OF MONROE.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR(S) TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK.

ITEM 201: CLEARING AND GRUBBING: THIS WORK CONSISTS OF CLEARING, GRUBBING, SCALPING, REMOVING TREES AND STUMPS, AND REMOVING ALL VEGETATION AND CONSTRUCTION DEBRIS FROM THE LIMITS SHOWN ON THE PLANS, EXCEPT SUCH OBJECTS THAT ARE TO REMAIN OR ARE TO BE REMOVED ACCORDING TO OTHER ITEMS OF WORK.

USE REMOVED OR EXCAVATED MATERIALS IN THE WORK WHEN THE MATERIAL CONFORMS TO THE SPECIFICATIONS; IF NOT THEN RECYCLE, OR DISPOSE OF THE MATERIAL ACCORDING TO 105.16 AND 105.17.

REMOVE OR SAVE ALL TREES, SHRUBS, AND PLANTS AS DESIGNATED ON THE PLANS. PRESERVE ALL VEGETATION AND OBJECTS NOT DESIGNATED FOR REMOVAL. PAINT CUT OR SCARRED SURFACES OF TREES OR SHRUBS SELECTED FOR RETENTION ACCORDING TO 666.04. IN ORDER TO RETARD AND PREVENT THE SPREAD OF THE EMERALD ASH BORER, LIMIT THE MOVEMENT OF REGULATED ARTICLES ACCORDING TO OHIO ADMINISTRATIVE CODE 901:5-56. OBSERVE REQUIREMENTS FOR HANDLING AND TRANSPORTING OF REGULATED ARTICLES IN QUARANTINED AREAS AS DEFINED BY THE OHIO DEPARTMENT OF AGRICULTURE (HTTP://WWW.AGRI.OHIO.GOV/EAB/).

ALL EROSION AND SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH THE SWPPP PLAN AND LOCAL AND OHIO EPA REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ALL INSPECTIONS AND REPORTING AS REQUIRED BY THE OHIO EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION (NPDES) PERMIT. CONTRACTOR SHALL PROVIDE WRITTEN REPORTS TO THE OWNER AND KEEP COPY ON FILE.

THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED THROUGH INFORMATION PROVIDED BY THE VARIOUS UTILITY OWNERS AND BY FIELD SURVEY, BUT ARE NOT GUARANTEED TO BE ACCURATE OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, PRIOR TO CONSTRUCTION, TO DETERMINE THE ACTUAL FIELD LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES IMPACTING HIS WORK. BY LAW, THE CONTRACTOR IS REQUIRED TO CONTACT THE OHIO UTILITY PROTECTION, INC. AT OHIO811.ORG, 8-1-1 OR 1-800-362-2764 AT LEAST 48 HOURS BUT NO MORE THAN 10 WORKING DAYS (EXCLUDING WEEKENDS AND LEGAL HOLIDAYS) BEFORE BEGINNING ANY DIGGING.

THE LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.

THE DESIGN ENGINEER ASSUMES NO RESPONSIBILITY FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF OPERATIONS OF THE CONTRACTOR, NOR FOR SAFETY ON THE JOB SITE OR THE CONTRACTOR'S FAILURE TO COMPLETE THE WORK AS SPECIFIED ON THIS PLAN.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SURVEYING AND CONSTRUCTION STAKING REQUIRED FOR SITEWORK IN THIS PACKAGE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL RESTRICT ALL CONSTRUCTION ACTIVITIES TO THE PROJECT SITE AND EXISTING RIGHTS-OF-WAY, CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER.

ACCESS TO ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

ANY STORM PIPES DAMAGED DURING CONSTRUCTION SHALL EITHER BE RESTORED TO ITS ORIGINAL CONDITION OR CONNECTED TO THE STORM SEWER SYSTEM AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION AS DIRECTED OR APPROVED BY THE OWNER.

ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

ALL MANHOLES, FIRE HYDRANTS AND VALVE BOXES SHALL BE ADJUSTED TO FINAL GRADE AT THE CONTRACTOR'S EXPENSE.

GRANULAR BACKFILL SHALL BE REQUIRED IN ALL TRENCHED IN AREAS OF EXISTING PAVEMENT. FILL IN PROPOSED PAVEMENT OR BUILDING PAD AREAS SHALL BE COMPACTED TO THE PROJECT'S GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND FIELD PERSONELL APPROVAL.

STORM SEWERS AND STRUCTURES:

ALL PROPOSED STORM SEWERS AND STRUCTURES ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER. SUPPLY PIPE OF THE REQUIRED SIZE OR ONE SIZE LARGER. PROPOSED STORM SEWERS "PR. STM" SHALL BE PVC-SDR 35/ HIGH DENSITY POLYETHYLENE (HDPE), PER ODOT 707.33/ OR REINFORCED CONCRETE PIPE, PER ODOT ITEM 706.02, CLASS IV. ALL STORM SHALL BE INSTALLED PER ODOT ITEM 611.10, TYPE A (CULVERTS) AND TYPE B (STORM/SANITARY UNDER PAVEMENT).

611.06 BEDDING. TYPE 1 BEDDING CONSISTS OF STRUCTURAL BACKFILL EXTENDING AT LEAST 6 INCHES (150 MM) BELOW THE BOTTOM OF THE CONDUIT FOR THE FULL WIDTH OF THE TRENCH. COMPACT THE BEDDING ACCORDING TO 611.06.

USE TYPE 1 BEDDING FOR 706.05, OR 706.051 AND 706.052 ON SLAB BOTTOMS, OR CORRUGATED INVERT PLATES.

TYPE 2 BEDDING CONSISTS OF STRUCTURAL BACKFILL EXTENDING AT LEAST 3 INCHES (75 MM) FOR ALL 706 RIGID PIPE CONDUITS AND 6 INCHES (150 MM) FOR ALL OTHER CONDUITS BELOW THE BOTTOM OF THE CONDUIT FOR THE FULL WIDTH OF THE TRENCH. EXTEND THE BEDDING UP AROUND THE PIPE FOR A DEPTH OF NOT LESS THAN 30 PERCENT OF THE RISE OF THE CONDUIT. SHAPE THE BEDDING TO FIT THE CONDUIT WITH RECESSES SHAPED TO RECEIVE THE BELL OF BELL-AND-SPIGOT PIPE. LEAVE THE BEDDING BELOW THE MIDDLE ONE-THIRD OF THE PIPE SPAN UNCOMPACTED. COMPACT THE REMAINING BEDDING ACCORDING TO 611.06.

USE TYPE 2 BEDDING FOR TYPES A, B, C, AND D CONDUITS EXCEPT FOR LONG SPAN STRUCTURES AND FOR CONDUITS THAT REQUIRE TYPE 3 BEDDING.

COMPACTED FILLS SHALL BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO TRENCHING FOR PLACEMENT OF SEWER. ALL FILLS SHALL BE INSPECTED AND APPROVED BY THE PROJECT'S GEOTECHNICAL ENGINEER, OR PER GOVERNING AGENCIES APPROVAL.

CATCH BASINS AND/OR MANHOLES OVER 4 FEET SHALL BE FURNISHED WITH STEPS, MEETING ODOT ITEM 706.13, 711.13, 711.30, OR 711.31.

CATCH BASINS LOCATED IN PAVEMENT AREAS SHALL HAVE FINGER DRAINS, (SEE DETAIL SHEET).

DISTANCES LISTED ON THE PLANS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

EXCAVATION/FILL:

SITE BUILDING PAD EXCAVATION AND EMBANKMENT SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATION AND APPROVAL



DUKE ENERGY-GAS
JEREMY PRATT
TEL: 513-287-4625
TEM: JEREMY.PRATT@DUKE-ENERGY.COM

CITY OF MONROE PUBLIC WORKS
(WATER, STORM & SWP3)
1000 HOLMAN AVENUE
MONROE, OH 45050
513-727-8953

CITY OF MONROE PLANNING & ZONING & BUILDING DEPARTMENT
233 S. MAIN ST.
MONROE, OHIO 45050
KAMERYN JONES
513-539-7374 EXT.-1020
JONESK@MONROEOHIO.ORG

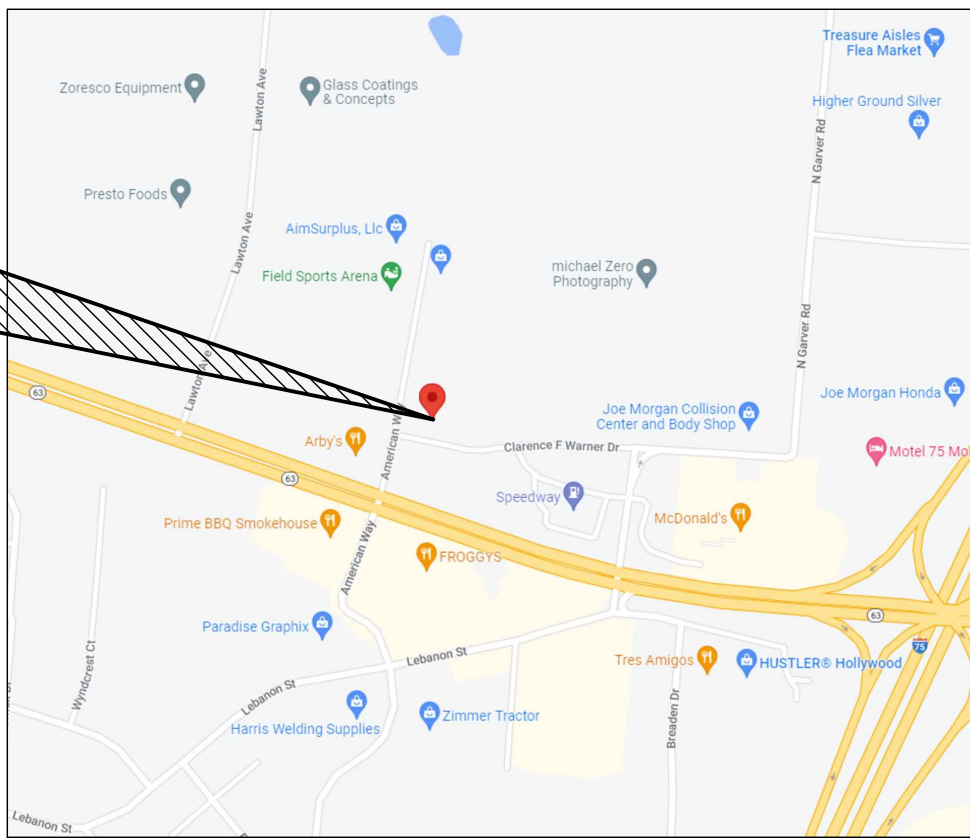
PLANS FOR THE CONSTRUCTION OF A NEW COMMERCIAL BUILDING KNOWN AS:

MONROE DISPENSARY

CLARENCE F. WARNER, CITY OF MONROE, BUTLER COUNTY, OHIO

JUNE, 2022

PROPOSED SITE



LOCATION MAP

APPLICANT:

CINCINNATI COMMERCIAL CONTRACTING
4779 RED BANK EXPRESSWAY
CINCINNATI, OHIO 45227

CIVIL ENGINEERING:

EVANS ENGINEERING
4240 AIRPORT RD., SUITE 211
CINCINNATI, OHIO 45226
(513)-321-2168
JONATHAN R. EVANS, P.E.

SURVEYING:

BINZ SURVEYING, LLC
6547 BROOKS RD.
HARRISON, OHIO 45030
(513)-202-0525
DANIEL BINZ

INDEX:

- C-1 TITLE SHEET & GENERAL NOTES
- C-1.1 SITE CONSTRUCTION DETAILS
- C-2 EXISTING CONDITIONS & DEMO PLAN
- C-3 SITE DIMENSION PLAN
- C-3.1 UTILITY SERVICE PLAN
- C-4 GRADING PLAN
- C-5 STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
- C-5.1 SWPPP NOTES & DETAILS

STANDARD DRAWINGS:

THE FOLLOWING ODOT AND LOCAL STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THIS PLAN:

- CB-2-2A, 2-2B, 2-2C (7-16-2021) CATCH BASINS NOs 2-2A, B & C
- CB-2-3, 2-4 (7-16-2021) CATCH BASINS NO's 2-3 & 2-4
- CB-2-5, 2-6 (7-16-2021) CATCH BASINS NO's 2-5 & 2-6
- CB 3 (7-16-2021) CATCH BASIN NO. 3
- CB 3A (7-16-2021) CATCH BASIN NO. 3A
- MH 3 (7-16-2021) MANHOLE NO. 3
- BP-7.1 (7-17-2020) NEW CURB RAMPS
- HW-2.1 (7-20-2018) HALF-HEIGHT HEADWALLS

THE FOLLOWING CITY OF MONROE STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THIS PLAN:

- 300-2, 300-5, 300-9, 300-10, 300-11, 300-12
- 300-15, 300-16, 300-17, 300-18, 300-19, 500-1,
- 500-5, 500-7, 500-8, 600-11, 600-12, 600-13,
- 600-14, 600-15, 600-17 800-2, 800-4, 800-11,
- 800-13

ANY MAINTENANCE OF TRAFFIC SHALL BE PER ODOTCD AND ODOT SPEC MT-101.9.

APPROVAL:

DRAWINGS APPROVED FOR CONSTRUCTION-CITY OF MONROE:

BY: _____

TITLE _____ DATE: _____

DEPARTMENT/ UTILITY TABLE:

DUKE ENERGY-ELECTRIC
BRETT KING
CINCINNATI, OHIO 45216
TEL: 513-287-4658
BRETT.KING@duke-energy.com

BUTLER COUNTY WATER & SEWER
(FOR SEWER)
RICK SMITH
130 HIGH STREET
HAMILTON, OH 45011
513.887.3067
RICHARD.SMITH@BCOHIO.US

CITY OF MONROE PLANNING & ZONING & BUILDING DEPARTMENT
233 S. MAIN ST.
MONROE, OHIO 45050
KAMERYN JONES
513-539-7374 EXT.-1020
JONESK@MONROEOHIO.ORG

DUKE ENERGY-GAS
JEREMY PRATT
TEL: 513-287-4625
TEM: JEREMY.PRATT@DUKE-ENERGY.COM

CITY OF MONROE PUBLIC WORKS
(WATER, STORM & SWP3)
1000 HOLMAN AVENUE
MONROE, OH 45050
513-727-8953

CITY OF MONROE PUBLIC WORKS AND ENGINEERING DEPARTMENT
FOR ANY WORK IN R/W
233 S. MAIN ST.
MONROE, OHIO 45050
BILL BROCK

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS
NO. & DESCRIPTION

BY

DATE

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



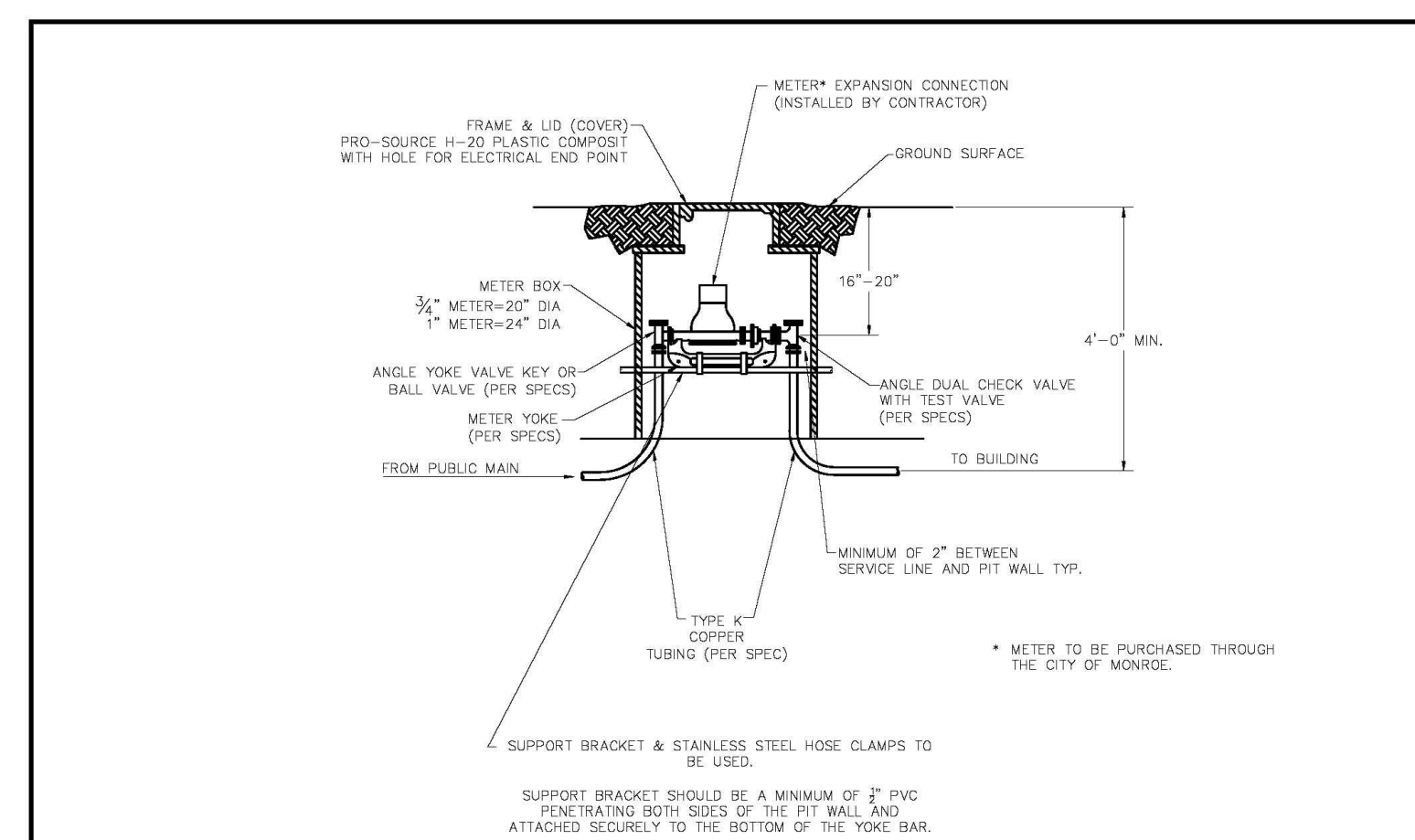
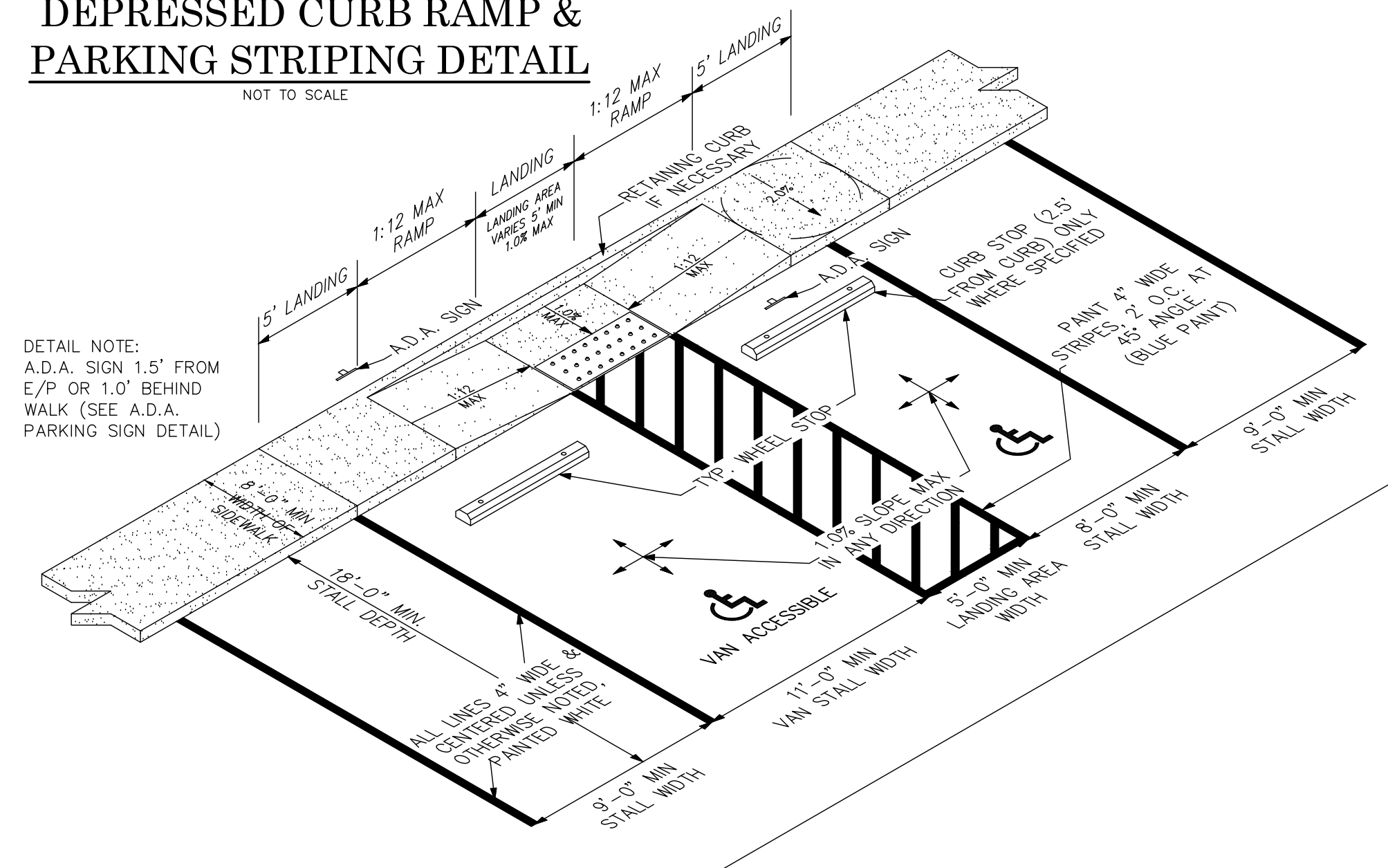
MONROE DISPENSARY
TITLE SHEET & GENERAL
NOTES
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=30'	N/A
JOB NO.	22-142	
DATE	Jul. 8, 2022	

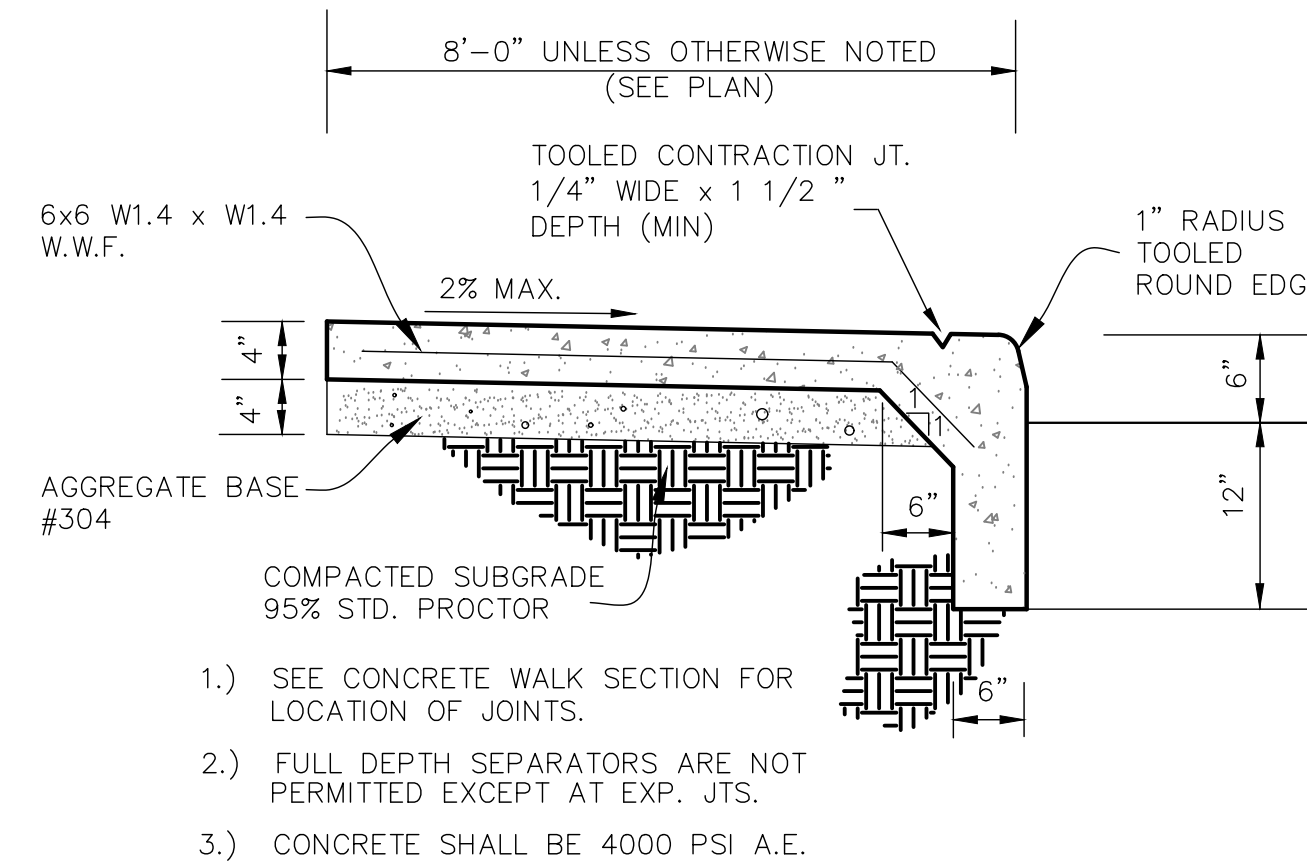
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C-1

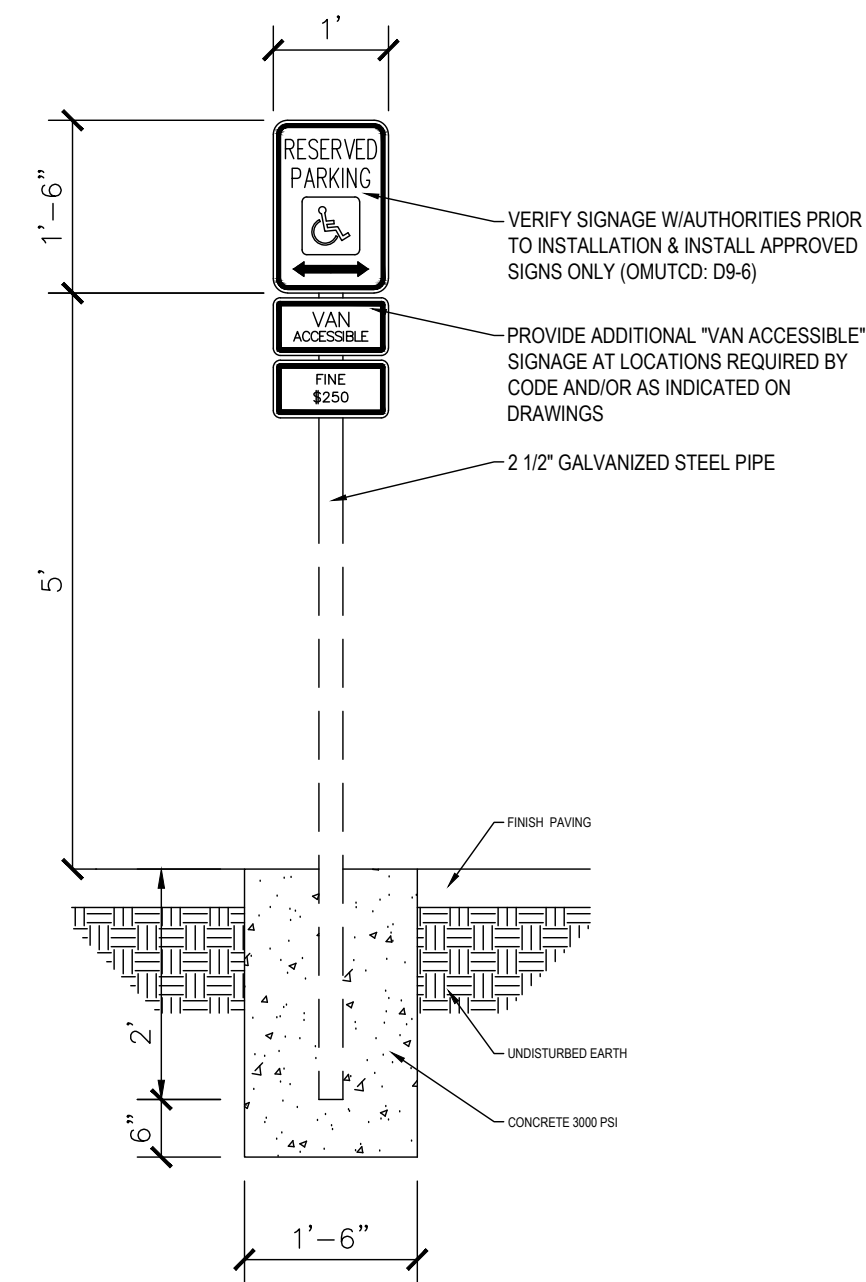
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CITY OF MONROE	STANDARD INSTALLATION FOR 3/4" AND 1" WATER METER SETTINGS	REVISIONS:	DATE 01/27/2023
ChoiceOne Engineering		APPROVED PAGE No. 800-11	

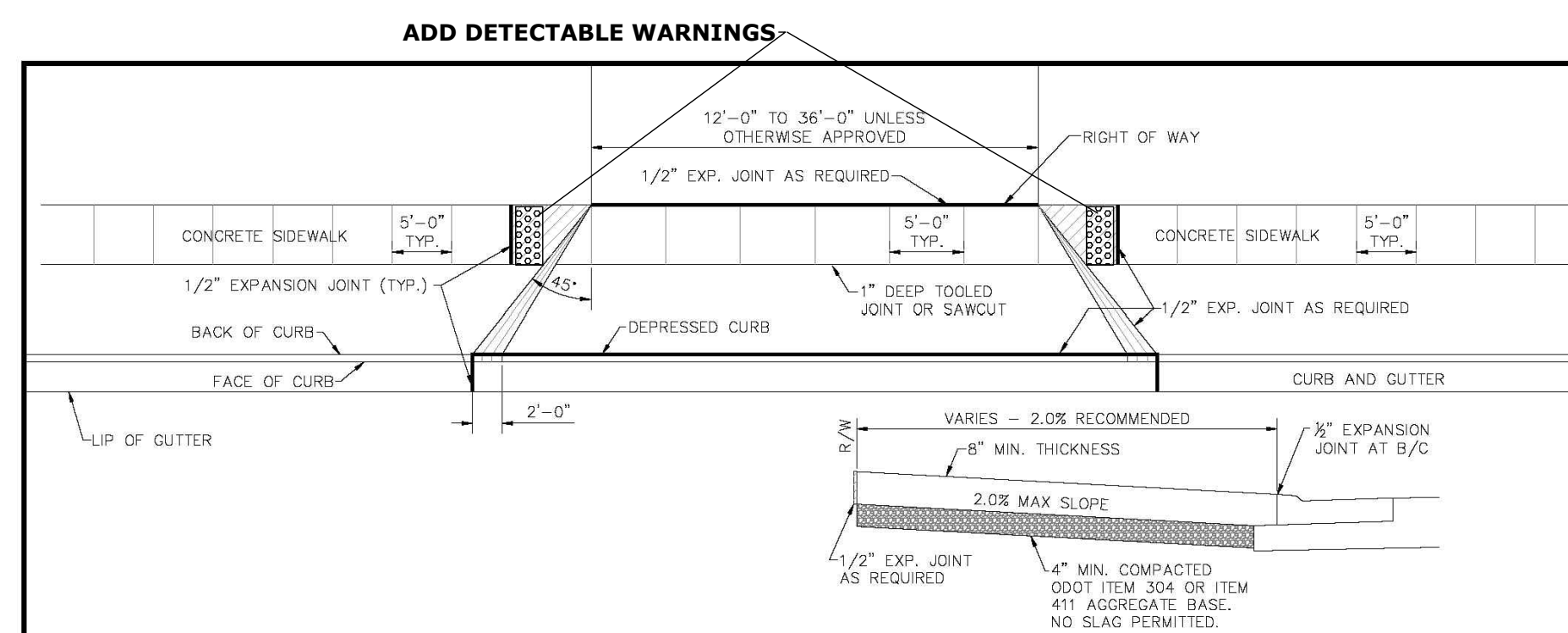


NOT TO SCALE



- NOTES:
1. ALL SIGNS SHOWN SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES.
 2. ALL SIGNS SHOWN SHALL BE REFLECTORIZED TO SHOW THE SAME COLOR BY NIGHT AS BY DAY.
 3. ALL SIGNS SHALL BE SECURELY MOUNTED ON GALVANIZED STEEL POSTS.
 4. INSTALL QUANTITY AND AT LOCATIONS REQUIRED BY CODE AND/ OR AS INDICATED ON DRAWINGS. CONFIRM ALL HANDICAPPED SIGNAGE CODES.

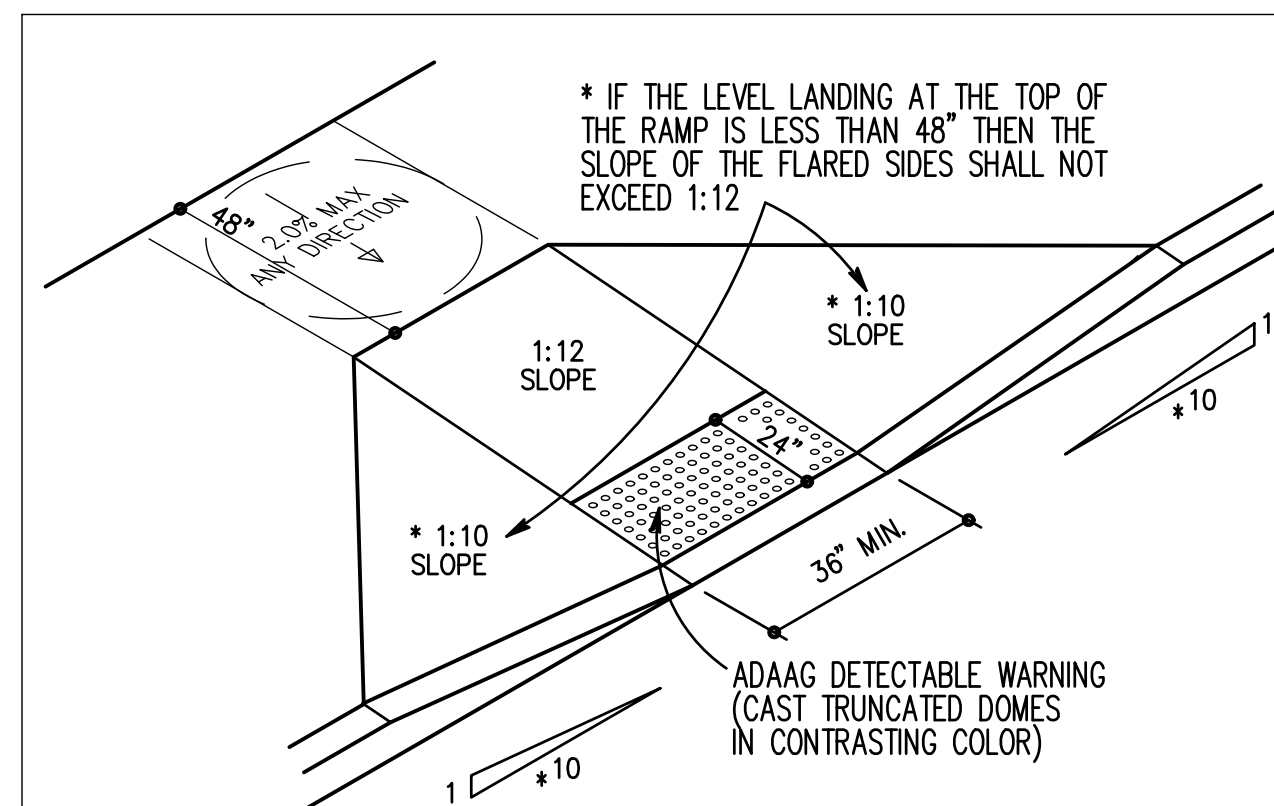
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- NOTES**

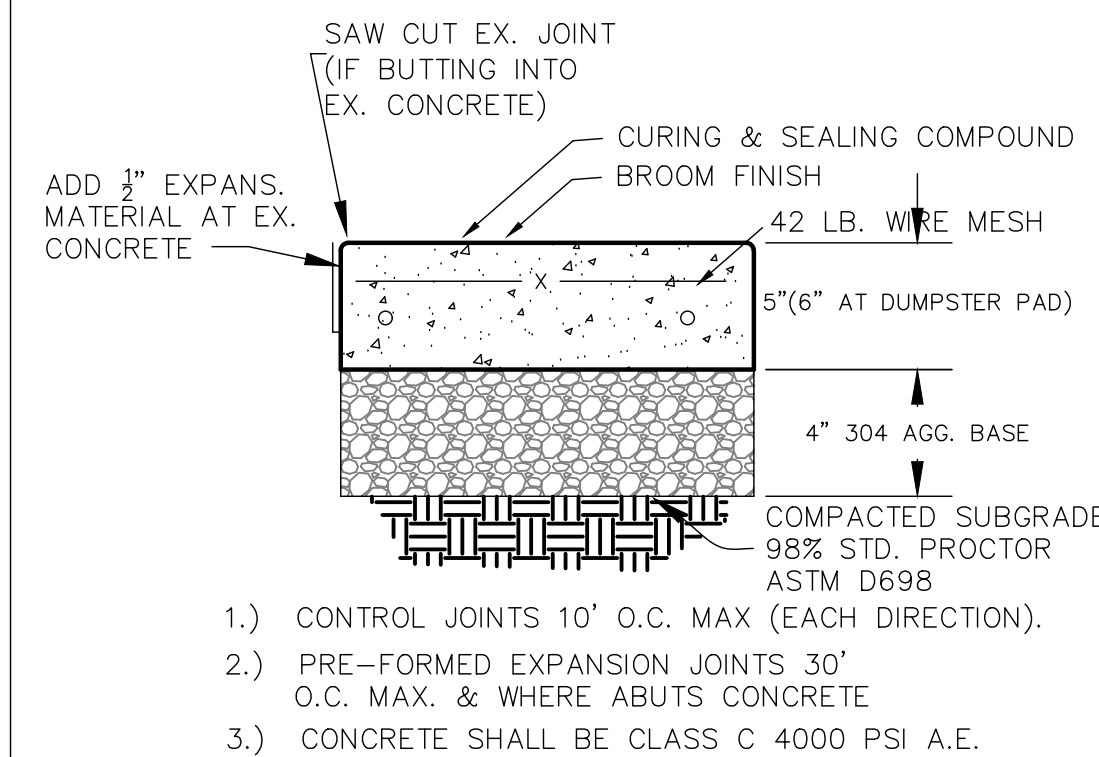
 - A. DRIVE APPROACHES MUST MEET THE REQUIREMENTS OF CDOT ITEM 452 AND 499 CANT BE PLACED IN CONCRETE.
 - B. DRIVE APPROACHES MAY BE PLACED MONOLITHICLY WITH CURB, PROVIDING A 1" DEEP CONTROL JOINT TO BE TOoled AT THE BACK OF CURB.
 - C. MAXIMUM JOINT SPACING MUST BE 10' LONGITUDINALLY AND TRANSVERSELY WITH JOINTS AT TAPERS.
 - D. EXPANSION MATERIAL MUST BE 1/2" FEMPOD, VINYL.
 - E. 6" OF COMPACTED CDOT ITEM 304 OR ITEM 411 AGGREGATE BASE MUST BE PLACED UNDER DRIVE APPROACHES.
 - F. PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFS.
 - G. WHERE CURB AND GUTTER HAS NOT BEEN DROPPED AT DRIVE APPROACHES, THE CONTRACTOR WILL CUT AND REMOVE CURB (SEE DETAIL).
 - H. WHERE ASPHALT/CONCRETE PAVEMENT IS DISTURBED, THE ASPHALT MUST BE REPLACED BY THE CONTRACTOR AT THE BACK OF CURB.
 - I. JOINTS MUST BE CLEANED AND EDGED BY A 1/4" RADIIUS CORDED LONGITUDINAL JOINTS MUST BE AS DIRECTED BY THE CITY. EXPANSION JOINTS MUST BE OF SUCH DIMENSIONS AS TO MEET OR EXCEED STANDARD FOR CONSTRUCTION JOINTS.
 - J. USE APPROVED CURING COMPOUND IMMEDIATELY AFTER FINISHING SURFACES OR OTHER APPROVED METHOD.
 - K. THIS STANDARD DRAWING IS FOR GUIDELINE PURPOSES. APPLICANT MUST PROVIDE A DRAWING SHOWING THE LOCATION OF THE PROPOSED APPROACH.
 - L. CONCRETE MUST BE GC. 1P
 - M. ALL NEW CONSTRUCTION OR MODIFICATIONS OF DRIVE APPROACHES REQUIRE A CONCRETE APPROACH, REGARDLESS OF WHETHER THERE IS A SIDEWALK OR NOT. THE NEW APPROACH IS TO GO FROM EDGE OF DRIVEWAY TO STREET TO RIGHT OF WAY OR A MINIMUM OF 10'-0".
 - N. DRAINAGE ISSUES WILL HAVE TO BE ADDRESSED, WHEN A DRIVEWAY IS INSTALLED OR MODIFIED.
 - O. PRECAUTIONS MUST BE TAKEN TO PROTECT EXISTING CONCRETE, CURB, ETC. FROM THE MARKS AND DAMAGE DURING CONSTRUCTION.

	COMMERCIAL AND INDUSTRIAL DRIVE APPROACH	REVISIONS: 01/29/2021 DATE APPROVED: 01/30/2021 PAGE No. 300-9
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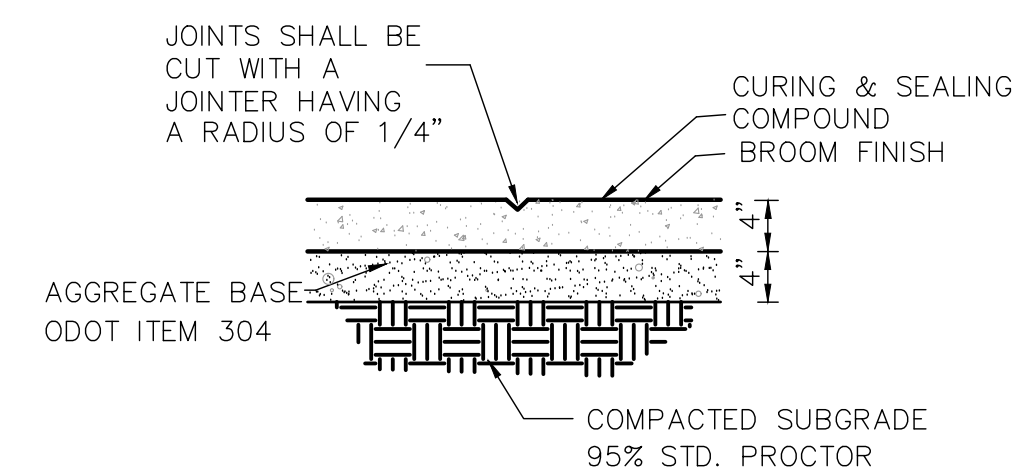


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PUBLIC R/W**

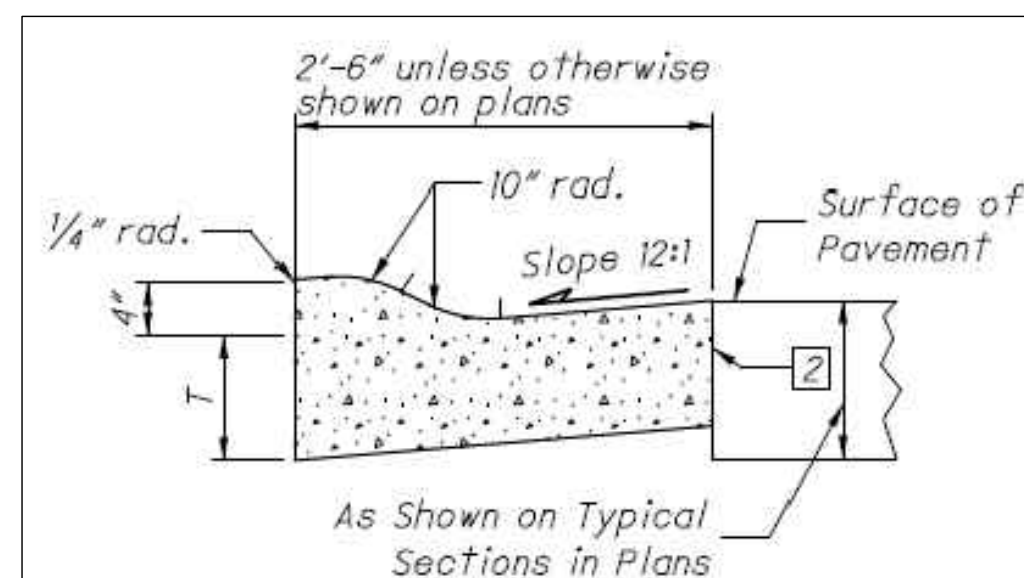


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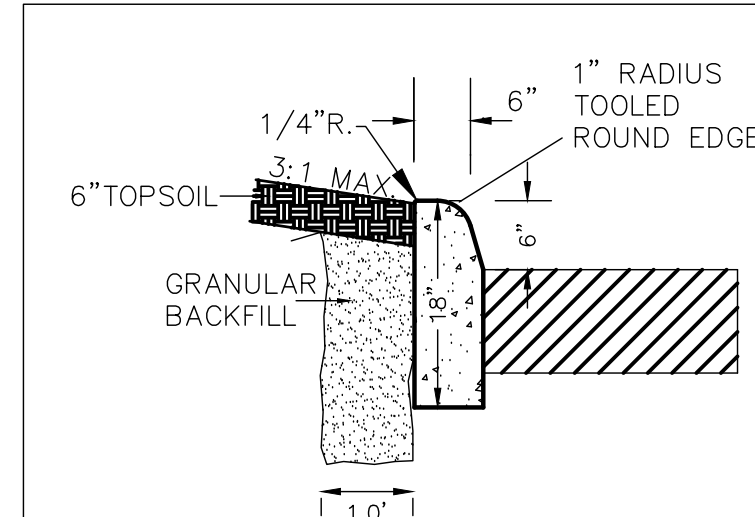


- NOTE:
- 1.) CONTROL JOINTS 5' O.C. MAX.
 - 2.) EXPANSION JOINTS 30' O.C. MAX.
 - 3.) CONCRETE SHALL BE 4000 PSI AE

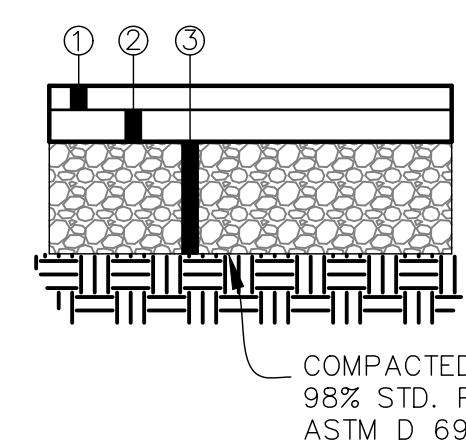
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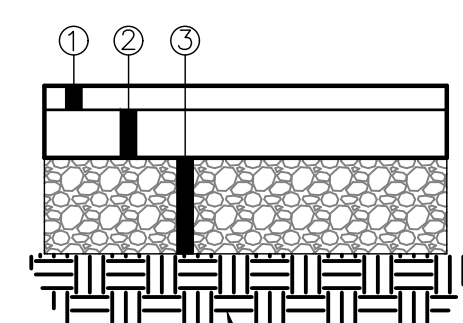


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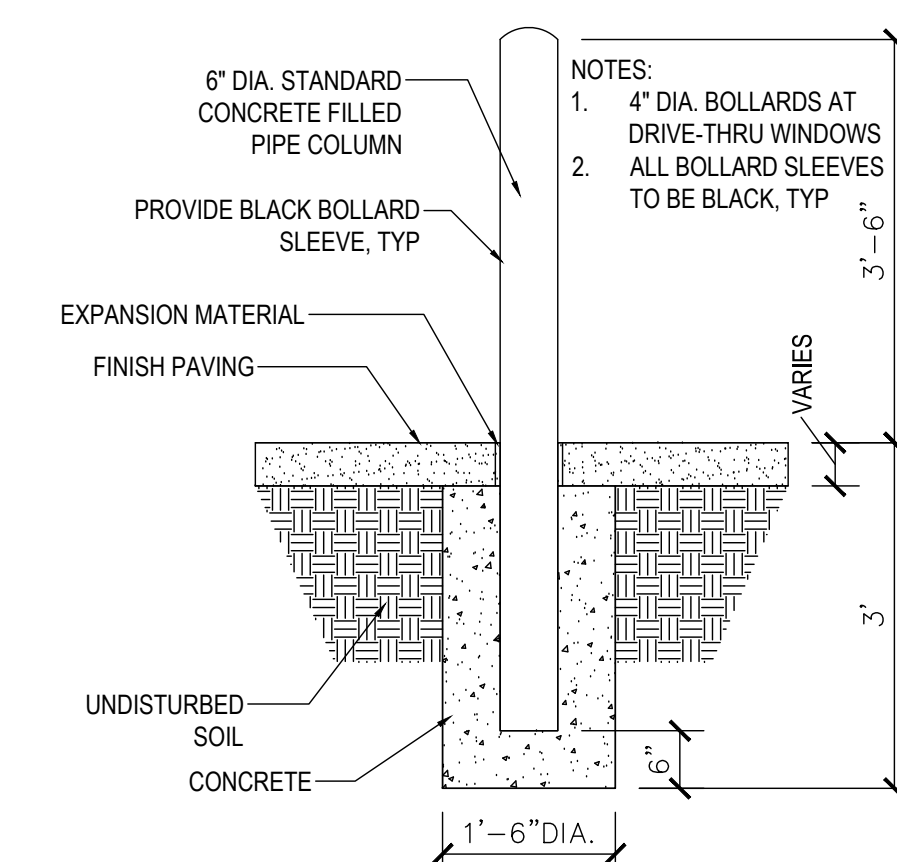
- ① -1½" OF ASPHALT SURFACE COURSE
② -2" OF ASPHALT INTERMEDIATE COURSE
③ -6" OF ODOT #304 CRUSHED STONE

NOT TO SCALE



- ① - 1½" OF ASPHALT SURFACE COURSE
② - 3" OF ASPHALT INTERMEDIATE COURSE
③ - 6" OF ODOT #304 CRUSHED STONE

NOT TO SCALE



NOT TO SCALE

PRELIMINARY
NOT FOR CONSTRUCTION

NO. & DESCRIPTION	REVISIONS
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DATE	BY
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EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



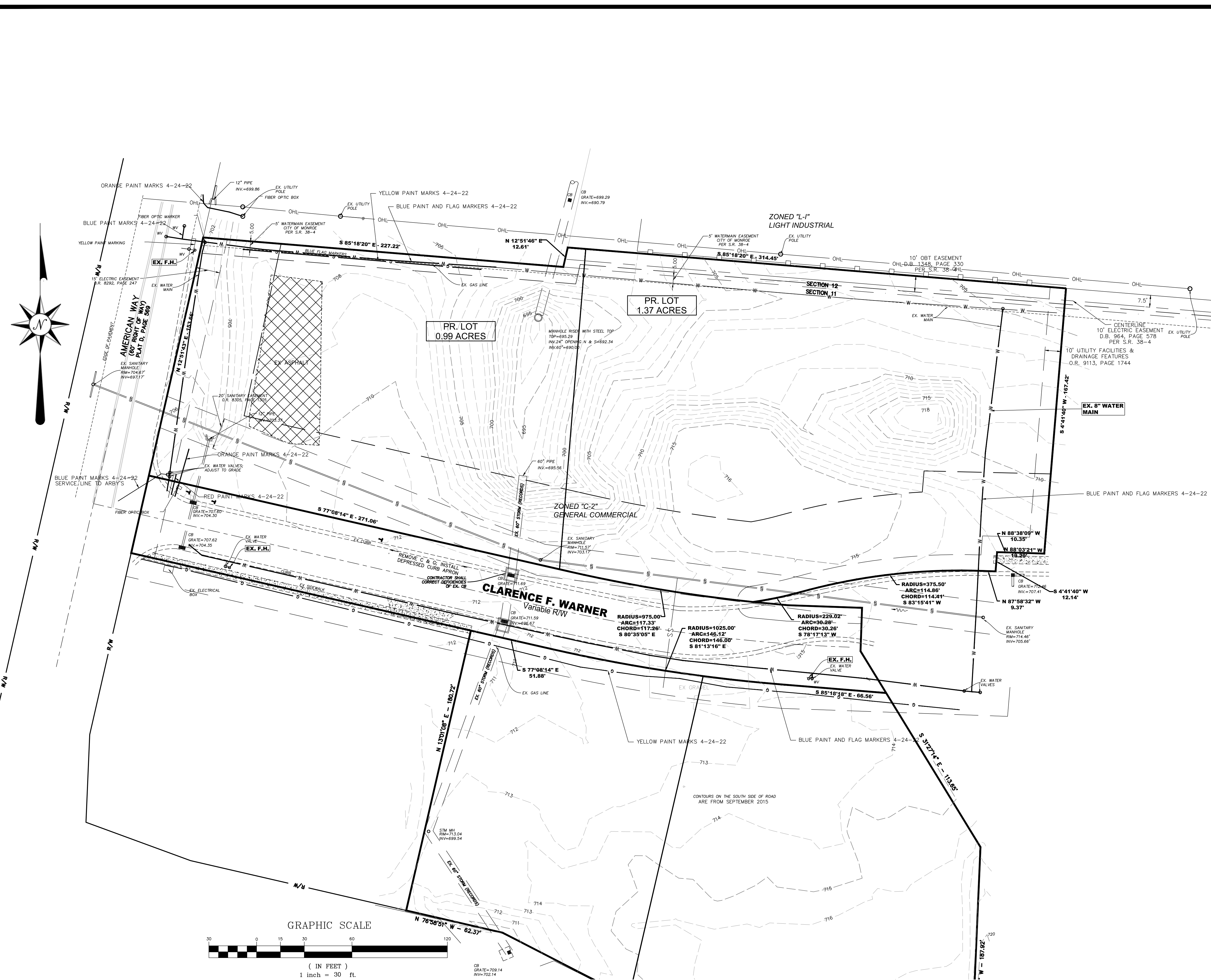
MONROE DISPENSARY
SITE CONSTRUCTION
DETAILS

CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	N/A	N/A
JOB. NO.	22-142	
DATE	Jul. 8, 2022	

SHEET NO.

C-1.1



EXISTING CONDITION NOTES:

1. CURRENT ZONING FOR THE PROPERTY IS "C-2". ANY SPECIFIC QUESTIONS REGARDING ZONING SHALL BE DIRECTED TO THE CITY OF MONROE ZONING DEPARTMENT.
2. USE WILL BE COMMERCIAL AND IS UNDERSTOOD TO BE COMPATIBLE WITH CURRENT ZONING.
3. PER FLOOD INSURANCE RATE MAP NUMBER 39017C0228F AND 39017C0228F EFFECTIVE 10/19/2018, THE SUBJECT PROPERTY IS LOCATED IN ZONE "X". ZONE "X" IS AN AREA OF MINIMAL FLOOD HAZARD.
4. ALL DEMOLITION SHALL BE PERFORMED BY A LICENSED CONTRACTOR AND BE PERFORMED PER LOCAL REQUIREMENTS. ALL REMEDIATION WORK SHALL BE PROVIDED BY A PROPERLY LICENSED ABATEMENT CONTRACTOR. ALL DEBRIS TO BE DISPOSED OF IN A LAWFUL MANNER AND APPROVED BY OWNER.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEERING FIRM IF ANY UTILITIES OR UNDERGROUND FEATURES ARE ENCOUNTERED WHICH ARE NOT SHOWN ON THESE PLANS OR DIFFER IN LOCATION, HORIZONTAL OR VERTICAL.
6. ANY PORTIONS OF WALK, CURB, OR PAVEMENT (OUTSIDE OF SITE CONSTRUCTION LIMITS) DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLACED IN-KIND.
7. CONTRACTOR SHALL INSTALL CONSTRUCTION BARRIER FENCE DURING AND AFTER DEMOLITION. ANY OPEN EXCAVATION SHALL BE PROPERLY BARRICADED AS REQUIRED BY LOCAL, STATE OR FEDERAL REGULATIONS.
8. CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.
9. EXCAVATION AND DEMOLITION CONTRACTOR SHALL TAKE EXTREME CARE TO PREVENT MUD AND DEBRIS FROM ENTERING EXISTING STORM SEWERS AND WATER COURSES.
10. THE CONTRACTOR SHALL KEEP EXISTING PAVEMENT SURROUNDING THE SITE "BROOM CLEAN" AND FREE OF SOIL OR AGGREGATE THAT MIGHT BE BROUGHT OFF-SITE FROM THE PROPERTY.
11. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STREET/PARKING LOT CLEAN BY PREVENTING DEBRIS, MUD, DIRT, ETC. FROM BEING TRACKED ONTO THE STREET/PARKING LOT. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DEBRIS, MUD, ETC. FROM THE STREET IMMEDIATELY WHEN IT OCCURS AND SHALL INSPECT THE STREET AT THE END OF EACH WORKING DAY.

LEGEND-PROP. FEATURES

 REMOVE PAVEMENT/CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS	
NO.	DESCRIPTION

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



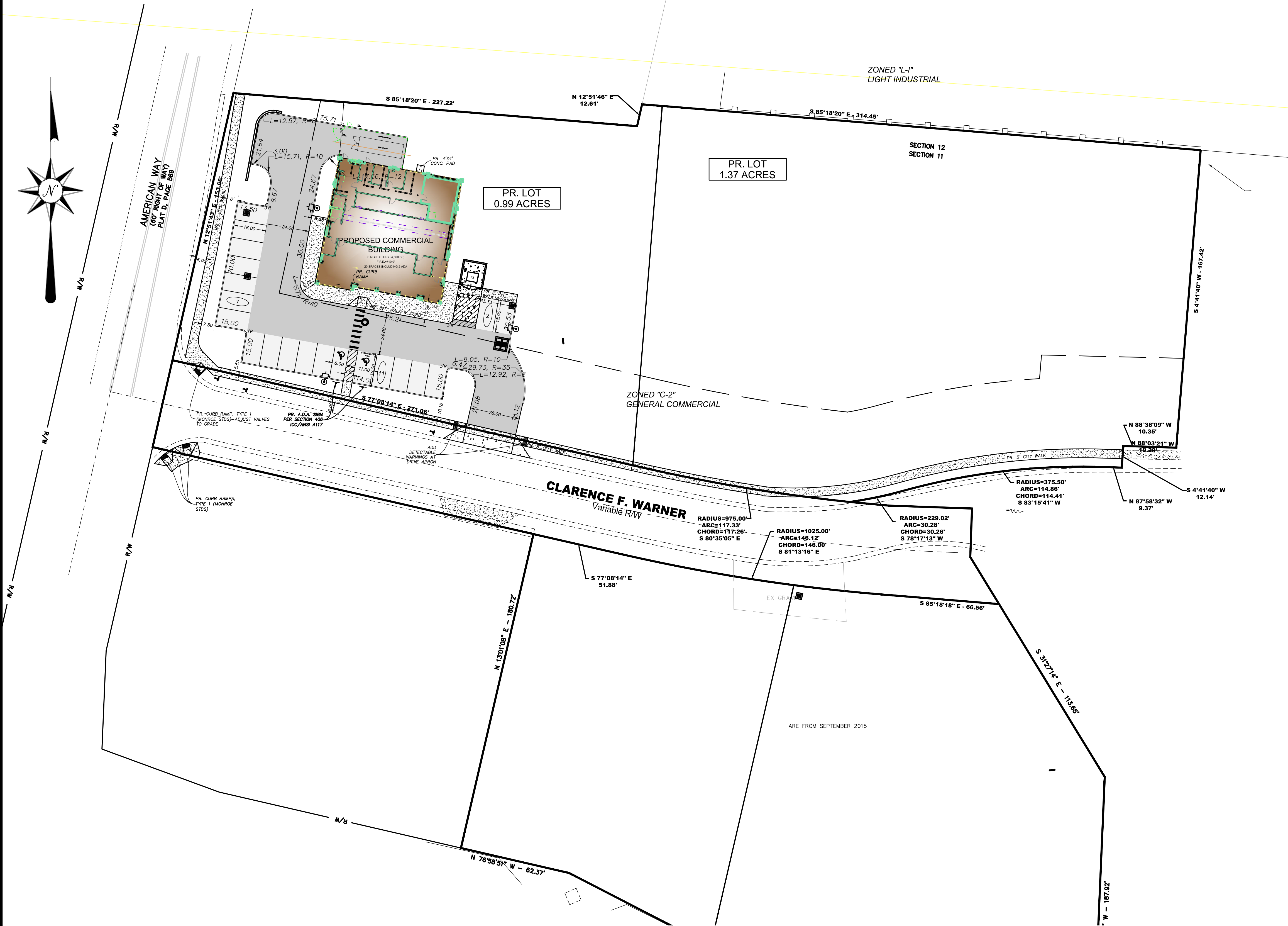
MONROE DISTANSARY
EXISTING CONDITIONS &
DEMO PLAN
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=30'	N/A
JOB NO.	22-142	
DATE	Jul. 8, 2022	

SHEET NO.

C-2





	REGULAR DUTY ASPHALT PAVEMENT
	LIGHT DUTY ASPHALT PAVEMENT
	NEW PORTLAND CEMENT CONCRETE PAVEMENT
	NEW PORTLAND CEMENT CONCRETE WALK

PARKING TABLE:

PROPOSED PARKING=	18
ADA ACCESSIBLE =	2
TOTAL PARKING	20 SPACES (MIN. 10' X 18')

1. ALL DIMENSIONS ARE TO FACE OF CURB, CENTERLINE OF STRIPE. PROPERTY LINE OR R/W UNLESS OTHERWISE NOTED.
2. ALL CURB RADI ARE 3' UNLESS OTHERWISE NOTED.
3. ALL CONSTRUCTION STAGING ACTIVITIES MUST BE SELF-CONTAINED WITHIN THE LOT.
4. ALL STORAGE OF CONSTRUCTION MATERIALS, CONSTRUCTION STAGING AREAS AND THE PARKING OF CONSTRUCTION VEHICLES, INCLUDING VEHICLES OF WORKERS, SHALL OCCUR ONLY ON THE SUBJECT PROPERTY.
5. ONLY THE ACCESS POINTS LOCATED UPON THE PROPERTY SHALL BE USED BY ALL LABORERS, SUPPLIERS, CONTRACTORS AND OTHERS CONNECTED WITH SUCH CONSTRUCTION ACTIVITIES.
6. ALL CONCRETE FOR SITE WORK SHALL BE PER DOT 452, CLASS "C", 4,000 PSI, 5-7% AIR ENTRAINED.
7. PROVIDE A TOOLED JOINT AT THE PERIMETER OF THE CONCRETE DRIVE.

(IN FEET)
1 inch = 30 ft.



PRELIMINARY
NOT FOR CONSTRUCTION

NO. & DESCRIPTION	

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1

DATE	
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EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



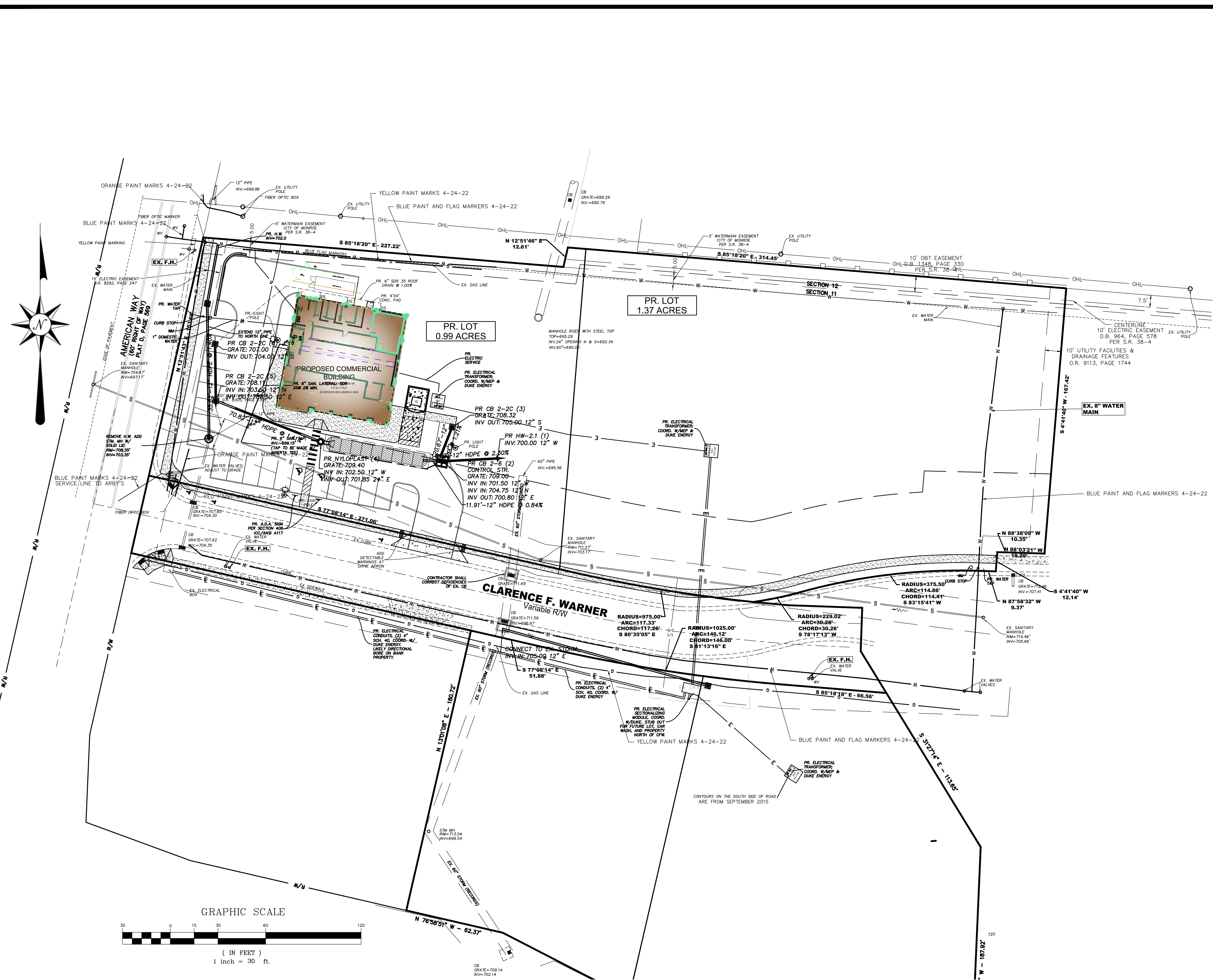
SITE DIMENSION PLAN
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=30'	N/A

B. NO.	22-142	
DATE	Jul. 8, 2022	

SHEET NO.

-3



LEGEND-PROP. FEATURES

- W PROPOSED DOMESTIC WATER SERVICE (1" METER; 1" LINE, TYPE K COPPER)
- SS ALL WATER LINES TO HAVE A MINIMUM OF 48" OF COVER
- PROPOSED 6" SANITARY LATERAL PVC SDR 35 @ 2% MIN.
- PROPOSED STORM
- E PROPOSED UNDERGROUND ELECTRIC SERVICE
- G PROPOSED GAS SERVICE (SIZE TBD BY USE)
- INSTALL 4" CONDUIT WITH PULL STRING AND LOCATOR WIRE (IF NEEDED FOR TIMING SEE NOTE 24 BELOW)
- DS -PR. DOWNSPOUT
- RD -PR. 6" SDR 35 ROOF DRAIN @ 1.00% (OR SLOPED AS NOTED)

UTILITY NOTES:

- CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST FOR REPAIRING OR RELOCATING ALL UTILITIES AFFECTED BY CONSTRUCTION. LOCATIONS AS SHOWN ARE BASED UPON UTILITY RECORDS AND A FIELD SURVEY BY BINZ SURVEYING.
- ALL UTILITY SERVICES SHOULD BE COORDINATED WITH THE LOCAL PROVIDER FOR OPTIMAL PLACEMENT OF SERVICES (SEE COVER SHEET FOR CONTACTS).
- FURTHERMORE, ALL BUILDING UTILITY CONNECTION POINTS SHALL BE VERIFIED WITH CURRENT ARCHITECTURAL AND M.E.P. PLANS PRIOR TO STARTING CONSTRUCTION.
- THE COST OF ALL UTILITY TAPS AND COORDINATION FEES SHALL BE THE RESPONSIBILITY OF THE OWNER.
- IF LOWEST LEVEL ELEVATION IS BELOW RIM ELEVATION OF UPSTREAM MANHOLE, THEN TAP MUST INCLUDE BACKFLOW PREVENTION OR BE PUMPED TO GRAVITY.
- SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE NEENAH R-1976 LID AND FRAME.
- COORDINATE WITH BODES FOR SEWER SERVICE AND MONROE PUBLIC WORKS FOR BUILDING WATER SERVICE.
- ROOF DRAINS, FOUNDATION DRAINS, COOLING WATER, SWIMMING POOL WATER OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- ROOF DRAINS SHALL BE SDR 35 AND TIED DIRECTLY INTO THE UNDERGROUND STORM SEWER SYSTEM.
- SEE ELECTRICAL PLAN (BY OTHERS) FOR LOCATION OF METER SETTING.
- A SIGN PERMIT IS NECESSARY. APPLICANT MUST SUBMIT AND GET APPROVAL BY ZONING DEPARTMENT AND BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
- EXISTING UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ACCORDING TO AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE AND LOCATION OF THE EXISTING UTILITIES, AS SHOWN OR NOT SHOWN ON THESE PLANS, AND REPAIRING ANY DAMAGE DONE TO THE UTILITIES DURING PROBING OR CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE AND/OR UTILITY OWNER, AS REQUIRED. CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE FOR INSPECTION. ALL TRENCHES, PIPING AND TAPS SHALL BE LEFT EXPOSED AND PROTECTED UNTIL INSPECTED AND APPROVED.
- SITE CONTRACTOR SHALL CLEAN ALL CONDUITS AND PIPES THAT COLLECT DEBRIS, MUD, CONCRETE, TRASH, ECT. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
- SITE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR PLACEMENT OF ALL NECESSARY CONDUIT PRIOR TO PAVING OPERATIONS.
- SITE CONTRACTOR TO REFER TO THE ARCHITECTURAL PLAN FOR ADDITIONAL NOTES AND DETAILS, INCLUDING SITE LIGHTING, IRRIGATION, GAS, ELECTRIC, INTERNET AND OTHER CONDUIT TO BE COORDINATED WITH UTILITY INSTALLATION.
- DOWNSPOUT DRAIN CONNECTION SHALL BE 2.0' MIN. BELOW FINISHED FLOOR ELEVATION. CONTRACTOR TO VERIFY AND COORDINATE WITH ARCHITECTURAL PLAN.
- CONTRACTOR SHALL COORDINATE ALL UTILITY SERVICE LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL PLAN.
- THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS.
- WATER MAINS SHALL BE LAID IN A MINIMUM OF 4'-0" FROM TOP OF FINISHED GRADE TO THE TOP OF WATER MAIN.
- DOMESTIC WATER PIPE FROM MAIN TO METER SHALL BE COPPER TUBING, TYPE K, PLASTIC PIPING, 200-250 PSI CAN BE USED FROM 3' OUTSIDE METER TO BUILDING.
- SANITARY SERVICE SHALL BE 6" PVC SDR-35 @ 2.00% MIN.
- CONTRACTOR SHALL ENSURE MINIMUM CLEARANCE OF 18" BETWEEN CROSSING UTILITIES, UNLESS OTHERWISE REQUIRED BY GOVERNING MUNICIPALITY UTILITIES REQUIREMENTS.

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS	
NO.	DESCRIPTION

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

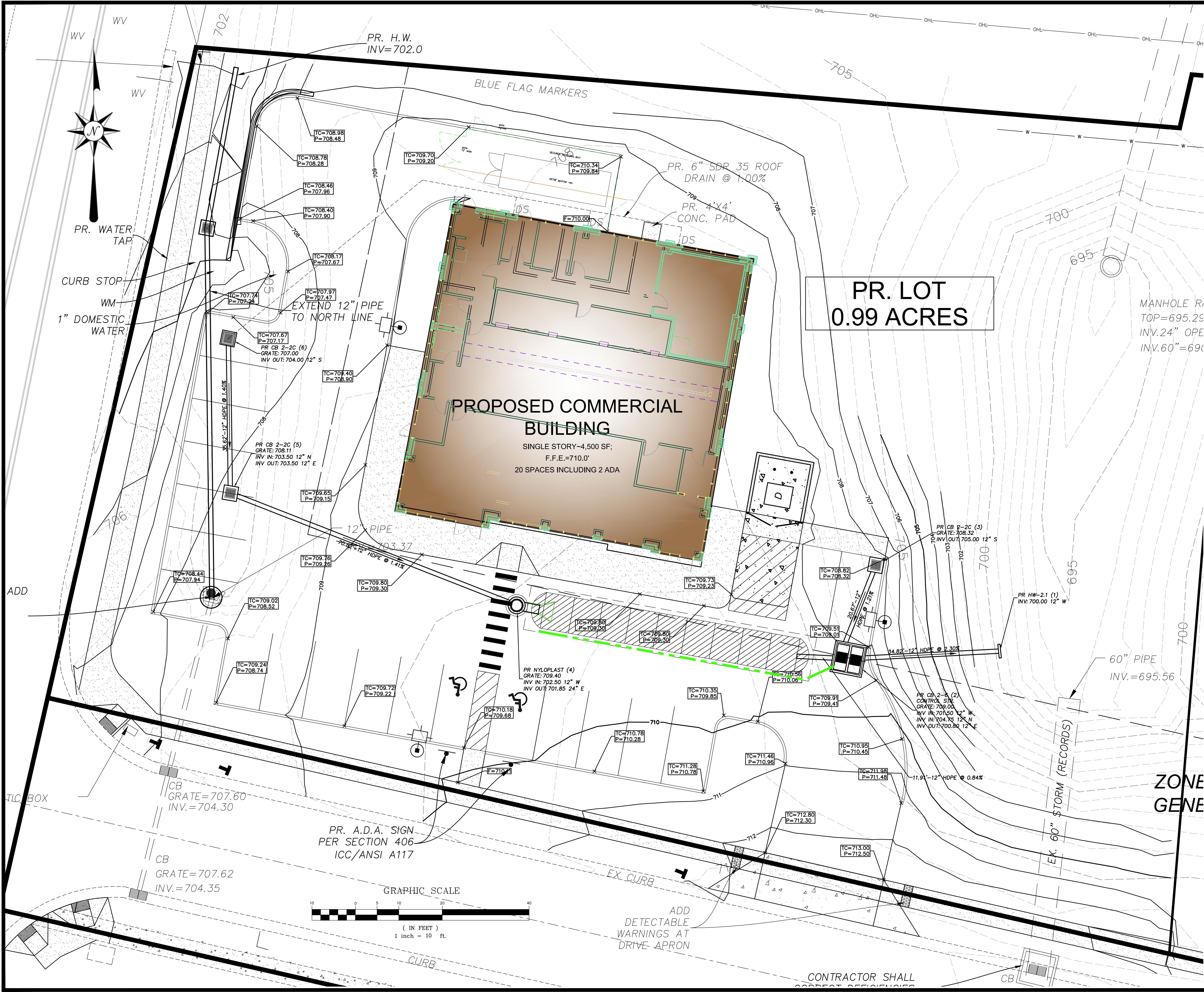
UTILITY SERVICE PLAN
MONROE DISTENSARY
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=30'	N/A
JOB NO.	22-142	
DATE	Jul. 8, 2022	

SHEET NO.

C-3.1





GRADING LEGEND

TC=TOP OF CURB ELEVATION
P=FINISHED GRADE (PAVEMENT)
F=FINISHED GRADE
TW=TOP OF WALL
BW=BOTTOM OF WALL

B/C=EXISTING BACK OF CURB GRADE
B/W=EXISTING BACK OF WALL GRADE
EX.=EXISTING GRADE

SPECIAL NOTES:

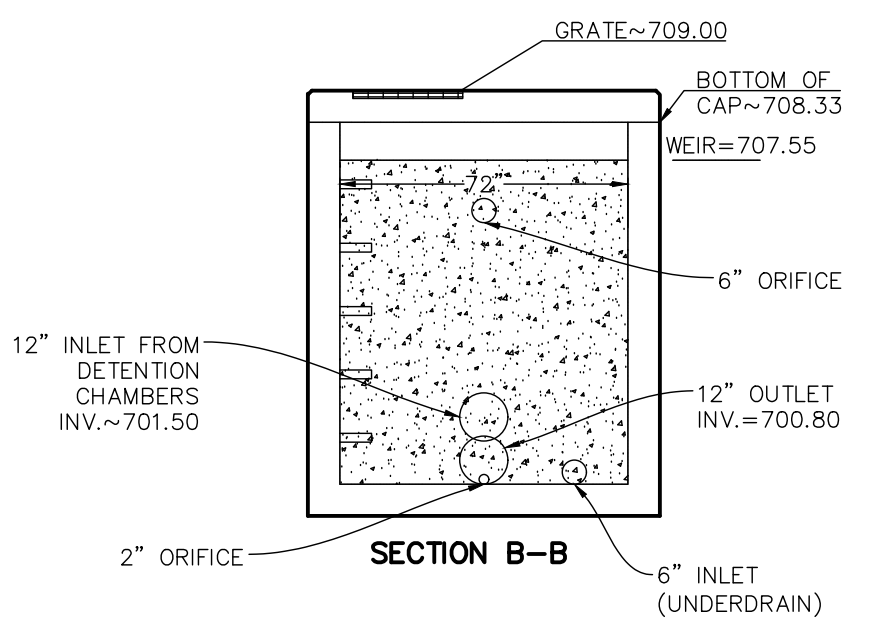
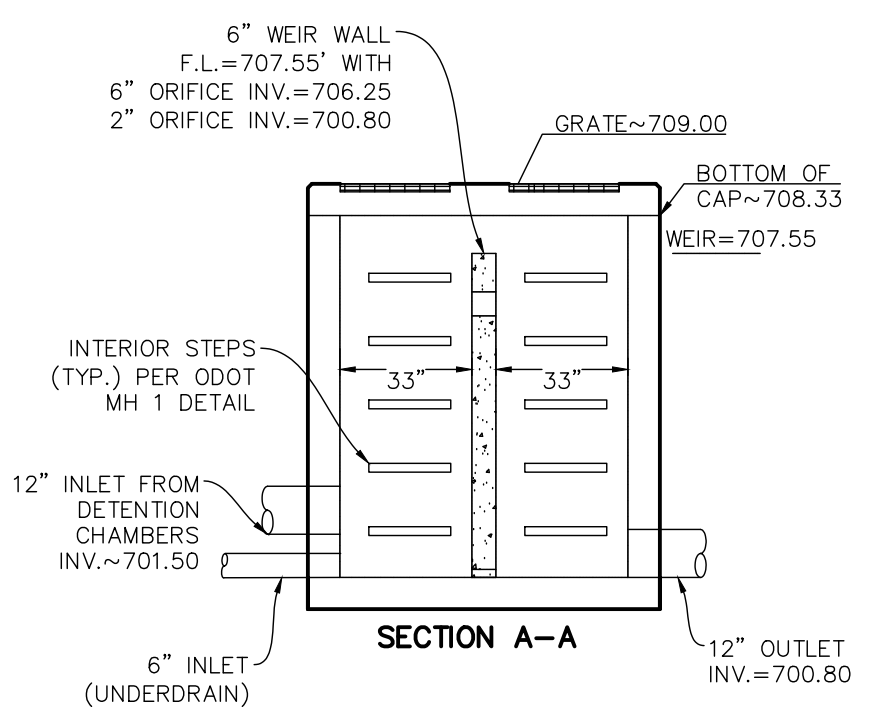
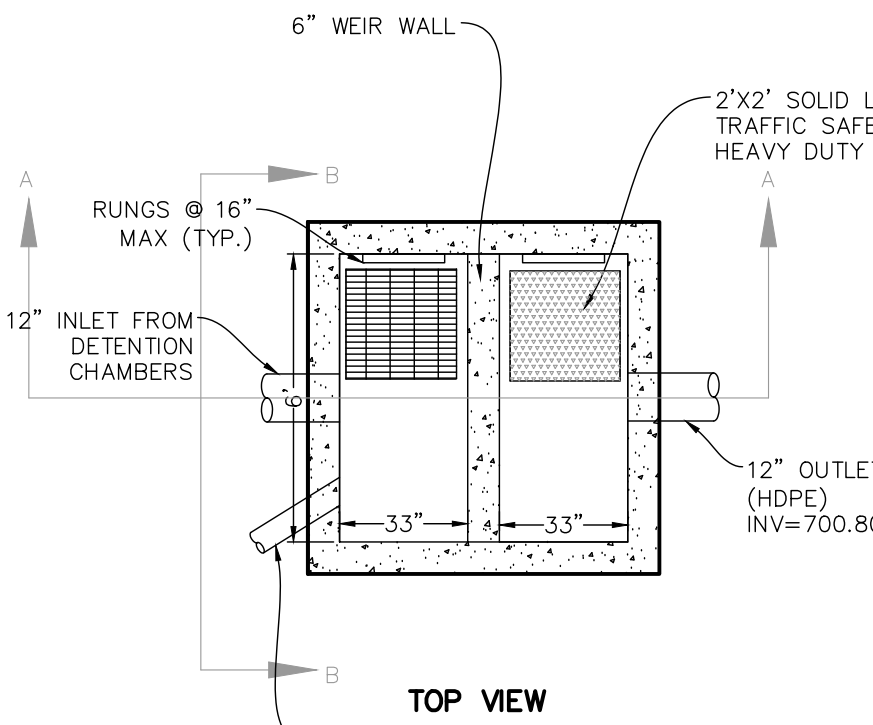
CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER BEFORE COMMENCING EARTHMOVING ACTIVITIES.

TOPSOIL ~6" SHOULD BE DISTRIBUTED BACK ACROSS LANDSCAPE AREAS PRIOR TO SEEDING.

CONTRACTOR SHALL DISPOSE OF EXCESS MATERIAL IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. EXPORTED MATERIAL SHALL BE TRANSPORTED TO AN APPROVED FILL AREA.

CONTOUR LEGEND:

--- EX. CONTOUR
--- PR. CONTOUR (MAJOR)
--- PR. CONTOUR (MINOR)



DETENTION CONTROL STRUCTURE
STRUCTURE NO. 1
MODIFIED ODOT CB 2-6
SCALE: 1" = 4'



PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS	
NO.	DESCRIPTION

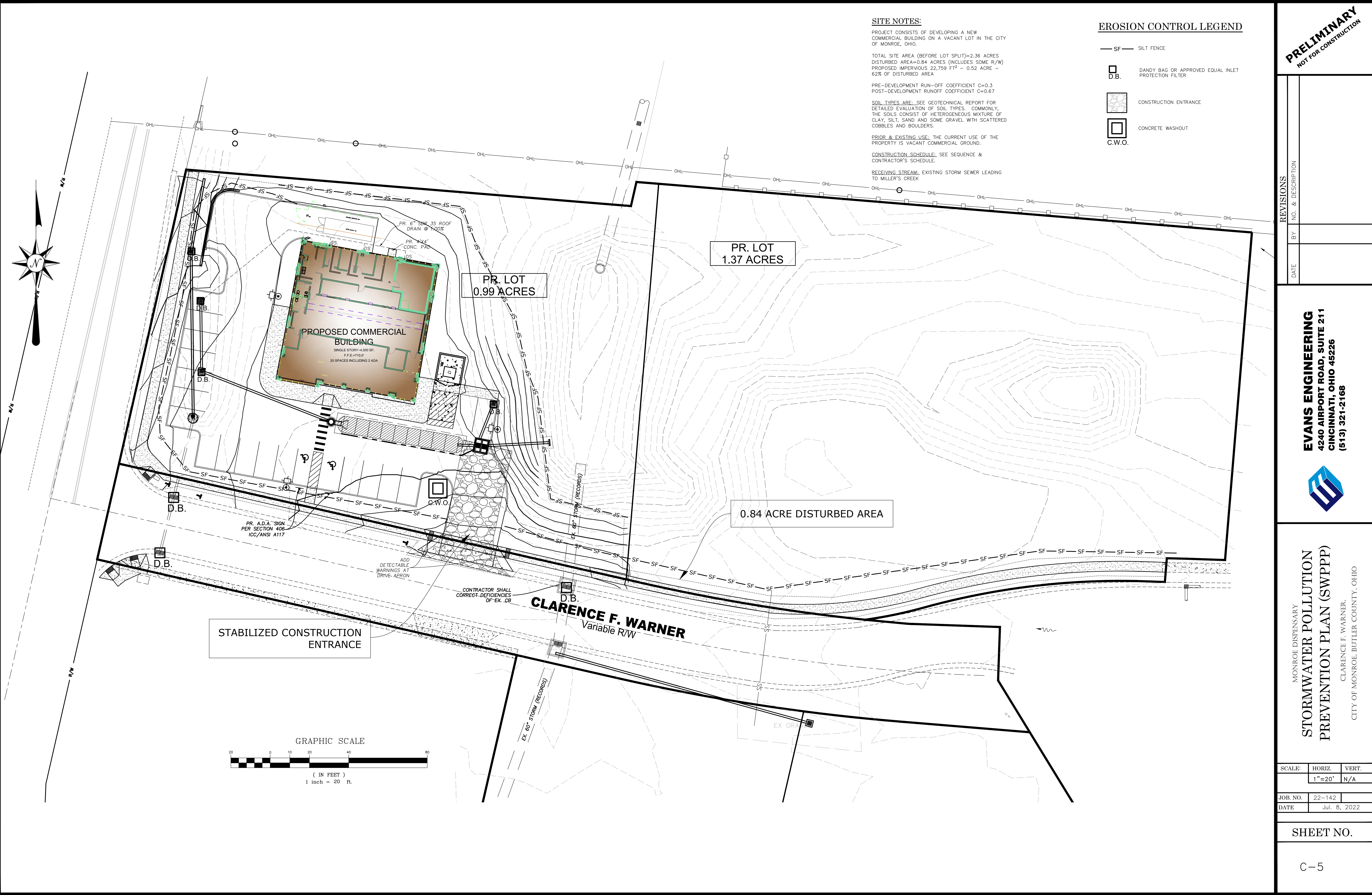
EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168



MONROE DISPENSARY
GRADING PLAN
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=10'	N/A
JOB. NO.	22-142	
DATE	Jul. 8, 2022	

SHEET NO.



PRELIMINARY

NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION

EVANS ENGINEERING

4240 AIRPORT ROAD, SUITE 211

CINCINNATI, OHIO 45226

(513) 321-2168

MONROE DISPENSARY

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

CLARENCE F. WARNER,

CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
	1"=20'	N/A

JOB. NO.	22-142
DATE	JUL. 8, 2022

SHEET NO.

C-5

EROSION AND SEDIMENT CONTROL NOTES:

PRE-CONSTRUCTION:

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF MONROE (513) 352-4973 AT LEAST SEVEN (7) DAYS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITIES AND, UNLESS WAIVED BY THE UTILITY, WILL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES FROM THE CITY OF MONROE.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF MONROE BY TELEPHONE AT THE FOLLOWING POINTS:
- A. THE REQUIRED PRE-CONSTRUCTION MEETING.
 - B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
 - C. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE.
 - D. PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES
 - E. PRIOR TO FINAL ACCEPTANCE
3. A COPY OF THE APPROVED SEDIMENT AND EROSION CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
4. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED AND APPROVED BY A REPRESENTATIVE OF THE CITY OF MONROE PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES.
5. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE AN EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM A REPRESENTATIVE OF THE CITY OF MONROE.
6. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE CITY OF MONROE BEFORE ANY CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION ARE IMPLEMENTED UNLESS IMMEDIATE ACTION IS NECESSARY. IN THIS CASE, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
7. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM AN SMU REPRESENTATIVE. THE CONTRACTOR SHALL KEEP WRITTEN RECORDS OF ALL SEDIMENT AND EROSION CONTROL INSPECTIONS AND MAINTENANCE FOR THE DURATION OF THE PROJECT. THIS INFORMATION MUST BE MADE AVAILABLE TO REPRESENTATIVES OF THE CITY OF MONROE UPON REQUEST.

SAFETY:

8. THE CITY OF MONROE SITE REPRESENTATIVE ALWAYS HAS THE OPTION OF REQUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES IF DEEMED NECESSARY.
9. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH A SAFETY FENCE. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL BUILDING OFFICIALS ON APPLICABLE SAFETY REQUIREMENTS, WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE MUST BE MADE OF WELDED WIRE AND AT LEAST FORTY TWO (42) INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN EIGHT (8) FEET, HAVE MESH OPENINGS NO GREATER THAN TWO (2) INCHES IN WIDTH AND FOUR (4) INCHES IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED AND IN GOOD CONDITION AT ALL TIMES.
10. STORM DRAIN INLETS IN NON-SUMP AREAS SHALL HAVE TEMPORARY ASPHALT PADS CONSTRUCTED AT THE TIME OF BASE PAVING TO DIRECT GUTTER FLOW INTO THE INLETS TO AVOID SURCHARGING AND OVERFLOW OF INLETS IN SUMP AREAS.
11. STOCKPILE SLOPES SHALL NOT BE STEEPER THAN 2:1.

STABILIZED CONSTRUCTION ENTRANCE:

12. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY USING A STREET SWEEPER OR SCRAPER. DEBRIS SHALL NOT BE WASHED OFF PAVED SURFACES OR INTO STORM DRAINS.
13. CONSTRUCTION ENTRANCES SHOULD NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES. VEHICLES THAT ENTER AND LEAVE THE SITE SHALL BE RESTRICTED FROM MUDDY AREAS OR CLEANED BEFORE LEAVING SITE.

SEDIMENT TRAPS AND BASINS:

14. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN TWENTY (20) FEET OR EXISTING OR PROPOSED FOUNDATION OR TRAFFIC AREA. NO STRUCTURE MAY BE CONSTRUCTED WITHIN TWENTY (20) FEET OF AN ACTIVE SEDIMENT TRAP OR BASIN.
15. SEDIMENT TRAPS AND BASINS MUST HAVE STABLE INFLOW AND OUTFLOW POINTS SO THAT WATER CAN DISCHARGE WITHOUT CAUSING EROSION.
16. SEDIMENT BASINS/TRAPS SHALL NOT BE GREATER THAN FOUR (4) FEET IN DEPTH.
17. SEDIMENT MUST BE CLEANED, AND THE TRAP/BASIN RESTORED TO ITS ORIGINAL DIMENSIONS, WHEN ACCUMULATION REACHES A HEIGHT HALF-WAY UP TO THE TOP OF THE DESIGNED HOLDING AREA.
18. SEDIMENT REMOVED FROM TRAPS AND BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR VEGETATION PRESERVATION AREA.
19. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM, STABLE GROUND SURFACE, OR RELEASE FROM THE SITE.
20. SEDIMENT BASINS MUST BE REMOVED WITHIN THIRTY SIX (36) MONTHS AFTER THEIR CONSTRUCTION.
21. OHIO DAM SAFETY LAWS APPLY TO BASINS LARGER THAN FIFTEEN (15) ACRE-FEET (24,000 CY) AS MEASURED TO THE TOP OF THE HOLDING AREA.

TEMPORARY & PERMANENT STABILIZATION:

22. ALL CRITICAL SLOPES (3:1 OR STEEPER) SHALL BE STABILIZED WITH SOD OR SEED AS SOON AS POSSIBLE BUT NO LATER THAN SEVEN (7) CALENDAR DAYS AFTER ACHIEVING FINAL GRADE.
23. ALL AREAS NO DRAINING TO A FUNCTIONING SEDIMENT BASIN MUST BE FINAL GRADED AND STABILIZED WITH SOD OR SEED WITHIN SEVEN (7) CALENDAR DAYS OF ACHIEVING FINAL GRADE.
24. ALL AREAS WITHIN FIFTY (50) FEET OF A STREAM MUST BE STABILIZED WITHIN TWO (2) CALENDAR DAYS OF ACHIEVING FINAL GRADE.
25. ALL AREAS THAT ARE TO REMAIN IDLE, INCLUDING STOCK PILES, FOR FOURTEEN (14) CALENDAR DAYS MUST BE STABILIZED WITH SEED OR SOD.
26. WHEN THE PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED BY MARCH 15 OR EARLIER IF GROUND AND WEATHER CONDITIONS ALLOW.
27. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SOD OR SEED WITH AN APPROVED CONTROL MATTING, RIP-RAP, OR BY OTHER APPROVED STABILIZATION MEASURES WITHIN TWO (2) DAYS OF ACHIEVING FINAL GRADE.
28. TEMPORARY SEDIMENT CONTROL DEVICES MAY BE REMOVED, WITH PERMISSION OF AN SMU REPRESENTATIVE, THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS.
29. STORMWATER MANAGEMENT STRUCTURES, USED TEMPORARILY FOR SEDIMENT CONTROL, SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS.

30. FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEQUATE GRADIENTS TO PREVENT WATER FROM PONDING FOR MORE THAN TWENTY FOUR (24) HOURS AFTER THE END OF A RAINFALL EVENT. DRAINAGE COURSES AND SWALE FLOW AREAS MAY TAKE AS LONG AS FORTY EIGHT (48) HOURS AFTER THE END OF A RAINFALL EVENT TO DRAIN. AREAS DESIGNED TO HAVE STANDING WATER (I.E. RETENTION PONDS) DO NOT HAVE TO MEET THIS REQUIREMENT.

31. ALL WASTE AND BORROW AREAS OFF-SITE MUST BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED.

OTHER:

32. NO SOLID OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. THE CONTRACTOR MUST IMPLEMENT ALL NECESSARY CONTROL MEASURES TO PREVENT THE DISCHARGE OF POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE OR SURFACE WATERS. UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE CHANNEL, STORM SEWER OR SURFACE WATER.
33. SEDIMENT MUST BE CLEANED FROM SILT FENCES AND MULCH BERMS WHEN ACCUMULATION REACHES A HEIGHT OF HALF-WAY UP TO THE TOP OF THE FENCE/BERM.
34. SEDIMENT REMOVED FROM SILT FENCES AND MULCH BERMS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR VEGETATION PRESERVATION AREA.
35. ALL SLOPES STEEPER THAN 3:1 REQUIRED GRADE TREATMENT, EITHER STAIR-STEP GRADING, GROOVING, FURROWING, OR TRACKING IF THEY ARE TO BE STABILIZED WITH VEGETATION.
36. AREAS WITH GRADES LESS STEEP THAN 3:1 SHOULD HAVE THE SOIL SURFACE LIGHTLY ROUGHENED AND LOOSE TO A DEPTH OF TWO (2) TO FOUR (4) INCHES PRIOR TO SEEDING.
37. CONSTRUCTION AND DEMOLITION DEBRIS MUST BE DISPOSED OF IN ACCORDANCE WITH OHIO REVISED CODE, CHAPTER 3714.

ADDITIONAL STORMWATER POLLUTION PREVENTION NOTES:

UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY "RAINWATER AND LAND DEVELOPMENT" MANUAL, CURRENT EDITION, SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.

THE DEVELOPER AND CONTRACTOR SHALL ABIDE BY THE RULES AND REGULATIONS SET FORTH IN THE OHIO EPA PERMIT NO. OH0C000005--"AUTHORIZATION FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)."

CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.

SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT THE COURSE OF EARTH DISTURBING ACTIVITY. SEDIMENT BASINS AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED PRIOR TO GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UP SLOPE DEVELOPMENT AREA IS REESTABLISHED. AS CONSTRUCTION PROGRESSES AND THE TOPOGRAPHY IS ALTERED, APPROPRIATE CONTROLS MUST BE CONSTRUCTED OR EXISTING CONTROLS ALTERED TO ADDRESS THE CHANGING DRAINAGE PATTERNS.

SOIL STOCKPILED MUST BE STABILIZED AND PROTECTED WITH SEDIMENT TRAPPING TO PREVENT SOIL LOSS.

SILT FENCES AND "INLET FILTERS" ARE TO BE CONTINUOUSLY MAINTAINED BY THE DEVELOPER AND/OR CONTRACTOR UNTIL ALL DANGER OF EROSION/SEDIMENTATION OCCURRING HAS BEEN ELIMINATED.

ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH STATE OF OHIO SPECIFICATION ITEM 659, AND PER TABLE LISTED ON THIS SHEET "STABILIZATION."

EXCAVATION CONTRACTOR SHALL TAKE EXTREME CARE TO PREVENT MUD AND DEBRIS FROM ENTERING EXISTING STORM SEWERS AND WATER COURSES.

THE CONTRACTOR SHALL KEEP EXISTING PAVEMENT SURROUNDING THE SITE "BROOM CLEAN" AND FREE OF SOIL OR AGGREGATE THAT MIGHT BE BROUGHT OFF-SITE FROM THE LOT ONTO STREETS.

THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STREET/PARKING LOT CLEAN BY PREVENTING DEBRIS, MUD, DIRT, ETC. FROM BEING TRACKED ONTO THE STREET/PARKING LOT. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DEBRIS, MUD, ETC. FROM THE STREET IMMEDIATELY WHEN IT OCCURS AND SHALL INSPECT THE STREET AT THE END OF EACH WORKING DAY.

THE DEVELOPER AND/OR CONTRACTOR SHALL PERFORM REGULAR STREET SWEEPING TO MINIMIZE SEDIMENTS TO THE PROPOSED STORM SEWER SYSTEM.

UPON REQUEST OF THE OHIO EPA, OR LOCAL JURISDICTION, THE CONTRACTOR SHALL PROVIDE ALL NPDES PERMIT REPORTS AND A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN. THE CONTRACTOR SHALL ALLOW THE OHIO EPA, OR LOCAL JURISDICTION, TO ENTER THE SITE TO INSPECT AND MONITOR ALL EROSION CONTROL MEASURES.

DUMPSTERS AND PORT-O-LETS ARE NOT TO BE CLOSER THAN 20' FROM THE PROPERTY LINES. ALL DUMPSTERS MUST BE COVERED.

TEMPORARY AND PERMANENT SEEDING:

1.1. SEEDBED PREPARATION

A. LIME (IN LIEU OF A SOIL TEST RECOMMENDATION) ON ACID SOIL (ph=5.5 OR LESS) AND SUBSOIL AT A RATE OF 100 POUNDS PER 1000 SF, OR TWO (2) TONS PER ACRE OF AGRICULTURAL GRADE LIMESTONE.

B. FERTILIZER (IN LIEU OF A SOILS TEST RECOMMENDATION) SHALL BE APPLIED AT A RATE OF 12-15 POUNDS (25 POUNDS FOR PERMANENT SEEDING) PER 1000 SF OF 10-10-10 OR 12-12-12 ANALYSIS OR EQUIVALENT.

1.2. SEEDING

1. TEMPORARY SEEDING MIXTURE

SEEDING PERIOD	TYPE	RATE (1,000 SF)
SPRING AND SUMMER	1. OATS	3 LBS
	2. PEREN. RYEGRASS	1 LBS
	3. TALL FESCUE	1 LBS
FALL	1. PEREN. RYEGRASS	1 LBS
	2. RYE	3 LBS
	3. WHEAT	3 LBS
	4. TALL FESCUE	1 LBS

2. PERMANENT SEEDING MIXTURE

SEEDING PERIOD	TYPE	RATE (1,000 SF)
SPRING, SUMMER, AND FALL	1. CREEPING RED FESCUE 0.5 LBS	0.25 LBS
	DOMESTIC RYEGRASS	0.25 LBS
	KENTUCKY BLUEGRASS 0.25 LBS	0.25 LBS
	2. TALL FESCUE	1 LBS
	3. DWARF FESCUE	1 LBS

2-1 SEEDING FOR STEEP BANKS OR CUTS

SPRING, SUMMER, AND FALL	1. TALL FESCUE	1 LBS
	2. CROWNVEITCH	0.25 LBS
	TALL FESCUE	0.50 LBS
	3. FLATPEA	0.50 LBS
	TALL FESCUE	0.50 LBS

2-2 SEEDING FOR WATERWAYS AND ROAD DITCHES

SPRING, SUMMER AND FALL	1. TALL FESCUE	1 LBS
-------------------------	----------------	-------

B. APPLY THE SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) PREFERABLY ON A FIRM, MOIST SEEDBED. SEED WHEAT OR RYE NO DEEPER THAN ONE (1) INCH. SEED RYEGRASS NO DEEPER THAN ONE QUARTER (1/4) OF AN INCH.

TEMPORARY AND PERMANENT SEEDING (CONT.)

C. WHEN FEASIBLE, EXCEPT WHERE A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMLY FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHEREVER POSSIBLE.

D. OTHER SEEDING SPECIES MAY BE SUBSTITUTED FOR THESE MIXTURES.

E. THESE SEEDING RATES NEED TO BE INCREASED TWO TO THREE TIMES IF THEY ARE TO BE USED AS A LAWN.

2. DORMANT SEEDING

A. TEMPORARY SEEDING--AFTER NOVEMBER 1, USE MULCH ONLY.

B. PERMANENT SEEDING--SEEDINGS SHOULD NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 20. THE FOLLOWING METHODS MAY BE USED TO MAKE A "DORMANT SEEDING":

1. FROM OCT. 1 THROUGH NOV. 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOV. 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
2. FROM NOV. 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, AND MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

3. MULCHING

A. MULCH SHALL CONSIST OF SMALL GRAIN STRAW (PREFERABLY WHEAT OR RYE) AND SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE OR 100 POUNDS PER 1000 SF.

B. SPREAD THE MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED.

C. MULCH ANCHORING METHODS:

1. MECHANICAL--USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH INTO THE SOIL.
2. ASPHALT EMULSION--APPLY AT THE RATE OF 160 GALLONS PER ACRE INTO THE MULCH AS IT IS BEING APPLIED.
3. MULCH NETTING--USE ACCORDING TO THE MANUF. RECOMMENDATIONS.

4. IRRIGATION

SUPPLY NEW SEEDLINGS WITH ADEQUATE WATER FOR PLANT GROWTH UNTIL THEY ARE FIRMLY ESTABLISHED.

STABILIZATION:

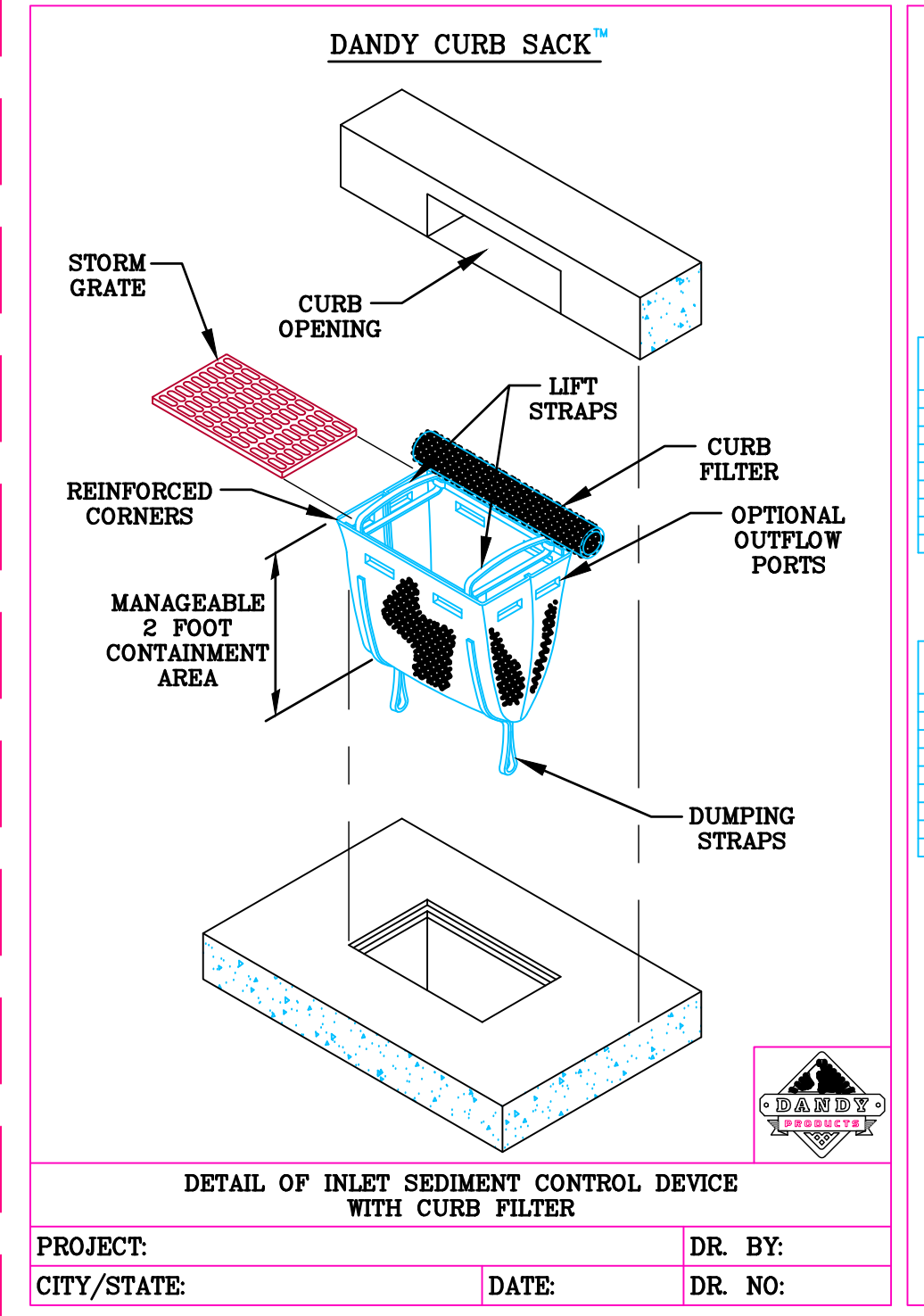
DISTURBED AREAS MUST BE STABILIZED AS FOLLOWS:

PERMANENT STABILIZATION

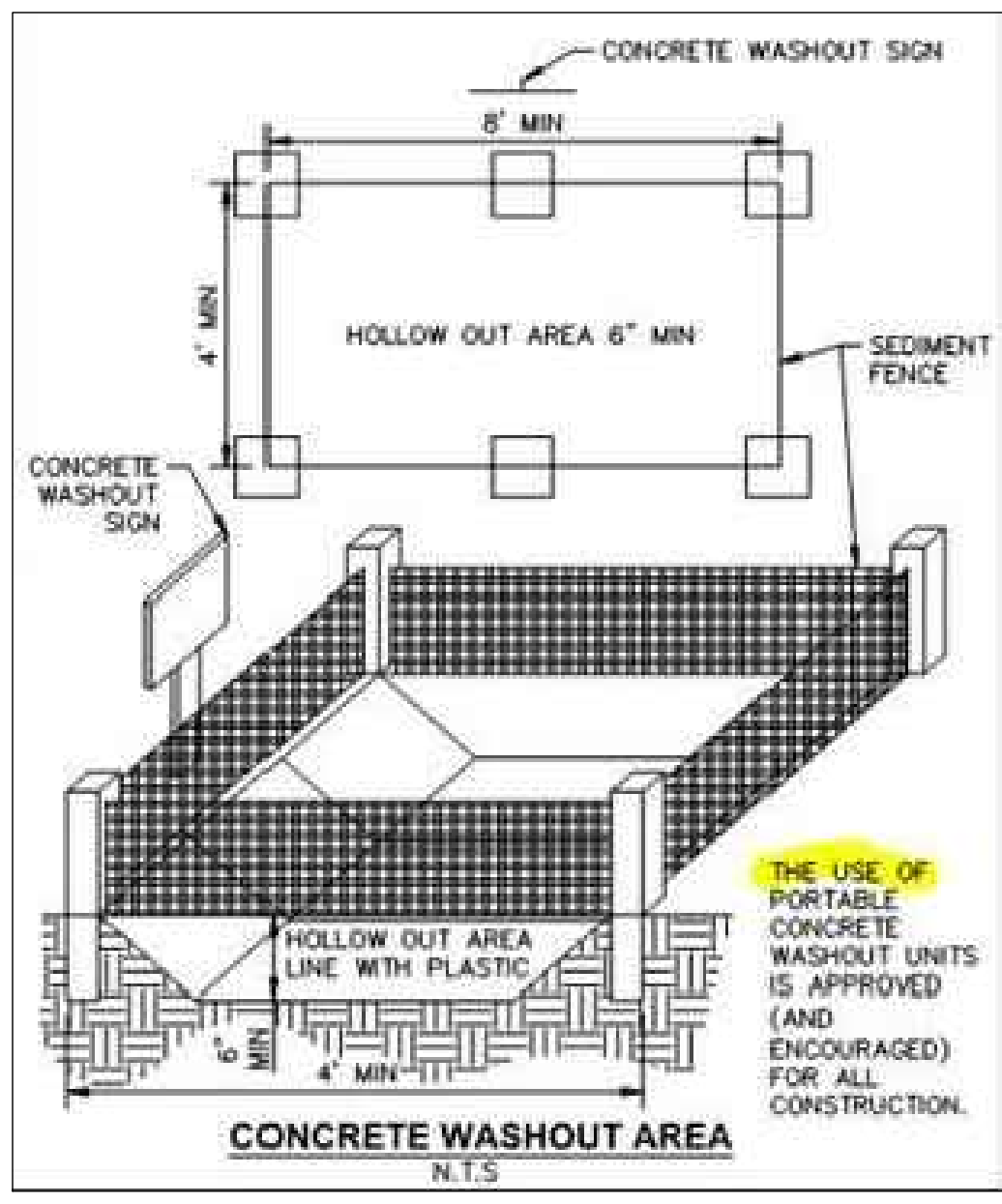
Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any area within 50 feet of a stream and at final grade	Within two days of reaching final grade
All other areas at final grade	Within seven days of reaching final grade within that area

TEMPORARY STABILIZATION

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a stream and not at final grade	Within two days of the most recent disturbance if the area will lie dormant for more than 14 days
For all construction activities, any disturbed areas that will be dormant for more than 14 days but less than one year, and not within 50 feet of a stream	Within seven days of the most recent disturbance within the area
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

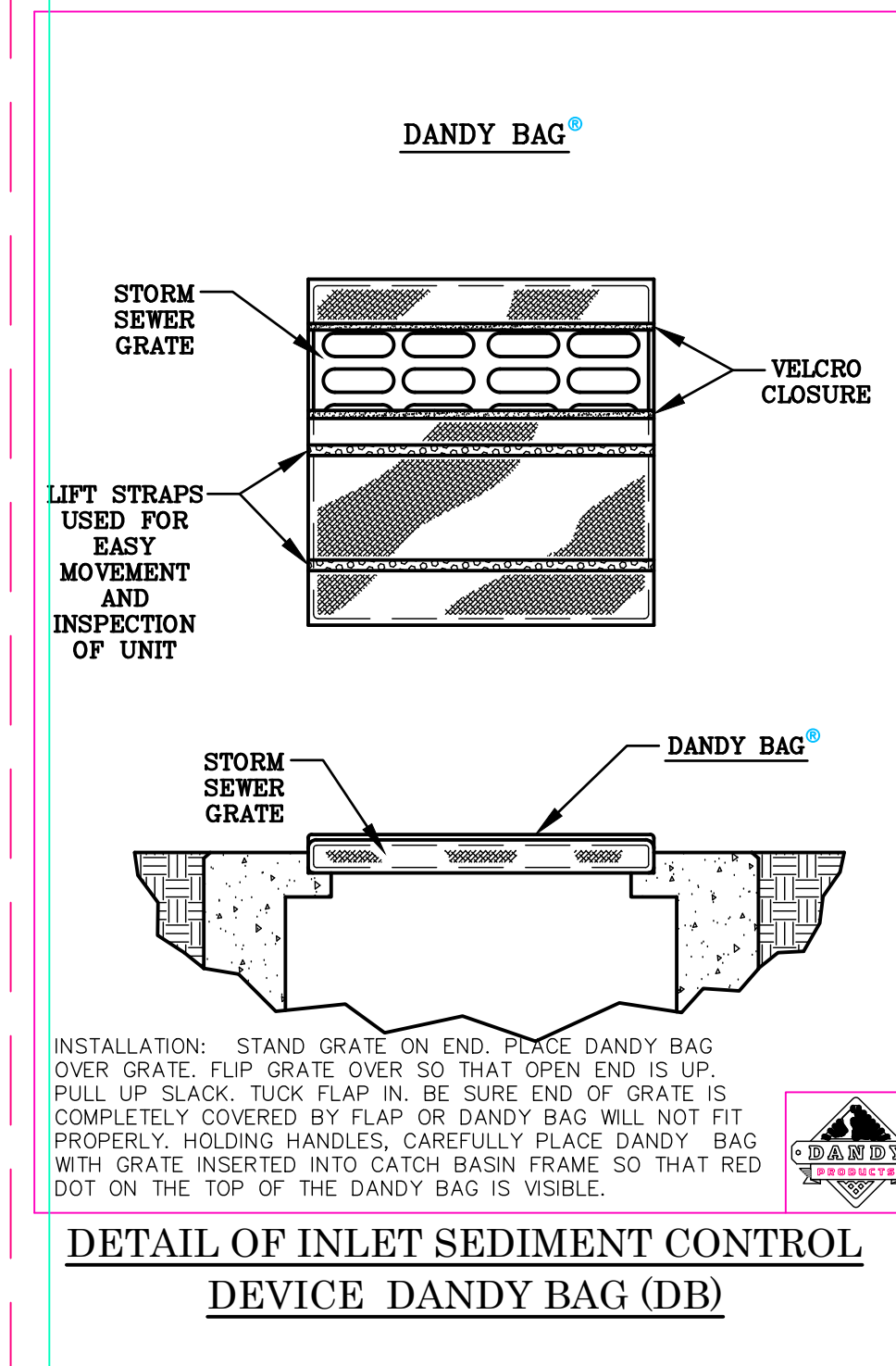


DETAIL OF INLET SEDIMENT CONTROL DEVICE DANDY CURB FILER BAG



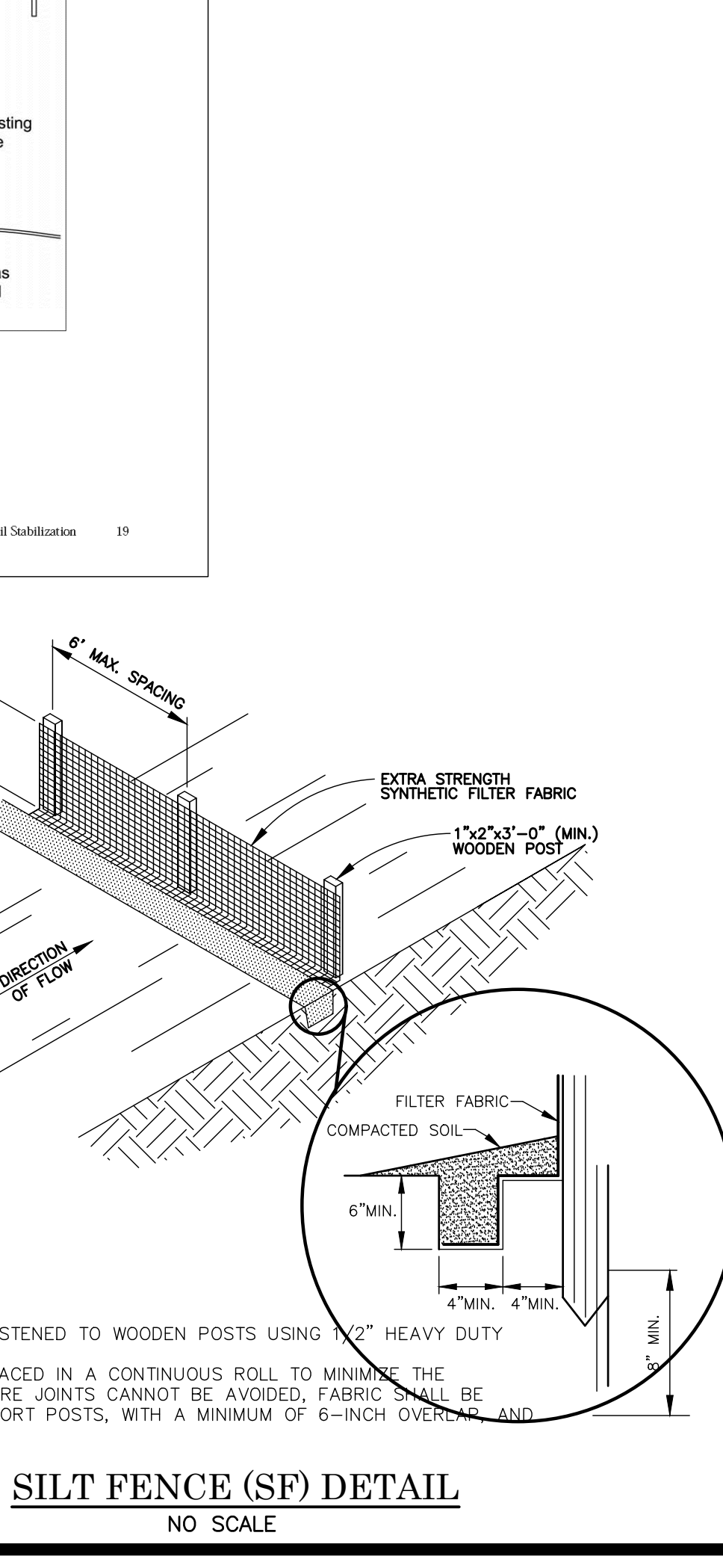
Stage	Actions
Mark off set aside areas	1. Fence naturally vegetated areas and the dripline of trees that will be maintained and protected during construction.
Install initial sediment and erosion controls	2. Install appropriate sediment controls to protect downstream and adjacent areas. These are to be installed prior to grading and construction begins and includes practices such as sediment traps, sediment barriers (silt fence, filter socks and berms) and protection of catch basins with inlet protection.
Prepare site and construct improvements	3. Install stone construction entrance prior to general grading or excavation or delivery of materials. 4. Remove topsoil and stockpile, seeding stockpile immediately upon completion. Install sediment controls as necessary. 5. Grade site or excavate building foundation or basement. 6. Temporary seed rough graded areas and maintain or repair sediment controls as needed. Maintenance includes the removal of sediment from streets and sediment controls. 7. Construct the building and site improvements.
Final grading and stabilization	8. Complete land grading and shaping. Soils shall be roughly graded, followed by the spreading and grading of topsoil. Installation of roof drains and other drains to stable outlets should be completed at this time. 9. Establish permanent vegetation. After reaching final grade elevations and leveling of topsoil, bare soils shall be stabilized with seed and mulch, sod or other permanent landscaping materials. 10. Remove temporary sediment control practices once vegetation is established.

DANDY CURB SACK™ SPECIFICATIONS			
NOTE: THE DANDY CURB SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A NOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:			
REGULAR FLOW DANDY CURB SACK™ (BLACK)			
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbf)	1.78 (400) x 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 x 15
Puncture Strength	ASTM D 4633	kN (lbf)	0.87 (195)
Mullen Burst Strength	ASTM D 3766	psi (kPa)	5506 (600)
Trapezoid Tear Strength	ASTM D 4533	kN (lbf)	0.87 (195) x 0.33 (75)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	1/min/m² (gal/min/ft²)	2882 (200)
Permeability	ASTM D 4491	Sec"	0.90
HI-FLOW DANDY CURB SACK™ (SAFETY ORANGE)			
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbf)	1.62 (365) x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 x 10
Puncture Strength	ASTM D 4633	kN (lbf)	0.40 (90)
Mullen Burst Strength	ASTM D 3766	psi (kPa)	4450
Trapezoid Tear Strength	ASTM D 4533	kN (lbf)	0.51 (115) x 0.33 (75)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	1/min/m² (gal/min/ft²)	5807 (425)
Permeability	ASTM D 4491	Sec"	1.1
*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows			



DETAIL OF INLET SEDIMENT CONTROL DEVICE DANDY BAG (DB)

Specifications for Construction Entrance	
1. Stone Size--GDOT # 2 (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.	6. Timing--The construction entrance shall be installed as soon as is practicable before major grading activities.
2. Length--The construction entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. (exception: apply 30 ft. minimum to single residence lots).	7. Culvert--A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.
3. Thickness--The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.	8. Water Bar--A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
4. Width--The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.	9. Maintenance--Top dressing of additional stone shall be applied as conditions demand. Must spill, drop, weather or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
5. Geotextile--A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong no-stap geotextile fabric and meet the following specifications:	10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction-site shall be restricted from muddy areas.
Figure 7-6.1	
Minimum Specification for Construction Entrance	
Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	60 psi.
Minimum Tear Strength	10 lbs.
Minimum Burst Strength	200 psi.
Minimum Elongation	20%.
Equivalent Opening Size	100 - 0.6 mm.
Permeability	1-10-3 cm/sec.



SILT FENCE (SF) DETAIL NO SCALE

PRELIMINARY
NOT FOR CONSTRUCTION

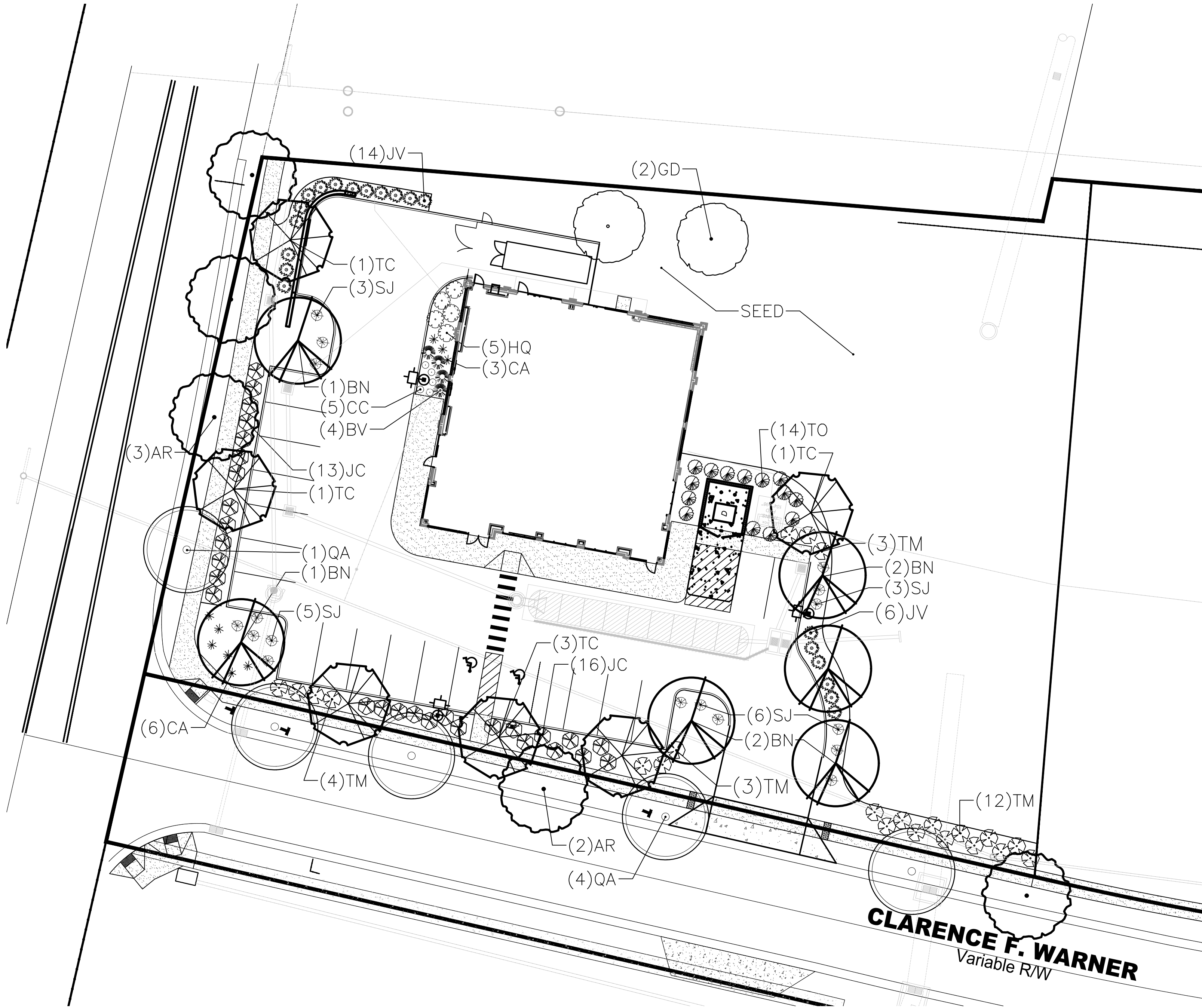
REVISIONS	NO. & DESCRIPTION
BY	
DATE	

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

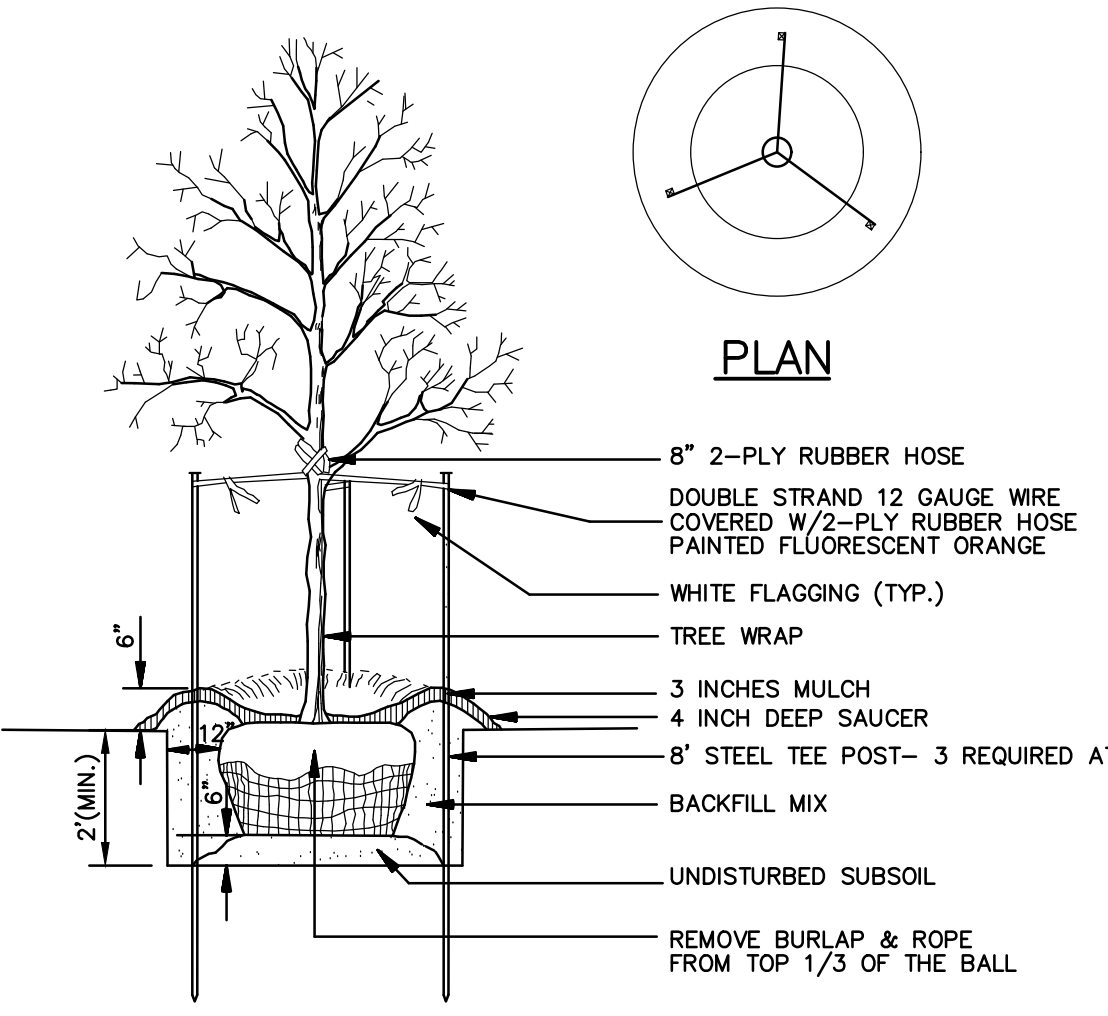
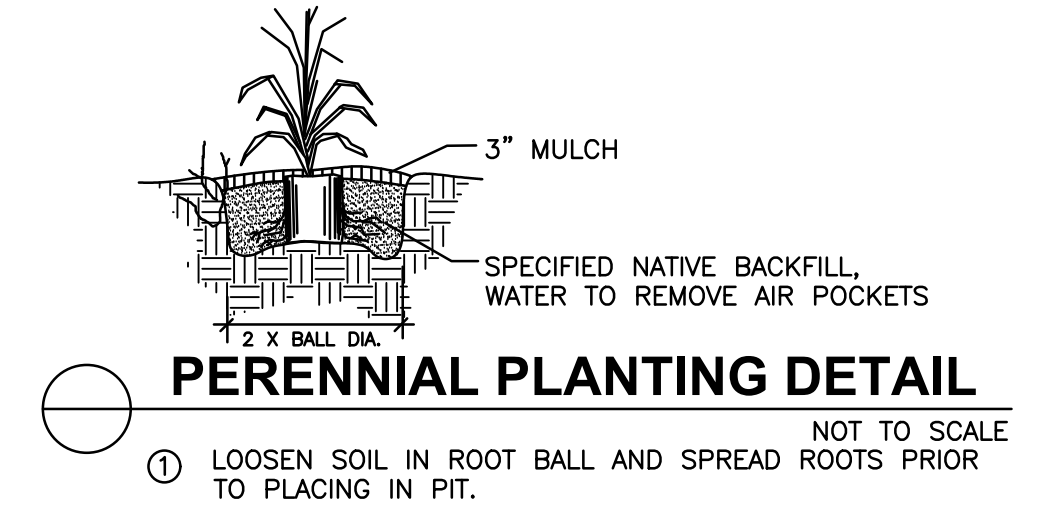


MONROE DISTENSARY
SWPPP NOTES & DETAILS
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

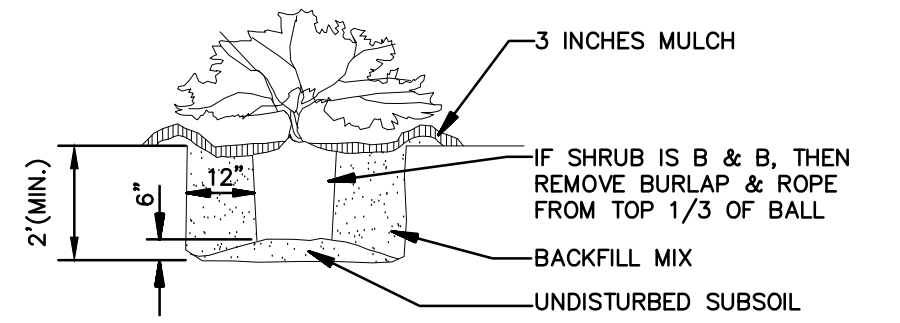
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	N/A	N/A
JOB NO.	22-142	
DATE	Jul. 8, 2022	
SHEET NO.		
C-5.1		



CLARENCE F. WARNER
Variable R/W



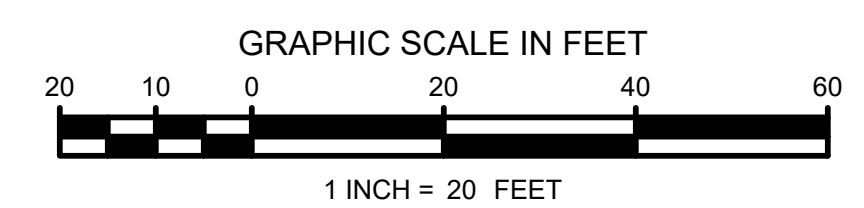
TREE PLANTING
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION	REMARKS
CANOPY/EVERGREEN TREES						
AR	5	Acer rubrum 'October Glory'	October Glory Maple	2.0" cal.	B&B	Straight Central Leader
BN	6	Betula Nigra 'Dura Heat'	River Birch	8" ht.	B&B	Clump
GD	2	Gymnocladus dioica	Kentucky Coffee Tree	2.5" cal.	B&B	Straight Central Leader
QA	5	Quercus alba	White Oak	2.0" cal.	B&B	Straight Central Leader
TC	6	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	2.5" cal.	B&B	Straight Central Leader
SHRUBS						
BV	4	Buxus microphylla 'Green Velvet'	Green Velvet Boxwood	18"	B&B	
HQ	5	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oakleaf Hydrangea		#3 cont.	
JC	29	Juniperus chinensis 'Sea Green'	Sea Green Chinese Juniper	36" ht.	B&B	
JV	20	Juniperus virginiana 'Gray Owl'	Gray Owl Juniper	36" ht.	B&B	
SJ	17	Spirea japonica 'Little Princess'	Little Princess Japanese Spirea	18" ht.	#3 cont.	
TM	19	Taxus x media 'Densiformis'	Densiformis Yew	36" ht.	B&B	
TO	14	Thuja occidentalis 'Emerald'	Emerald Green Arborvitae	6" ht.	B&B	
ORNAMENTAL GRASSES						
CA	9	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass		#3 cont.	
PERENNIALS						
CC	5	Caryopteris x clandonensis 'Dark Knight'	Dark Knight Bluebeard		#3 cont.	

LANDSCAPE REQUIREMENTS		
	REQUIRED	PROVIDED
VEHICULAR USE AREAS (ISLANDS)	1 TREE AND 3 SHRUBS PER ISLAND, 5 ISLANDS = 5 TREES AND 15 SHRUBS	5 TREES, 15 SHRUBS
VEHICULAR USE AREAS (PERIMETER)	1 TREE PER 5 PARKING SPACES AND 3' TALL EVERGREEN SCREEN ALONG PARKING AREAS. 20 PARKING SPACES = 5 TREES	5 TREES, 3' TALL EVERGREEN SCREEN
NON-PARKING VEHICULAR USE AREAS	1 TREE PER 50 LINEAR FEET AND 3 SHRUBS PER 15 LINEAR FEET OF VUA. 100 LINEAR FEET OF ACCESS DRIVE = 2 TREE AND 20 SHRUBS	2 TREE, 20 SHRUBS
FRONT YARD LANDSCAPE REQUIREMENTS	20% TO BE LANDSCAPED WITH TREES AND SHRUBS. (MIN. 6 FOOT WIDE AREA ADJACENT TO THE RIGHT OF WAY. PERIMETER VUA CAN COUNT TOWARDS REQUIREMENT.) CLARENCE WARNER: 4,610 SF FRONT YARD AREA = 922 SF LANDSCAPE AREA REQUIRED AMERICAN WAY: 1,800 SF FRONT YARD AREA = 360 SF LANDSCAPE AREA REQUIRED.	CLARENCE WARNER: 1,355 SF FRONT YARD LANDSCAPE AREA PROVIDED. AMERICAN WAY: 560 SF FRONT YARD LANDSCAPE AREA PROVIDED.
STREET TREES	CLARENCE WARNER: 1 TREE PER 40 LF, ALONG ROW. 216 LF ROW TOTAL = 6 STREET TREES. AMERICAN WAY: 150 LF ROW = 4 STREET TREES.	CLARENCE WARNER: 6 STREET TREES AMERICAN WAY: 4 STREET TREES



UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE

- LANDSCAPE NOTES:
- ALL PLANTING BEDS TO BE TILLED TO A DEPTH OF 4". RAKE TILLED AREAS TO REMOVE DEBRIS 1" OR LARGER. PLANTING BEDS TO RECEIVE A MINIMUM OF 4" OF TOPSOIL AND TILL WITH LOOSE SUBGRADE. GRADE PLANTING BEDS TO A SMOOTH, UNIFORM GRADE.
 - ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
 - ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
 - ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD.
 - ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
 - ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE PERIOD OF SPECIFIED.
 - ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
 - STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
 - WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A SHREDDED HARDWOOD MULCH TO A MINIMUM DEPTH OF THREE INCHES. APPLY PRE-EMERGENT HERBICIDE BEFORE MULCHING.
 - ALL EXISTING TREES SHOWN ON THE PLAN TO BE PRESERVED AND PROTECTED.

- PERMANENT SEEDING
- ALL DISTURBED AREAS SHOULD BE FINE GRADED AND SEEDED IMMEDIATELY AFTER CONSTRUCTION. SEED WITH APPROPRIATE MIXTURE AT THE MANUFACTURE'S WRITTEN RECOMMENDED RATE.
 - TILL AREAS TO BE SEEDED TO A DEPTH OF 4". RAKE TILLED AREAS TO REMOVE DEBRIS 1" OR LARGER. PROTECT SEEDED AREAS WITH SLOPES EXCEEDING 1:6 WITH EROSION CONTROL FIBER MESH.
 - PROTECT SEEDED AREAS WITH STRAW MULCH AT A UNIFORM RATE OF 2 TONS PER ACRE TO A DEPTH OF 1" OVER SEEDED AREAS.

REVISION NUMBER	DATE	REMARKS

2K LA k
2K Landscape Architecture, LLC
3234 Harvest Ave.
Cincinnati, Ohio 45213
513.226.8572
www.2Klandscapearchitecture.com

LANDSCAPE PLAN
MONROE DISPENSARY
CLARENCE F. WARNER
CITY OF MONROE, BUTLER COUNTY, OHIO

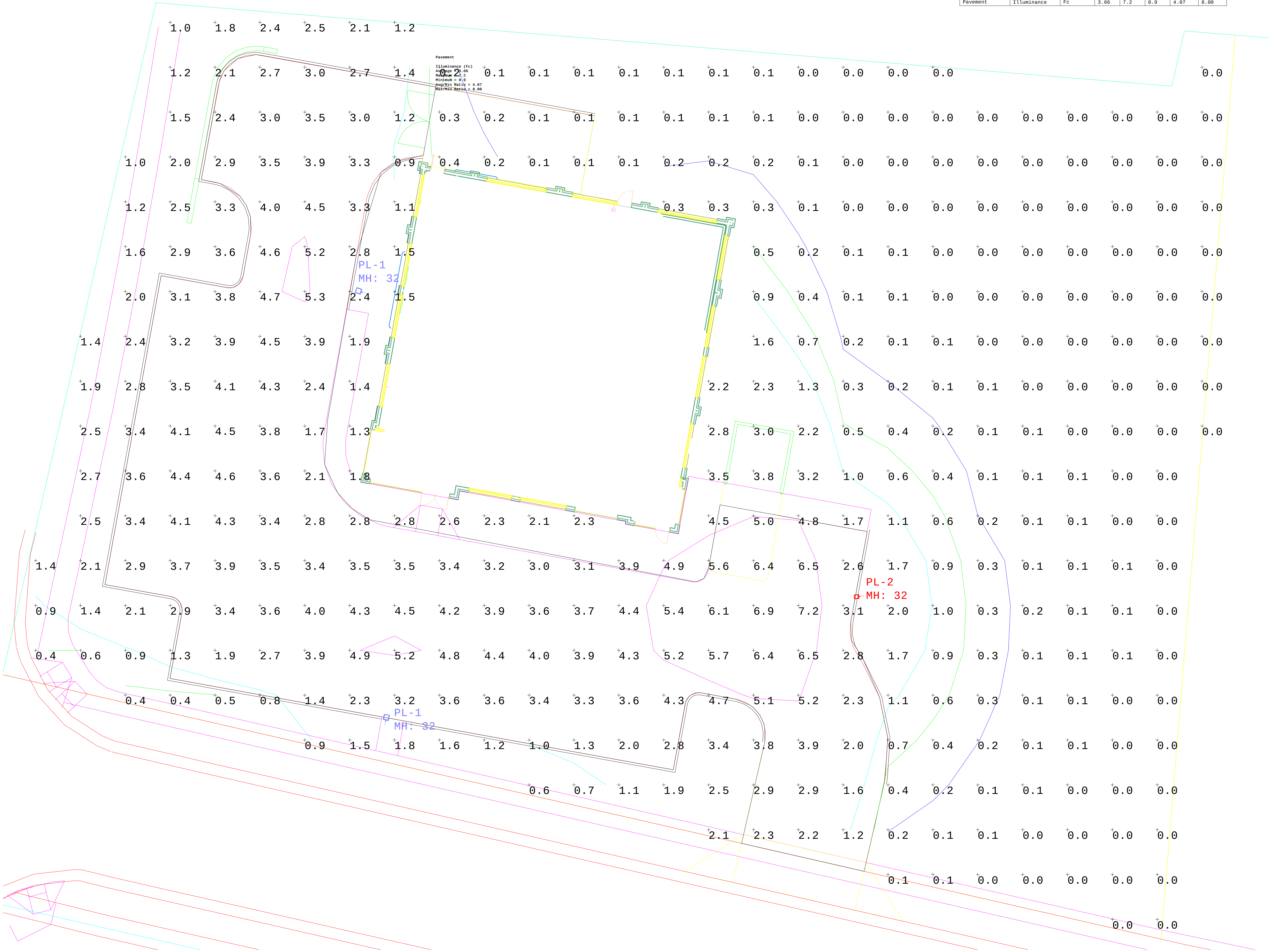
OWNER:
PROJECT NO.: 2022-28

DATE: JULY 8, 2022
DRAWN BY: KTC
CHECKED BY: KTC
SCALE: 1" = 20'

SHEET:
L-1

Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Description	Yag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	1	RSX3_LED_P4_40K_R4_HS_1	Single	RSX3 LED P4 40K R4 HS	PL-2	0.950	26929	311.92	311.92	32
	2	RSX3_LED_P4_40K_R3_HS	Single	RSX3 LED P4 40K R3 HS	PL-1	0.950	28386	311.92	623.84	32

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site	Illuminance	Fc	1.63	7.2	0.0	N.A.	N.A.
Pavement	Illuminance	Fc	3.66	7.2	0.9	4.07	8.00

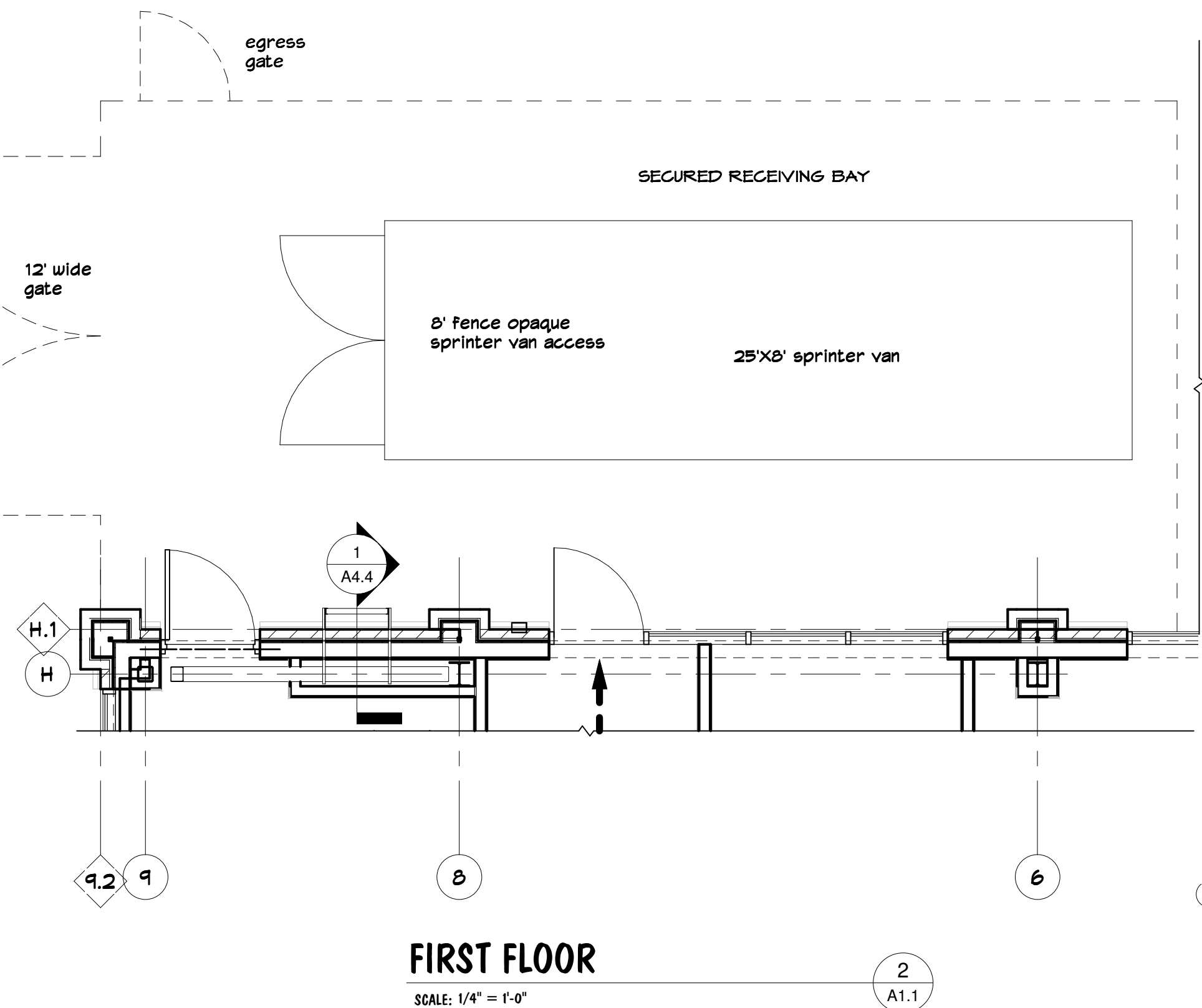
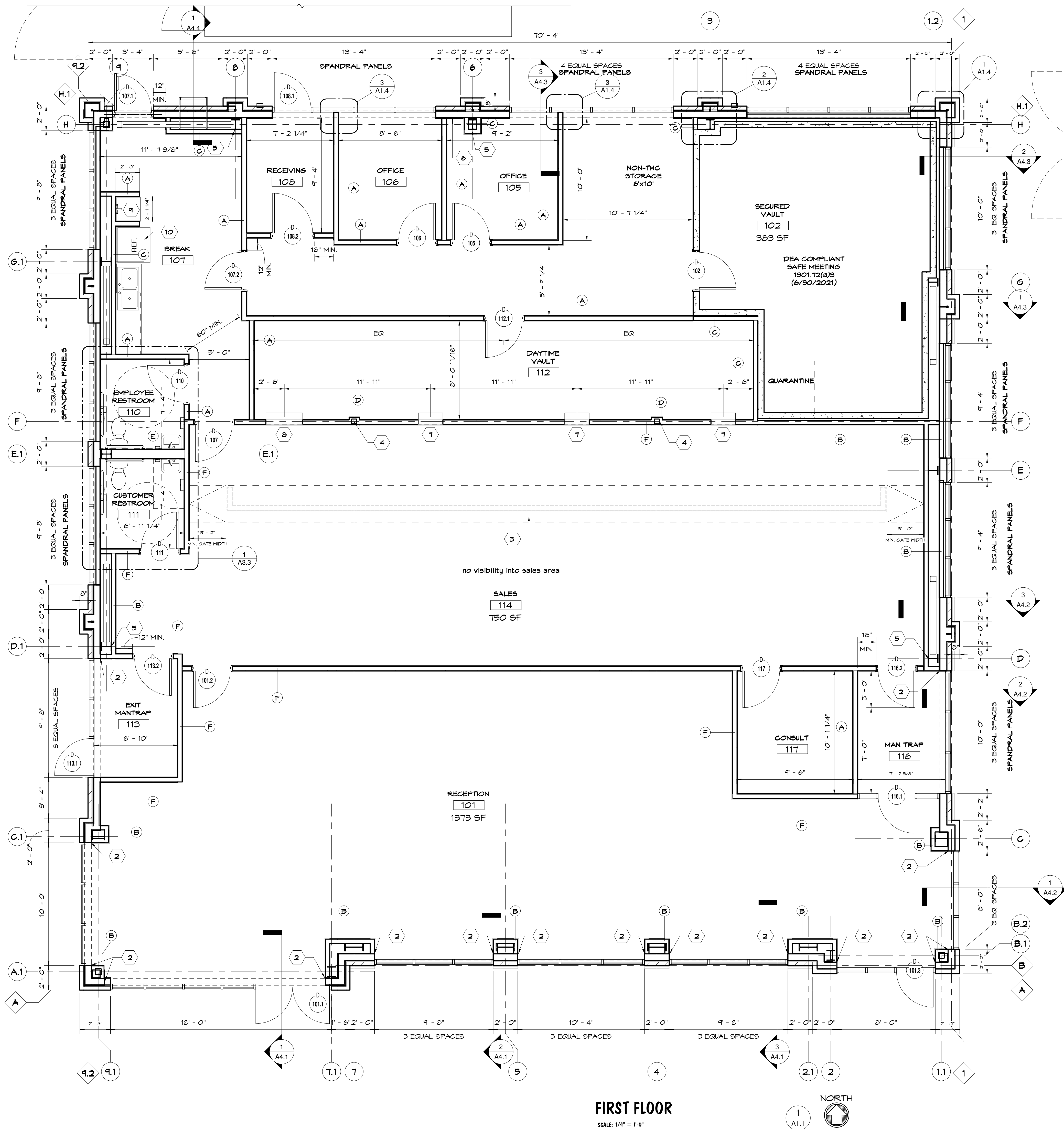


Butler - Dispensary
New Dispensary
Clarence F Warner Drive,
Monroe, OH 45050

REV	DATE	DESCRIPTION

PH101

PHOTOMETRIC PLAN	
DATE: 06/21/2022	DRAWN BY: CCC
NOT FOR CONSTRUCTION	



FIRST FLOOR

SCALE: 1/4" = 1'-0"

GENERAL NOTES

- A. COORDINATE KNOX BOX LOCATION WITH FIRE DEPARTMENT
- B. INSTALL GYPSUM WALL BOARD CONTROL JOINT AT 30'-0" MAX. SEE DETAILS 445 ON THIS SHEET

VAULT GENERAL NOTES

(3) A vault constructed after September 1, 1971:

(i) The walls, floors, and ceilings of which vault are constructed of at least 8 inches of reinforced concrete or other substantial masonry, reinforced vertically and horizontally with 1/2"-inch steel rods tied 6 inches on center, or the structural equivalent to such reinforced walls, floors, and ceilings;

(ii) The door and frame unit of which vault shall conform to the following specifications or the equivalent: 30 man-minutes against surreptitious entry, 10 man-minutes against forced entry, 20 man-hours against lock manipulation, and 20 man-hours against radiological techniques;

(iii) Which vault, if operations require it to remain open for frequent access, is equipped with a "day-gate" which is self-closing and self-locking, or the equivalent, for use during the hours of operation in which the vault door is open;

(iv) The walls or perimeter of which vault are equipped with an alarm, which upon unauthorized entry shall transmit a signal directly to a central station protection company, or a local or state police agency which has a legal duty to respond, or a 24-hour control station operated by the registrant, or such other protection as the Administrator may approve, and, if necessary, holdup buttons at strategic points of entry to the perimeter area of the vault;

(v) The door of which vault is equipped with contact switches; and

(vi) Which vault has one of the following: Complete electrical lacing of the walls, floor and ceilings; sensitive ultrasonic equipment within the vault; a sensitive sound accumulator system; or such other device designed to detect illegal entry as may be approved by the Administration.

KEY NOTES

1. ALIGN FACE OF FINISHES.
2. ALIGN INTERIOR FINISH W/ WINDOW JAMB.
3. COUNTER TO BE PROVIDED BY TENANT. GATES TO PERFORM AS EGRESS COMPONENTS. SEE DOOR SCHEDULE FOR REQUIREMENTS.
4. PROVIDE 6" METAL STUDS EACH SIDE OF COLUMN.
5. ALIGN F/STUD W/ FACE OF COLUMN.
6. WALL MOUNTED I.T. CABINET. PROVIDE BLOCKING IN WALL AS NECESSARY.
7. 18"x18" OPENING W/ SOLID SURFACE COUNTER. SET T/OPENING @ 60" A.F.F. SEE DETAIL 6/A3.2
8. 36"x36" OPENING W/ SOLID SURFACE COUNTER. SET T/OPENING @ 60" A.F.F. SEE DETAIL 6/A3.2
9. MOP SINK
10. PROVIDE WATER/POWER FOR REFRIGERATOR. REFRIGERATOR BY TENANT.

K|B|A
KBA Incorporated ARCHITECTS
CINCINNATI OHIO

29 HIGH STREET
Milford, Ohio 45150
513.752.7800
Fax: 513.752.7833
www.KBAinc.com

SHEET CONTENTS:
FLOOR PLAN

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4779 Red Bank Expressway Cincinnati, Ohio 45227
phone (513) 561-6633 fax (513) 561-3554

Proposed Retail Center For:
BUTLER DISPENSARY
Monroe, Ohio

REV. DATE CK'D

Drawn By: WNS Checked By: WNS

WILLIAM NORMAN SCHALK
IDENTIFICATION NUMBER AND EXPIRATION DATE
10478
EXPIRATION DATE 1/31/22

Date: 6/21/22 Job No: 22.033

A1.1

BUILDING TOTALS		
BRICK	2,340	34%
STONE	323	5%
GLASS/DOORS	2,005	30%
EIFS	2,119	31%
ALL WALLS	6,787	100%

SOUTH ELEVATION		
FINISH	AREA (sf)	% ON ELEVATION
BRICK	858	32%
STONE	93	4%
GLASS	697	30%
EIFS	640	28%
TOTAL WALL	2,288	100%

SP = SPANDREL GLASS
SP* = PROVIDE ALTERNATE FOR SPANDREL GLASS

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	697	100%
TOTAL GLASS	697	100%

WEST ELEVATION		
BRICK	446	30%
STONE	84	6%
GLASS	422	28%
EIFS	531	36%
TOTAL WALL	1,483	100%

SP = SPANDREL GLASS
SP* = PROVIDE ALTERNATE FOR SPANDREL GLASS

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	422	100%
TOTAL GLASS	422	100%

SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

NORTH ELEVATION

SCALE: 3/16" = 1'-0"

WEST ELEVATION

SCALE: 3/16" = 1'-0"

EAST ELEVATION

SCALE: 3/16" = 1'-0"

NORTH ELEVATION		
BRICK	603	39%
STONE	51	4%
GLASS	482	31%
EIFS	420	27%
TOTAL WALL	1,554	100%

SP = SPANDREL GLASS
SP* = PROVIDE ALTERNATE FOR SPANDREL GLASS

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	482	100%
TOTAL GLASS	482	100%

EAST ELEVATION		
BRICK	433	30%
STONE	87	6%
GLASS	404	28%
EIFS	528	36%
TOTAL WALL	1,452	100%

SP = SPANDREL GLASS
SP* = PROVIDE ALTERNATE FOR SPANDREL GLASS

GLASS		
FINISH	AREA (sf)	% OF ELEVATION GLASS
FALSE GLASS	0	0%
TRANSPARENT GLASS	404	100%
TOTAL GLASS	404	100%



EXTERIOR PERSPECTIVE

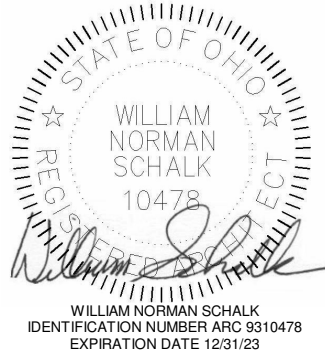
SCALE: 1/2" = 1'-0"

1
A2.2

Proposed Retail Center For:
BUTLER DISPENSARY
Monroe, Ohio

REV. DATE CK'D

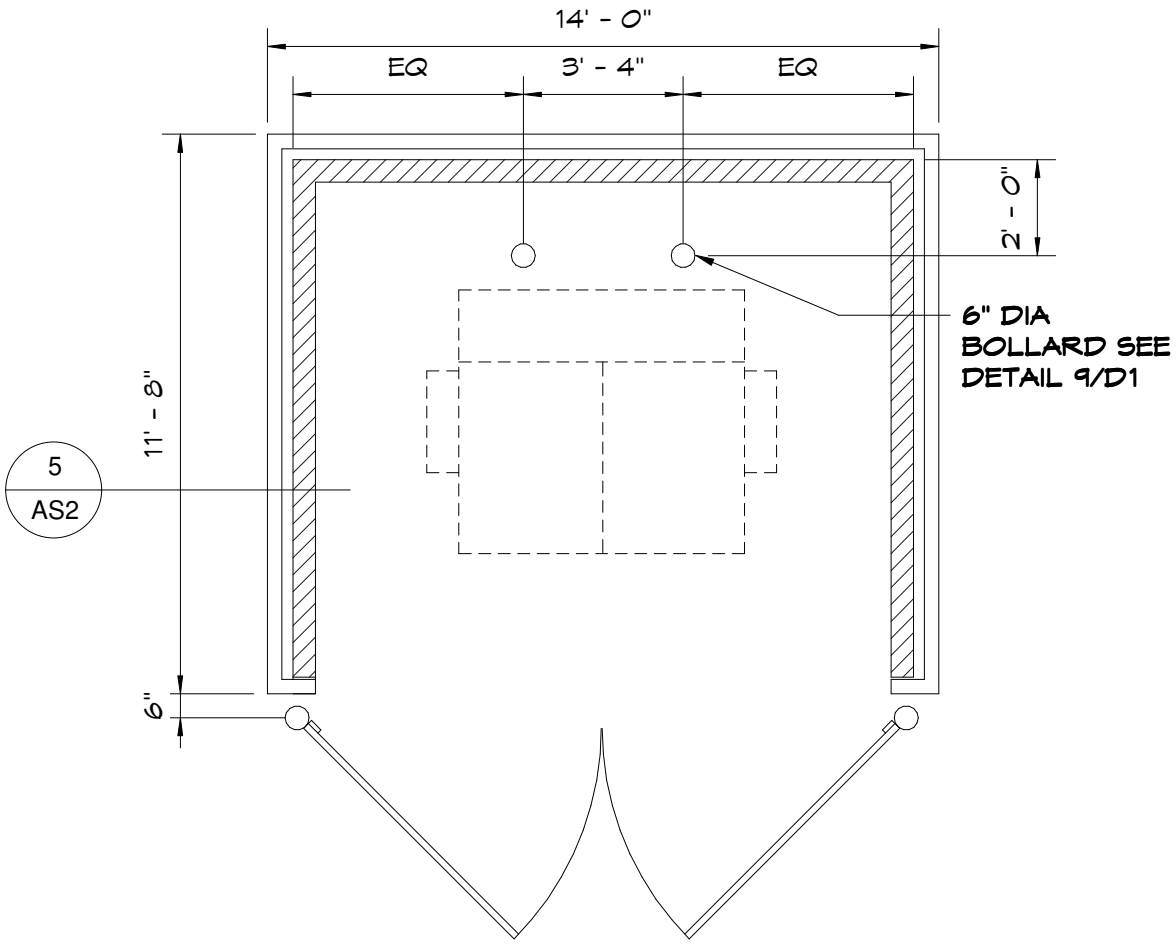
Drawn By: WNS Checked By: WNS



Date: 6/21/22 Job No: 22.033

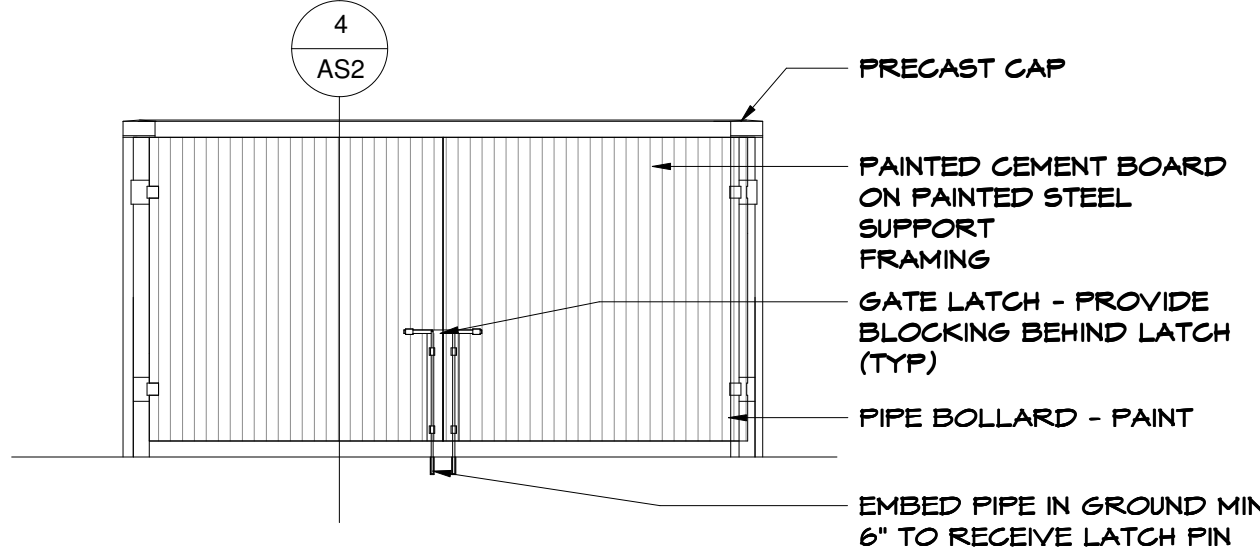
A2.2

ACTUAL CONSTRUCTED COLORS WILL VARY



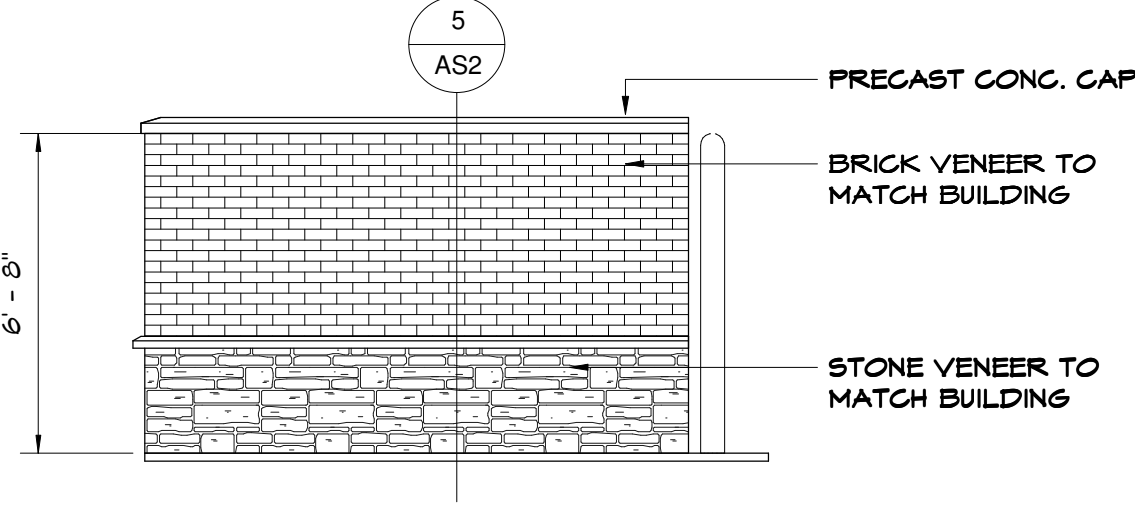
DUMPSTER ENCLOSURE PLAN

SCALE: 1/4" = 1'-0"



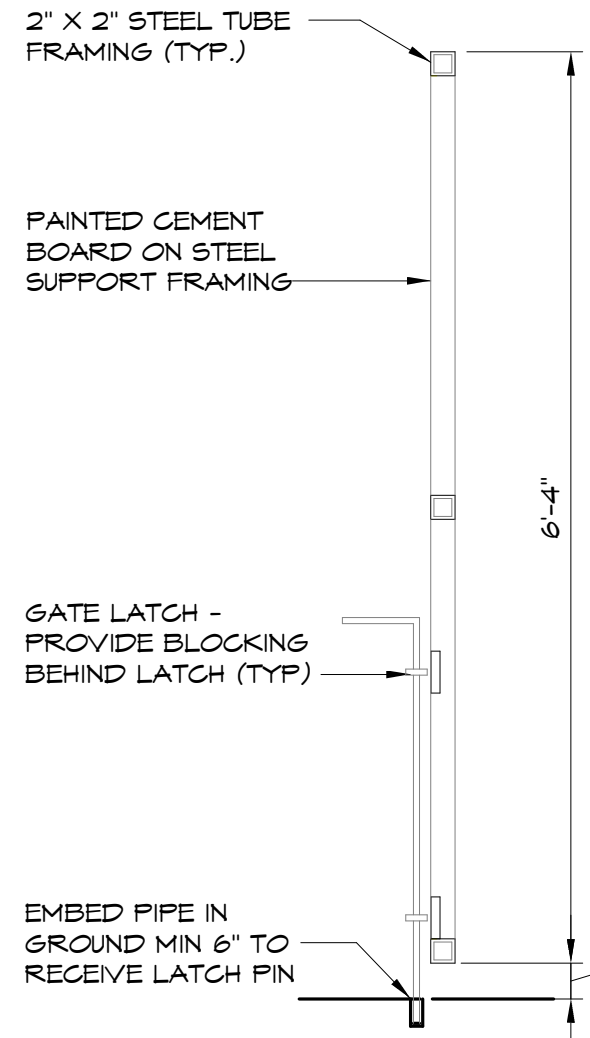
GATE ELEVATION

SCALE: 1/4" = 1'-0"



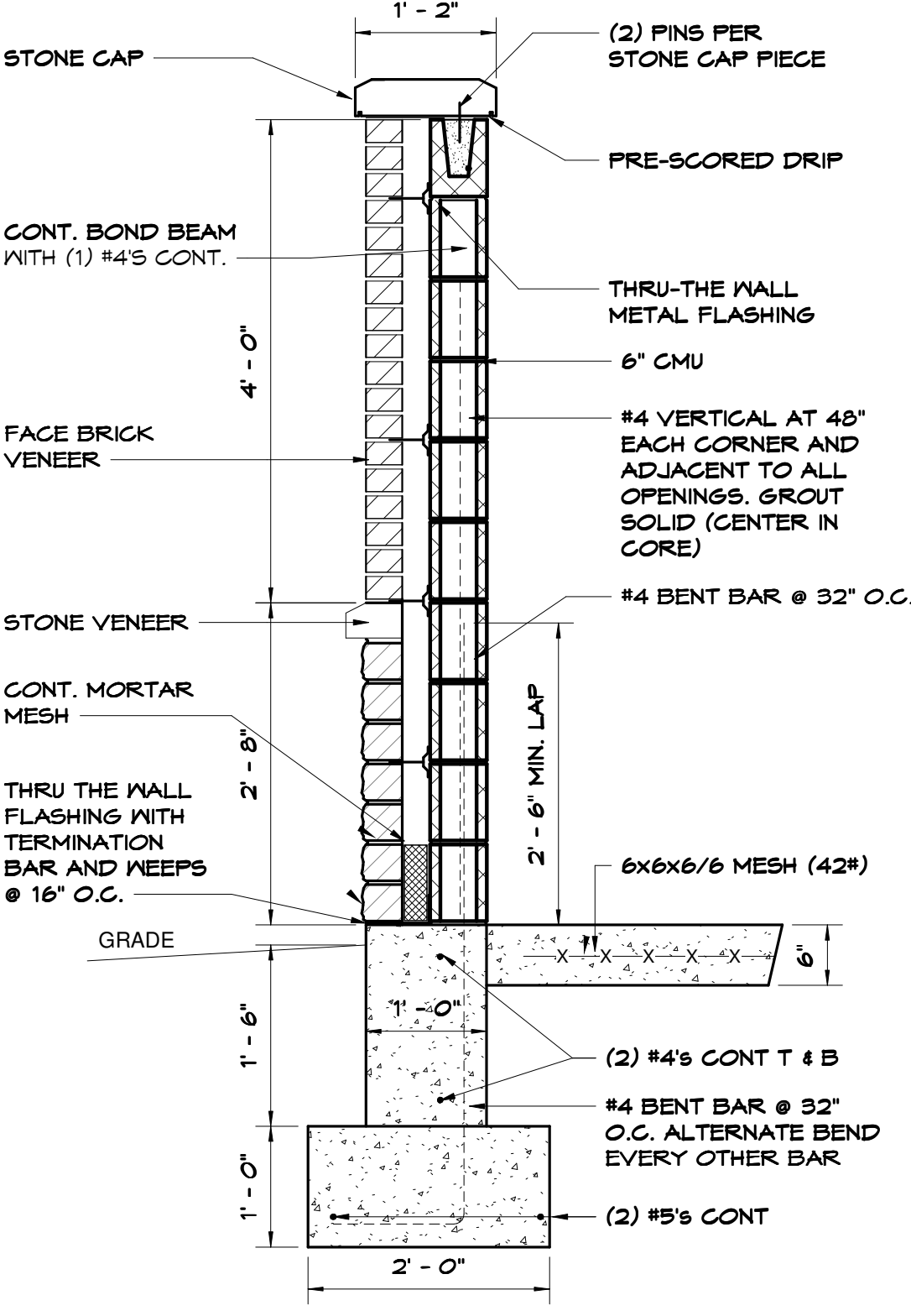
DUMPSTER ENCLOSURE SIDE ELEVATION

SCALE: 1/4" = 1'-0"



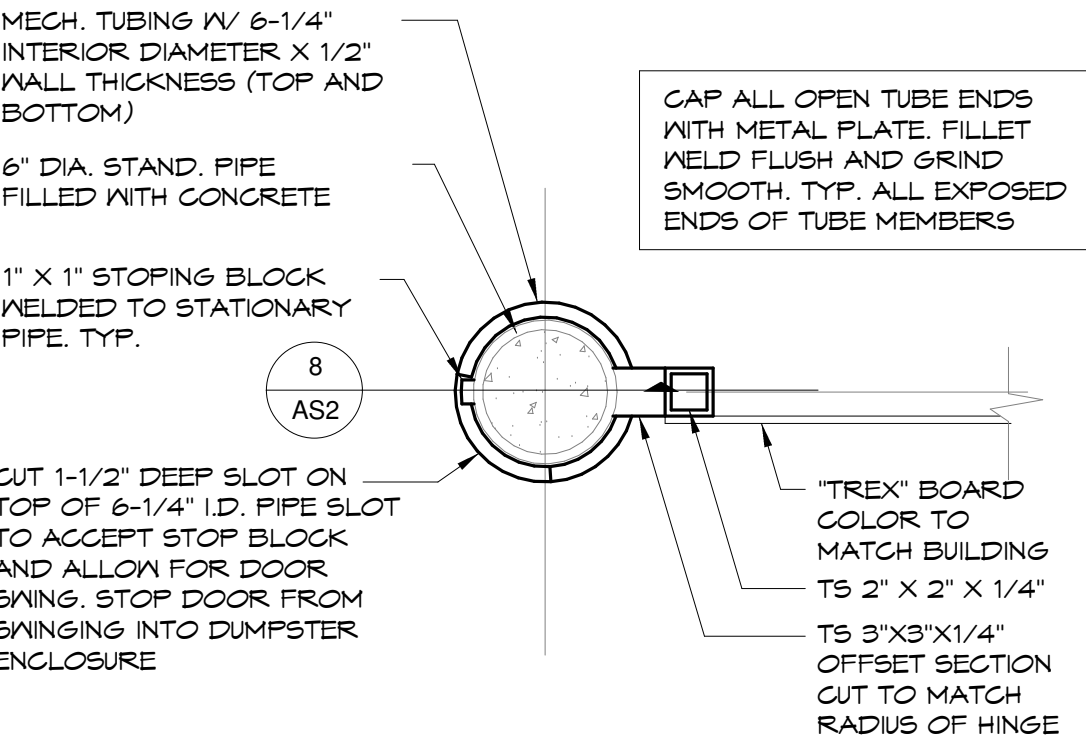
DUMPSTER GATE SECTION

SCALE: 3/4" = 1'-0"



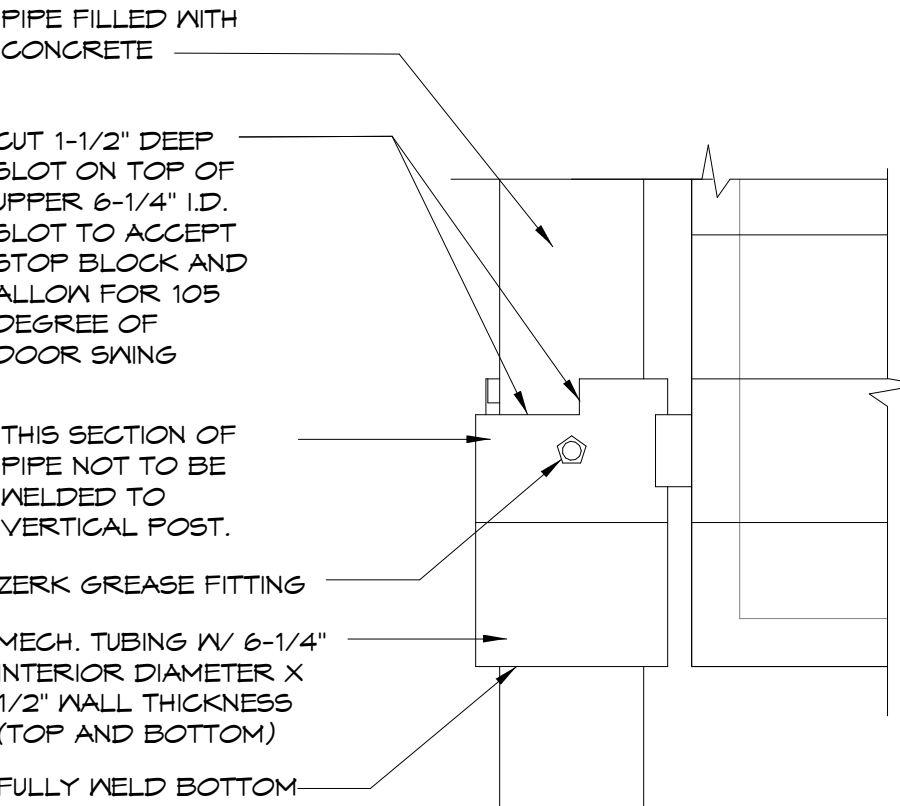
DUMPSTER WALL SECTION

SCALE: 3/4" = 1'-0"



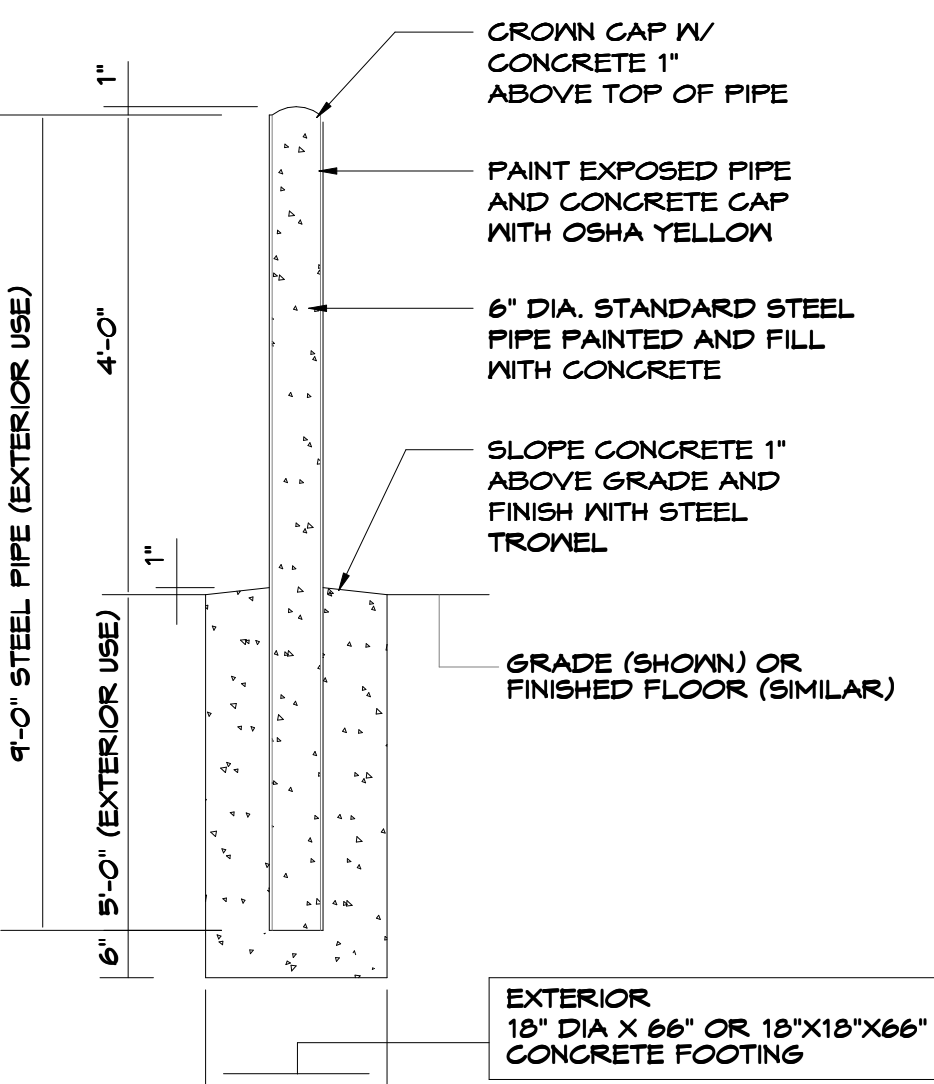
DUMPSTER GATE HINGE PLAN

SCALE: 1 1/2" = 1'-0"



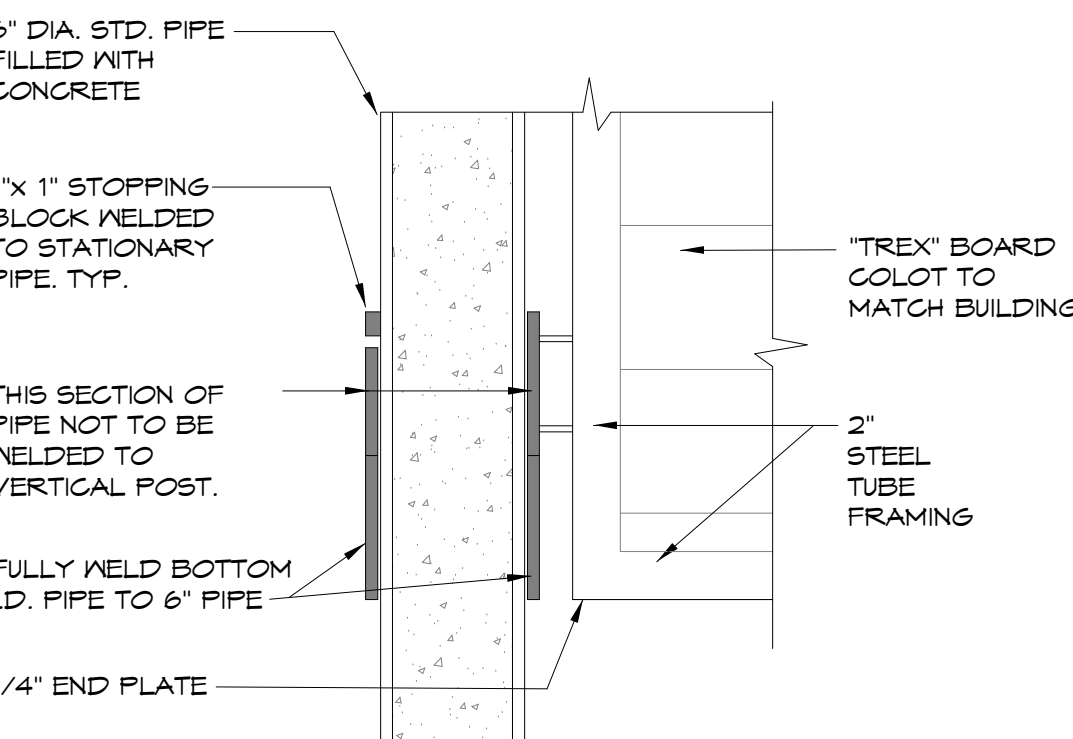
DUMPSTER GATE HINGE-ELEVATION

SCALE: 1 1/2" = 1'-0"



BOLLARD SECTION - EXTERIOR

SCALE: 1/2" = 1'-0"



DUMPSTER GATE HINGE-SECTION

SCALE: 1 1/2" = 1'-0"



Drainage Calculations

June 20, 2022

For: MONROE DISPENSARY
CLARENCE F. WARNER
CITY OF MONROE, BUTLER CO., OHIO

By: Evans Engineering
4240 Airport Rd., Suite 211
Cincinnati, Ohio 45226

Project Narrative

This project consists of constructing a commercial building on a vacant lot located on the north side of Clarence F Warner Drive in Monroe, Ohio. Storm water detention will be provided by underground Stormtech chambers. We have modeled our storm water design on current City of Monroe Storm Water Regulations.

Existing Conditions

The site is located at the north side of Clarence F Warner Drive, east of American Way. It is mostly an open grass area draining northeast into a storm sewer. The time of concentration for the existing conditions was estimated to be 10 minutes. The predeveloped runoff coefficient used in the calculations was 0.3.

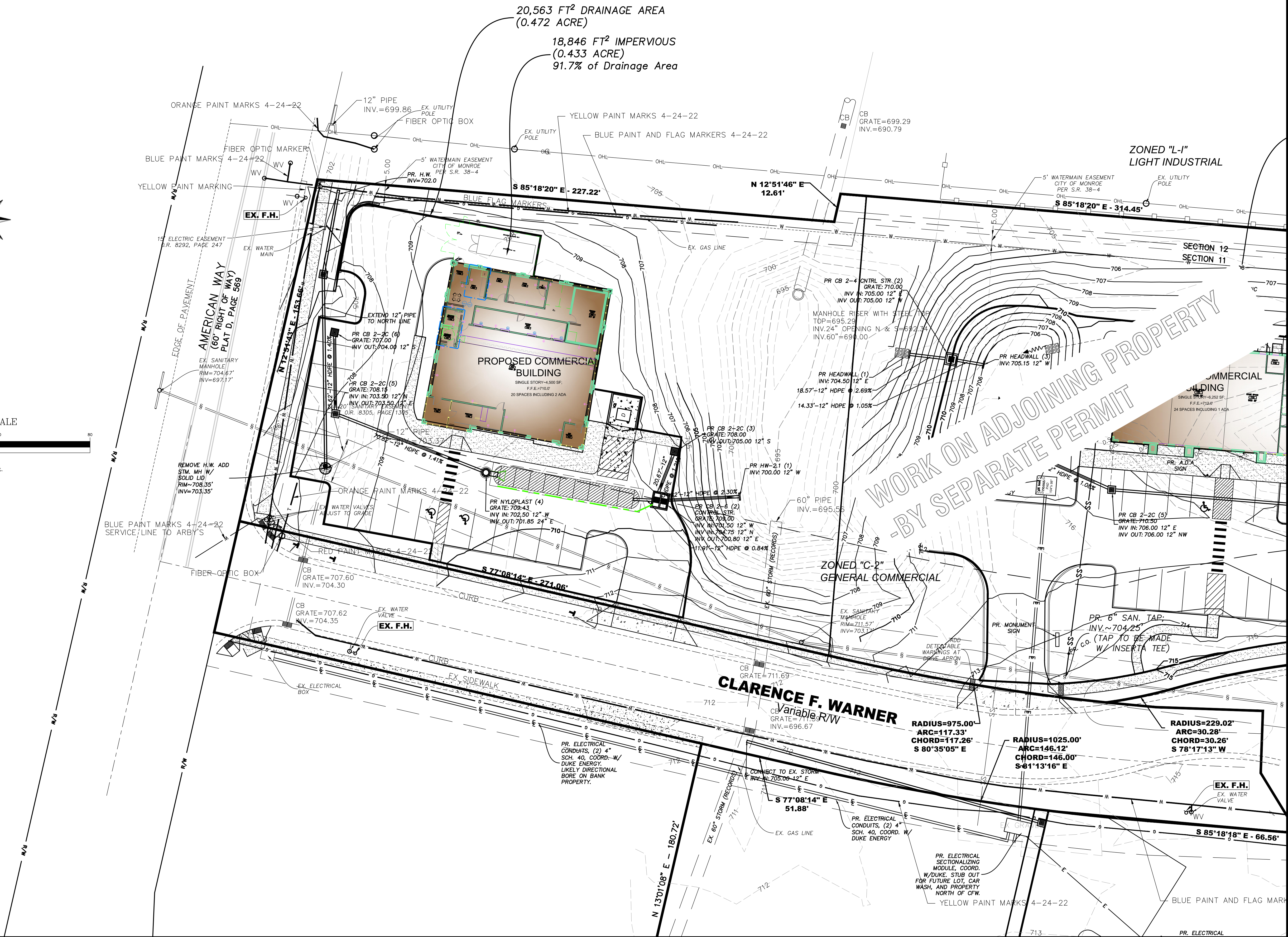
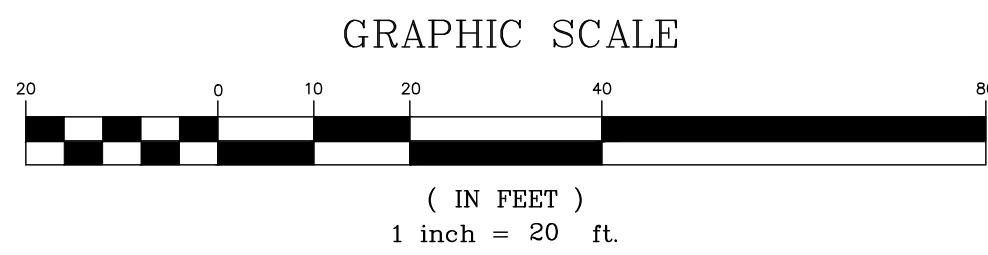
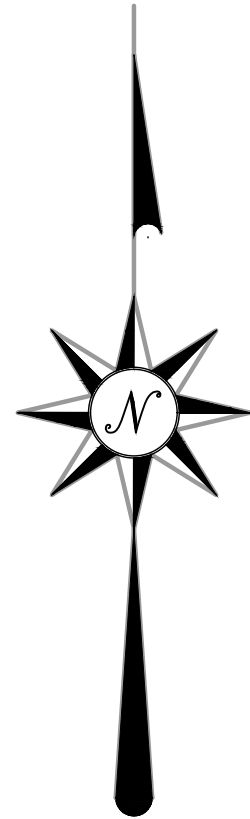
Proposed Drainage

Storm water detention will be provided for the proposed building and paved areas, using an underground Stormtech system. The drainage area to the detention system will be approximately 0.47 acres. Grass areas around the perimeter of the site will remain as direct runoff. This development will result in 92% imperviousness of the drainage area tributary to the proposed detention system. The basin will outlet through a control structure located on the east side of the system.

The required storage volume was determined by finding the critical storm and then using Hydraflow to model the detention system. A weir wall with orifices will be built into the control structure. The orifices are sized such that the release rate due to the critical storm event in the post-developed condition is restricted to the runoff rate due to a 1-year storm in the pre-developed conditions. Less frequent, more intense storms will be restricted to the pre-developed runoff rate due to one design storm lower (i.e. $Q_{50\text{yr-post}} < Q_{25\text{yr-pre}}$). In this case the critical storm was found to be the 25-year storm.

The pre-developed time of concentration of 10 minutes was used again for the post-developed condition in the Hydraflow model so that similar storms are being compared. The post-developed runoff coefficient was calculated to be 0.85. Through an iterative process of sizing the detention system and controlling orifice to meet the requirements, the required storage volume was found to be 2454 ft³ during the 100-year storm event. The Stormtech system shown provides 2860 ft³ of storage. Hydrographs are attached showing that all design storms up to the critical storm are restricted to the peak discharge rate of the 1-year storm in predeveloped conditions.

We have designed the erosion and sediment control to minimize sediment loss during construction by using silt fencing, inlet controls, and temporary sediment control. We have included notes to discuss stabilization of ground. Upon completion and stabilization there will be grass and landscaping to be placed around the perimeter of the property. Upon completion, this project should have a good stable buffer around the property which should help water quality and storm water management.



REVISIONS		
NO.	BY	DESCRIPTION

EVANS ENGINEERING
4240 AIRPORT ROAD, SUITE 211
CINCINNATI, OHIO 45226
(513) 321-2168

MONROE DISPENSARY
DRAINAGE MAP
CLARENCE F. WARNER,
CITY OF MONROE, BUTLER COUNTY, OHIO

SCALE:	HORIZ.	VERT.
1"=20'	N/A	N/A

JOB NO.	22-142
DATE	Jun. 20, 2022

SHEET NO.
C-DR

Critical Storm Determination Using SCS Method for Runoff Volume Due to 24-hour Storm

$$Q = (P - 0.2S)^2 / (P + 0.8S)$$

$$S = 1000 / CN - 10$$

		ACRES	
Drainage Area (ft ²)	20563	0.47	
P _{1yr-24hr} (in.)	2.5		
CN _{pre}	74		CN _{pre} for open space, good condition (grass cover > 75%), Soil Group C
CN _{post}	96.1		CN _{post} weighted between 74 and 98 with 92% imperviousness
S _{pre}	3.514		
S _{post}	0.408	100*(18846) /20563=	91.7 % impervious
Q _{pre} (in.)=	0.61	CN _{post} = 0.92 * 98 + (1-0.92) * 74 =	96.1
Q _{post} (in.)=	2.07		
V _{pre} (ft ³)	1042		
V _{post} (ft ³)	3546		

Percent Volume Increase 240

Critical Storm (yr) 25

% Increase in Runoff Volume from a 1-yr, 24 hour Storm		Storm Frequency (Years)
Equal or Greater than (percent)	Less Than (percent)	
-	10	1
10	20	2
20	50	5
50	100	10
100	250	25
250	500	50
500	-	100

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	



DISPENSARY - BUTLER

MONROE, OH

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-7200.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

- STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

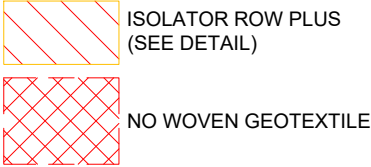
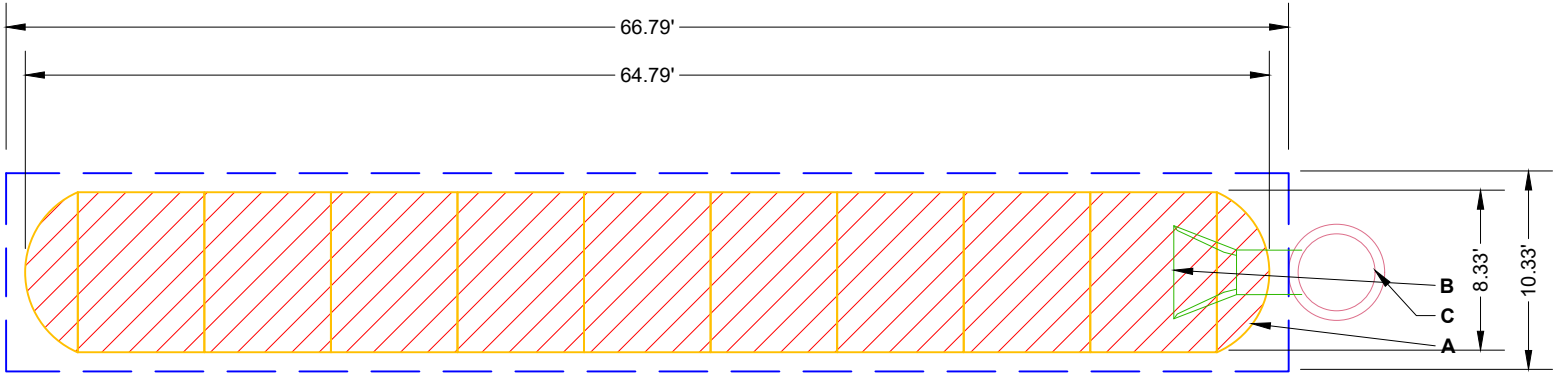
NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-7200 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT		PROPOSED ELEVATIONS		*INVERT ABOVE BASE OF CHAMBER				
				PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
9	STORMTECH MC-7200 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	713.55	PREFABRICATED END CAP	A	24" BOTTOM PARTIAL CUT END CAP, PART#: MC7200IEPP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.26"	
2	STORMTECH MC-7200 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	709.05					
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	708.55					
9	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	708.55	FLAMP	B	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MC720024RAMP		
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	708.55	CONCRETE STRUCTURE	C	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		
2861	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	707.55					
		TOP OF MC-7200 CHAMBER:	706.55					
		24" ISOLATOR ROW PLUS INVERT:	701.74					
		BOTTOM OF MC-7200 CHAMBER:	701.55					
690	SYSTEM AREA (SF)	BOTTOM OF STONE:	700.80					
154.3	SYSTEM PERIMETER (ft)							



— — BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

DISPENSARY - BUTLER

MONROE, OH

DATE:

PROJECT #:

DRAWN: KZ

CHECKED: N/A

StormTech®

Chamber System

888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

010'20'

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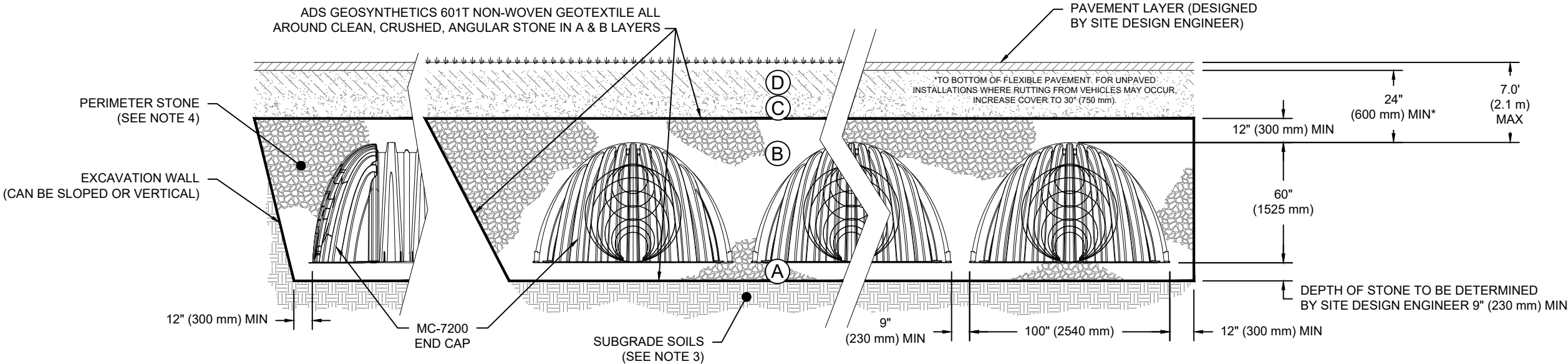
SHEET

2 OF 5

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

DISPENSARY - BUTLER

MONROE, OH

DRAWN: KZ

CHECKED: N/A

DATE:

PROJECT #:

DESCRIPTION

CHK

DRW

DATE

**StormTech®**
Chamber System

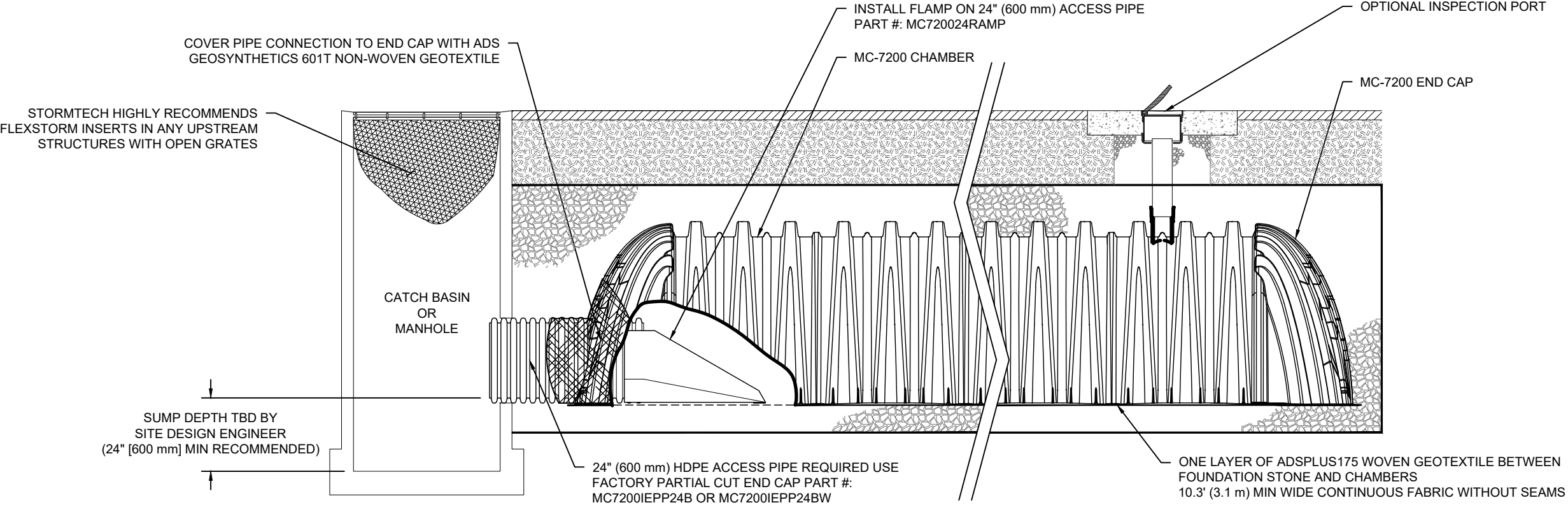
888-892-2694 | WWW.STORMTECH.COM

**ADS**
4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

SHEET

3 OF 5

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MC-7200 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR PLUS ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

DISPENSARY - BUTLER

MONROE, OH

DATE:

DRAWN: KZ

PROJECT #:

CHECKED: N/A

DESCRIPTION

CHK

DRW

DATE

StormTech®
Chamber System

888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

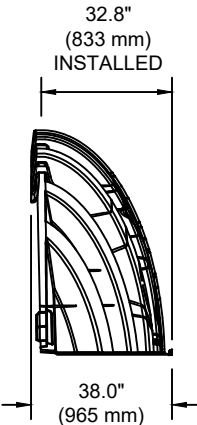
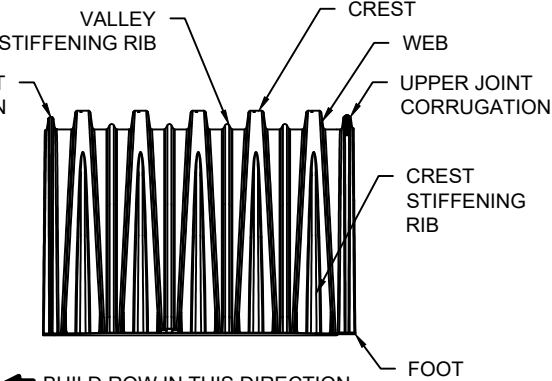
ADS

SHEET

4 OF 5

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

NTS



SIZE (W X H X INSTALLED LENGTH)

CHAMBER STORAGE	175.9 CUBIC FEET	(4.98 m³)
MINIMUM INSTALLED STORAGE*	267.3 CUBIC FEET	(7.56 m³)
WEIGHT (NOMINAL)	205 lbs.	(92.9 kg)

SIZE (W X H X INSTALLED LENGTH)

END CAP STORAGE	39.5 CUBIC FEET	(1.12 m³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m³)
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC7200IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC7200IEPP06B		---	0.86" (22 mm)
MC7200IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC7200IEPP08B		---	1.01" (26 mm)
MC7200IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC7200IEPP10B		---	1.33" (34 mm)
MC7200IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC7200IEPP12B		---	1.55" (39 mm)
MC7200IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC7200IEPP15B		---	1.70" (43 mm)
MC7200IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC7200IEPP18TW			
MC7200IEPP18B		---	1.97" (50 mm)
MC7200IEPP18BW			
MC7200IEPP24T	24" (600 mm)	23.05" (585 mm)	---
MC7200IEPP24TW			
MC7200IEPP24B		---	2.26" (57 mm)
MC7200IEPP24BW			
MC7200IEPP30BW	30" (750 mm)	---	2.95" (75 mm)
MC7200IEPP36BW	36" (900 mm)	---	3.25" (83 mm)
MC7200IEPP42BW	42" (1050 mm)	---	3.55" (90 mm)

CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-7200 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

NOTE: ALL DIMENSIONS ARE NOMINAL

StormTech[®]
Chamber System



SHEET
OF 5

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Hydrograph Report

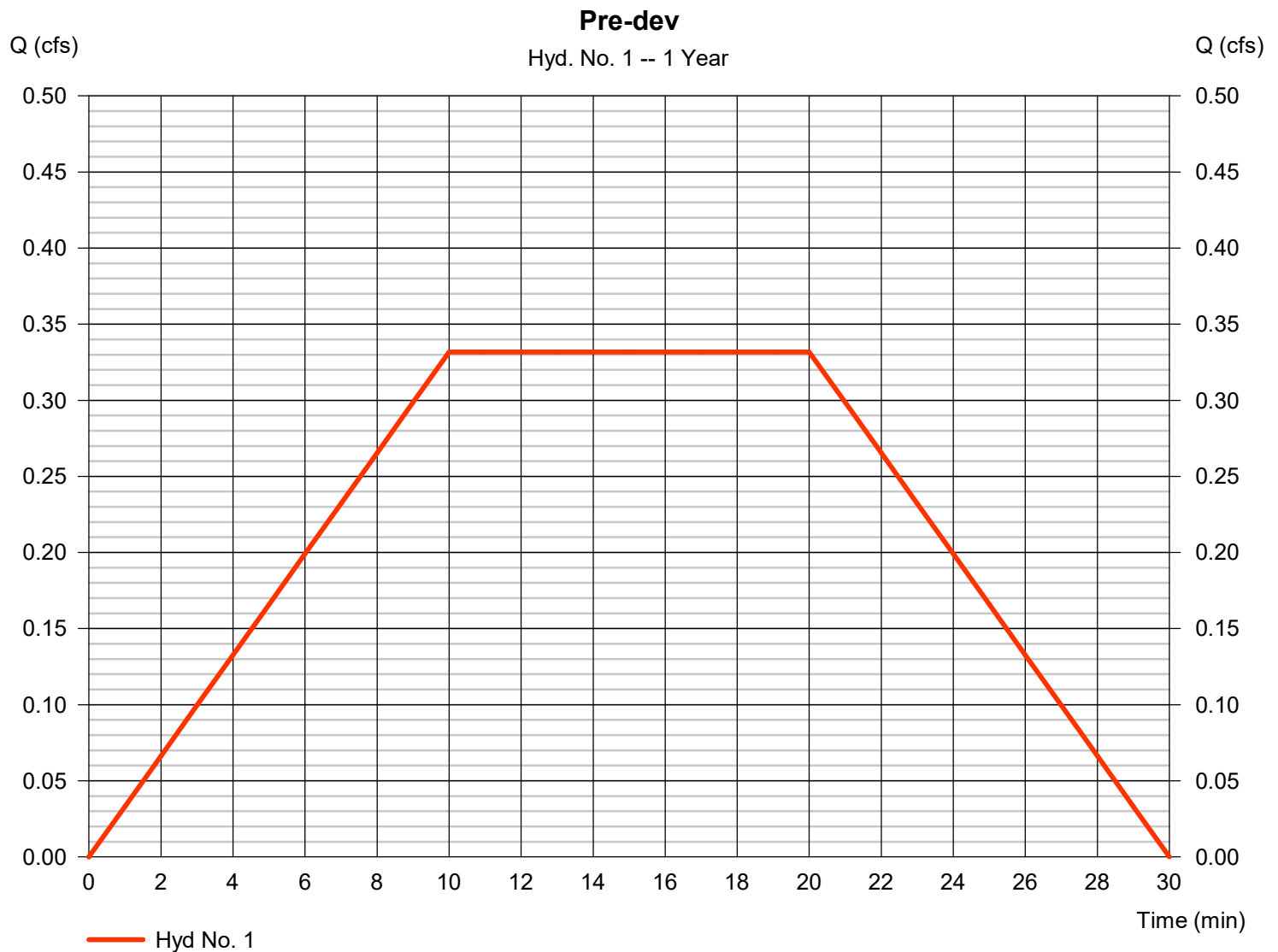
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.332 cfs
Storm frequency	= 1 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 398 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 2.353 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

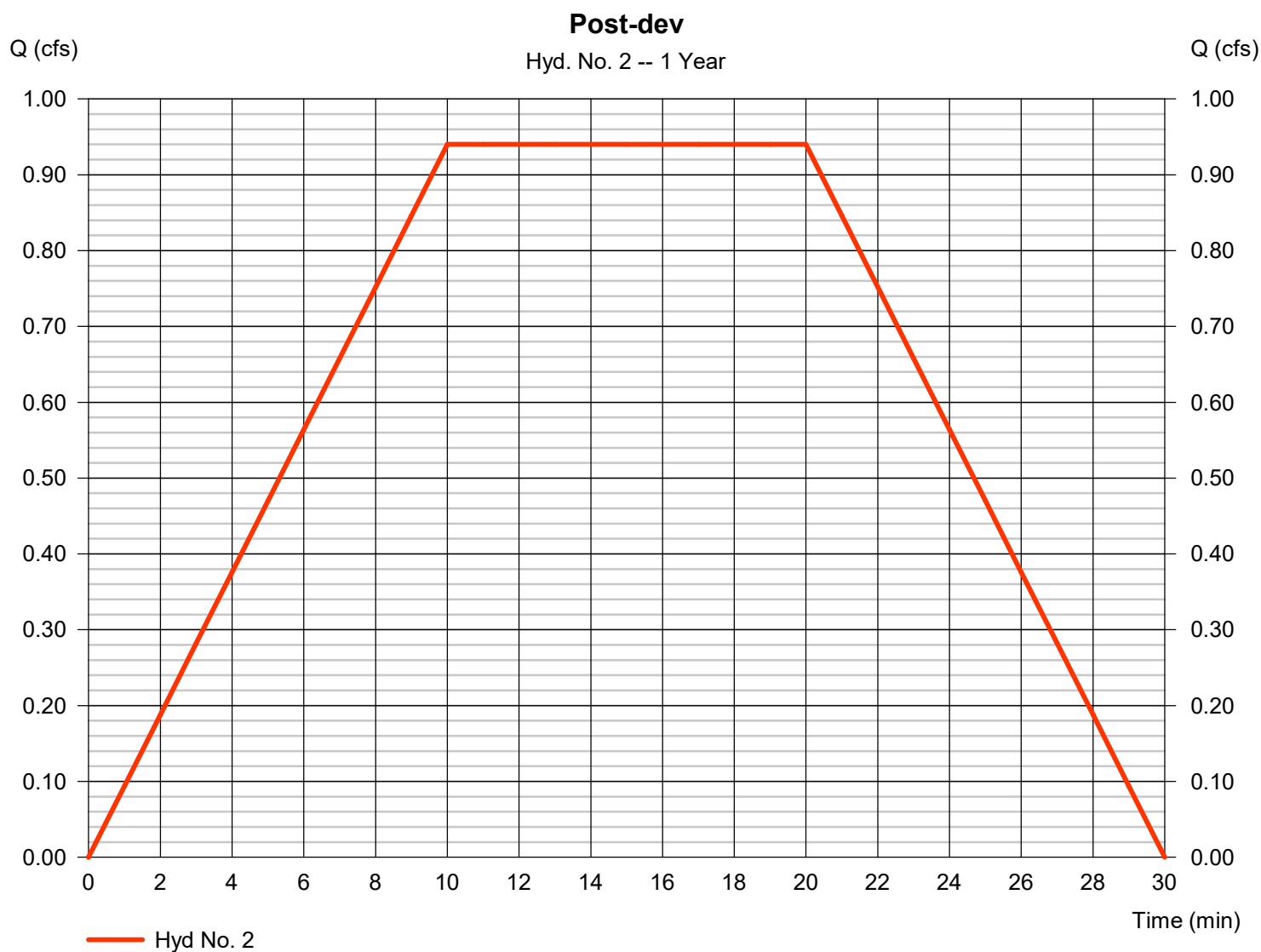
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.940 cfs
Storm frequency	= 1 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,128 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 2.353 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

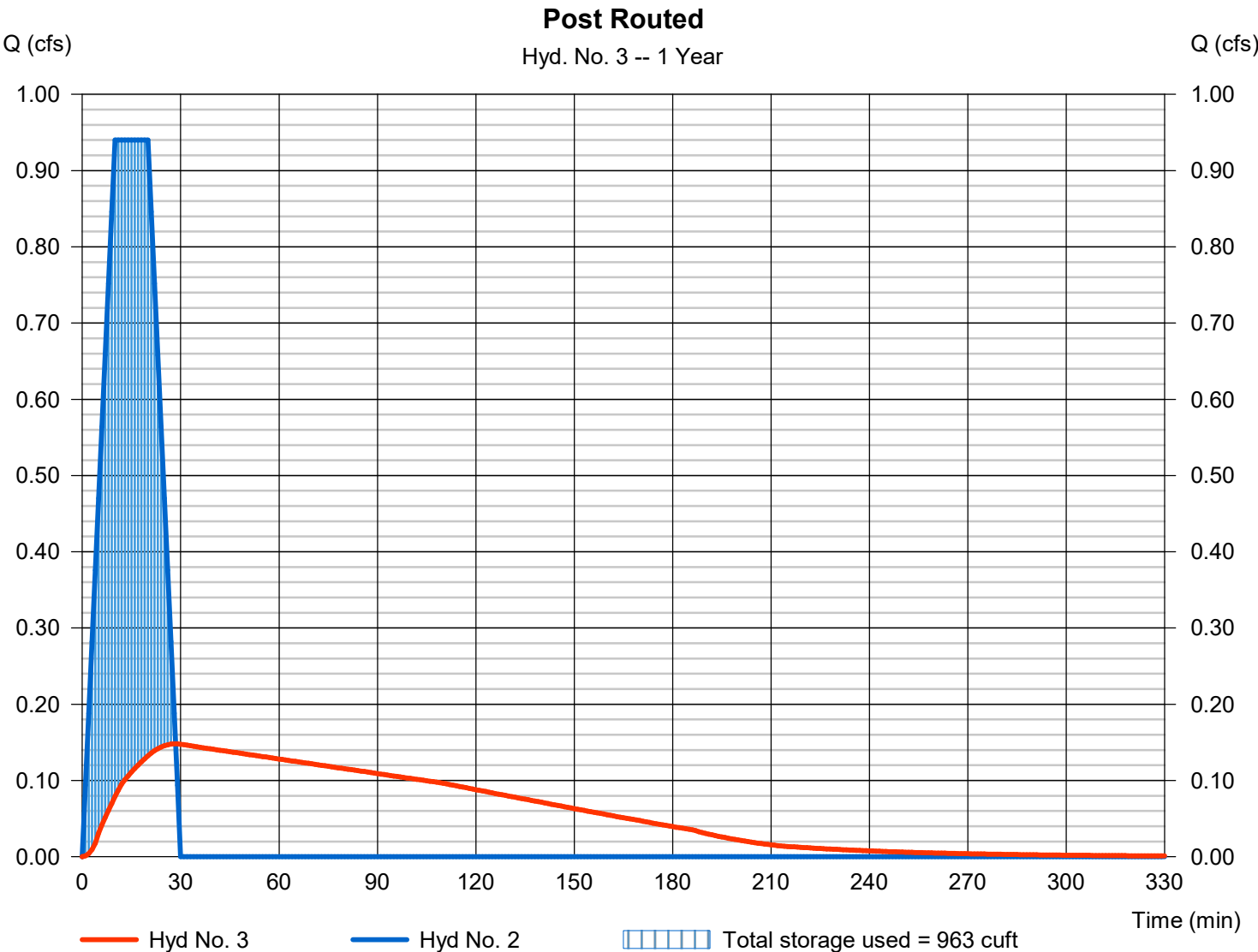
Monday, 06 / 20 / 2022

Hyd. No. 3

Post Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.148 cfs
Storm frequency	= 1 yrs	Time to peak	= 28 min
Time interval	= 1 min	Hyd. volume	= 1,125 cuft
Inflow hyd. No.	= 2 - Post-dev	Max. Elevation	= 702.97 ft
Reservoir name	= Underground	Max. Storage	= 963 cuft

Storage Indication method used.



Pond No. 1 - Underground

Pond Data

Pond storage is based on user-defined values.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	700.80	n/a	0	0
1.00	701.80	n/a	376	376
2.00	702.80	n/a	504	880
3.00	703.80	n/a	484	1,364
4.00	704.80	n/a	468	1,832
5.00	705.80	n/a	426	2,258
6.00	706.80	n/a	352	2,610
6.75	707.55	n/a	249	2,859
7.50	708.30	n/a	11	2,870

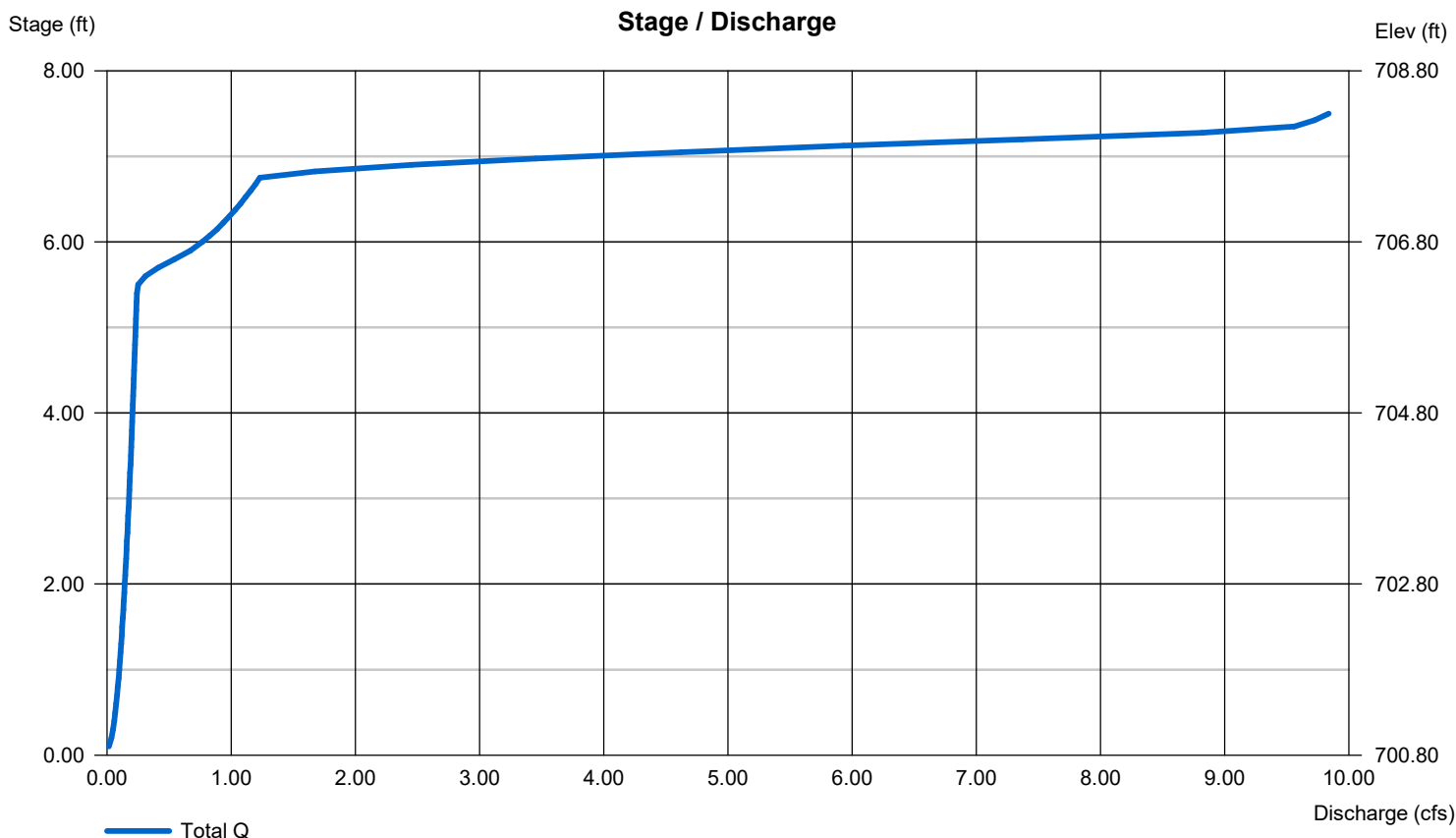
Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	2.00	6.00	0.00
Span (in)	= 12.00	2.00	6.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 700.80	700.80	706.25	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .012	.012	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 6.00	0.00	0.00	0.00
Crest El. (ft)	= 707.55	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= Yes	No	No	No
Exfil.(in/hr)	= 0.000 (by Wet area)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

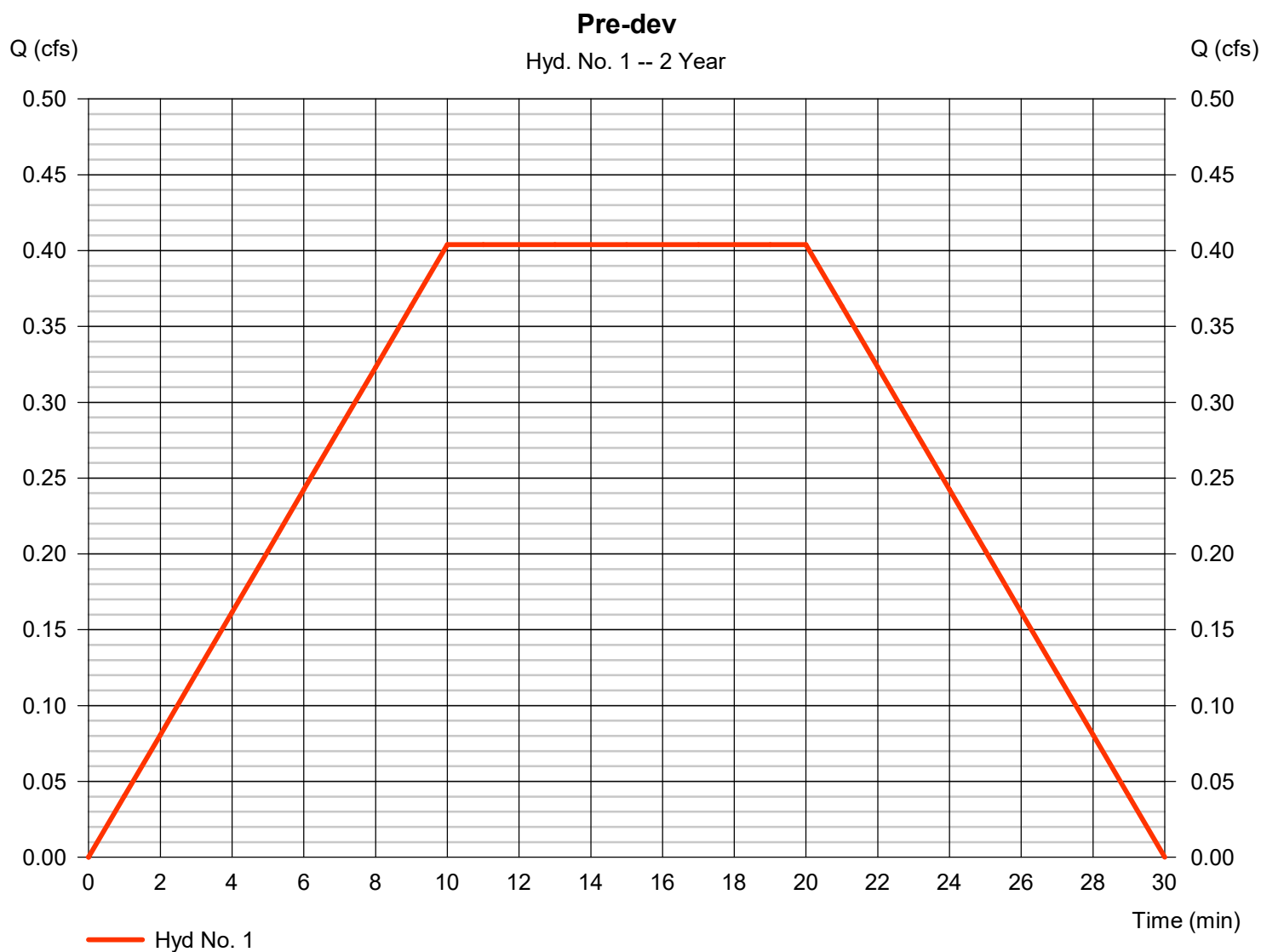
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.404 cfs
Storm frequency	= 2 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 485 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 2.865 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

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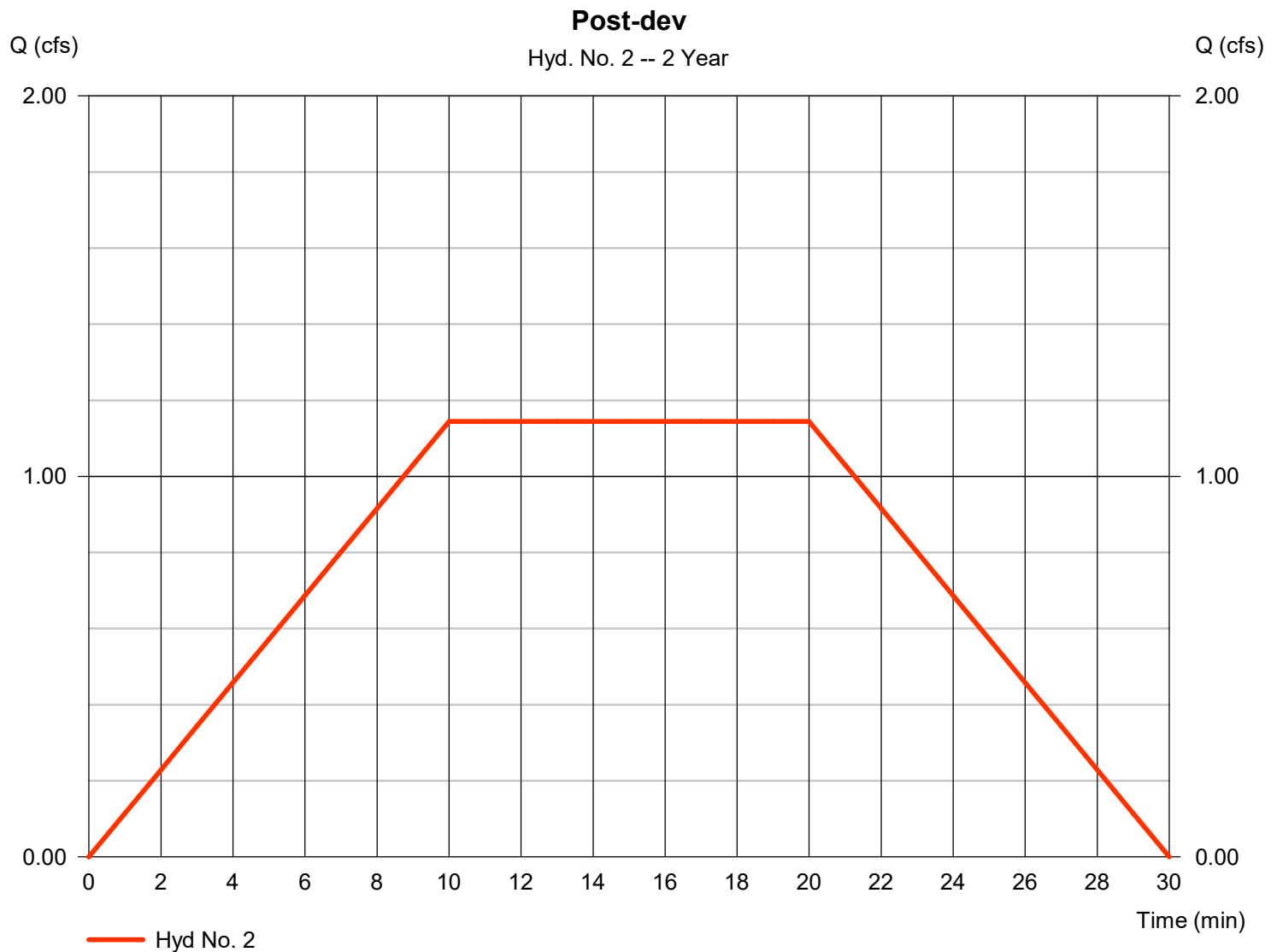
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.145 cfs
Storm frequency	= 2 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,373 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 2.865 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

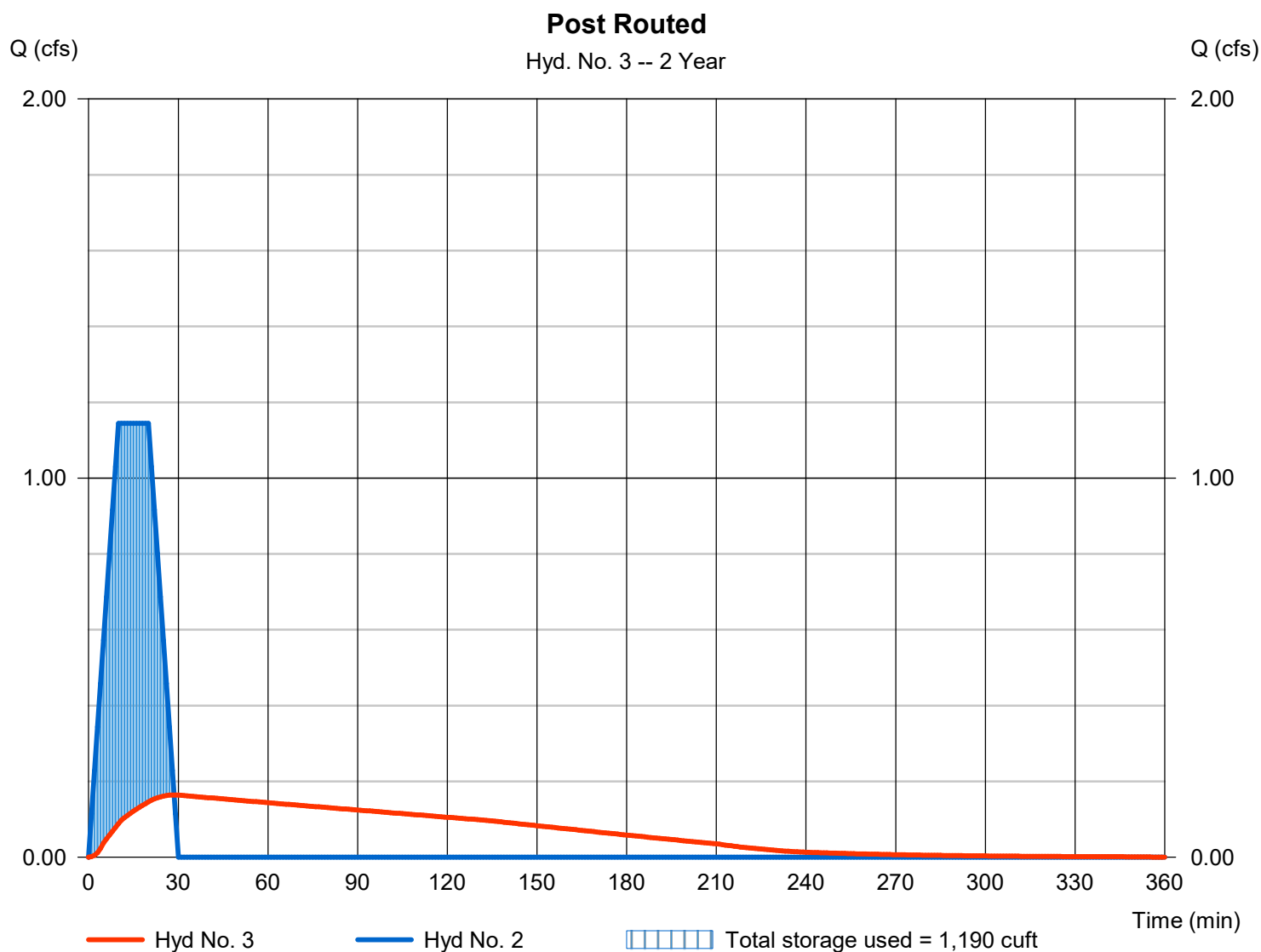
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 2 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.164 cfs
 Time to peak = 29 min
 Hyd. volume = 1,371 cuft
 Max. Elevation = 703.44 ft
 Max. Storage = 1,190 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.474 cfs
Storm frequency	= 5 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 568 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 3.359 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

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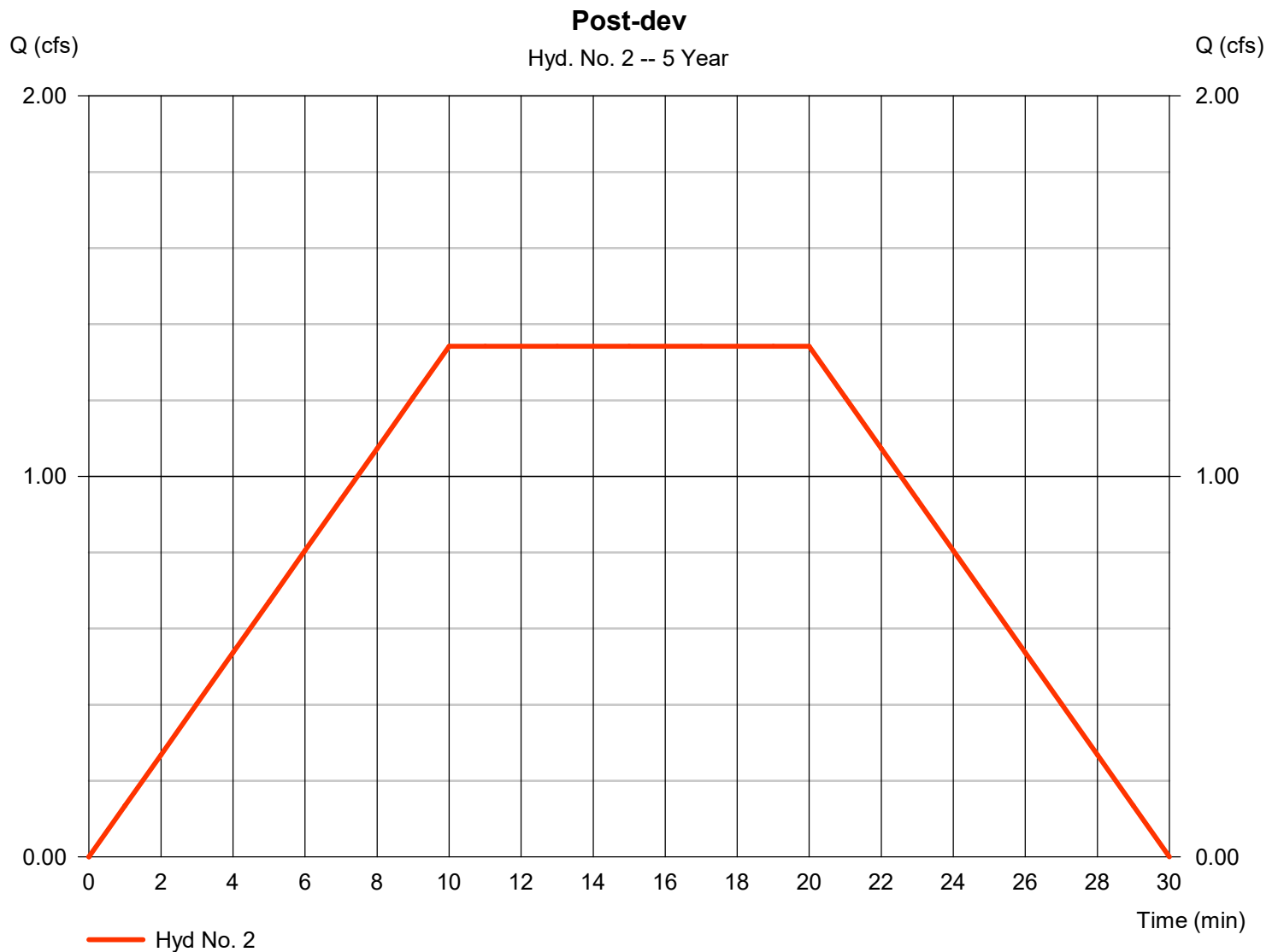
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.342 cfs
Storm frequency	= 5 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,610 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 3.359 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

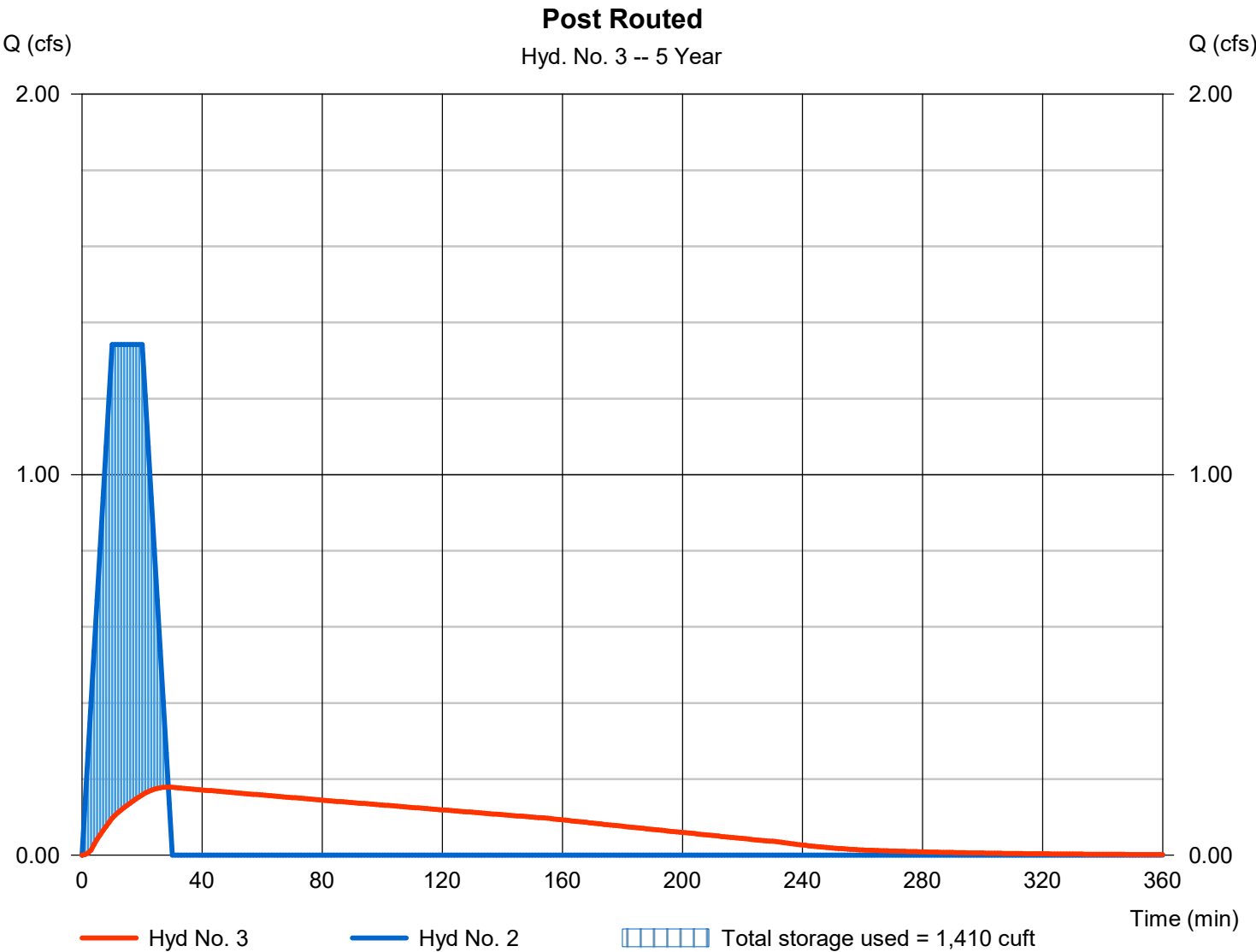
Monday, 06 / 20 / 2022

Hyd. No. 3

Post Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.179 cfs
Storm frequency	= 5 yrs	Time to peak	= 29 min
Time interval	= 1 min	Hyd. volume	= 1,608 cuft
Inflow hyd. No.	= 2 - Post-dev	Max. Elevation	= 703.90 ft
Reservoir name	= Underground	Max. Storage	= 1,410 cuft

Storage Indication method used.



Hydrograph Report

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Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.557 cfs
Storm frequency	= 10 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 669 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 3.953 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

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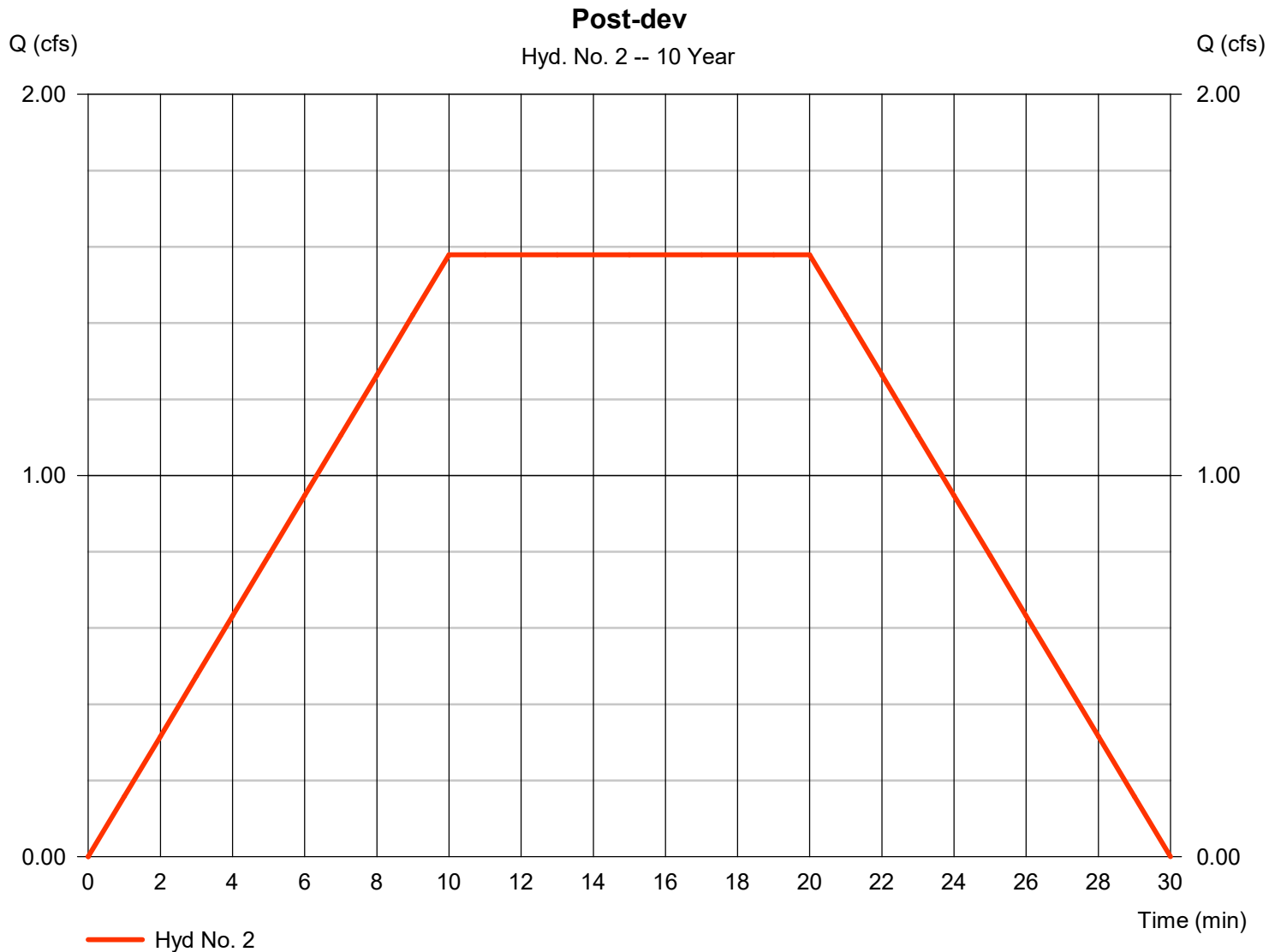
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.579 cfs
Storm frequency	= 10 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 1,895 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 3.953 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

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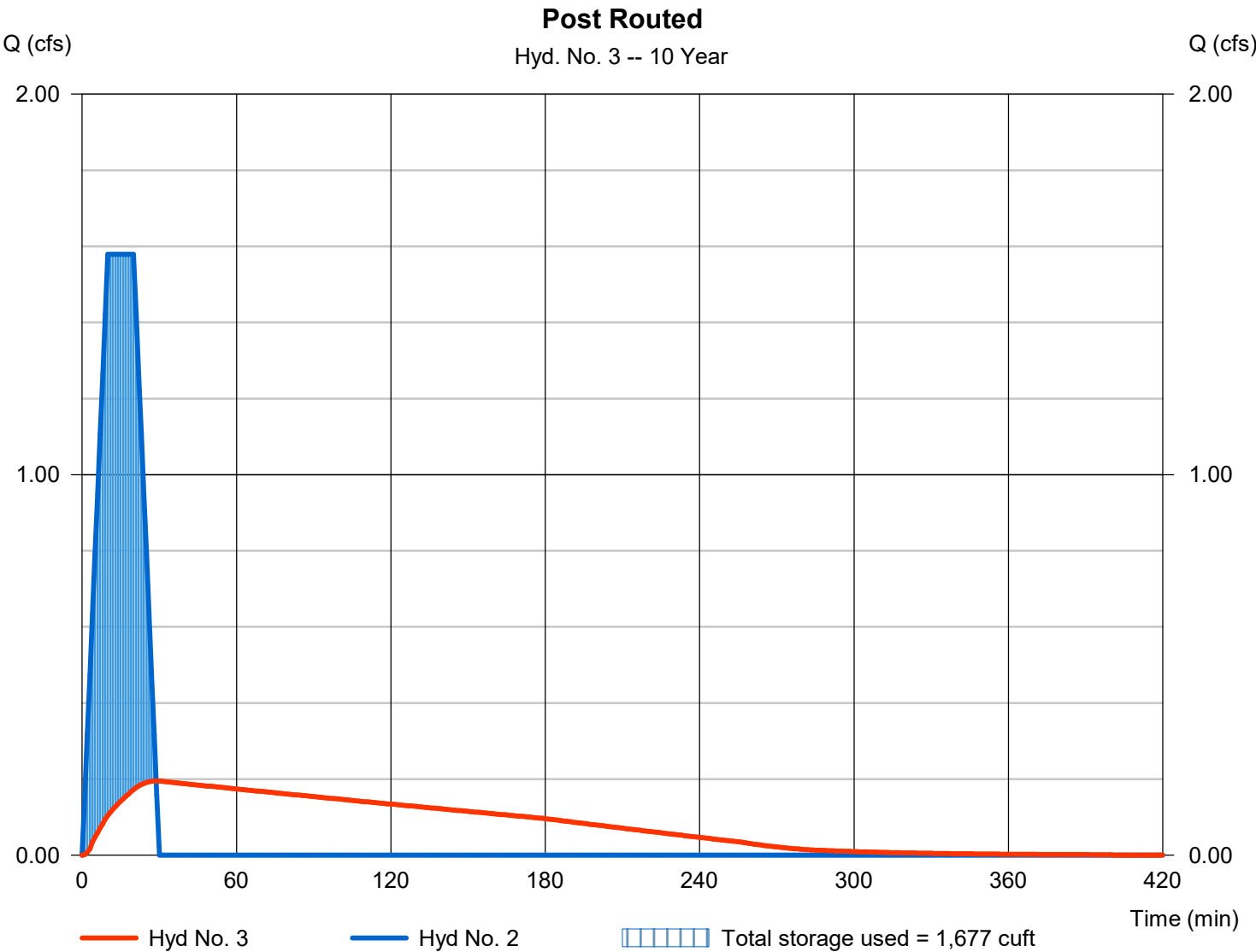
Monday, 06 / 20 / 2022

Hyd. No. 3

Post Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.195 cfs
Storm frequency	= 10 yrs	Time to peak	= 29 min
Time interval	= 1 min	Hyd. volume	= 1,893 cuft
Inflow hyd. No.	= 2 - Post-dev	Max. Elevation	= 704.47 ft
Reservoir name	= Underground	Max. Storage	= 1,677 cuft

Storage Indication method used.



Hydrograph Report

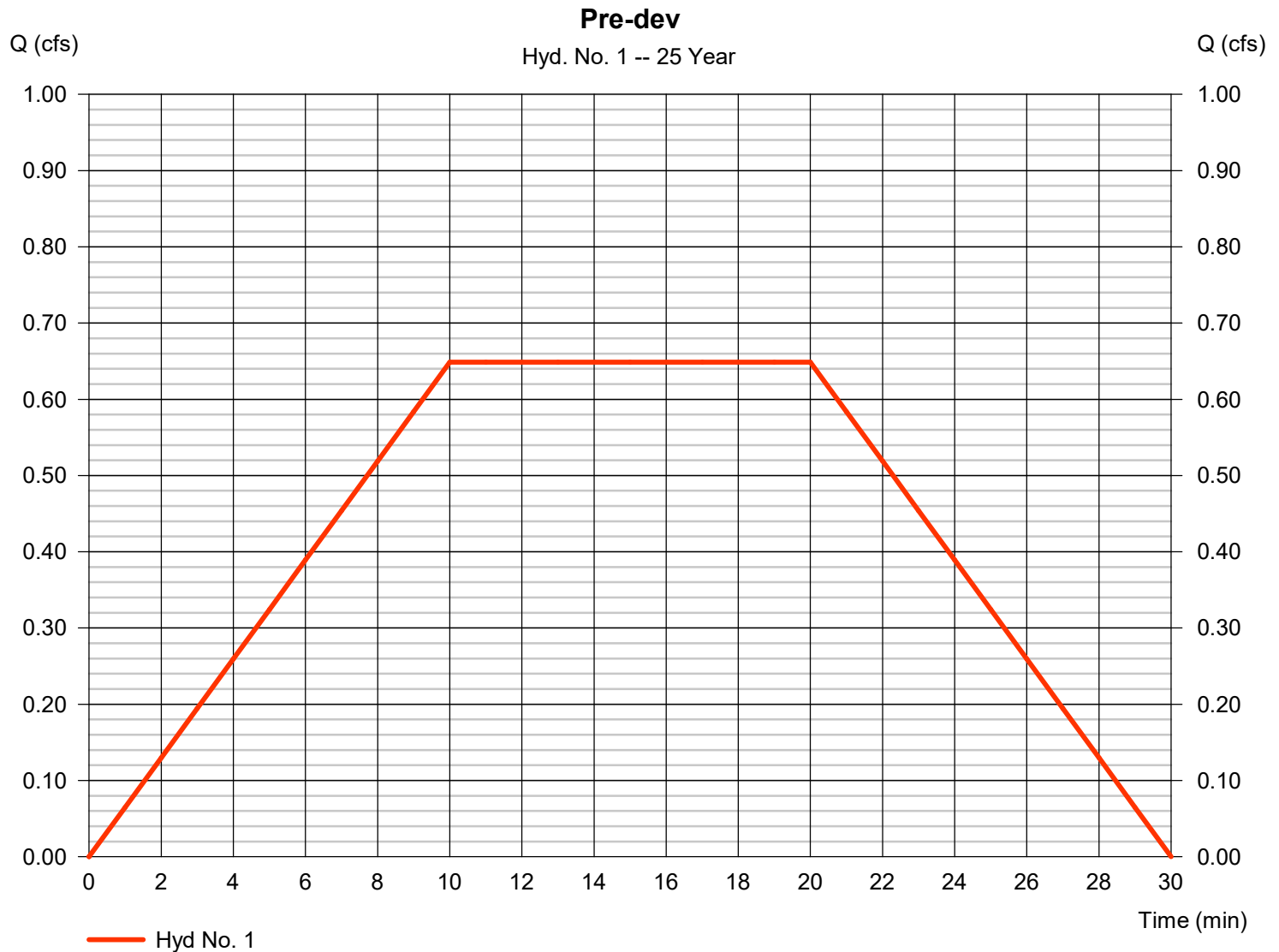
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Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.649 cfs
Storm frequency	= 25 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 778 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 4.600 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

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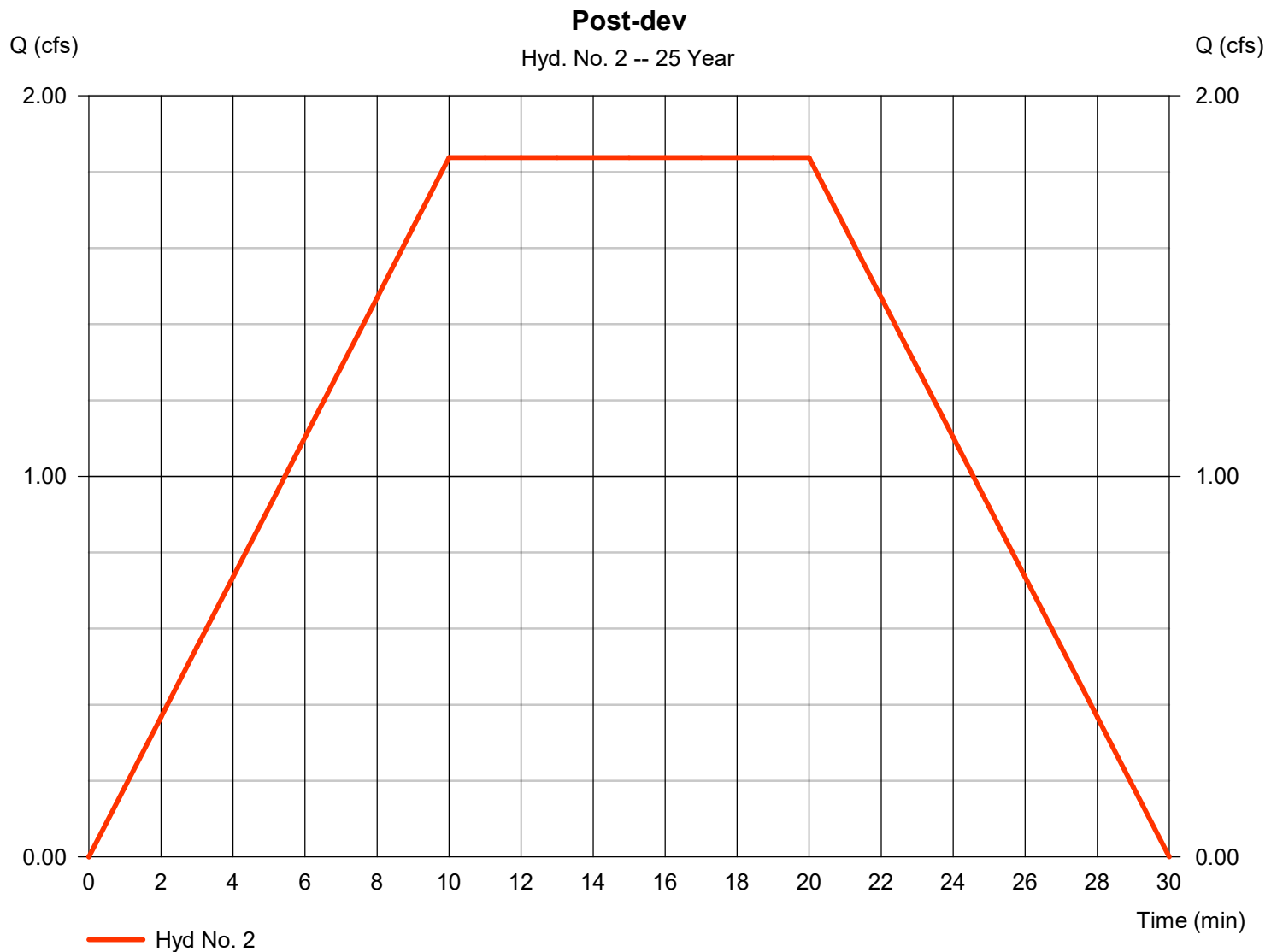
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 1.838 cfs
Storm frequency	= 25 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 2,205 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 4.600 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

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Monday, 06 / 20 / 2022

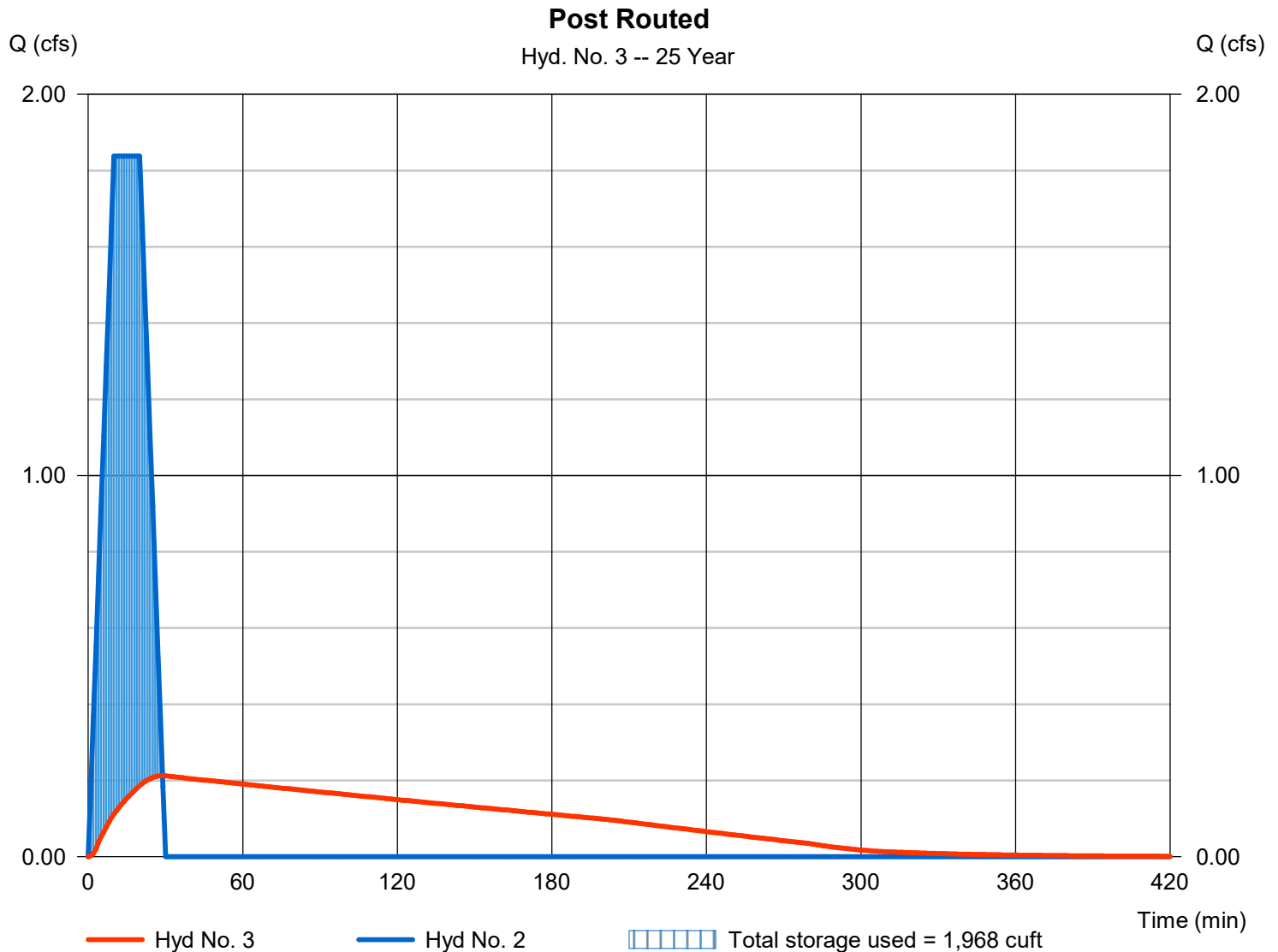
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 25 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.213 cfs
 Time to peak = 29 min
 Hyd. volume = 2,203 cuft
 Max. Elevation = 705.12 ft
 Max. Storage = 1,968 cuft

Storage Indication method used.



Hydrograph Report

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Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.750 cfs
Storm frequency	= 50 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 900 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 5.319 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

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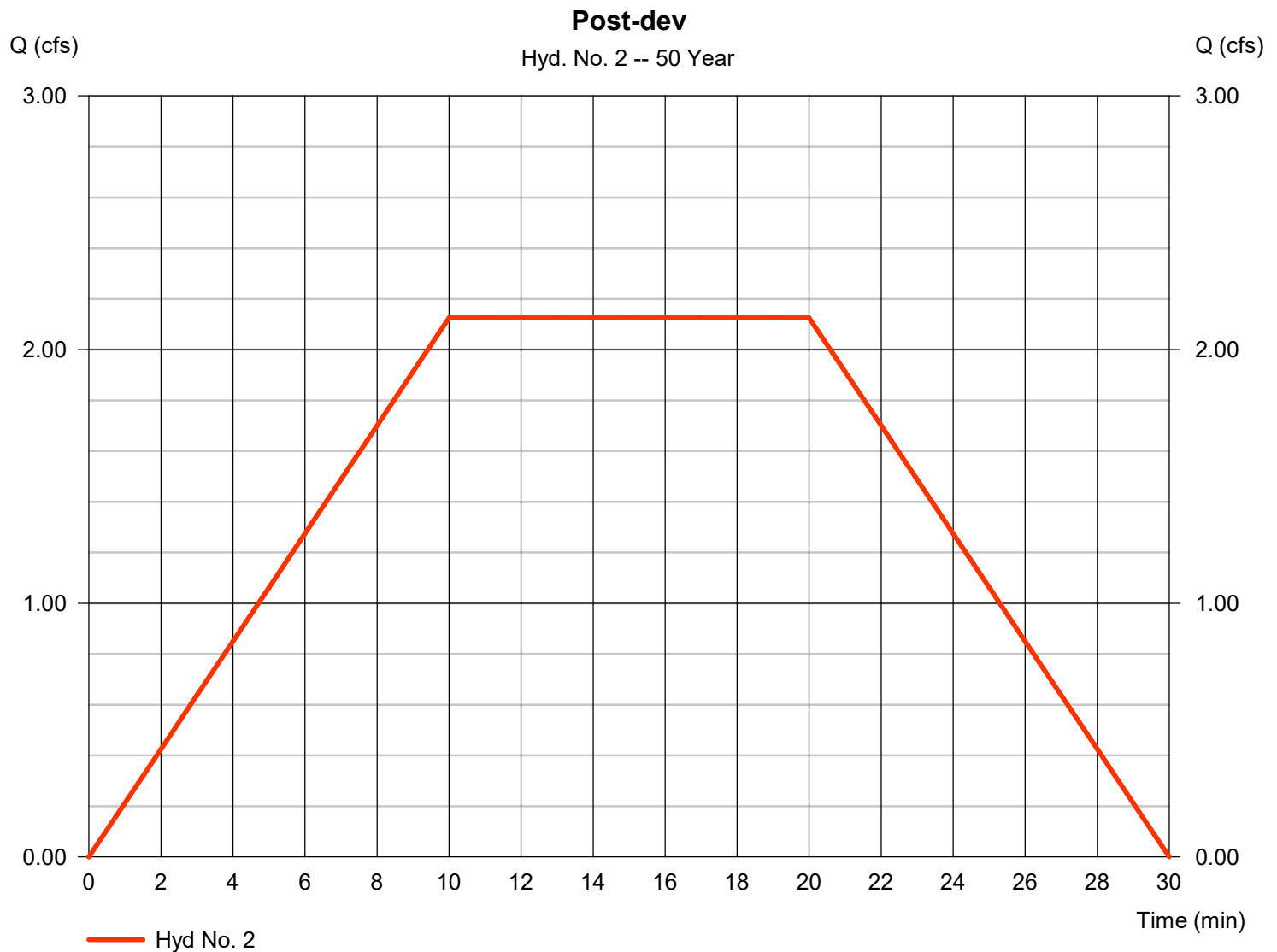
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 2.125 cfs
Storm frequency	= 50 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 2,550 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 5.319 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

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Monday, 06 / 20 / 2022

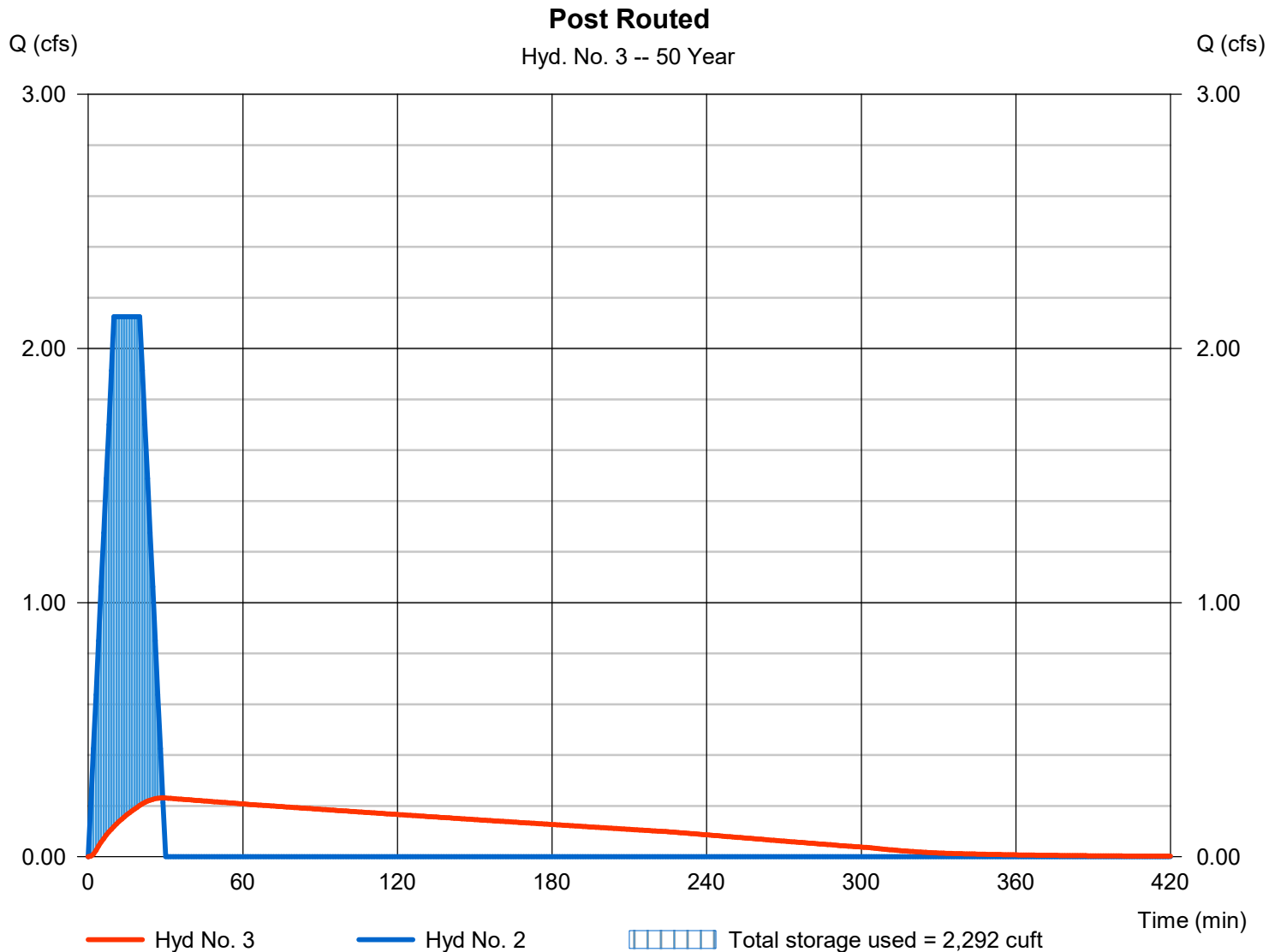
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 50 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.232 cfs
 Time to peak = 29 min
 Hyd. volume = 2,547 cuft
 Max. Elevation = 705.90 ft
 Max. Storage = 2,292 cuft

Storage Indication method used.



Hydrograph Report

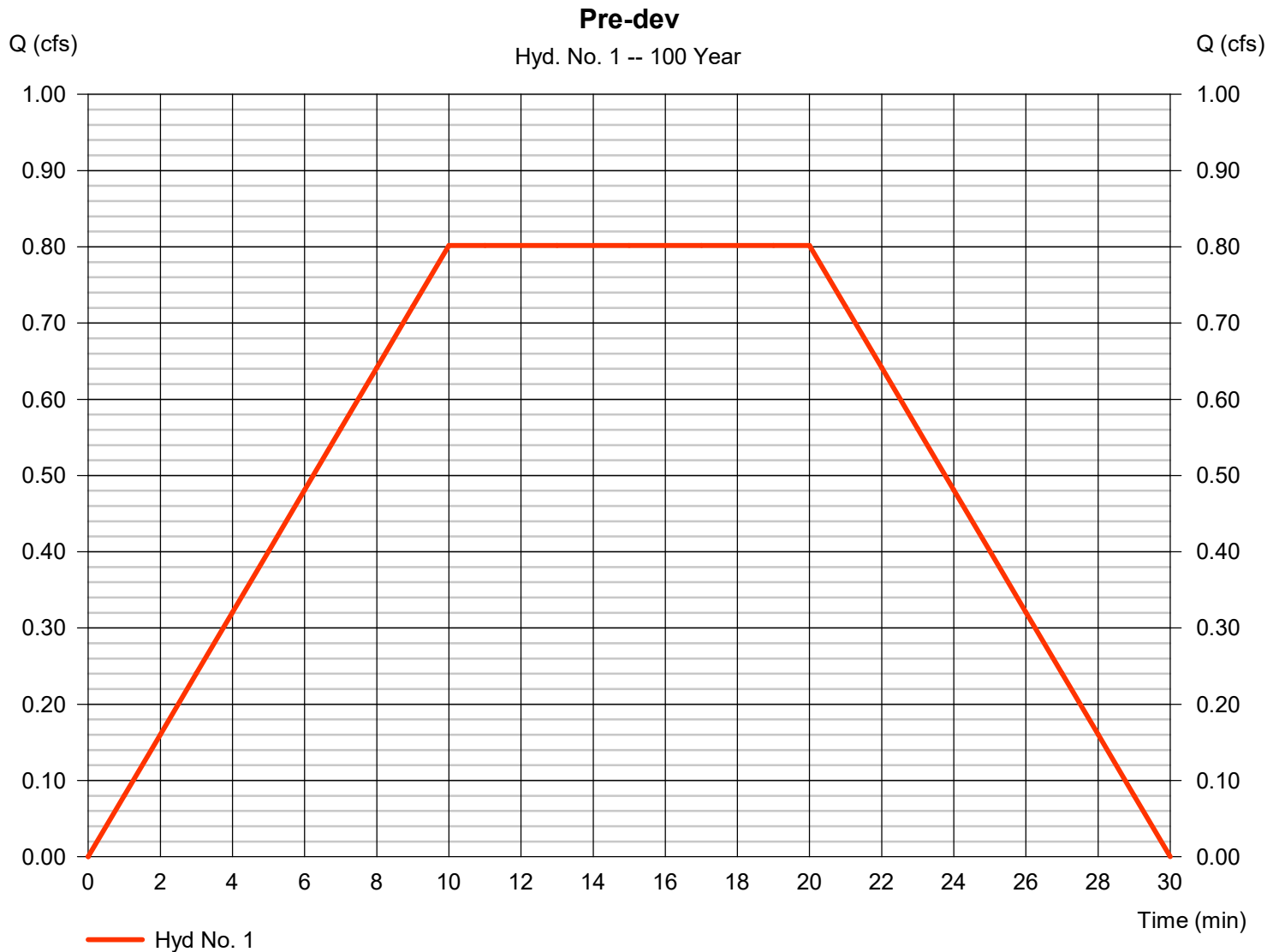
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Monday, 06 / 20 / 2022

Hyd. No. 1

Pre-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 0.802 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 962 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.3
Intensity	= 5.686 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

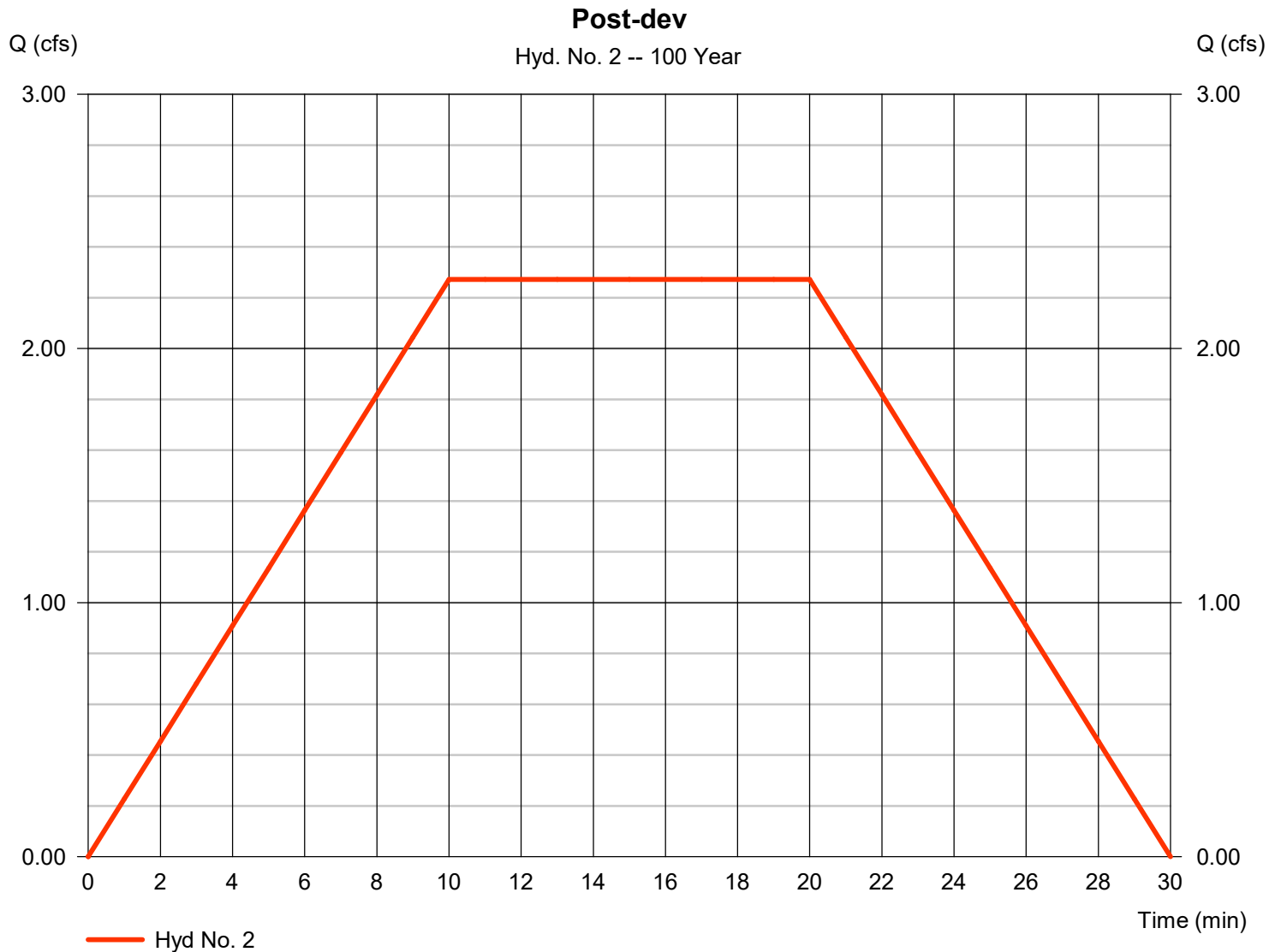
Monday, 06 / 20 / 2022

Hyd. No. 2

Post-dev

Hydrograph type	= Mod. Rational	Peak discharge	= 2.272 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 2,726 cuft
Drainage area	= 0.470 ac	Runoff coeff.	= 0.85*
Intensity	= 5.686 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

* Composite (Area/C) = $[(0.480 \times 0.90) + (0.280 \times 0.30)] / 0.470$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

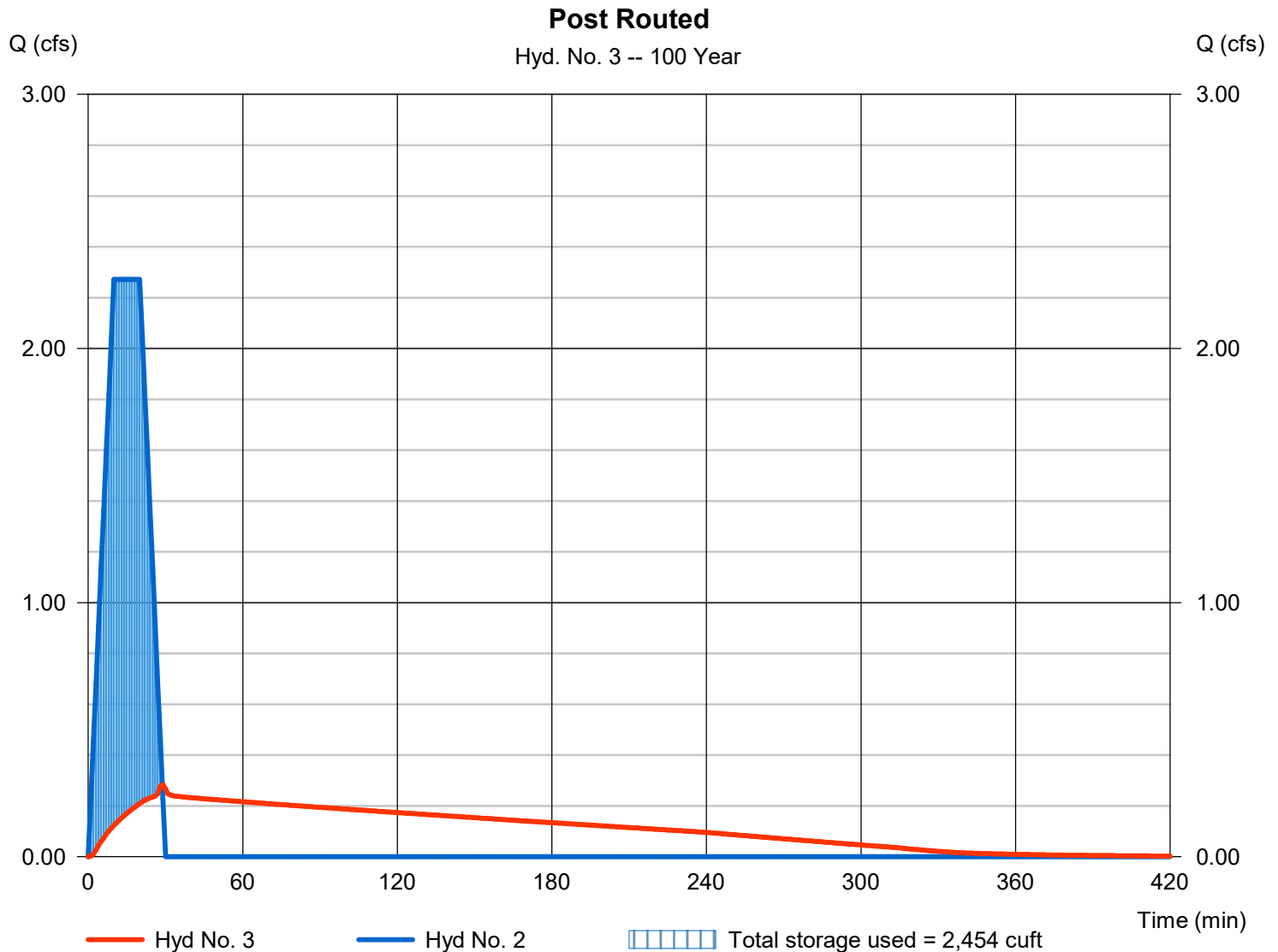
Hyd. No. 3

Post Routed

Hydrograph type = Reservoir
 Storm frequency = 100 yrs
 Time interval = 1 min
 Inflow hyd. No. = 2 - Post-dev
 Reservoir name = Underground

Peak discharge = 0.283 cfs
 Time to peak = 29 min
 Hyd. volume = 2,723 cuft
 Max. Elevation = 706.36 ft
 Max. Storage = 2,454 cuft

Storage Indication method used.



Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2019

Monday, 06 / 20 / 2022

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	80.0000	14.0000	1.0000	-----
2	106.0000	17.0000	1.0000	-----
3	0.0000	0.0000	1.0000	-----
5	131.0000	19.0000	1.0000	-----
10	170.0000	23.0000	1.0000	-----
25	230.0000	30.0000	1.0000	-----
50	250.0000	27.0000	1.0000	-----
100	290.0000	31.0000	1.0000	-----

File name: butler county.IDF

$$\text{Intensity} = B / (T_c + D)^E$$

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	4.21	3.33	2.76	2.35	2.05	1.82	1.63	1.48	1.36	1.25	1.16	1.08
2	4.82	3.93	3.31	2.86	2.52	2.26	2.04	1.86	1.71	1.58	1.47	1.38
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.46	4.52	3.85	3.36	2.98	2.67	2.43	2.22	2.05	1.90	1.77	1.66
10	6.07	5.15	4.47	3.95	3.54	3.21	2.93	2.70	2.50	2.33	2.18	2.05
25	6.57	5.75	5.11	4.60	4.18	3.83	3.54	3.29	3.07	2.88	2.71	2.56
50	7.81	6.76	5.95	5.32	4.81	4.39	4.03	3.73	3.47	3.25	3.05	2.87
100	8.06	7.07	6.30	5.69	5.18	4.75	4.39	4.08	3.82	3.58	3.37	3.19

Tc = time in minutes. Values may exceed 60.

Precip. file name: Sample.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	2.20	0.00	3.30	4.25	5.77	6.80	7.95
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10



CINCINNATI COMMERCIAL CONTRACTING

YOUR CHOICE FOR QUALITY

Subject: Clarence F Warner Dispensary – Preliminary Comments

July 08, 2022

Dear Kameryn,

Here are responses to your comments from June 30, 2022.

Sidewalk

- Sidewalk now is minimum 8'.

Parking

- Nothing to revise, slopes are less than 7%

Landscaping

- Dimensions have been added to Sheet C-3 to show 6ft area.
- Landscaping is shown on the east side of the building.
- Tree spacing along right-of-way has been fixed.
 - o 1 Additional tree has been added.
- Understood.
 - o A substantial amount of landscaping is proposed, it's covered now.
- Understood.
- Understood.

Architectural

- Understood.
- Understood.

Signs

- Understood.
- Understood.

Department Comments

- Police – Understood
- Fire – Understood
- Engineering
 - o Drainage and storm water calcs provided. SWP3 ledger still being finalized.

Respectfully Submitted,

Christian Stone

BIM Director

cstone@cincigroup.com

(513) 561-6633 x107

VISIT OUR WEBSITE





Envelope Compliance Certificate

Project Information

Energy Code: 90.1 (2010) Standard
Project Title: Butler Dispensary
Location: Monroe (Butler), Ohio
Climate Zone: 5a
Project Type: New Construction
Vertical Glazing / Wall Area: 38%

Construction Site:
Monroe, OH

Owner/Agent:

Designer/Contractor:
Matt Remar
KBA Incorporated
29 High Street
Milford, OH 45150

Building Area

Floor Area

1-Retail : Nonresidential

5005

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor _(a)
South Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1194	19.0	0.0	0.109	0.064
Window 1: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	526	---	---	0.260	0.550
Door 1: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	64	---	---	0.260	0.800
West Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1224	19.0	0.0	0.109	0.064
Window 2: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	425	---	---	0.260	0.550
Door 2: Glass (> 50% glazing):Metal Frame, Non-Entrance Door, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	24	---	---	0.260	0.550
East Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1224	19.0	0.0	0.109	0.064
Window 3: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	425	---	---	0.260	0.550
North Wall: Steel-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1194	19.0	0.0	0.109	0.064
Window 4: Metal Frame with Thermal Break, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	345	---	---	0.260	0.550
Door 3: Glass (> 50% glazing):Nonmetal Frame, Entrance Door, Perf. Specs.: Product ID PPG Solarban 60, SHGC 0.39, [Bldg. Use 1 - Retail] (b)	21	---	---	0.260	0.350
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Retail]	5005	---	30.0	0.032	0.048
Floor 1: Slab-On-Grade:Unheated, Vertical 2 ft., [Bldg. Use 1 - Retail] (c)	335	---	10.0	0.540	0.540

- (a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
- (b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
- (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 12% better than code

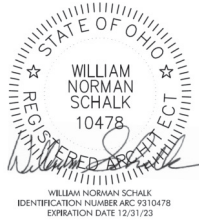
Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Matt Remar - Designer
Name - Title

Matt Remar
Signature

07-08-22
Date





Inspection Checklist

Energy Code: 90.1 (2010) Standard

Requirements: 91.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2,5.4. 3.1.1,5.7 [PR1] ¹	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
4.2.2,8.4. 1.1,8.4.1. 2.8.7 [PR6] ²	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.5.3.3 [FO1] ²	Below-grade wall insulation R-value.	R-_____	R-_____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.3.5 [FO3] ²	Slab edge insulation R-value.	R-_____ ☐ Unheated ☐ Heated	R-_____ ☐ Unheated ☐ Heated	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [FO4] ²	Slab edge insulation installed per manufacturer's instructions.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.5 [FO5] ²	Slab edge insulation depth/length.	_____ ft	_____ ft	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.7.3 [FO7] ¹	Insulation in contact with the ground has $\leq 0.3\%$ water absorption rate per ASTM C272.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
6.4.4.1.5 [FO11] ³	Bottom surface of floor structures incorporating radiant heating insulated to $\geq R-3.5$.	R-_____	R-_____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply. See the Envelope Assemblies table for values.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.2 [FR1] ³	Factory-built fenestration and doors are labeled as meeting air leakage requirements.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.4.3.4 [FR4] ³	Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are >=7 ft apart.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	
5.5.4.3a [FR8] ¹	Vertical fenestration U-Factor.	U- ____	U- ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.4.3b [FR9] ¹	Skylight fenestration U-Factor.	U- ____	U- ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.4.4.1 [FR10] ¹	Vertical fenestration SHGC value.	SHGC: ____	SHGC: ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.5.4.4.2 [FR11] ¹	Skylight SHGC value.	SHGC: ____	SHGC: ____	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.2.1 [FR12] ²	Fenestration products rated in accordance with NFRC.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.2.2 [FR13] ¹	Fenestration products are certified as to performance labels or certificates provided.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.2.3, 5.3.6 [FR14] ²	U-factor of opaque doors associated with the building thermal envelope meets requirements.	U- ____ ☐ Swinging ☐ Nonswinging	U- ____ ☐ Swinging ☐ Nonswinging	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.4.3.1 [FR15] ¹	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces and in climate zones 1-6.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10] ²	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	

Additional Comments/Assumptions:

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.1 [IN1] ¹	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.1 [IN2] ¹	Roof R-value. For some ceiling systems, verification may need to occur during Framing Inspection.	R-_____ ☐ Above deck ☐ Metal ☐ Attic	R-_____ ☐ Above deck ☐ Metal ☐ Attic	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2, 5.8.1.3 [IN3] ¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the ceiling slope is $\leq 3:12$.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.2 [IN6] ¹	Above-grade wall insulation R-value.	R-_____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	R-_____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.5.3.4 [IN8] ²	Floor insulation R-value.	R-_____ ☐ Mass ☐ Steel ☐ Wood	R-_____ ☐ Mass ☐ Steel ☐ Wood	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values.
5.8.1.1 [IN10] ²	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.4 [IN11] ²	Eaves are baffled to deflect air to above the insulation.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.5 [IN12] ²	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.6 [IN13] ²	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

☐ 1 High Impact (Tier 1)
 ☐ 2 Medium Impact (Tier 2)
 ☒ 3 Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.8.1.7 [IN14] ²	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.7.1 [IN15] ²	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.7.2 [IN16] ²	Foundation vents do not interfere with insulation.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
5.8.1.8 [IN17] ³	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.			☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
5.4.3.3 [FI1] ¹	Weatherseals installed on all loading dock cargo doors in Climate Zones 4-8.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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